

**REPORT OF THE  
VIRGINIA COMMISSION ON YOUTH**

**COLLECTION OF  
EVIDENCE-BASED TREATMENT  
MODALITIES FOR CHILDREN AND  
ADOLESCENTS WITH MENTAL  
HEALTH TREATMENT NEEDS  
3RD EDITION**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



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**COMMONWEALTH OF VIRGINIA  
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2008**





COMMONWEALTH of VIRGINIA  
*Commission on Youth*

Delegate William H. Fralin, Jr., *Chairman*  
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March 27, 2008

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Dear Fellow Citizen of the Commonwealth:

It is my pleasure, as Chairman of the General Assembly's Commission on Youth, to bring to your attention some of the critical issues having a tremendous impact upon the Commonwealth's youth and their families. These issues shape our work both in the General Assembly and also at home among our constituents. Each year, the list of youth and family legislation introduced during the General Assembly is a long one. It is crucial that we focus our efforts to address these far-reaching concerns, while being careful stewards of the Commonwealth's resources.

According to the 2006 American Community Survey, in Virginia there are over 1.8 million young people who are eighteen or younger. This number represents almost 25% of our state's population. In addition, a significant percentage of the state budget is appropriated for services to youth and families. The Virginia Commission on Youth monitors programs and entities serving youth across all executive branch agencies.

The Virginia Commission on Youth was established by the 1989 General Assembly Session in response to the two-year study examining issues related to chronic status offenders (HJR 247). The Commission began operations in 1991. The goal of the Commission is to provide a legislative forum in which the complex policy issues related to youth and their families can be explored and resolved. The Commission's focus areas include, but are not limited to, child welfare, juvenile justice, education, child health and mental health. Through legislative study resolutions, budget language or at the direction of standing committees, the Commission establishes the scope of studies each year. The Commission conducts its studies through research and data analysis and generally with guidance from Advisory Groups providing subject expertise. The Commission's ability to pull key players in the public and private sectors around each year's study table is critical to the quality of studies.

I am pleased to share with you the Commission's publication of the *Collection of Evidence-based Treatments for Children with Mental Health Disorders, 3<sup>rd</sup> Edition (Collection)*. The *Collection* is an updated listing of evidence-based treatments that are proven to be the most effective for children and adolescents with mental health disorders. With limited governmental resources it is important that we prioritize treatment options. Evidence-based treatments link treatments to results. They are standardized, replicable and outcome-based. In the field of mental health and substance abuse, evidence-based treatments are shown to improve both program and participant outcomes.

For more information about the Virginia Commission on Youth or the *Collection*, I encourage you to visit our website at <http://coy.state.va.us>.

Sincerely,

A handwritten signature in black ink, appearing to read "William H. Fralin, Jr." with a stylized flourish at the end.

William H. Fralin, Jr.

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**MEMBERS OF THE VIRGINIA COMMISSION ON YOUTH**

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**From the Virginia House of Delegates\***

William H. Fralin, Jr., Chair  
Mamye E. BaCote  
Robert H. Brink  
Mark L. Cole  
Robert Tata

**From the Senate of Virginia**

Harry B. Blevins  
R. Edward Houck  
Yvonne B. Miller

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Vanessa Cardenas  
Glen Francis  
Marvin H. Wagner

**Commission on Youth Staff**

Amy M. Atkinson, Executive Director  
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Cordell Hairston  
Leah Hamaker

*\* One seat vacant as of January 2008*



# COMMONWEALTH of VIRGINIA

## Commission on Youth

Delegate William H. Fralin, Jr.  
*Chairman*  
Senator Harry B. Blevins  
*Vice-Chairman*



Suite 269  
General Assembly Building  
Richmond, Virginia 23219

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## Preface

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Section 30-174 of the *Code of Virginia* establishes the Virginia Commission on Youth and directs the Commission to "... study and provide recommendations addressing the needs of and services to the Commonwealth's youth and their families." This section also directs the Commission to "...encourage the development of uniform policies and services to youth across the Commonwealth and provide a forum for continuing review and study of such services."

The 2002 General Assembly, through Senate Joint Resolution 99, directed the Virginia Commission on Youth to coordinate the collection of empirically based information to identify the treatments recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders. The resulting 224-page publication entitled *Collection of Evidence-based Treatments for Children and Adolescents with Mental Health Treatment Needs* was compiled by the Commission on Youth with the assistance from an advisory group of experts pursuant to Senate Joint Resolution 99. The *Collection* was published in *House Document 9* and presented to the Governor and the 2003 General Assembly.

To ensure that this information remained current and that it reached the intended audience, the 2003 General Assembly passed Senate Joint Resolution 358, which required the Commission to update the *Collection* biennially. The resolution also required the Commission to disseminate the *Collection* via web technologies. The Secretaries of Health and Human Resources, Public Safety and Education, along with the Advisory Group, were requested to assist the Commission in updating the *Collection*, as were various state and local agencies.

The *Collection of Evidence-based Treatment Modalities for Children and Adolescents with Mental Health Treatment Needs, 3<sup>rd</sup> Edition* is the second biennial update. It summarizes current research on those mental health treatments that have been proven to be effective in treating children and adolescents. The *Collection 3<sup>rd</sup> Edition* is intended to serve a broad readership: educators, service providers, parents, caregivers, and others seeking information on evidence-based mental health treatments for youth. To facilitate access to the *Collection 3<sup>rd</sup> Edition*, this publication is available in its entirety on the Commission on Youth website (<http://coy.state.va.>).

The Commission on Youth gratefully acknowledges the contributions of its Advisory Group members, and the General Assembly's Division of Legislative Automated Systems for its assistance in preparing the *Collection's* website and print editions.

A handwritten signature in black ink that reads "Amy M. Atkinson".

Amy M. Atkinson



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### **Disclosure Statement**

The information contained herein is strictly for informational and educational purposes and is not designed to replace the advice and counsel of a physician or mental health provider. The Commission on Youth makes no representations regarding the suitability of the information contained herein for any purpose.

# Introduction

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## Background of Children and Adolescents' Mental Health

The recognition that children and adolescents suffer from mental illness is a relatively recent occurrence. Throughout history, childhood was considered a happy period. Children were not thought to suffer from mental disorders or emotional distresses, due to the notion that they were spared the stresses that afflict most adults (American Psychiatric Association, 2002). It is now well recognized that these disorders are not just a stage of childhood or adolescence, but are a result of genetic, developmental, and physiologic factors.

Research conducted in the 1960s has revealed that children suffer from mental disorders (American Psychiatric Association, 2002). It was not until the third edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* of the American Psychiatric Association in 1980 that child and adolescent mental disorders were assigned a separate and distinct section within the classification system (National Institute of Mental Health, 2001). The development of treatments, services, and methods for preventing mental disorders in children and adolescents has also gradually evolved over the past several decades.

The National Alliance for the Mentally Ill (NAMI) defines mental illness as a disorder of the brain that may disrupt a person's thinking, feeling, moods, and ability to relate to others (NAMI, 2005). Mental disorders and mental health problems appear in families of all social classes and backgrounds. However, there are children who are at greatest risk due to other factors. These include physical problems, intellectual disabilities (mental retardation), low birth weight, family history of mental and addictive disorders, multigenerational poverty, and caregiver separation or abuse and neglect (U.S. Department of Health and Human Services, 1999). Table 1 outlines the risk factors associated with children's mental health disorders.

Table 1

### **Risk Factors Related to Children's Mental Health**

- Biological Influences
- Psychosocial Influences
- Family and Genetic Factors
- Stressful Life Events
- Childhood Maltreatment
- Peer and Sibling Influences

Source: Austin/Travis County Community Action Network. *Risk Factors Related to Children's Mental Health*, 2006.

To date, child and adolescent mental health has emerged as a distinct arena for service delivery, drawing on the philosophies and practices that characterize other childhood fields, such as early intervention (Woodruff et al., 1999). With the increased attention given children's mental health

and the development of systems of care for children with serious emotional disorders and their families in the last two decades, mental health is emerging as a new focus in the field of early childhood (Woodruff et al.). Family members, practitioners, and researchers are becoming increasingly aware that mental health services are an important and necessary support for young children who experience mental, emotional, or behavioral challenges, as well as for their families.

## **Prevalence of Mental Disorders in Children and Adolescents**

According to the President's New Freedom Commission on Mental Health, childhood is a critical time for the onset of behavioral and emotional disorders (New Freedom Commission on Mental Health, 2003). The Center for Mental Health Services estimates that 11% of children in the United States have at least one significant mental illness accompanied by impairment in home, school or peer contexts (U.S. Department of Health and Human Services, 2001).

According to the National Institute of Mental Health (NIMH), half of all lifelong cases of mental illness begin by the age 14 (Archives of General Psychiatry, as cited by the NIMH, 2005). Moreover, it was noted that there were frequently long delays between the first onset of symptoms and when people seek and receive treatment. In addition, this study stated that an untreated mental disorder could lead to a more severe, more difficult to treat illness and to the development of co-occurring mental illnesses. Nearly half of all individuals with one mental disorder met the criteria for two or more disorders (NIMH, 2005).

According to InCrisis (2005), based on the 2000 U.S. Census Report and the Methodology for Epidemiology of Mental Disorders in Children and Adolescents (MECA) Study, 8.4 million U.S. children aged 9 to 17 have had a diagnosable mental or addictive disorder associated with at least minimal impairment. This translates to a prevalence of almost 21%, or one out of five children. Based on these estimates, 4.3 million youth suffer from a mental illness that results in significant impairments at home, at school, or with peers. Thus, there are 2 million children in the United States, or five percent, who experience extremely severe functional impairments. Table 2 includes information on the prevalence of specific mental health disorders in older children and adolescents.

Federal regulations also define a sub-population of children and adolescents with more severe functional limitations, known as serious emotional disturbance (SED) (InCrisis, 2005). The term "serious emotional disturbance" is used in a variety of federal statutes in reference to children under the age of 18 with a diagnosable mental health problem that severely disrupts their ability to function socially, academically, and emotionally (InCrisis). Children and adolescents with SED number approximately five to nine percent of children ages 9 to 17 (Friedman, as cited by InCrisis).

As cited by Virginia's Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS, 2005) and the current edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)* (American Psychiatric Association, 2000), SED meets the following specific functional criteria:

- Problems in personality development and social functioning that have been exhibited over at least one year's time;
- Problems that are significantly disabling based on social functioning of most children of the child's age;
- Problems that have become more disabling over time; and
- Service needs that require significant intervention by more than one agency.

Table 2

**Children and Adolescents  
Ages 9 to 17  
with Mental or Addictive Disorders\***

*Based on MECA Sample*

| <b>Disorders*</b>       | <b>Prevalence</b> |
|-------------------------|-------------------|
| Anxiety disorders       | 13.0%             |
| Mood disorders          | 6.2%              |
| Disruptive disorders    | 10.3%             |
| Substance use disorders | 2.0%              |
| Any disorder            | 20.9%             |

\*Disorders include diagnosis-specific impairment and Child Global Assessment Scale  $\leq 70$  (mild global impairment).

Source: Shaffer, as cited by InCrisis, 2005.

DMHMRSAS estimates that between 92,346 and 110,815 Virginia children and adolescents have SED, with between 55,407 and 73,877 exhibiting extreme impairment (2005). In addition, 67,477 Virginians (age 6 and older) have mental retardation and 18,116 infants, toddlers, and young children (birth to age 5) have developmental delays requiring early intervention services (DMHMRSAS).

According to DMHMRSAS (2005), some children may also be “at risk” of developing SED. These at-risk youth are characterized by at least one of the following:

- The child exhibits behavior or maturity significantly different from most children of the child’s age and is not due to a developmental disability or to mental retardation; or
- Parents or persons responsible for the child’s care have predisposing factors themselves, such as inadequate parenting skills, substance use disorder, mental illness, or other emotional difficulties, that could result in the child’s developing serious emotional or behavior problems; or
- The child has experienced physical or psychological stressors.

## **Meeting the Need for Treatment**

Acknowledgment of children’s and adolescents’ mental health needs has prompted further study of the specific disorders that plague this group, as well as the interventions utilized for treatment. Increased activity in this area can be attributed to the document *Mental Health: A Report of the Surgeon General* (1999). This report includes a chapter on children and adolescents and is the first such report to reference mental health needs of children. A follow-up effort was released one year later, entitled *Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda* (2000). This publication set the tone for policy and research in children’s mental health.

The Surgeon General’s 1999 Report outlines the importance of mental health in children and the view that the treatment of mental disorders should be a major public health goal. In *National*

*Action Agenda*, the Office of the Surgeon General asserted that three steps must be taken to improve services for children with mental health needs: improving early recognition and appropriate identification of disorders within all systems serving children; improving access to services by removing barriers faced by families; and closing the gap between research and practice, ensuring evidence-based treatments for children (U.S. Department of Health and Human Services, 1999).

The Surgeon General's 1999 Report also specified the need for utilizing scientific evidence for mental disorders and describes a system plagued by treatment barriers, including stigma, discriminatory health insurance practices, and the unavailability of appropriate services. Other guiding principles are that 1) families should be involved as full participants in all aspects of the planning, delivery and evaluation of services and supports and 2) treatments should be sensitive and responsive to racial, ethnic, linguistic and cultural differences. Other important features include improving or remedying environmental factors that put children at risk for developing mental, emotional, or behavioral problems.

Another federal initiative that is closely aligned to the philosophy and findings set forth in the Surgeon General's Report is the National Institute of Mental Health's (NIMH) *Blueprint for Change: Research on Child and Adolescent Mental Health* (2001).

Although awareness of children's mental health issues has evolved, knowledge about treatments is still emerging. According to the American Psychiatric Association (2002), 12 million American children suffer from mental illness; however, only one in five receives treatment.

There has been little research that estimates the burden of mental illness in children and adolescents (NIMH's Meeting Summary on Preventing Child and Adolescent Mental Health Disorders, 2004). In 1998, the direct costs for the treatment of child mental health problems (both emotional and behavioral) were approximately \$11.75 billion or \$173 per child (Sturm et al., Ringel & Sturm, as cited by NIMH, 2004). This study pointed out that one of the many reasons why national health expenditures for child/adolescent mental disorders are difficult to estimate is that mental health services are delivered and paid for in the health, mental health, education, child welfare, and juvenile justice sectors and that no comprehensive national datasets exist in this area.

Further, indirect costs associated with mental illness (i.e., future lost wages because of lower educational attainment) were not included in the study. However, this important study noted that child and adolescent preventive interventions have the potential to reduce significantly the economic burden of mental illness, in that preventive services reduce the need for mental health and connected services. Such interventions can also improve school readiness, health status, and academic achievement, as well as reducing the need for special education services (National Institute for Health Care Management, 2005). Additionally, an increase in the benefits of positive developmental outcomes, such as educational attainment and economic productivity, along with a decrease in welfare dependency, also increase societal savings (National Institute for Health Care Management).

Without appropriate treatment, childhood mental health disorders can escalate. Seventy-four percent of 21 year olds with a diagnosed mental health disorder were reported to have had prior difficulties (InCrisis, 2005). Untreated childhood mental health disorders may also be precursors of school failure, involvement in the juvenile justice system, and/or placement outside of the home. Other serious outcomes include destructive, ambiguous, or dangerous behaviors and mounting



parental frustration. The resulting cost to society is high in both human and financial terms. Discovering a child's serious emotional disturbance early and ensuring that the child receives appropriate care can break the cycle (New Freedom Commission on Mental Health, 2003).

The efforts of the Office of the Surgeon General encourage further testing and refining of programs in a real-world context. A preventive and developmental approach to children's mental health problems must be taken. While many programs try to provide coordinated care for children with mental health needs, the children's mental health system remains splintered. The principle that mental health is an essential part of children's health is emphasized throughout the *National Action Agenda* report.

## **Challenges to Ascertaining Effective Treatments**

Until recently, most research on mental health treatment has focused on adults. However, researchers are starting to focus on mental health disorders in treatment, ascertaining what is normal and abnormal, compared with stages of childhood development (Grayson, 2004). Goals of such research include prediction and prevention of developmental problems that may lead to mental illness in children (Grayson). Identifying key risk factors is crucial in determining what may have the potential to increase a child's chances of developing mental health disorders. When treated appropriately, children with mental health disorders can successfully control the symptoms (Grayson).

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### **Additional Resources**

#### **U.S. Department of Health and Human Services**

*Mental Health: A Report of the Surgeon General*

<http://www.surgeongeneral.gov/library/mentalhealth/chapter3/sec6.html>

#### **Virginia Commission on Youth**

*House Document 23, Youth with Emotional Disturbance Requiring Need of Out-of-Home Placement* (2002)

[http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/HD232002/\\$file/HD23\\_2002.pdf](http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/HD232002/$file/HD23_2002.pdf)

### **Organizations/Weblinks**

#### **American Academy of Child & Adolescent Psychiatry (AACAP)**

<http://www.aacap.org/clinical>

**Mental Health America of Virginia**

<http://www.mhav.org/home.html>

**National Alliance for the Mentally Ill (NAMI)**

National: <http://www.nami.org/helpline>

Virginia:

[http://www.nami.org/MSTemplate.cfm?Section=Homepage60&Site=NAMI\\_Virginia&Template=/ContentManagement/ContentDisplay.cfm&ContentID=51980](http://www.nami.org/MSTemplate.cfm?Section=Homepage60&Site=NAMI_Virginia&Template=/ContentManagement/ContentDisplay.cfm&ContentID=51980)

**National Institute for Mental Health**

<http://www.nimh.nih.gov/publicat/violence.cfm>

**Technical Assistance Partnership for Child and Family Mental Health**

<http://www.tapartnership.org>

**Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS)**

P.O. Box 1797 – Richmond, VA 23218-1797

804-786-3921 – Toll Free 800-451-5544 – Voice TDD 804-371-8977

<http://www.dmhmrzas.virginia.gov>

# ROLE OF THE FAMILY IN TREATMENT PROGRAMS

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The involvement of family members in child and adolescent services is crucial to successful treatment outcomes (Kutash & Rivera, 1995; Pfeifer & Strzelecki, 1990). The effectiveness of services for children and adolescents is believed to hinge less on the particular type of treatment provided than on the participation of the family in planning, implementing, and evaluating the services. Research indicates that, for children with serious mental health problems, the more the family participates in planning services, the more likely the family members are to feel that their child's needs are being met (Koren et al., 1997) and that they have control over the child's treatment (Curtis & Singh, 1996; Thompson et al., 1997). Furthermore, family participation promotes an increased focus on families, the provision of services in natural settings, a greater awareness of cultural sensitivity, and a community-based system of care. There is also a growing body of research that has found that family participation improves the delivery of services, as well as their outcomes (Knitzer et al., 1993).

Nevertheless, there is a growing body of evidence indicating that children from vulnerable populations (children of single mothers, children who live in poverty, and minority children) who exhibit the most serious problems are also the most likely to terminate their treatment early (Kadzin & Mazurick, 1994). Additional research is necessary to determine the factors that contribute to this early termination. In recognition of this problem, however, it is important for mental health providers to ensure that these families are actively recruited and engaged in the services that the child receives in order to maximize the potential for successful outcomes.

This goal is complicated, however, by the fact that both families and providers may be confused and hesitant about the role that family members should play in treatment efforts. This is further complicated by systemic barriers that may preclude families from fully participating in the procurement of high-quality mental health services for their children. One such barrier is the relinquishment of custody of children for obtaining mental health services.

National surveys conducted by the Bazelon Center for Mental Health Law, the National Alliance for the Mentally Ill (NAMI), the Federation of Families for Children's Mental Health, and Maryland's Coalition of Families for Children's Mental Health state that between 23 and 27% of families of children with Serious Emotional Disturbance (SED) report being encouraged to relinquish custody in order to obtain needed services for their children (Virginia State Executive Council, 2004). These families typically lack the financial resources to obtain appropriate mental health services for their children. In order to gain access to publicly-funded mental health services, many of these families pursue services available within the child welfare/foster care system (Virginia State Executive Council). To receive these services, families may be forced to relinquish custody of their child to a child welfare agency in order to access funding. Approximately 20% of those who have children with SED do in fact relinquish custody (Virginia State Executive Council). In November of 2007, Virginia confronted this issue by issuing interagency guidelines to address this practice. These guidelines provide guidance to agencies regarding the authorization of needed services to children with emotional and behavioral issues so that families are not forced to

relinquish custody. Unfortunately, other states are continuing to grapple with this issue. Other barriers facing families may include the availability of appropriate services, the availability of culturally competent services, and the lack of child psychiatrists.

In an attempt to combat this problem, researchers have identified six broad roles that families should play in the treatment process. Members of the family should act as contributors to the environment, recipients of service, partners in the treatment process, service providers, advocates, and evaluators and researchers (Friesen & Stephens, 1998). It is important that family members assume each of these roles in order to provide the effective support network that is necessary for the child's continued improvement.

Friesen & Stephens (1998) outline these six roles for families:

**Contributors to the Environment** – Family members are the key component of the environment in which a child resides. Consequently, treatment providers often try to identify ways in which the behavior and interactions between family members influence the child's emotional and behavioral problems. With the assistance of the treatment provider, family members should consider ways to improve the home environment and the relationships in the family in order to provide the child with the most stable, supportive environment possible. In addition, family members should seek external support from their extended family and members of the community in order to reduce the stress of raising a child with emotional or behavioral difficulties.

**Recipients of Service** – Family members are also an important part of the therapeutic process. Service providers often focus on the family unit as a whole, creating interventions and strategies that target the health of the entire family. These interventions are intended to assess the strengths and weaknesses that exist within the family structure, to enhance the well-being of parents and other family members, and to help families locate support mechanisms in the community. The provider also assists family members in developing the skills necessary to support the special needs of the child. Services may include supportive counseling, parental training and education, development of coping skills and stress management techniques, respite care, parental support groups, transportation, and financial assistance.

**Partners in the Treatment Process** – Family members also serve as equal contributors in the problem-solving process. They should work with treatment providers to identify the goals of treatment and to plan realistic strategies to achieve these goals. Additionally, family members should play a key role in implementing these strategies to ensure that the treatment goals are met. When performing these functions, caregivers should not be afraid to ask questions and to voice their opinions and preferences. It is crucial that they are fully informed and that their preferences are considered in all treatment decisions.

**Service Providers** – The treatment process is incomplete without the direct services provided to the child by family members. They are responsible for providing emotional support and information to the child and other family members, and for filling in the gaps in the services being received by the child. Furthermore, they often coordinate the services being received by the child by requesting, convening, and scheduling meetings, and transporting the child to appointments. It is a crucial role, the importance of which cannot be understated. Parents and caregivers need to remain vigilant and involved in all aspects of the child's treatment. This includes keeping all follow-up appointments,

becoming knowledgeable about any prescribed medications, and keeping track of all treatments that have been tried unsuccessfully.

**Advocates** – Family members often serve as the child’s only voice in the mental health system. They should therefore actively advocate for the child in order to ensure that he receives the appropriate services, and should voice any concerns regarding undesirable practices and policies. There are several local, state, and national organizations that can assist parents and caregivers in these efforts, allowing them to serve as part of a larger voice in the community.

**Evaluators and Researchers** – It is important that families participate in research and evaluation activities so that their opinions can be heard regarding which treatments and services are most beneficial and convenient. The input of family members is crucial to ensure that all children receive services that are efficient and effective. While much of this research requires the involvement of the family for a significant length of time, the input of caregivers and other family members is extremely important.

Families play important supporting roles in combating mental health disorders. Although the child is the most important focus of treatment, family members can help by offering support, and encouragement, and by creating a favorable environment. Family members can help their child while they are receiving treatment by recognizing and praising small achievements, modifying expectations during stressful periods, measuring progress on the basis of the improvements made, and being flexible, while trying to maintain a normal routine (Psychiatry 24x7.com, 2005).

The following information is attributed to the Substance Abuse and Mental Health Services Administration (SAMHSA) (2000). Families must recognize that, while they are obtaining services for their child, they are the experts in understanding the following:

- how their child responds to different situations;
- their child’s strengths and needs;
- what their child likes and dislikes; and
- what has worked and not worked in helping their child.

Families are ultimately responsible for determining what services and supports their children receive. Thus, families must communicate to service providers their children’s strengths and weaknesses, as well as their priorities and expectations. Family members must also inform their service provider as soon as they realize that treatment is not working so that appropriate modifications can be made (SAMHSA, 2000). It is crucial to remember that children are different and their needs are also very diverse.

These recommendations also hold true for children who come in contact with the juvenile justice system. Family involvement is particularly critical for these youth to ensure positive outcomes (Osher & Hunt, 2002). It is imperative that families remain involved so they provide information on the child’s diagnosis and treatment history, use of medications, the families’ ability to participate in treatment, special circumstances that affect their child, and their child’s education history and status (including whether the child is enrolled in special education) (Osher & Hunt). Ideally, families should remain involved at each stage of the system so they can be involved in decision-making and treatment (Osher & Hunt). Families and juvenile justice officials must cooperate to ensure that all have mutual responsibility for the child’s outcomes (Osher & Hunt).

Families must remain actively involved in all aspects of their child's mental health treatment. Without family involvement, it is extremely difficult for service providers to ensure that the gains achieved by the child in treatment are maintained and solidified. Moreover, the combined efforts of service providers, family members, and advocates are necessary to ensure that the services provided in the community effectively meet the needs of all children and families. It is important that parents and caregivers understand the results of any evaluation, the child's diagnosis, and the full range of treatment options. If parents are not comfortable with a particular clinician, or treatment option, or are confused about specific recommendations, they should consider a second opinion.

The guide to parents and caregivers which follows was developed by the American Academy of Child & Adolescent Psychiatry (AACAP).

### **Questions that Parents or Caregivers Should Ask About Treatment Services**

**Before a child begins treatment, parents should ask the following:**

- Does my child need additional assessment and/or testing (medical, psychological etc.)?
- What are the recommended treatment options for my child?
- Why do you believe treatment in this program is indicated for my child? How does it compare to other programs or services which are available?
- What are the advantages and disadvantages of the recommended service or program?
- What will treatment cost, and how long will it take?
- How much of the cost is covered by insurance or public funding? Will we reach our insurance limit before treatment is completed?
- How will my child continue education while in treatment?
- Does my child need medication? If so, what is the name of the medication that will be prescribed? How will it help my child? How long before I see improvement? What are the side effects which commonly occur with this medication?
- What are the credentials and experience of the members of the treatment team?
- How frequently will the treatment sessions occur?
- Will the treatment sessions occur with just my child or the entire family?
- How will I be involved with my child's treatment?
- How will we know if the treatment is working? What are some of the results I can expect to see?
- How long should it take before I see improvement?
- What should I do if the problems get worse?
- What are the arrangements if I need to reach you after-hours or in an emergency?
- As my child's problem improves, does this program provide less intensive/step-down treatment services?
- How will the decision be made to discharge my child from treatment?
- Once my child is discharged, how will it be decided what types of ongoing treatment will be necessary, how often, and for how long?

Source: American Academy of Child & Adolescent Psychiatry (AACAP), 2000.

### **Supplementary Issues for Families**

Continuous 24-hour-a-day news coverage of events, such as natural disasters, catastrophic events, and crime reports, may cause children to experience stress, anxiety, and fears (AACAP, 2002).

According to the American Academy of Child & Adolescent Psychiatry (AACAP), children may be easily influenced and unable to distinguish the difference between reality and the fantasy presented on television (2001). As a result, children may be exposed to behaviors and attitudes that can be overwhelming and difficult to understand (AACAP). Caregivers should understand that violent media images may have a greater impact upon children with emotional and behavioral issues than might otherwise be the case (AACAP, 2006).

### **Systems of Care and Family Involvement**

Family involvement is a vital component within a system of care. A system of care is "...a comprehensive spectrum of mental health and other necessary services which are organized into a coordinated network to meet the multiple and changing needs of children and their families" (Stroul, 2002). A system of care is not a program but a philosophy. The information in this section is attributed to *Systems of Care: A Framework for System Reform in Children's Mental Health* (Stroul).

The primary values of the system of care philosophy are that services for children are:

- Community-based;
- Child-centered and family-focused; and
- Culturally competent.

In a system of care, family involvement is vital because families are designated partners in the design of effective mental health services and supports. Families have a primary decision-making role in the care of their own children, as well as in the policies and procedures governing care for all children in their communities. This includes:

1. Choosing supports, services, and providers;
2. Setting goals;
3. Designing and implementing programs;
4. Monitoring outcomes;
5. Partnering in funding decisions; and
6. Determining the effectiveness of all efforts to promote the mental health and well-being of children and youth.

Systems of care rely upon family and youth experiences and utilize families' expertise to steer decision-making in service and system design, operation, and evaluation. In recent years, studies have been designed to assess the impact of family partnerships upon child and family outcomes. The findings reveal that children who had families that were involved in their treatment experienced improved educational outcomes and well-being, as well as reduced length of stay in out-of-home placements and residential settings (Jivanjee, et al., 2002). Systems of care establish partnerships that work because the system is guided by the family.

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### **Organizations/Weblinks - General**

#### **Center for Effective Collaboration and Practice**

*Spanish services are available.*

888-457-1551

<http://cecp.air.org>

#### **Florida Mental Health Institute**

813-974-4661

<http://www.fmhi.usf.edu>

#### **National Alliance for the Mentally Ill (NAMI)**

*Spanish services are available.*

703-524-7600

<http://www.nami.org>

#### **National Mental Health Association (NMHA)**

*Spanish services are available.*

703-838-7529

<http://www.nmha.org>

#### **National Resource Network on Child and Family Mental Health Services**

202-408-9320

<http://www.wbgh.com>

**National Technical Assistance Center for Children's Mental Health**

*Spanish services are available.*

202-687-5000

<http://www.dml.georgetown.edu>

**Research & Training Center on Family Support and Children's Mental Health**

800-628-1696

<http://www.rtc.pdx.edu>

**U.S. Department of Education**

**Office of Special Education Programs**

*Spanish services are available.*

202-205-5507

<http://www.ed.gov/about/offices/list/osers/index.html?src=mr>

**U.S. Department of Health and Human Services**

**Substance Abuse and Mental Health Services Administration (SAMHSA)**

National Mental Health Information Center (*Spanish services are available.*)

Child, Adolescent and Family Branch, Center for Mental Health Services

800-789-2647

<http://www.mentalhealth.samhsa.gov/child>

**Virginia Resources**

**Attorney General, Virginia Office of**

804-786-2071

<http://www.oag.state.va.us>

**Mental Health America of Virginia**

<http://www.mhav.org/home.html>

**National Alliance for the Mentally Ill Virginia (NAMI Virginia)**

[http://www.nami.org/MSTemplate.cfm?Section=Homepage60&Site=NAMI\\_Virginia&Template=/ContentManagement/ContentDisplay.cfm&ContentID=51980](http://www.nami.org/MSTemplate.cfm?Section=Homepage60&Site=NAMI_Virginia&Template=/ContentManagement/ContentDisplay.cfm&ContentID=51980)

**Virginia Federation of Families/Medical Home Plus (*a program of The Arc of Virginia*)**

2025 East Main Street, Suite 107 – Richmond, VA 23223

804-649-8481 Ext. 102; Toll free: 888-604-2677

<http://www.medhomeplus.org>

**Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services**

P.O. Box 1797 – Richmond, VA 23218-1797

804-786-3921 – Toll Free 800-451-5544 – Voice TDD 804-371-8977

<http://www.dmhmrzas.virginia.gov>

# EVIDENCE-BASED TREATMENTS

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## Overview

The field of child and adolescent mental health is multi-disciplinary, with a diverse service system. Today there is a multitude of theories about which treatments work best, making it is very difficult for service providers to make informed choices. It is imperative that treatments for mental health disorders be examined, based on clinical research, in order to ascertain whether they are effective. Detailed study of mental health treatments allows for greater acceptability of the intervention, better replication in different settings, and greater specificity for trainees (Christophersen & Mortweet, 2001). Interventions that have strong empirical support are referred to as “evidence-based” treatments.

Evidence-based—or empirical—treatments are interventions for which there is consistent scientific evidence showing that they improve client outcomes (National Association of State Mental Health Program Directors Research Institute, Inc. Center for Evidence-Based Practices, 2000). In the field of children’s mental health science and service delivery, the term *evidence-based* refers to a body of knowledge obtained through carefully implemented scientific methods, about the prevalence, incidence, or risk for mental disorders or the impact of treatments or services on mental health problems (National Institute of Mental Health [NIMH], 2001). It represents the quality and soundness of the scientific evidence regarding questions about etiology, distribution, or risk for disorders or about outcomes of care for children with mental health problems (NIMH). In the past, many decisions with important consequences have been uninformed by quality research findings. This form of decision-making lacks accountability. Evidence-based practices offer practitioners a different decision-making process, according them the satisfaction of staying on top of research findings and a means of making decisions which are publicly accountable. Evidence-based practices enable service providers to identify and utilize “best practices” in treatment (New York State Office for Mental Health, 2001).

In order for treatments to be considered evidence-based, they must be consistent with the characteristics of the evidence-based guidelines developed by the NIMH, highlighted in the Surgeon General’s report on mental health (1999) and outlined by Burns et al. (1999).

- At least two control group design studies or a large series of single-case design studies;
- Minimum of two investigators;
- Use of a treatment manual;
- Uniform therapist training and adherence;
- True clinical samples of youth;
- Tests of clinical significance of outcomes applied;
- Both functioning and symptom outcomes reviewed; and
- Long-term outcomes beyond termination.

Recent debate has focused on the degree of support required for determining which interventions are of value in treating specific disorders (Lonigan et al., 1998). Table 1 shows the two classifications of research studies on treatments.

Table 1

### Efficacy vs. Effectiveness

**Effective** (or well-established) treatments are those which have beneficial effects when delivered to heterogeneous samples of clinically referred individuals treated in clinical settings by clinicians other than researchers.

**Efficacious** (or clinical utility) studies are directed at establishing how well a particular intervention works in the environment and under the conditions in which treatment is typically offered.

Source: Lonigan et al., 1998.

Most efficacy studies are directed at establishing whether a particular intervention works and whether the research for the trial is conducted under tightly controlled conditions (Lonigan et al., 1998). Interventions identified as efficacious can later be subject to effectiveness trials.

Distinguishing between these two classifications is significant because the evidence is frequently ambiguous. This may be because the evidence is preliminary, rather than well-established. In addition, treatments may be newer, and their long-term effects, still unclear. Assessments of the effectiveness of a treatment may vary and the patient's other medical conditions must be taken into account when considering what is an effective treatment.

The President's New Freedom Commission on Mental Health outlines the need to promote evidence-based practices (2003). Goal Five of the report outlines the need for advancing evidence-based practices by using dissemination and demonstration projects and by creating public-private partnerships to guide their implementation. Moreover, the report discusses the need to improve and expand the workforce, which provides evidence-based mental health services and supports. The report asserts that the U.S. must have a more effective system to bring scientific discovery to service providers, consumers, and families.

One of the major goals outlined in the Surgeon General's *National Action Agenda* for children's mental health (2000) is the continued development, dissemination, and implementation of scientifically proven prevention and treatment services in the field of children's mental health. Other action steps are identified, including increasing the research on proven treatments, practices, and services developed in the laboratory in order to assess their effectiveness in real-world settings. The need to evaluate model programs which can be disseminated and sustained in the community is also emphasized. Promotion of private and public partnerships to facilitate this dissemination is crucial. Unfortunately, the report indicates that there is a growing gap between knowledge and practice and between what is known through experience and what is actually implemented in many public mental health systems across the country.

### Benefits of Evidence-based Treatments

"The best care results from the conscientious, explicit, and judicious use of current best evidence and knowledge of patient values by well-trained experienced clinicians" (Institute of Medicine, 2001, p. 76). Evidence-based treatments allow patients, clinicians, and families to see the difference between alternative treatment decisions and to ascertain what treatment approach best facilitates successful outcomes (Donald, 2002). Treatments that are evidence-based and research

driven can complement a clinician's experience. Evidence-based medicine has emerged as an invaluable method of informing clinical and policy decisions about the numerous faces and aspects of healthcare. Evidence-based medicine provides data for questions which do not have intuitive answers or for those items which may do "more harm than good" (Donald). It has significantly aided clinicians in the decision-making process by providing a fair, scientifically rigorous method of evaluating treatment options.

Evidence-based medicine has also assisted professional bodies in developing clearer and more concise working practices, as well as in establishing treatment guidelines and practices. The accumulated data for these treatments support their consideration as first-line treatment options (Nock et al., 2004). With literally hundreds of treatment approaches available, it is difficult for clinicians to select the most appropriate and effective intervention (Nock et al.). Professional accountability and technical complexity are two issues currently facing the medical community.

Over the past decade, medicine has come under increased scrutiny. Evidence-based medicine is considered a necessary tool for treating patients in a period in which demands for effective treatment have increased (Donald, 2002). Evidence-based medicine emerged from the notion that decisions about the care of individual patients should involve the conscientious and judicious use of current best evidence (Fonagy, 2000). Use of evidence-based medicine can be advantageous in that it brings all players in the medical industry together in the decision-making process. This can ultimately reduce conflict and even potentially reduce litigation.

The current emphasis in evidence-based medicine for mental health treatments is on promoting effective use of resources and simultaneously allowing for improvements in the clinician's knowledge base (Fonagy, 2000). Ethically, the strongest argument in support of this practice is that it allows the best-evaluated methods of health care to be identified.

Another driving force in the utilization of evidence-based medicine is the potential for cost savings (Fonagy, 2000). With rising awareness of mental health issues and a demand by purchasers to know they are obtaining the best treatment for the best price, emphasis on evidence-based practices is both practical and justified. Few people have time to conduct research and evaluate best practices. Evidence-based medicine provides a structured process for clinicians and patients to access information on what is effective. Treatment interventions produce the intended or expected results.

## **Limitations of Evidence-Based Treatments**

Negative reactions have emerged due to the assessment of the practices surrounding evidence-based medicine and the utilization of evidence-based treatments. Currently, there are several obstacles to evidence-based decision-making.

One criticism pertains to the vast amount of information available to clinicians. The rapid emergence of data regarding evidence-based treatments has made it difficult for clinicians to both access and disseminate (Burns et al., 1999). While deluged with unstructured information, clinicians and decision-makers alike are able to identify few procedures or systems to enable them to find quickly and accurately the necessary information to address treatment concerns.

Another criticism relates to the fact that the evidence may be preliminary, rather than well established, thus the treatments may be so new that their long-term effects are not yet known. Accordingly, assessments of the effectiveness of a treatment may vary across studies, depending on

the population studied, the questions asked, or the methodology employed (Rodwin, 2001). Even when an area is carefully studied, there frequently is significant uncertainty and vagueness about what treatment is the most effective. In addition, the benefits and limitations of a particular treatment vary depending upon the child's other medical conditions. In these instances, there may be concessions between the effectiveness of the treatment and safety/quality of life issues (Rodwin).

In utilizing evidence-based treatments, clinicians need to be re-trained, first in using the science-based treatments and, second, in making them more usable for other practitioners (Burns et al., 1999). Despite the documentation of the efficacy of these treatments, these treatments have not been widely incorporated by training programs or practicing clinicians (Addis & Krasnow, as cited by Nock et al., 2004). Efforts to disseminate knowledge to stakeholder groups or implement evidence-based interventions have often failed partly due to their poor fit with the target audience or setting context. The issue of "poor fit" must be examined, along with a variety of issues, before evidence-based interventions can be effectively employed.

The variable quality of research findings makes it difficult for clinicians and policy makers to discriminate between them. Many of the studies utilized in evidence-based medicine have excluded very important variables such as training, staff turnover, minimal family involvement, and comorbidity of conditions (Burns et al., 1999). Another argument made against evidence-based treatments is that they have been developed and tested in well-controlled research settings and may not be effective in actual clinical settings (Nock et al., 2004). Many unfavorable beliefs about the usefulness of evidence-based treatments beyond research settings emerge from the notion that these treatments must be administered rigidly without "...variation, creativity, or flexibility and without consideration of the individual differences with which the patients present" (Nock et al., p. 777).

In addition, the study process for particular treatment interventions can be long and painstaking, whereas policy decisions need to be made almost immediately. Although there are specific evidence-based treatments for mental disorders and recommendations for their use in official treatment guidelines, such as the *American Psychiatric Association Practice Guidelines for the Treatment of Psychiatric Disorders*, it is still very difficult to track the kinds of treatment methods actually being practiced (Donald, 2002).

Another issue surrounding evidence-based treatments is fidelity. Fidelity to a treatment modality raises questions as to how strictly treatment protocols or manuals must be followed and how this affects provider creativity, practice style, and individual treatment approaches (Chaffin & Freidrich, 2004). Specific, teachable, learnable skills and behaviors are emphasized in evidence-based treatments. However, utilization of practice guidelines that originate from a central agency can be intimidating and threatening. Implementation and utilization of evidence-based treatments require a deliberate and carefully planned approach by the provider or clinician. Effective implementation of evidence-based treatments depends upon adherence to the content and the therapeutic methods and processes (Chaffin & Freidrich). Even for well-developed interventions, with training materials and a documented training procedure, high fidelity implementation requires very intensive efforts. Key factors include adequate organizational supports, attention to the fit between the values of the program and those of the organization, and commitment to implement the program with fidelity (Chaffin & Freidrich).

Another concern surrounding the utilization of evidence-based treatments is the cost that must be appropriated for staffing, training, and evaluation. The information contained in this section is taken from a study published by the New Hampshire Center for Public Policy regarding

implementation of evidence-based treatments in New Hampshire (2007). As outlined in this study, the most significant impediment to implementation of evidence-based treatments is appropriate staffing. This becomes an issue due to the significant amount of training and consultation required to maintain treatment fidelity. For example, staff at rural agencies may have extensive travel and time away from their current job duties to attend the required trainings. Several evidence-based practices require specialized and costly types of training in order to credential providers. These costs can be very difficult to fund. Funding and coordinating training, particularly for proprietary evidence-based treatments, can be seen as a significant barrier. The cost of training and continuing supervision for credentialing may also be seen as an issue. Moreover, the cost and time associated with fidelity measurement and practice protocols can be high. It must be noted that the proprietary nature of some evidence-based treatments, with the monetary fees associated with training and certification, bears a cost that must be maintained and budgeted over time.

## Issues for Consideration

Efforts to disseminate knowledge to stakeholder groups or implement evidence-based interventions must address a variety of factors in order to be successful. These issues, as outlined by the NIMH (2002), are discussed in the following list:

- *Differences between science and practice.* Dissemination and implementation efforts require the joining of two, very often distinct, communities. While scientific research seeks to first advance knowledge, clinical practice seeks to do what is immediately best for individual patients.
- *Understanding the target audience.* When disseminating new knowledge, understanding one's target audience is critical. In the mental health community, this target audience varies widely from policy makers and state administrations to local providers or family consumers.
- *The impact of culture.* The "fit" of new information or intervention models within a local context will likely facilitate or impede their implementation.
- *Individual information processing.* The accurate individual receipt and processing of information is critical to dissemination efforts; unfortunately, this process often goes unmeasured.
- *Organizational change.* Dissemination and implementation efforts should consider organizational change strategies, along with those targeting individual beliefs and behaviors, since providers are embedded within organizations and efforts towards change may be obstructed by administrative hurdles.

Implementation of evidence-based treatments takes more than training. Barriers surrounding policy, community, and structure must be addressed (Chaffin & Freidrich, 2004). Structural problems may include funding for adaptation of treatments, lack of incentives linking rewards to client outcomes, and lack of organizational demand for practice change (Chaffin & Freidrich). Misconceptions that evidence-based practices are inflexible and impersonal must be acknowledged and countered for there to be successful implementation. A crucial first step to counter such concerns is the dissemination of information regarding the benefits of evidence-based practices to public funding agencies, governing agencies, third-party payers, parents and professional organizations (Chaffin & Freidrich).

Cultural competency may also be a barrier to the implementation of evidence-based treatments. Evidence-based treatments frequently define the population served by factors such as age, diagnosis, presenting problems, culture, and ethnicity (New Hampshire Center for Public Policy, 2007). Evidence-based treatments must include sufficient information to indicate for whom the



treatment is best suited in terms of age, gender, or culture. A significant challenge for implementation of evidence-based treatments involves the determination of how best to incorporate them within the community (Blase & Fixen, 2003). This may conflict with the specified requirements of the evidence-based treatment and could potentially affect treatment fidelity. Accordingly, it is crucial that the evidence-based program complements the needs of the defined population, as well as the community (Blase & Fixen).

## **Recent Activity Surrounding Evidence-based Practices**

There have been more than 1,500 published clinical trials on outcomes of psychotherapies for youth and more than 500 different named psychotherapies (Hoagwood, 2004). This includes six meta-analyses discussing the effects of these treatments and more than 300 published clinical trials on the safety and efficacy of psychotropic medication (Hoagwood). There have also been fourteen major reviews of these interventions. Moreover, 22 federal agencies have endorsed or discussed the use of evidence-based treatments.

These federal agencies include the:

- Administration for Children and Families,
- Agency for Healthcare Research and Quality,
- Center for Mental Health Services,
- National Institute of Health,
- National Institute for Mental Health,
- Health and Human Services Department,
- Central Intelligence Agency, and
- Department of Justice.

In 1998, approximately \$11.75 billion was spent for mental health services for children (Huang et al., 2003). This represents a three-fold increase since 1986 (Sturm, as cited by Huang et al.). The size of the expenditures raises questions about how these dollars are being spent and whether resources are being used effectively. As the evidence increases to identify practices that have proven effectiveness, policy must also address both the selection and funding of these services. Care must be taken to fund only those services that are found to be effective or promising.

Effective prevention interventions for violence prevention, school-based prevention, and social competency enhancement have also been clearly delineated. Information about the cost-effectiveness of these interventions is also being gathered to show cost per participant and crime victim benefit. A significant benefit of this research is that ineffective psychosocial treatments for mental health disorders are being identified.

Virginia is also moving towards enhancing the utilization of evidence-based treatments in the public mental health arena. Virginia's Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) promotes the development of evidence-based practices. Evidence-based practices are expected and required, with incentives and support for providers to learn and use these practices (DMHMRSAS, 2004). The Department collaborates with localities in developing and implementing community-based programs that utilize evidence-based practices.

In November 2005, the Virginia Commission on Youth approved a recommendation to co-sponsor a statewide conference with DMHMRSAS. In 2006 and 2007, an Advisory Committee comprised of state and local agencies, private providers, state university representatives and other

stakeholders worked in cooperation to plan the *Conference on Systems of Care and Evidence-based Treatments: Tools that Work for Youth and Families*. The event was designed around behavioral health care professionals seeking information on evidence-based practices for children and adolescents with mental health disorders. The utilization and implementation of evidence-based treatments in diverse practice settings was a primary conference topic, as was the systems of care philosophy. This philosophy, which is recognized by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA), emphasizes the organization of community-based services and supports which meet the diverse needs of youth with serious behavioral health needs. The long-range goal of Systems of Care is to help youth function better at home, in school, in the community, and throughout life.

The conference was held September 16-18, 2007 in Roanoke, Virginia with over 500 behavioral healthcare, juvenile justice, child welfare and education professionals, caregivers, families and youth in attendance. Continuing education credits were offered to the conference attendees.

## **Conclusion**

Effective psychosocial treatments are available for treating a wide range of commonly encountered disorders in both controlled research trials and real-world settings. However, these treatments are not widely used by clinicians in the field. The conclusion is that the development of evidence-based treatments does not necessarily lead to their use (Donald, 2002). Dissemination of information about treatments from research settings to actual clinical practice is a vital step, without which evidence-based treatments will be used only by clinical researchers, thus depriving the general public the benefits of these psychotherapeutic advances.

The majority of mental health providers agree on the necessity of providing empirical support for their interventions. Additionally, the public expects to receive effective treatment from mental health professionals. Therefore, one would expect clinicians to incorporate and accept evidence-based treatments into practice settings.

Several factors have been identified to account for this inconsistency. First, the training that mental health professionals receive does not require comprehensive training in evidence-based treatments; consequently, when they enter practice, they do not have the skills to administer these treatments (Donald, 2002). Second, continuing education programs do not require training in evidence-based treatments; therefore, there is no way to incorporate treatments from research settings to clinical practice. Third, many clinicians in the field are negatively biased toward evidence-based treatments (Donald). Unfortunately, the failure to train practitioners in evidence-based treatments may result in a lack of availability of these treatments (Sanderson, 2002).

Evidence-based practices can be utilized in real-world settings and are effective for children suffering and at risk for suffering with mental disorders (Donald, 2002). The failure to disseminate evidence-based treatment information to clinical practitioners in the field has resulted in the lack of availability of many of these treatments. This, in turn, has caused a lack of training for evidence-based treatments for mental disorders in children. With increased accountability in the medical field, the failure to train practitioners in evidence-based treatments will prevent effective utilization and adoption of effective evidence-based treatments.

Evidence-based treatments have been developed with the express purpose of improving the treatment of child and adolescent mental health disorders (Nock et al., 2004). While evidence-

based research may suggest that there is limited variability in the patients and the methods used, clinicians can incorporate these well-documented treatments, while still adequately addressing the individual differences of the patient (Nock et al.). The perception surrounding evidence-based treatments is that a complete body of research must exist for a particular mental health disorder before the treatment can be employed. However, the rationale behind evidence-based treatments is that the best-supported and available practices in the field of children's mental health should be utilized (Chaffin & Friedrich, 2004).

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**Additional Resources**

**Substance Abuse and Mental Health Services Administration (SAMHSA)**

*National Registry of Evidence-based Programs and Practices*

<http://nrepp.samhsa.gov>

**Virginia Commission on Youth**

*Conference on Systems of Care and Evidence-based Treatments: Tools that Work for Youth and Families*

<http://coy.state.va.us>

# **K**EY COMPONENTS OF **SUCCESSFUL TREATMENT PROGRAMS**

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While studies have identified numerous strategies and techniques that are effective in the treatment of different mental health issues, a growing body of research shows that there are three guiding principles that should provide the foundation for any treatment program: integrated programming; engagement of families in treatment efforts; and culturally competent service delivery.

## **Integrated Programming – the “Systems” Approach**

Research continues to support the idea that the mental health needs of children and adolescents are best served within the context of a “system of care” in which multiple service providers work together in an organized, collaborative way. The system of care approach encourages agencies to provide services that are child-centered and family-focused, community-based, and culturally competent. The guiding principles also call for services to be integrated, with linkages between the child-serving agencies and programs that allow for collaborative planning, development, and implementation of services.

In order to assure continuity of treatment, communities must establish a framework, which ensures that a child can transition with ease from one service to another. The efficiency of these transitions is enhanced through the creation of effective individualized service plans. These plans, which are targeted to the child’s specific needs, identify problems, establish goals, and specify appropriate interventions and services.

Providers have found that a breakdown in the system of care is frequently encountered in the area of discharge planning. A discharge plan should be created whenever a child is transitioning from inpatient or residential treatment back into the community. These plans should be updated in consultation with the child’s family or guardian before the child is released from treatment. They should describe the therapy and services begun in the facility and recommend any necessary follow-up services, which should then be coordinated by a case manager. While frequently overlooked, discharge plans are a key component of a comprehensive system of care, as they help to ensure that the gains made in an inpatient or residential setting are continued once the child returns to the community.

Systems of care have been found to produce important system improvements. For example, studies have shown reductions in the use of residential and out-of-state placements, as well as improvements in functional behavior. Parents also appear to be more satisfied with services provided within systems of care than with more traditional service delivery systems. However, the effect of systems of care on costs remains uncertain, and there is little evidence to demonstrate that the system of care framework results in improved clinical outcomes when compared to services delivered within more traditional systems (U.S. Department of Health and Human Services, 1999).

As asserted by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, there must be agency collaboration at state and local levels (2004). This can be

achieved by promoting integration of services and establishing policies that require services providers to conduct a single comprehensive intake addressing the areas of mental health, mental retardation and substance abuse. Moreover, community partnerships can be strengthened or enhanced to improve the delivery of child and adolescent behavioral health services.

## **Screening and Assessment**

Comprehensive assessment, screening, and evaluation are necessary for children and adolescents experiencing a mental health crisis. Children should also be screened to identify potential delayed or atypical development, thus determining the appropriate level of assessment (Building Systems of Care, 2002). In addition to screening, assessment and evaluation collectively address the needs and services of the child and family (Building Systems of Care). A child or adolescent with emotional and/or behavior problems should be evaluated by a qualified mental health professional to determine whether a comprehensive psychiatric evaluation for serious emotional behavior problems is necessary (American Academy of Child & Adolescent Psychiatry [AACAP], 2005). Such a step will lead to accurate assessment and, if needed, appropriate, individualized treatment.

## **Individualized Care Planning**

Once screening and assessment have taken place, an individual care plan is needed to meet the distinct needs of the child. The goal is to plan and provide appropriate services to the child. Elements that must be acknowledged include building trust, engaging the family, and tailoring family supports (Building Systems of Care, 2002). Some of the components to be included in such a plan, as identified by Building Systems of Care, are:

- Background information and family assessment;
- Identifying information;
- Child development and behavior;
- Needs;
- Family functioning style;
- Social support network;
- Safety issues and risks;
- Goals;
- Sources of support and/or resources;
- Action plan; and
- Progress evaluation.

## **Engagement of Families in Treatment Efforts**

During the last two decades, service providers and researchers have increasingly come to realize the important role that families play in mental health treatment services for children. The child mental health system has responded by making families essential partners in the delivery of mental health services for children and adolescents (U.S. Department of Health and Human Services, 1999). For further discussion of the roles that families should play in treatment services, see “Role of the Family in Treatment Programs” in the *Collection*.

According to the President’s New Freedom Commission on Mental Health, local, state, and federal officials must engage families to participate in planning and evaluating treatment and support services (2003). The direct participation of consumers and families in developing a range of community-based, recovery-oriented treatment and support services is important. Consumers

and families with children with serious emotional disturbances have a key role in mental health care delivery by requesting a system that focuses on recovery and on the utilization of appropriate evidence-based treatments. Goal Two of the President's Commission specifies that mental health care be consumer and family driven. Consumers and families should be encouraged to become fully involved and to promote a recovery-based mental health system. Families can take part in this process by becoming educated about appropriate treatments for their child, as well as who is qualified to deliver these treatments. For more information about mental health providers' qualifications, please see the *Collection's* section entitled "General Description of Providers."

## **Culturally Competent Service Delivery**

Virginia's population of racial minorities grew from approximately 23 to 28% between 1990 and 2000 (U.S. Census Bureau, 2000). This growth in diversity has significant implications for service providers in the Commonwealth, as cultural factors are becoming increasingly important in the evaluation and treatment of mental disorders.

Culture has been found to influence many aspects of mental illness. Patients from specific cultures may express and manifest their symptoms in different ways, and may differ in their styles of coping, their family and community supports, and their willingness to seek and continue with treatment. Moreover, clinicians may also be influenced by their own cultural values, and this may affect diagnosis, treatment, and service delivery decisions (U.S. Department of Health and Human Services, 2001).

The following is attributed to Kumpfer and Alvarado (1998). Research has shown that tailoring interventions to the cultural traditions of the family improve outcome effectiveness. Culturally relevant values can be integrated to existing model programs for various ethnic groups. Such an approach can address the various nuances that cultures may exhibit, such as specific values and beliefs. Various cultural beliefs and modifications need to be incorporated into an organized, culturally sensitive treatment framework. Children may be reticent to share elements of their cultural orientation with persons they do not know. Cultural competency involves addressing the various folkways, mores, traditions, customs, rituals, dialects that are specific to each culture and ethnicity (Saldana, 2001). There is a tremendous amount of variability within and between each cultural group. These differences are described in Table 1.

Cultural differences may exacerbate the general problems of access to appropriate mental health services in the community. The mental health treatment setting relies significantly on language, communication, and trust between patients and providers. Therapeutic success may therefore hinge on the clinician's ability to understand a patient's identity, social supports, self-esteem, and perception of stigma. Consequently, mental health service providers must recognize underlying cultural influences so they can effectively address the mental health needs of each segment of the community (U.S. Department of Health and Human Services, 1999).

Culturally competent treatment programs are founded upon an awareness of and respect for the values, beliefs, traditions, customs, and parenting styles of all of the people served in the community. Providers are aware of the impact of their own culture on the therapeutic relationship with their clients, and therefore make sure that they consider these factors when planning and delivering the services for youth and their families. Furthermore, culturally competent programs ideally include multilingual, multicultural staff and provide extensive community outreach (Cross et al., 1989).



Table 1

### Addressing Cultural Variability

- Acculturation – This reflects the extent to which a person is familiar and proficient within U.S. mainstream culture.
- Poverty – There may be difference in resources, as well as in “resourceful behaviors” needed for survival. This may include awareness or compliance with traditional mental health interventions.
- Language – Differences exist in fluency in the client’s native language and in English, but also in dialect. Among various ethnicities, there exists many different language sub-groups.
- Transportation, Housing, & Childcare – A lack of available supports may interfere with access to treatment and adherence with provider expectations.
- Reading Ability/Educational Background – Individuals may vary substantially in academic experience and aptitude. This is true within ethnic subgroups, as well as between subgroups.
- Beliefs – People from diverse cultures vary in their beliefs about what is considered “illness,” what causes the illness, what should be done to address the illness and what the treatment outcome should be. The provider cannot assume the client’s views match their views.
- Physical Characteristics – People of color differ in their appearance even within ethnic groups.

Source: Saldana, 2001.

The services offered within a community should also reflect a respect for cultural diversity; for example, the inclusion of extended family members in treatment efforts should be incorporated within certain treatment approaches, when appropriate. It would also be beneficial for mental health agencies to display culturally relevant pictures and literature in order to show respect and increase consumer comfort with services. Furthermore, agencies should consider the holidays or work schedules of the consumers when scheduling office hours and meetings (Cross et al., 1989).

In addition, cultural differences other than ethnicity must be considered. For example, Americans living in rural areas display unique characteristics that present barriers to mental health care as well. Some individuals living in these areas do not seek care where there is a perceived stigma attached to mental health disorders and a lack of understanding about mental illnesses and their treatments, a lack of information about where to go for treatment, and an inability to pay for care. Furthermore, factors such as poverty, geographic isolation, and cultural differences may affect the amount and quality of mental health care available to these individuals. These issues are further complicated by the limited access to and availability of mental health specialists, such as psychiatrists, psychologists, psychiatric nurses and social workers in rural areas (NIMH, 2000).

It is important to consider the impact of culture on mental health service delivery. Specialized cultural programming has been found to promote service utilization for all ages, including children (Snowden & Hu, 1997). Furthermore, children and families enrolled in mental health programs that are linked to community culture have been found to be less likely to drop out of treatment than families in mainstream programs (Takeuchi et al., 1995). Cultural training and service planning serve as important components of the mental health delivery system.

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# REFERENCE CHART OF DISORDERS AND EVIDENCE-BASED TREATMENTS

## EVIDENCE-BASED CHILDREN'S MENTAL HEALTH Findings by Treatment Type<sup>1</sup>

| Disorders/Behavior  | Support for Treatment                            | Positive Effects Consistent Evidence   | Inconsistent Evidence Unproven  | Comments   |
|---------------------|--|--|---|--|
| ADHD                | Evidence-based Treatments & Promising Treatments | <i>Psychosocial</i><br>Behavioral Parent Training<br>Contingency Management<br>Biofeedback<br>Physical Exercise<br>Relaxation and Physical Exercise<br>Self-Verbalization<br><br><i>Pharmacological</i><br>Methylphenidate (MPH) | Dietary replacement, exclusion; various vitamin, mineral, or herbal regimens; biofeedback; and perceptual stimulation | Not necessary to select one treatment at the expense of the other.   |
| Adjustment Disorder | Promising Treatments                             | <i>Psychosocial</i><br>Interpersonal Psychotherapy<br>Cognitive Behavioral Therapy<br>Stress Management<br>Family Therapy<br>Group Therapy   |   | Medication is seldom used as a singular treatment for adjustment disorders because the child requires assistance in coping with the stressor causing the adjustment disorder. Some research suggests that SSRIs may help relieve depressive symptoms, especially in adolescents. |

<sup>1</sup> The information contained herein is strictly for informational purposes and is not intended to replace the advice and counsel of a medical professional.

| <b>Disorders/Behavior</b> | <b>Support for Treatment</b> | <b>Positive Effects Consistent Evidence</b>  | <b>Inconsistent Evidence Unproven</b>   | <b>Comments</b>  |
|---------------------------|------------------------------|--|---|--|
| Anxiety                   | Evidence-based Treatments    | <i>Psychosocial</i><br>Behavior & Cognitive Behavioral Therapy<br>Exposure therapy<br>Psychoeducation  | Play Therapy<br>Psychodynamic Therapy<br>Biofeedback<br>Antihistamines<br>Neuroleptics<br>Herbal Remedies | Educational support treatments have shown some promise. These approaches involve providing support and education about anxiety to parents and children with anxiety problems. There is also some support for the use of hypnosis in children with high levels of test-taking anxiety.            |
| Anorexia Nervosa          | Evidence-based Treatments    | <i>Psychosocial</i><br>Nutritional Rehabilitation<br>Family Psychotherapy<br>Inpatient Behavioral Programs<br><br><i>Pharmacological Treatments</i><br>SSRIs   | Individual Psychotherapy<br>Group Therapy<br>12 Step Programs<br>Somatic Treatments                       | It is important to note that many patients display a limited response to treatment and will require long-term monitoring and intervention. Treatment occurs in three phases: restoring the weight lost; treating psychological and interpersonal issues; and achieving long-term, full recovery. |
| Binge Eating Disorder     | Promising                    | Effective treatments are those which disrupt the binge-eating cycle and establish a structured pattern of eating to allow the patient to experience less hunger, deprivation, and negative feelings about food and eating. |   | Treatment goals and strategies for binge eating disorder are similar to those for bulimia nervosa except patients with binge eating disorder may present difficulties associated with being overweight, rather than being malnourished.  |

| <b>Disorders/Behavior</b> | <b>Support for Treatment</b> | <b>Positive Effects Consistent Evidence</b>   | <b>Inconsistent Evidence Unproven</b>   | <b>Comments</b>  |
|---------------------------|------------------------------|---|---|--|
| Bipolar Disorders         | Evidence-based Treatments    | <i>Psychosocial</i><br>No consistent studies on psychosocial treatments with children<br><br><i>Pharmacological Treatments</i><br>Lithium     | Electroconvulsive therapy (no research with children)   | Some evidence supporting the use of lithium in the acute phase. No evidence for or against the use of electroconvulsive therapy. Treatment planning should include pharmacologic, social, vocational, academic, and interpersonal components.        |
| Bulimia Nervosa           | Evidence-based Treatments    | <i>Psychosocial</i><br>Cognitive Behavioral Therapy<br>Combined Treatments<br>Group Therapy<br><br><i>Pharmacological Treatments</i><br>SSRIs | Bupropion<br>Monoamine Oxidase Inhibitors (MAOIs)<br>Individual Therapy<br>Behavioral Therapy<br>12-Step Programs | Treatment includes treatment of co-occurring disorders, establishment of regular, non-binge meals, and improvement of attitudes related to the disorder.   |
| Firesetting               | Promising Treatments         | <i>Psychosocial</i><br>Cognitive Behavioral Therapy<br>Fire Safety Education  |   | Leaving the child untreated is not beneficial, as the child usually does not outgrow this behavior. There is a strong link between neglect and abuse and firesetting, so placing a child in a safe, supervised family setting can be very effective. |
| Mental Retardation        | Evidence-based Treatments    | <i>Psychosocial</i><br>Individual Therapy<br>Family Therapy<br>Social Skills Training<br>Cognitive Therapy                                    |   | Treatment is tailored for co-occurring disorders and is based on two guiding principles: normalization and community-based care.   |

| Disorders/Behavior  | Support for Treatment     | Positive Effects Consistent Evidence  | Inconsistent Evidence Unproven  | Comments   |
|---|---------------------------|---|---|--|
| Oppositional Defiant & Conduct Disorder                           | Evidence-based Treatments | <p><i>Psycho-social</i></p> <ul style="list-style-type: none"> <li>Parent training based on <i>Living with Children</i></li> <li>Videotape Modeling Parent Training</li> <li>Multisystemic Therapy</li> <li>Anger Coping Therapy</li> <li>Assertiveness Training</li> <li>Delinquency Prevention Program</li> <li>Rational Emotive Therapy</li> </ul>   | <ul style="list-style-type: none"> <li>Boot camps</li> <li>Psychiatric hospitalization</li> <li>Medication trials</li> <li>Brief courses of Cognitive-Behavioral Therapy</li> </ul> | <p>Interventions are usually performed in school or home. Various treatment modalities are utilized for treating these disorders, as well as the comorbid disorders accompanying ODD and CD. Medications must only be prescribed in conjunction with psychological interventions, such as parent training and to help with co-occurring mental health disorders.</p> |
| Pervasive Developmental Disorders (Autism & Asperger's Disorders) | Promising Treatments      | <p><i>Behavior Intervention</i></p> <ul style="list-style-type: none"> <li>Educational and Communication-focused Interventions</li> <li>TEACCH (Treatment and Education of Autistic and related Communication handicapped Children)</li> <li>Natural Language Methods</li> <li>(PECS) Picture Exchange Communication System</li> <li>Behavior Intervention</li> <li>Joint attention behavior training</li> <li>Occupational Therapy</li> <li>Sensory Integration Therapy</li> </ul> <p><i>Pharmacological Treatments</i></p> <ul style="list-style-type: none"> <li>Antipsychotics</li> <li>Psychostimulants</li> </ul> |   | <p>Studies show that children with autism respond well to a highly structured, specialized education program. Components of such a program may include communication therapy, social skill development, sensory integration therapy and applied behavior analysis.</p>   |

| <b>Disorders/Behavior</b>                   | <b>Support for Treatment</b> | <b>Positive Effects Consistent Evidence</b>   | <b>Inconsistent Evidence Unproven</b>                | <b>Comments</b>   |
|---|------------------------------|---|--|---|
| Reactive Attachment Disorder<br>Self Injury | Promising Treatments         | <i>Psychosocial</i><br>Cognitive Behavioral Therapy<br>Behavior Modification Addictions Model<br><br><i>Pharmacological Treatments</i><br>SSRIs   | Rebirthing techniques<br>Compression holding therapy | The prevalence of RAD is very rare and its cause is unknown.<br><br>Research continuing on psychosocial interventions and medications. Hospitalization used as last resort.   |
| Sex Offending                               | Promising Treatments         | <i>Psychosocial</i><br>Multisystemic Therapy<br>Residential Sex Offender Treatment  |  | Promising sex offender treatment programs often combine an intensive, multi-modal approach with early intervention.<br>Comprehensive cognitive-behavior programs often focus on taking responsibility for one's sexual behavior, developing victim empathy, and developing skills to prevent future offending.<br>Approaches to the treatment of juvenile sex offenders can vary. |
| Substance Abuse                             | Evidence-based Treatments    | <i>Psychosocial</i><br><ul style="list-style-type: none"> <li>▪ Cognitive Behavioral Therapy</li> <li>▪ Group Therapy</li> <li>▪ Behavioral Therapies</li> <li>▪ Skills Development</li> <li>▪ Family Therapy</li> <li>▪ Multisystemic Therapy</li> <li>▪ Individual Psychotherapy</li> <li>▪ Medical Detoxification</li> </ul> |  | The use of medication should be pursued only as a last resort in the dually-diagnosed population, given the potential for misuse and overdose. Benzodiazepines are usually contraindicated in the presence of a substance abuse disorder due to their addictive properties.   |

| <b>Disorders/Behavior</b> | <b>Support for Treatment</b>                     | <b>Positive Effects Consistent Evidence</b>  | <b>Inconsistent Evidence Unproven</b>  | <b>Comments</b>   |
|---------------------------|--|--|--|---|
| Tourette's Disorder       | Evidence-based Treatments & Promising Treatments | <i>Psychosocial</i><br>Habit Covariance<br>Habit Reversal<br>Cognitive Behavioral Therapy<br><br><i>Pharmacological Treatments</i><br>Neuroleptics | Plasma exchange or intravenous immunoglobulin (IVIG)<br>Contingency Management<br>Deep Brain Stimulation | When tics interfere with functioning and/or there are other disorders present, medication may be helpful. |

## **EVIDENCE-BASED CHILDREN'S MENTAL HEALTH Findings by Service Setting**

| <b>Disorders</b>                             | <b>Support for Treatment</b> | <b>Positive Effects Consistent Evidence</b>  | <b>Inconsistent Evidence Unproven</b> | <b>Comments</b>  |
|--|------------------------------|--|---------------------------------------|--|
| Juvenile Justice – Multi Modal Interventions | Evidence-based Treatments    | Multisystemic Therapy (MST)<br>Wraparound<br>Integrated Systems of Care<br>Functional Family Therapy<br>Cognitive Behavioral Therapy<br>Multidimensional Treatment Foster Care |                                       | MST is the most effective treatment for delinquent adolescents and MST shares strengths with other systemic family approaches. |



| <b>Disorders</b>             | <b>Support for Treatment</b> | <b>Positive Effects</b>  | <b>Inconsistent Evidence</b> | <b>Comments</b>   |
|------------------------------|------------------------------|--|------------------------------|---|
| School Setting Interventions | Promising Approaches         | <p>Integration of mental health professionals into the school environment</p> <p>Creation of a “System of Care” within the school environment</p> <p>Engagement of families in educational planning and services</p> <p>Consistent program implementation</p> <p>Other environmental and community factors</p> |                              | <p>Classroom contingency management methods are effective in controlling the behavior of children with conduct problems.</p> <p>Parent- administered reinforcements enhance classroom contingency management.</p> |

# MENTAL RETARDATION

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## **Introduction**

Mental retardation is not a single, isolated disorder. It is a term used to describe a condition affecting individuals who are limited in mental functioning to a level that affects many aspects of life, including basic skills such as communicating, taking care of personal needs, and social interaction. The national prevalence rate for mental retardation has been cited at 1.1% (Kerker, as cited by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, 2003). Mental retardation is approximately 1.5 times more common in boys than in girls (Silka & Hauser, 1997).

The following information is specific to Virginia and was obtained from the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS). According to Shirley G. Ricks, Director of DMHMRSAS' Office of Child and Family Services, national prevalence estimates applied to 2000 Census Data for Virginia indicate that 1.2% of Virginia's population (or 11.8 cases per 1,000) have mental retardation (Personal Communication, July 19, 2005). Based on the prevalence rate, it is projected that 14,166 children in the Commonwealth have mental retardation. The Virginia Department of Education data indicates that there are 13,975 children between the ages of 3-22 with mental retardation being served by the school system. In 2004, data from Virginia's community services boards indicated that 10,973 children between the ages of 0 to 17 having a diagnosis of mental retardation were being served (Personal Communication, July 19, 2005).

Mental retardation originates before the age of 18 (DMHMRSAS, 2003). The first signs of mental retardation are usually displayed in early childhood, often within the first or second year of a child's life. The child tends to lag behind his peers in milestones such as sitting up, walking, and talking. He also demonstrates lower than normal levels of interest in his environment and responsiveness to others (*Gale Encyclopedia of Childhood and Adolescence*, 1998). The existence of limitations in adaptive skills occurs within the context of community environments, typical of the child's age and is based on individualized needs for supports (DMHMRSAS). It is important that parents, pediatricians, and service providers are familiar with and recognize these signs, as early

intervention serves as a crucial component to ensure that the development and quality of life of these children are maximized.

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*, published by the American Psychiatric Association, provides the standard criteria for a diagnosis of mental retardation which are used in the diagnosis of children, as well as adults. The disorder is characterized by “significantly subaverage intellectual functioning” which must be supported by three factors: intellectual impairment, significant difficulty in adaptive functioning, and onset before the age of 18 (American Psychiatric Association, 1994).

The first required element of the diagnosis—intellectual impairment—is typically measured by cognitive testing instruments. Normal intelligence (IQ) measurements on standardized, individually administered tests, such as the Wechsler Intelligence Scale or the Stanford-Binet test, generally fall between 80 and 135 and, for this diagnosis, the child must have an IQ that falls below 70 or 75 (Szymanski & King, 1999). The threshold for mental retardation is typically set at 70, and experts generally agree that scores of 71 to 75 are consistent with mental retardation only when significant deficits in adaptive behavior are present (Szymanski & King). Normal IQ measurements on these tests generally fall between 80 and 135.

In addition, all children receiving the diagnosis must also demonstrate significant impairment in two or more of the following adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work (American Psychiatric Association, 1994). There are standardized scales to measure these behaviors, but they often do not capture all of the functional domains, and therefore this element of diagnosis is typically measured after a clinical assessment of the child (Szymanski & King, 1999).

A diagnosis of mental retardation has been further classified based on the child’s level of impairment. Table 1 outlines *DSM-IV*’s degrees of severity of mental retardation.

Table 5

**Degrees of Severity of Mental Retardation**

|                             |                                    |
|-----------------------------|------------------------------------|
| Mild mental retardation     | IQ level 50-55 to approximately 70 |
| Moderate mental retardation | IQ level 35-40 to 50-55            |
| Severe mental retardation   | IQ level 20-25 to 35-40            |
| Profound mental retardation | IQ level below 20-25               |

Source: *DSM-IV, 2000*.

The *DSM-IV* also stipulates that the onset of symptoms occurs prior to the age of 18. It is important to note, however, that experts warn that children under age two should not be given a diagnosis of mental retardation unless the deficits are relatively severe and/or the child has a condition that is highly correlated with mental retardation, such as Down syndrome. Instead, service providers should acknowledge the cognitive or behavioral deficit as a form of developmental disability and leave room for further diagnosis as the child gets older (Biasini et al., in press; Sattler, 1992).

In recent years, there has been an effort to replace the term “mental retardation” with “intellectual disability” (American Association on Intellectual and Developmental Disabilities, 2007). Both the Centers for Disease Control and the American Association on Mental Retardation have adopted the term (American Association on Intellectual and Developmental Disabilities). In addition, the President’s Committee on Mental Retardation has adopted the change in renaming the committee the President’s Committee for People with Intellectual Disabilities [PCPID] (President’s Committee for People with Intellectual Disabilities, 2007). However, the term “mental retardation” continues to be used in the *DSM-IV* (American Psychiatric Association, 1994). In Virginia, the agency responsible for serving this population, the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) continues to use the term “mental retardation”. Furthermore, some readers may not be aware of the term “intellectual disability”. For the purposes of this Collection, “mental retardation” is used.

## **Causes and Risk Factors**

There are numerous causes of mental retardation. Those most frequently cited include external factors, such as infections, trauma, toxins, premature births, and delivery problems. Down syndrome, Fragile X syndrome and fetal alcohol syndrome (FAS) together are responsible for 30% of all identified cases (Jellinek, Patel, & Froehle, 2002). An estimated 300 genes are believed to play a role in mental retardation, while only 11 genes responsible for mental retardation are not associated with named syndromes, e.g., Down syndrome (Kingman, 2002). In about a third of people with mental retardation, no cause for that retardation has been found (*Dallas Morning News*, 2002).

A deficiency of a key protein called WAVE-I, found throughout the brain, may correlate with one form of mental retardation (Pain & Central Nervous System Week, 2003). Findings from the study cited indicate that mental retardation involves many more areas of the brain than previously determined (Pain & Central Nervous System Week).

It is important for the causes of retardation to be identified, if possible, in order to clarify the prognosis and tailor treatment efforts (Szymanski & King, 1999). Furthermore, the identification of causation may be valuable in alerting the clinician to possible medical and behavioral complications that occur more frequently in certain conditions (Szymanski & King). However, research has shown that in 58 to 78% of the cases of mild retardation and in 23 to 43% of severe cases, no official cause has been determined (Szymanski & King). The milder the mental retardation, the more difficult it is to identify the etiology (Jellinek, Patel, & Froehle, 2002).

A multidisciplinary team that may include psychologists, psychiatrists, pediatricians, and clinical geneticists typically conducts the assessment for mental retardation. All assessments should be comprehensive and should include standardized intelligence testing, evaluation of adaptive skills through testing or clinical evaluation, biomedical and family history evaluation, and psychological and behavioral testing (Szymanski & King, 1999).

## **Comorbidity**

Individuals who receive a diagnosis of mental retardation frequently suffer from additional mental disorders (Masi, 1998). Clinicians and researchers have explained this high prevalence of co-morbidity as the result of the psychological vulnerability of children with mental retardation. This can have a significant impact on a child’s coping skills and mental health, and it may be one of

the primary factors limiting the functioning, quality of life, and adaptation of mental retardation to community life (Masi).

The prevalence of mental illnesses in children with mental retardation ranges from 27 to 71% (Bregman, 1991). There is a substantial range of variation in the prevalence rates found in prior studies due to differences in methodology, diagnostic definitions, and population sampling strategies among the different studies. Frequently, the symptoms of mental retardation may disguise the symptoms of any co-occurring disorders (Rifkin, 2004). The most common comorbid conditions are described in more detail in the following paragraphs:

- *General Medical Conditions* – Seizure disorders are present in 15 to 30% of individuals with severe or greater mental retardation, and motor handicaps (20 to 30%) and sensory impairments (10 to 20%) are also frequently reported (Szymanski & King, 1999).
- *Pervasive Developmental Disorders* – Mental retardation is extremely common in children with pervasive developmental disorders. Approximately 75% of autistic children are also diagnosed with mental retardation (Fombonne, 1997). However, a reciprocal relationship has not been reported; the majority of children with mental retardation do not display significant impairments in reciprocal social interaction that are typically present in pervasive developmental disorders such as autism.
- *Attention Deficit Disorders (ADD and ADHD)* – The incidence of Attention Deficit Disorder (ADD) is more frequent in persons with mental retardation (18%) than in the general population (9%) (*DSM-IV*). Attention Deficit Hyperactivity Disorder (ADHD) is also particularly frequent, with a range of 4 to 11% of persons with mental retardation affected by this disorder (Feinstein & Reiss, 1996). Experts have attributed the frequency of these diagnoses in the mentally retarded to the fact that inattention is often a component of intellectual impairment.
- *Conduct Disorders* – It has been reported that approximately one third of children and adolescents with mental retardation display the characteristics of conduct disorder (Richardson et al., 1985). However, experts caution that it is important to consider the child's circumstances, ability to understand social rules, and possession of sufficient skills to communicate opposition when proposing such a diagnosis (Szymanski & King, 1999).
- *Behavior Disorders* – Children with greater degrees of mental retardation have been found to display increased aggressiveness, feeding disorders, stereotyped movements and self-injurious behavior (Masi, 1998). Self-injurious behavior is particularly common, with approximately 10 to 15% of persons with mental retardation displaying these characteristics (Oliver et al., 1987). The tendency to self injury is particularly common in certain mental retardation syndromes, such as Lesch-Nyhan, Prader-Willi, as well as in patients with mental retardation who experience mood disorders (depressive and manic), schizophrenia, personality disorders, and anxiety disorders (especially obsessive-compulsive disorder) (Masi).
- *Mood Disorders* – Mood disorders, especially of the depressive nature, are quite common in persons having mental retardation and are believed to be significantly underdiagnosed (Szymanski & King, 1999). Social isolation, stigmatization, and poor social skills put children with mental retardation at increased risk for depression (Reiss & Benson, 1985). The symptoms are often triggered by external stressful events, but ordinary life changes can also be responsible (Masi, 1998). Bipolar mood disorders are also present in the mentally retarded, but are more difficult to recognize. They have been found to involve dysphoria coupled with periods of irritability, aggressiveness, or self-injury, rather than the more typical manic episode (Masi).

- *Anxiety Disorders* – While it is likely that these disorders are highly prevalent in persons with mental retardation, they are believed to be underreported due to the difficulty diagnosing persons of limited intelligence (Masi, 1998). Research indicates that the most frequent manifestations of anxiety disorders in this population include acute episodes of anger, flight, and crying or compulsions (repetitive, ritualistic behaviors) (Masi). Clinicians have found that psychosocial stress factors, including fragile self-esteem, fears of failing, and loss of caregivers are likely contributors to the psychological difficulties of this population (Szymanski & King, 1999).
- *Posttraumatic Stress Disorder (PTSD)* – PTSD is also believed to be significantly underdiagnosed in this population (Szymanski & King, 1999). Children with mental retardation are particularly vulnerable to abuse, given their high level of dependency and their tendency to want to please others, as well as lack of understanding of their rights. They may also be targeted because of their lack of communication skills, which may prevent reporting.
- *Schizophrenia* – The incidence of schizophrenic disorders has been found to be higher in children diagnosed with mental retardation than in the general population (Heaton-Ward, 1977). All forms of psychotic disorders have been identified in mentally retarded persons (Masi, 1998).

The diagnostic evaluation for psychiatric disorders is principally the same for patients with mental retardation, child and adult, as it is in the general population (Szymanski & King, 1999). It is important to recognize, however, that the psychiatric diagnostic assessment of children with mental retardation must be comprehensive and consider biological, psychological, and social contexts, rather than being merely a “medication evaluation” focused only on the choice of drug to suppress a disruptive behavior. Furthermore, any additional mental health diagnosis should be formal and specific, rather than a nonspecific description of “behavior disorder” or “challenging behavior.” It is important that the child’s assessment and resulting diagnosis demonstrate that he is ill, rather than merely “bad” or “noncompliant.”

There are certain specific limitations that affect the reliability of the dual diagnosis in children and adolescents with mental retardation. First of all, the level of communication skills that the child or adolescent exhibits is strongly related to the reliability of the diagnosis (Szymanski & King, 1999). Individuals with more severe cognitive limitations are less likely to be given a dual diagnosis than children with lower levels of impairment due to their inability to communicate their symptoms and distress (Borthwick-Duffy & Eyman, 1990). Evaluation of significantly impaired children requires the mental health assessor to depend on information provided by caregivers familiar with the child and on direct behavioral observations, which tend to be less informative and reliable.

The reliability of the diagnosis is also highly reliant on the availability of information regarding the biological, psychological, and social history of the child or adolescent (Biasini et al., 1999). The child’s history of behavior and symptoms are often crucial in making a diagnosis and, in the absence of this information, the evaluator is placed in the difficult position of making a diagnosis strictly on current symptoms and behavior without being fully informed of a child’s treatment history. This information is particularly crucial in the evaluation of children with profound and severe mental retardation. Many psychologists and psychiatrists rely heavily on biological markers, observable signs, and patterns of family psychopathology to diagnose these severely impaired children (Sturme, 1995).

The strength and accuracy of a diagnosis are also directly affected by the experience and training of the clinician conducting the evaluation (Szymanski & King, 1999). It is crucial that the assessment be conducted by an individual specially trained in the evaluation and treatment of children with mental retardation. Furthermore, clinicians must recognize that there are often mismatches between the behaviors scripted in the *DSM-IV* for certain diagnoses and the symptoms presented in children with mental retardation (Biasini et al., 1999). These differences can lead to under-diagnosis; therefore, evaluators must be comprehensive in their approach and think outside the usual formulas when diagnosing children with mental retardation (Sturmey, 1995).

## **Treatments**

The treatment of children with mental retardation is based on two guiding principles: normalization and community-based care (Szymanski & King, 1999). Normalization requires that children with mental retardation live under patterns and conditions of everyday life that are as close as possible to mainstream society. This is based on the premise that the life functioning of a child or adolescent with mental retardation will improve if they have adequate supports (Jellinek, Patel, & Froehle, 2002). The concept of community-based care flows directly from this principle, calling for the treatment and integration of children with mental retardation within the community to the maximum extent possible. No more than 10% of persons with mental retardation in this country have ever lived in institutional settings, and most can be found either living with their families or in community-based out-of-home placements such as foster care, group homes, and independent living programs (Szymanski & King). Service providers have found that, with proper services, the majority of children with mental retardation do well in the community. With appropriate personalized supports over a sustained period, the life functioning of the child with mental retardation generally will improve; however, mental retardation is a life-long disability (Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, 2003).

The primary goal of service providers specializing in mental retardation is prevention, as there is no cure for the condition once the damage has occurred (Szymanski & King, 1999). Whenever possible, providers hope to prevent conditions that may result in mental retardation in children by educating women and families about the benefits of abstinence from alcohol during pregnancy and frequent child immunizations. Moreover, if an underlying condition that may lead to mental retardation has been identified in a child, providers focus on the treatment of that specific disorder in order to minimize potential brain injuries that could increase the risk of mental impairment. However, once a child has been diagnosed with mental retardation, providers begin to pursue early intervention, education, and ancillary treatments, such as physical, occupational, and language therapies (Szymanski & King, 1999). In addition, family support and other services are typically put into place to ensure that the child is receiving comprehensive care in the home, school, and community.

The methods and intensity of treatment are adapted as the child progresses in age. In infants, exercises and special types of play are used to provide sensory and motor stimulation and enhance development (Gale Research, 1998). All states are required by law to offer children with mental retardation early intervention programs from the time they are born. Once the child reaches the age of three, federal law requires that special education programs be made available for the child and family. These services concentrate on self-care, such as feeding, dressing, and toilet training, and also provide assistance with language and communication difficulties and physical difficulties. As the child gets older, the emphasis on special education programs changes to training in daily living skills, as well as academic subjects. Treatment efforts will also include medical care for any

comorbid physical conditions, such as seizure disorders, motor handicaps, and sensory impairments, as well as treatment of any psychosocial dysfunction and comorbid mental disorders.

Several factors may influence the choice of treatment methods in children with mental retardation. First, the child's level of cognitive and communication skills may cause a service provider to adapt the method of treatment. For example, a child who lacks communication skills would be unable to benefit from verbally based treatments such as psychotherapy; consequently, behavioral modification and educational accommodations would be more effective. Another consideration is the impact of any concurrent general medical disorders. An effective treatment plan requires that the service provider recognize the child's physical limitations and synthesize physical, developmental, and psychological needs and interventions (Szymanski & King, 1999).

Furthermore, the site of treatment may impact the methodology used. In most cases, outpatient settings are appropriate if the necessary services can be secured in the community. However, providers must be more cautious when placing children with mental retardation in inpatient treatment facilities. Clinicians have reported that not all of these facilities are familiar with needs of children with mental retardation and many are not equipped to provide these children with appropriate therapy, habilitative or recreational programs, and other necessary services (Szymanski & King, 1999). Consequently, placements must be carefully made after the provider has gained a wealth of knowledge regarding the services offered and the methods used by the facility.

An additional factor that can have a significant impact on treatment efforts is the willingness of the child and family members to participate and comply with the therapeutic plan. Education and ongoing support are essential, and detailed explanations must be given to family members to ensure that they understand all of the behavioral and pharmacological interventions that are being used to treat the child.

### ***Developmental and Educational Services***

All states are required by law to offer early intervention programs for children with mental retardation from the time they are born. Infant/toddler services can be home-based, center-based, or some combination of these two methods. The nature of the services is determined based on an assessment of the child and the family priorities. Under federal law, these considerations must be used to develop an Individual Family Service Plan (IFSP) for the child, which should include input from all parties participating in the intervention. This plan is usually developed and coordinated by a case manager who is available and acceptable to the family. The services that are provided in response to this plan may include assistive technology, intervention for sensory impairments, family counseling, parent training, health services, language services, nursing intervention, nutrition counseling, occupational therapy, physical therapy, case management, and transportation to services (Biasini et al., 1999).

As the child gets older, psychoeducational services must be provided. The Individuals with Disabilities in Education Act (IDEA) (Public Law 94-142, Public Law 99-457, and Public Law 102-119) requires that children with mental retardation or related developmental disorders receive a free and appropriate education. Interventions are based on the needs of the child as determined by a team of professionals. These interventions should address the priorities and concerns of the family and should be provided in the least restrictive and most inclusive setting, allowing them to have every opportunity to interact with nondisabled peers and to have access to the community resources available to all other children.



The services provided to preschool children and school-aged children can be home-based, but are more frequently center-based. As in the case of infants and toddlers, an Individualized Education Program (IEP) is developed through team evaluation and parental input. This plan describes the objectives for improving the child's skills and may include family or parent-focused activities. It may include special education services, child counseling, occupational therapy, physical therapy, language therapy, recreational activities, school health services, transportation services, and parent training or counseling. These services must also be provided in the least restrictive setting possible, such as a regular preschool program, Head Start Center, or the child's home (Biasini et al.).

### ***Treatment of Comorbid Conditions***

The general principles of treatment are the same as those for children with other mental disorders. However, treatment techniques may need to be modified in order to adapt to the individual's developmental level, particularly regarding communication skills.

Two elements significantly affect the effectiveness of psychotherapy in children with mental retardation. First, the child must exhibit a sufficient level of communication skills in order for this type of therapy to be appropriate. Second, in order to maximize results, treatment must be implemented across settings (classroom, home, and other environments); and the therapist must collaborate with the other interested parties in the child's life, such as teachers, family members, and other service providers (Szymanski & King, 1999).

The most effective forms of psychotherapy are:

- *Individual therapy* – This type of intervention has been found to be beneficial for children with mental retardation with higher cognitive skills (Harris, 1995). It is best conducted by a therapist specifically trained in developmental disorders. Techniques and activities should be adapted to the child's chronological age and level of development (Szymanski & King, 1999).
- *Family therapy* – Research supports the benefits of family therapy for children with mental retardation (Harris, 1995). It typically focuses on the caregiver's identification and support of the child's strengths and independence, and the provision of opportunities for success. It may also include educational and emotional support components. The family should be seen as treatment team members, as they are essential to recognizing the child's strengths, avoiding guilt feelings and overprotection, supporting the child's pathways to independence, and providing opportunities for success. This form of therapy has also been found to be beneficial in assisting in locating resources, identifying entitlement for services and providing advocacy, empathy, and concrete advice in management of the child's disability (Szymanski & King, 1999).
- *Group therapy* – Therapeutic efforts in a group environment have been found to be particularly useful with adolescents who have relatively good verbal skills, as they often benefit from peer interaction and support (Szymanski & King, 1999; Harris, 1995). Multiple family group therapy has also been found to be beneficial, as it provides the family and child with support in a context similar to society at large (Szymanski & Kiernan, 1983).
- *Behavior modification* – Behavioral modification has been reported to be beneficial to children with mental retardation that lack social skills or demonstrate problem behaviors such as self-injury (Reiss, 1994). This intervention provides a consistent and structured framework for teaching appropriate behavioral patterns, as well as adaptive life skills. It

- *Social skills training* – Social skills training has also been found to improve the integration of children with mental retardation into the community (Hollins et al., 1994). Those who receive social skills training are taught effective social interactions and appropriate social behavior.
- *Cognitive therapy* – This form of therapy teaches children with mild retardation to recognize situations in which they get into trouble and to adopt alternative behaviors and solutions. It has only recently been adapted for use with children with mental retardation, and therefore research regarding its effectiveness is limited (Benson, 1992). The therapeutic goal would be to develop more reasonable goals, with care taken not to set goals that are beyond the patient’s cognitive ability (Rifkin, 2004).

### ***Pharmacological Treatment***

The effects of medication on children with mental retardation are not generally different from those on the general population (Szymanski & King, 1999). However, certain issues related to pharmacology have been recognized exclusively in the mentally retarded population. For example, clinicians have found that medication is often prescribed to children with mental retardation for symptom suppression without being integrated into the overall treatment plan (Szymanski & King). The literature repeatedly advises that medication should not be used for the convenience of caregivers or as a substitute for appropriate services. An additional concern is that follow-up behavioral data is infrequently collected and providers often fail to monitor for side effects. This is especially important in mentally retarded populations, because these patients may be unable to report symptoms adequately.

While psychotropic drugs are not often used with children with mental retardation, they are most often prescribed in patients who exhibit disruptive behavior, including self-injury, stereotyped behaviors, e.g., hand or finger twisting, or complex whole body movements, and aggression (Szymanski & King, 1999). Recent research suggests that atypical antipsychotics may be a better first choice than typical antipsychotics because of the lowered risk of side effects (Rifkin, 2004). This must be considered in light of the fact that there are no studies that address the use of antipsychotics in patients who are aggressive and psychotic (Rifkin). It is important to note that no professional body has published drug guidelines for patients with mental retardation, thus thorough psychosocial assessment and treatment are important in the treatment of patients with mental retardation whether or not they receive drug treatment (Rifkin). Moreover, medications should be prescribed as they would be for the general psychiatric population, with special attention being paid to possible behavioral effects (Silka & Hauser, 1997).

### ***Discharge Planning***

As indicated by Silka & Hauser, appropriate discharge planning is crucial for children that may be placed in acute or short-term inpatient treatment (1997). Effective discharge planning strengthens the supports provided by an existing placement as it facilitates continued psychiatric care. Ideally, discharge planning, including plans for outpatient follow-up and the provision of any additional services, should commence early in the process. Early and continual contact with all

community supports, from family to outpatient therapists, is imperative. Silka & Hauser outline questions to be addressed by the treatment team:

- Who is responsible for which service (case manager, family, agency, client, and others)?
- What is expected from this hospitalization?
- What are the minimal discharge criteria?

## **Unproven Treatments**

The effectiveness of diet restrictions in mentally retarded patients is generally not supported by research (Szymanski & King, 1999). This type of treatment includes vitamin and mineral supplements and various dietary restrictions, such as yeast and gluten-free regimens.

## **Other Important Treatment Elements**

### ***Cultural Considerations***

Any assessment of adaptive behavior focuses on how well children can function and maintain themselves independently and how well they meet the personal and social demands imposed on them by their cultures. Because various cultures may hold their own views regarding the level of functioning/skills expected of children of certain ages, clinicians must be culturally sensitive in diagnosing children with developmental delays and retardation. In addition, the sociocultural background and native language of the child should be considered in assessing intelligence and level of impairment (Szymanski & King, 1999).

### ***Family Involvement***

Service providers must make every effort to include the family in all aspects of treatment and planning. They must consider the level of knowledge and understanding of the family regarding the disability of the child, and must also be sure that the family is sufficiently informed of all service and treatment options. If professionals fail to acknowledge parents as partners in the process, they run the risk of alienating them in the process. This can result in a lack of interest or participation in necessary services. Thus, the knowledge and expertise families already possess about their child and their child's syndrome should be valued (Hodapp, DesJardin, & Ricci, 2003). Families of children with less common genetic syndromes become the experts on their child's disorder, frequently being the only ones with experience or knowledge of a particular syndrome (Fidler & Hatton, as cited by Hodapp, DesJardin & Ricci).

### ***Availability of Community Services and Supports***

The Arc, a non-profit organization which supports persons with mental retardation, has reported that approximately 200,000 individuals nationwide are on waiting lists for such essential supports and services as service coordination, housing, employment, in-home supports, early intervention, transportation, and respite care (The Arc, 1999). A report by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) shows that service availability for children with mental retardation is also a serious concern in Virginia. In its 2001 Comprehensive State Plan, the DMHMRSAS reported that 1,858 children and adolescents were on the waiting list for mental retardation services.

Research indicates that lack of services can exacerbate the problems of children with mental retardation, as it may allow for an increase in the severity of the disability or learning delays (The Arc, 1999). Furthermore, lack of services may also lead to greater dependence, isolation, and a decrease in self-esteem and productivity. Consequently, providers and policy makers must make

every effort to identify these children and provide them with necessary services to ensure that they become productive members of society.

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### **Organizations/Weblinks - National**

#### **American Association of Intellectual and Development Disabilities** (formerly American Association on Mental Retardation)

4444 North Capitol Street, NW. Suite 846 - Washington, DC 22001-1512  
800-424-4688  
<http://www.aaidd.org>

#### **Council for Exceptional Children**

Division on Developmental Disabilities  
1110 North Glebe Road, Suite 300 - Arlington, VA 22201-5704  
703-620-3660, 866-915-5000 (TTY), 888-232-7733  
E-mail: [cec@cec.sped.org](mailto:cec@cec.sped.org)  
<http://www.ddcecec.org>

#### **National Down Syndrome Society (NDSS)**

666 Broadway, Eighth Floor - New York, NY 10012-2317  
212-460-9330; 800- 221-4602  
<http://www.ndss.org>

#### **National Fragile X Foundation**

P.O. Box 190488 - San Francisco, CA 94119  
800-688-8765  
<http://www.fragilex.org>

#### **National Organization on Fetal Alcohol Syndrome**

900 17th Street, NW, Suite 910 - Washington, DC 20006  
202-785-4585 or 800-66NOFAS (666-6327)  
E-mail: [info@nofas.org](mailto:info@nofas.org)

#### **National Information Center for Children and Youth with Disabilities (NICHCY)**

P.O. Box 1492 - Washington, DC 20013  
800-695-0285 (Voice/TTY)  
E-mail: [NICHCY@aed.org](mailto:NICHCY@aed.org)  
<http://www.nichcy.org>

### **Special Education Resources**

<http://www.specialednet.com/Resources.htm>

### **The Arc of the United States** (formerly Association for Retarded Citizens)

1010 Wayne Avenue, Suite 650 - Silver Spring, MD 20910

301-565-3842

<http://www.thearc.org>.

### **U.S. Department of Education**

U.S. Office of Special Education and Rehabilitative Services

400 Maryland Ave., S.W. - Washington, DC 20202-7100

202-245-7468

<http://www.ed.gov/about/offices/list/osers/index.html>

IDEA 1997 Statute on Implementing Regulations

202-205-5465 or 202-205-5507

<http://www.ed.gov/offices/OSERS/IDEA>

### **U.S. Department of Health and Human Services**

Administration for Children and Families

Administration on Developmental Disabilities

Mail Stop HHH 300-F - 370 L'Enfant Promenade, SW - Washington, DC 20447

202-690-6590

<http://www.acf.dhhs.gov/programs/add>

### **Virginia Resources**

#### **Partnership for People with Disabilities at Virginia Commonwealth University**

700 East Franklin Street, 10th Floor - Richmond, VA 23284

804-828-3876 or 800-828-1120 (TDD Relay)

<http://www.vcu.edu/partnership>

#### **Support for Consumer-Run Mental Health Programs in Virginia**

<http://www.vocalsupportcenter.org/valinks.htm>

#### **The ARC of Virginia**

2025 East Main Street, Suite 120 - Richmond, VA 23223

804-649-8481

E-mail: [thearc@arcofva.org](mailto:thearc@arcofva.org)

<http://www.arcofva.org>

#### **University of Virginia Health System**

Mental Retardation

<http://www.healthsystem.virginia.edu/internet/homehealth/retardation.cfm>

#### **Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services**

Office of Mental Retardation Services

P.O. Box 1797 - Richmond, VA 23219

804-786-1746

<http://www.dmhmrzas.state.va.us>

**Virginia Fragile X Resource Group**

<http://www.vafragilex.org/right.html>

**Virginia Office for Protection and Advocacy**

E-mail: [general.vopa@vopa.virginia.gov](mailto:general.vopa@vopa.virginia.gov)

[http:// www.vopa.state.va.us](http://www.vopa.state.va.us)

Richmond Office

1910 Byrd Avenue, Suite 5 - Richmond, VA 23230

804-225-2042 or 800-552-3962

TTY 804-225-2042 or 800- 552-3962

Virginia Beach Office

287 Independence Boulevard - Virginia Beach, VA 23462

757-552-1148 or 800-552-3962

Voice/TTY 757-552-1145



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# ERVASIVE DEVELOPMENTAL DISORDERS

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## **Introduction**

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## **Introduction**

Pervasive Developmental Disorders (PDDs) is a classification used to describe disorders arising during the first years of life which disrupt various developmental processes (National Dissemination Center for Children with Disabilities, 2001). The diverse expression of symptoms that accompany PDDs may challenge clinicians in diagnosis and treatment. Although children with these conditions may present for evaluation and treatment at any point in the life cycle, parents usually note symptoms as early as infancy; typically onset is prior to three years of age (National Institute of Neurological Disorders and Stroke [NINDS], 2001). PDDs vary from the majority of recognized mental disorders which generally appear in late adolescence or early adulthood (Volkmar, 1999).

Symptoms of PDDs include communication problems, such as: using and understanding language; difficulty relating to people, objects, and events; unusual play with toys and other objects; difficulty with changes in routine or familiar surroundings; and repetitive body movements or behavior patterns (NINDS, 2001). Table 1 presents the most common characteristics of PDDs.

Children diagnosed with this class of disorders may also exhibit the following characteristics: impairments in social interaction, imaginative activity, and both verbal and nonverbal communication skills; participation in activities that tend to be repetitive, and a limited range of interests.

Table 1

### Characteristics of Pervasive Development Disorders

|  |
|--|
| Impairment in social interaction skills;<br>Impairment in communication skills; or<br>Presence of stereotyped behavior, interests, and activities. |
|--|

Source: National Information Center for Children and Youth with Disabilities, January 1998.

Autism is often referred to as a "spectrum disorder," meaning that the symptoms and characteristics of autism can present themselves in a variety of combinations, ranging from extremely mild to quite severe (Autism Spectrum Disorders, 2002). Autism is also referred to as autism spectrum disorders (ASDs), according to the American Academy of Pediatrics to define the broader spectrum of clinical characteristics that now define autism (American Academy of Pediatrics [AAP], 2007). PDD may also be referred to as ASD and the terms may be used interchangeable (National Institute of Mental Health [NIMH], 2007).

Table 2 identifies all of the umbrella PDD categories, according to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*. Two of these—Autistic Disorder and Asperger’s Disorder—are covered in this section. Persons needing information on Childhood Disintegrative Disorder and Rett’s Disorder, which have a low incidence in children, should research current literature.

Table 2

### Types of Pervasive Development Disorders

|  |
|--|
| <ul style="list-style-type: none"><li>• AUTISTIC DISORDER</li><li>• ASPERGER'S DISORDER</li><li>• RETT'S DISORDER</li><li>• CHILDHOOD DISINTEGRATIVE DISORDER</li><li>• PERVASIVE DEVELOPMENTAL DISORDER NOT OTHERWISE SPECIFIED</li></ul> |
|--|

Source: National Institute of Neurological Disorders and Stroke (NINDS), 2001.

## Causes and Risk Factors

PDDs are believed to be caused by neurological differences that have yet to be fully explained (Stanford University School of Medicine, 2002). Currently, researchers are investigating areas such as neurological damage and biochemical imbalance in the brain. It is understood that these disorders are not caused by any psychological factors (NICHCY, 2001). Although a number of different theories have been put forward, none has withstood close scrutiny. Probably several causes and etiological pathways lead to PDD. There is no reason to suppose there is only one pathway.

Ten years ago, commonly accepted incidence rates ranged from 5-15 individuals per 10,000 (Stanford University School of Medicine, 2002). Today, projected incidence rates range anywhere from 7 to 48 per 10,000 (Stanford University School of Medicine). There also appears to be a gender difference in autism, with four times more males than females being diagnosed. Autism affects individuals across all racial, ethnic and social groups. Table 3 illustrates these incidence rates.

Table 3

### Incidence of Pervasive Development Disorders

- |   |
|---|
| <ul style="list-style-type: none"><li>• 1 in 1,000 individuals diagnosed with the "classic" autism;</li><li>• 1 in 500 individuals within the autism spectrum, including PDDs; and</li><li>• 1 in 200 individuals within the autism spectrum, including PDD and Asperger's.</li></ul> |
|---|

Source: National Autism Society of America Conference, Dr. Marie Bristol-Powers from the National Institute of Child Health and Human Development, as cited by the Autistic Children's Activity Program, 2002.

## Categories

Each of the PDDs has specific diagnostic criteria as outlined by the American Psychiatric Association in its *DSM-IV*. Although the term *pervasive development disorders* was introduced well over a decade ago, it is unfamiliar to lay people, as well as policy makers and health administrators (Rimland, 1993). Rimland notes that classifying these disorders as PDDs may prove to be confusing due to the fact that autism is a specific (rather than pervasive) disorder characterized by deficits in social and cognitive functioning. There is, however, a need for a classification title due to the fact that most children have some form of PDD, rather than being diagnosed specifically with autism or Asperger's Disorder (Rimland).

The intent of the *DSM-IV* is that the diagnostic criteria not be used as a checklist, but rather as a guideline for diagnosing pervasive developmental disorders. There are no clearly established guidelines for measuring the severity of a child's symptoms. In many situations, it is difficult to isolate the characteristics of autism from a PDD not otherwise specified (PDDNOS) (Boyle, as cited in the NICHCY, 2001). Accordingly, a child may be diagnosed by one practitioner as having autistic disorder and by another as having PDDNOS.

Generally, a child is diagnosed as having PDDNOS if he has have some behaviors seen in autism, but does not meet the full *DSM-IV* criteria for having autistic disorder (NICHCY, 2001). Although the terminology and diagnostic process for these disorders can be confusing, treatment of the child will be consistently based on his diagnosis.

Table 4 outlines major points which help distinguish the difference between the specific diagnoses.

## AUTISTIC DISORDER

Autistic disorder is the most common of the PDDs. Manifestations of the disorder vary greatly, depending on the developmental level and chronological age of the individual (NICHCY, 1998).

By definition, the onset of autistic disorder is prior to age three years and it follows a continuous course (NICHCY, 1998). In school-age children and adolescents, developmental gains in some areas are common, e.g., increased interest in social functioning as the child reaches school age. Some individuals deteriorate behaviorally during adolescence, whereas others improve (NICHCY).

The essential features of autistic disorder are the presence of markedly abnormal or impaired development in social interaction (Murphy, 2001). Older children may fail to develop nonverbal

forms of communication and do not have interest in forming friendships. There may be a lack of sharing, enjoyment, interests, or achievements with other people (NICHCY, 1998).

Table 4

### Distinguishing Characteristics of Pervasive Developmental Disorders

- **AUTISTIC DISORDER** - Impairment in social interaction, communication, and imaginative play prior to age three years. Stereotyped behaviors, interests and activities.
- **ASPERGER'S DISORDER** - Characterized by impairments in social interactions and the presence of restricted interests and activities, with no clinically significant general delay in language, and testing in the range of average to above average intelligence.
- **PERVASIVE DEVELOPMENTAL DISORDER NOT OTHERWISE SPECIFIED** (commonly referred to as atypical autism) - a diagnosis of PDDNOS may be made when a child does not meet the criteria for a specific diagnosis, but there is a severe and pervasive impairment in specified behaviors.
- **RETT'S DISORDER** - A progressive disorder which, to date, has occurred only in girls. Characterized by a period of normal development and then loss of previously acquired skills, loss of purposeful use of the hands, replaced with repetitive hand movements beginning at the age of 1-4 years.
- **CHILDHOOD DISINTEGRATIVE DISORDER** - Characterized by normal development for at least the first two years, significant loss of previously acquired skills.

Source: American Psychiatric Association, as cited by the Autism Society of America, 2002.

There is an increased risk of autistic disorder among siblings of individuals with the disorder. Rates of the disorder are four to five times higher in males than in females (*DSM-IV*, as cited in the PDD Support Page, 2000). Females with the disorder are more likely, however, to exhibit more severe mental retardation (NICHCY, 1998).

The number of reported autism cases has increased by 173% in the past decade, according to the Autism Program of Virginia (Associated Press, 2003). In Virginia, the incidence of autism from 2000 to 2004 increased by 78% (Associated Press).

Table 5

### Prevalence of Autism

- Autism affects an estimated 1 in 150 births.
- It is estimated that as many as 1.5 million Americans today have a form of autism.
- Autism is growing at a rate of 10-17% a year.

Source: Autism Society of America, 2002.

### Diagnosis

There are no medical tests for diagnosing autism, thus an accurate diagnosis must be based on observation of the child's communication, behavior, and developmental levels (Autism Society, 2002). However, because many of the behaviors associated with autism are shared by other disorders, various medical tests may be ordered to rule out or identify other possible causes of the symptoms being exhibited (Murphy et al., 2001).

In October 2007, the American Academy of Pediatrics (AAP) issued a report to assist providers in the early detection of autism. Children with autism demonstrate distinct deficits, and recognition of these symptoms may aid providers in the assessment of autism. Language delays, usually around

18 months of age, may be the first issue that prompts parents to consult their child's pediatrician (American Academy of Pediatrics, *Identifying Infants and Young Children with Developmental Disorders in the Medical Home*, 2006). There are very subtle signs that may actually lead to earlier diagnosis. These, according to the AAP, include:

- not turning when the parent says the child's name;
- not turning to look when the parent points says, "Look at..." and not pointing to themselves to show parents an interesting object or event;
- lack of back and forth babbling;
- smiling late; and
- failure to make eye contact with people.

According to the AAP, *Identifying Infants and Young Children with Developmental Disorders in the Medical Home* (2006), warning signs that warrant immediate evaluation include:

- no babbling or pointing or other gestures by 12 months;
- no single words by 16 months;
- no two-word phrases by 24 months; and
- regression or loss of language or social skills at any age.

Children with ASDs demonstrate deficits in social relatedness and do not appear to seek connectedness (AAP, *Identifying Infants and Young Children with Developmental Disorders in the Medical Home*, 2006). Because children with ASDs lack fundamental social skill building blocks, they may be less likely to develop age appropriate relationships. Proper assessment allows for early intervention.

Further, the AAP has issued a policy statement that recommends that all children be screened for autism during their regular doctor's visits at 18 months and 24 months (2006). Since the characteristics of the disorder vary, a child who exhibits symptoms of ASD should also be evaluated by a multidisciplinary team, which may include a neurologist, psychologist, developmental pediatrician, speech/language therapist, learning consultant, or another professional knowledgeable about autism (Autism Society of America, 2002).

Identifying children who have or who may develop autism is difficult (Barclay, 2004). Table 6 outlines the diagnostic criteria for autistic disorder.

Children who have positive screening results should be referred to early developmental intervention and early childhood services and scheduled for earlier return visits to increase developmental observation (AAP, 2006).

### ***Causes and Risk Factors***

Uncertainty surrounding the etiology of autism has stalled primary prevention efforts (Newschaffer, 2003). Previous studies have focused on the genetic aspect of autism; however, gene-finding studies are far from congruent and no model has yet explained the gender disparity and variable phenotype across family datasets (Newschaffer).

Possible nonheritable risk factors are pre- and perinatal maternal infections, birth complications, chemical exposure, and childhood vaccinations (Newschaffer, 2003). Maternal infections and birth complications associated with autism has been reported with some consistency (Newschaffer). Most recently, attention has been focused on childhood immunizations being associated with autism

(Newschaffer). Three expert studies released in 2000-2001 have concluded that the data available did not support a link between the Measles-Mumps-Rubella (MMR) vaccination and autism (Newschaffer).

Table 6

### Diagnostic Criteria for Autistic Disorder

- A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3):
1. Qualitative impairment in social interaction, as manifested by at least two of the following:
    - a) marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction;
    - b) failure to develop peer relationships appropriate to developmental level;
    - c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest);
    - d) lack of social or emotional reciprocity;
  2. Qualitative impairments in communication as manifested by at least one of the following:
    - (a) delay in or total lack of development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime);
    - (b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others;
    - (c) stereotyped and repetitive use of language or idiosyncratic language
    - (d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level;
  3. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
    - (a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus;
    - (b) apparently inflexible adherence to specific, nonfunctional routines or rituals;
    - (c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements);
    - (d) persistent preoccupation with parts of objects;
- B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.
- C. The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder.

Source: American Psychiatric Association, 1994, as cited in NICHCY.

Another recent study tested the levels of testosterone in the amniotic fluid and the impact these levels may have on the social development of a child (Lutchmaya, 2002). The study has identified a link between prenatal hormones and social development (Lutchmaya). The findings have

implications for understanding abnormal conditions of social development, such as autism (Lutchmaya).

A study from Heidi Larsson and colleagues in Denmark determined that premature births and pregnancy complications are associated with an increased risk for developing autism (Kaiser Family Foundation, 2005).

As shown in Table 7, a study at the University of Western Australia by Emma J. Glasson, Ph.D., has shown an association between difficult births and the development of autism later in life (DeNoon, 2004). Not every autistic child had a difficult birth but, as a group, autistic children have had more birth complications than other children (DeNoon). Some of the birth problems associated with autistic children include: near-miscarriage; induced labor; labor of less than one hour; fetal distress; and Cesarean section (DeNoon). Also, as a group, the mothers of autistic children give birth at an older age (DeNoon). The study stresses that these factors did not cause autism (DeNoon).

*Table 7*

### **Autism Associated with Premature Births and Pregnancy Complications**

- Infants born before 35 weeks gestation, as opposed to 37 to 42 weeks gestation, are 2.5 times more likely to be diagnosed with autism.
- Infants born in a breech position are 1.63 times more likely to be diagnosed with autism.
- Infants who score 7 or lower on the Apgar test, composite test to measure heart rate, respiratory effort, muscle tone, skin color and reflex irritability five minutes after birth are 1.89 times more likely to develop autism.
- Infants born to parents with no psychiatric disorder history are 3.41 times less likely to develop autism.
- There is a significant association between high parental age (over 30 for the mother and 35 or older for the father) and autism.

Source: Henry J. Kaiser Family Foundation, 2005.

Another study conducted by a team of brain scientists at Carnegie Mellon University has discovered findings which led to the “Underconnectivity Theory,” which states that autism is a system-wide brain disorder that limits the coordination and integration among different areas of the brain (The PEATC Press, 2004). This suggests treatment of autism as a system-wide disorder, rather than for a localized region or particular area of the brain (The PEATC Press).

### ***Comorbidity***

Research has revealed that autism has familial links with other mental disorders, notably depression, obsessive-compulsive disorder, and motor tics (The Chemical, Industrial & Pharmaceutical Laboratories [CIPLA], 2000). Depression is more frequent in immediate relatives and pre-dates the arrival of the child with autism. However, its occurrence is linked to the development of depression in the child with autism. It may appear that some children with autism appear to have mental retardation, language disorders or even congenital deafness or blindness and these conditions do co-occur with autism (Murphy et al., 2001). Epilepsy occurs in up to 30% of those with autism and can amplify their symptoms. Research has been conducted which suggests that epilepsy might cause or mimic autism (CIPLA).

### ***General Treatment Principles***

Due to the severity of autistic disorder, the need for a high level of service, and corresponding high costs, there has been a continuing search for effective treatments. The goal of treatment for autistic disorder is to promote the child's social and language development and minimize behaviors that interfere with the child's functioning and learning (U.S. Department of Health and Human Services, 1999). Intensive special education programs that are sustained over time and behavior therapy implemented early in life can aid the autistic child in acquiring language and other learning. Special education programs in highly structured environments also aid the patient in gaining social and job skills. Only recently have studies shown positive outcomes for very young children with autism (U.S. Department of Health and Human Services).

### ***Treatment Guidelines***

Although there is no proven treatment for autism, research has demonstrated the efficacy of applied behavioral methods in reducing inappropriate behavior and in increasing communication, learning, and appropriate social behavior (U.S. Department of Health and Human Services, 1999). Because of the spectrum nature of autism and the many behavioral combinations which can occur, no one approach is effective in alleviating symptoms of autism in all cases.

The goals of treatment for autism are to improve language and social skills, decrease problem behaviors and to support parents and families (Prater & Zylstra, 2002). Early intervention for treatment of autistic children is critical, given that children who begin treatment at a young age have significantly better outcomes (Prater & Zylstra).

The treatment information discussed in the following paragraphs has been compiled by the Autism Society of America (2002).

Studies show that individuals with autism respond well to a highly structured, specialized education program, tailored to their individual needs. A well-designed intervention approach may include some elements of communication therapy, social skill development, sensory integration therapy and applied behavior analysis, delivered by trained professionals in a consistent, comprehensive and coordinated manner. The more severe challenges of some children with autism may be best addressed by a structured education and behavior program which contains a one-on-one teacher to student ratio or small group environment. However, many other children with autism may be successful in a fully inclusive general education environment with appropriate support. In addition to appropriate educational supports in the area of academics, students with autism should have training in functional living skills at the earliest possible age.

To be effective, any approach should be flexible in nature, rely on positive reinforcement, be re-evaluated on a regular basis, and provide a smooth transition from home to school to community environments. A good program will also incorporate training and support systems for parents and caregivers, with generalization of skills to all settings.

### ***Promising Treatments***

The following section is a summary of the treatments highlighted by Families for Early Autism Treatment, Inc. which show promising results in the treatment of autistic disorder in children.

### **Educational Implications**

Early diagnosis and appropriate educational programs are important to children with autism or PDD (NICHCY, 1998). From the age of three, children with autism and PDD are eligible for an educational program appropriate to their individual needs. Behavior and communication problems



that interfere with learning frequently require the assistance of a knowledgeable professional in the autism field who develops and helps to implement a plan which can be carried out at home, and school (Autism Society of America, 2002).

### **Educational and Communication Focused Interventions**

The TEACCH (Treatment and Education of Autistic and related Communication handicapped CHildren) approach recognizes differences in the rate and nature of development among children. Teaching objectives are based on individual developmental patterns. The guiding principles of the TEACCH program are to provide strategies that support the person throughout the lifespan; facilitate autonomy at all levels of functioning; and accommodate such strategies to accommodate individual needs.

The AAP emphasizes the need for effective educational interventions. The components that should be included are listed in Table 8.

*Table 8*

### **Effective Early Childhood Intervention for Children with ASD**

- Entry into intervention as soon as an ASD diagnosis is seriously considered rather than deferring until a definitive diagnosis is made;
- Provision of intensive intervention, with active engagement of the child at least 25 hours per week, 12 months per year, in systematically planned, developmentally appropriate educational activities designed to address identified objectives;
- Low student-to-teacher ratio to allow sufficient amounts of 1-on-1 time and small-group instruction to meet specific individualized goals;
- Inclusion of a family component (including parent training as indicated);
- Promotion of opportunities for interaction with typically developing peers to the extent that these opportunities are helpful in addressing specified educational goals;
- Ongoing measurement and documentation of the individual child's progress toward educational objectives;
- Resulting in adjustments in programming when indicated;
- Incorporation of a high degree of structure through elements such as predictable routine, visual activity schedules, and clear physical boundaries to minimize distractions;
- Implementation of strategies to apply learned skills to new environments and situations (generalization) and to maintain functional use of these skills; and
- Use of assessment-based curricula that addresses:
  - functional, spontaneous communication;
  - social skills, including joint attention, imitation, reciprocal interaction, initiation, and self-management;
  - functional adaptive skills that prepare the child for increased responsibility and independence;
  - reduction of disruptive or maladaptive behavior by using empirically supported strategies, including functional assessment;
  - cognitive skills, such as symbolic play and perspective taking; and
  - traditional readiness skills and academic skills as developmentally indicated.

Source: American Academy of Pediatrics (AAP), *Management of Children with Autism Spectrum Disorders*, 2007.

### **Natural Language Methods**

Significant gains for teaching language, including speech intelligibility, have occurred in recent years. Speech and language pathologists often integrate communication training with the child's

behavior program to provide a coordinated opportunity for structured and naturalistic language learning. The chief focus of skill development for children with autism is communication, because it is the most pervasive area of developmental delay. Instruction in communication is designed to provide a generative tool that will serve many immediate needs throughout the child's life.

### **Picture Exchange Communication System**

The Picture Exchange Communication System (PECS) is a communication-training program that helps children with autism acquire functional communication skills. Children using PECS are taught to give a picture of a desired item to a communication partner in exchange for the item, thus initiating a communicative act for an actual outcome.

### **Behavior Intervention**

Effective treatment for severe behavioral disorders requires early intervention for many years, during all or most of the child's waking hours, addressing all significant behaviors in all of the child's environments by all significant persons (Lovaas, as cited by the Autism Society of America, 2002). This best describes the basic idea of intensive behavior intervention, which has as its goal teaching the child how to learn by focusing on developing skills in attending, imitation, receptive/expressive language, pre-academics, and self-help. However, this method has been controversial and the research findings have been considered by some to be difficult to replicate (Mudford et al., as cited by Elder, 2002).

There is some evidence to support both traditional and newer naturalistic behavioral approaches to teaching social skills. Joint attention training may be especially beneficial in young, preverbal children. A recent study demonstrated that joint attention and symbolic play skills can be taught (AAP, *Management of Children with Autism Spectrum Disorders*, 2007). Because joint attention behaviors precede social language development, joint attention behavior training, which uses a behavior modification approach, shows promise for teaching children with autism behavioral skills (AAP, *Management of Children with Autism Spectrum Disorders*). Social skills groups, social stories, visual cueing, social games, video modeling, scripts, peer-mediated techniques, and play and leisure curricula are supported primarily by descriptive and anecdotal literature, but the research-based literature is increasing (AAP, *Management of Children with Autism Spectrum Disorders*).

### **Occupational Therapy and Sensory Integration Therapy**

The information in the following section is taken from the AAP's *Management of Children with Autism Spectrum Disorders* (2007). While occupational therapy is helpful in the development of self-care skills, such as dressing, using utensils, personal hygiene and academic skills, it also shows promise in the promotion of play skills and the establishment of routines to improve attention and organization in children with ASD. While research regarding the efficacy of occupational therapy in ASD is lacking, sensory integration (SI) therapy often is used alone or as part of a broader program of occupational therapy for children with ASDs. The goal of SI therapy is to correct deficits in neurological processing and integration of sensory information to allow the child to interact with the environment in a more adaptive way. Studies are being conducted; to evaluate the effectiveness of SI. SI may be helpful as part of an overall program that uses desired sensory experiences to reinforce a desired behavior and to assist with transitioning between activities.

## **Pharmacological Treatments**

The information in the following paragraph is taken from the AAP's *Management of Children with Autism Spectrum Disorders* (2007). Pharmacologic interventions for children with ASD may be considered for maladaptive behaviors such as aggression, self-injurious behavior, repetitive behaviors, sleep disturbance, anxiety, hyperactivity, inattention, destructive behavior, or other disruptive behaviors. After treatable medical causes and environmental factors have been ruled out, medication may be considered if the behavioral symptoms cause significant impairment in functioning. In some cases, the diagnosis of a comorbid disorder can be made and the child may be treated with medications that are used for treating these conditions. Modifications of diagnostic criteria may be necessary to account for clinical presentations of psychiatric conditions in individuals with developmental disabilities.

Antipsychotic medications are often used to treat severe aggression exhibited by children with autism. Numerous controlled clinical trials cited by Elder (2002) and referred to in this section have shown that various types of antipsychotics are efficacious in treating hyperactivity, excitability, and stereotyped behaviors. Psychostimulants have also been used for years to treat the hyperactivity and inattention common in autism. Of all pharmacological information reviewed, the findings associated with psychostimulant trials and the reports of clinicians and families are mixed. However, studies have shown that many children with autism who present with extreme hyperactivity do benefit from psychostimulants, although individual reactions vary greatly, and many families oppose using these medications.

Serotonin-affecting medications have been shown to be effective in treating symptoms of autistic disorder and have shown to be effective in reducing self-injury, increasing socialization, and decreasing anxiety. It has been estimated that 80% of the psychopharmacological interventions used to treat children have unfortunately not been empirically tested on children (Riddle et al., as cited by Elder). It is not surprising that there are questions about the use of these interventions. A more detailed discussion of the use of antidepressants in treating children and adolescents is included in the "Antidepressants and the Risk of Suicidal Behavior" section of the *Collection*.

## ***Unproven Treatments***

The understanding of autism has grown tremendously. Although there is no cure, increased knowledge about the disorder has led to the development of better treatments. Because of the rising prevalence of autism, more research is needed to increase knowledge about effective treatment interventions.

The following are treatments for which there is conflicting data regarding effectiveness.

|                                   |   |
|-----------------------------------|---|
| Auditory integration training     | Antifungal medications                                    |
| Facilitated communication         | Detoxication; chelation                                   |
| Hyperbaric oxygen                 | Dietary manipulations, e.g. elimination of gluten, casein |
| Secretin                          | Hippotherapy; dolphin therapy                             |
| Vitamin B6 and magnesium          | Sensory integration therapy                               |
| Dimethylglycine (DMG)             | Craniosacral therapy                                      |
| Intravenous immunoglobulin (IVIG) | Behavioral optometry                                      |
| AZT (zidovudine, Retrovir)        | Steroids  |

Source: Kallen, R., 2000.

Chelation therapy—a series of intravenous infusions containing ethylenediaminetetraacetic acid (EDTA) and various other substances—is another unproven treatment option for autism (National Council Against Health Fraud, 2002). Chelation therapy causes heavy metals, such as mercury, to bind to the chelation, thus causing its removal from the body (Tilton, 1998). In theory, once the mercury has been removed, the effects of the toxin are eliminated (Tilton). To date, there has been no well-designed research to show that chelation is successful in the treatment of autism (National Council Against Health Fraud). Using chelation, as opposed to a proven treatment, can result in fatalities (National Council Against Health Fraud).

The American Academy of Pediatrics acknowledges prevalence in the utilization of nonstandard therapies in the treatment of autism. Accordingly, it is important that providers become knowledgeable about complementary and alternative medicine therapies (CAM) (AAP, *Management of Children with Autism Spectrum Disorders*, 2007). Providers should avoid becoming defensive or dismissive of CAM and instead help families understand how to evaluate scientific evidence and recognize unsubstantiated treatments (AAP, *Management of Children with Autism Spectrum Disorders*). Providers should evaluate the scientific evidence of effectiveness and risk of harm and convey this information to the families, just as one should for treatment with medication and for non-medical interventions (AAP, *Management of Children with Autism Spectrum Disorders*). An example is the utilization of a gluten-free/casein-free diet for children. While there is no evidence to support or refute this intervention, studies are currently underway. These studies will provide useful information regarding the effectiveness of these CAM (AAP, *Management of Children with Autism Spectrum Disorders*).

## **ASPERGER'S DISORDER**

Asperger's Disorder is a type of PDD characterized by problems in development of social skills and behavior (American Academy of Child & Adolescent Psychiatry [AACAP], *Facts for Families, Asperger's Disorder No. 69*, 1999). Asperger's is commonly recognized after the age of three (National Institute of Neurological Disorders and Stroke [NINDS], 2001). In the past, many children with Asperger's Disorder were diagnosed as having autism or other disorders. While autism and Asperger's have certain similarities, there are several important differences (AACAP).

Clinically, the difference between autism and Asperger's Disorder is based upon the severity and in the qualitative expression of the criteria (Bloch-Rosen, 1999). Both syndromes are characterized by social interaction deficits, impaired communication skills, and unusual or bizarre behaviors (Frith, as cited in Bloch-Rosen, 1999). However, motor deficits are more pronounced in Asperger's Disorder and its onset is later, with the child exhibiting social skill deficiencies without grossly impaired language skills (Frith, as cited in Bloch-Rosen). Additionally, children with Asperger's Disorder may exhibit a variety of characteristics, and the disorder can range from mild to severe. Children may also have difficulties with change and prefer sameness (Kirby, 2001). Other symptoms include sensitivity to sounds, tastes, smells, and sights, a preference for soft clothing and certain foods, and intolerance to certain sounds or lights (Kirby).

Asperger's Disorder was not added to the *DSM-IV* until 1994 and only in the past few years has it been recognized by both professionals and parents (Kirby, 2001). Of all of the PDDs included in the *DSM-IV*, Asperger's Disorder has been the most debated (AACAP, 1999). Today, children diagnosed with Asperger's would have been diagnosed with autism prior to its addition in the *DSM-IV*. The *DSM-IV* classification defines Asperger's on the basis of the presence of qualitative

impairments in social interaction like those observed in autism, but without the significant delay in language or cognitive behavior (AACAP).

### ***Diagnosis***

Diagnosis of Asperger's Disorder requires the participation of professionals with different areas of expertise. Klin & Volkmar (1995) have stated that this is particularly true with overall developmental functioning, neuropsychological features, and behavioral status. Accordingly, clinical assessment is most effectively conducted by an experienced interdisciplinary team. In the majority of cases, a comprehensive assessment will involve the following components: history; psychological assessment; communication and psychiatric assessments; further consultation as needed; parental conferences; and recommendations. Also, due to the lack of awareness many service providers may have about Asperger's Disorder, it is beneficial for evaluators assessing the child to maintain contact with the professionals who are responsible for obtaining and employing the treatment interventions.

It is important to encourage parental participation in the evaluation of the child in order to demystify the assessment procedures and to make parents an integral part of the assessment and treatment planning. At this time, parents can be informed and educated about the lack of knowledge about Asperger's Disorder and the confusion surrounding the disorder.

### ***Comorbidity***

There are few studies regarding co-morbid psychiatric disorders with children diagnosed with Asperger's Disorder. However, research has shown an association between Asperger's Disorder and Tourette's Syndrome (Bloch-Rosen, 1999). Comorbidity of certain conditions may vary according to the child's developmental level. For example, Attention Deficit Hyperactivity Disorder (ADHD) appears to be more common in younger children diagnosed with Asperger's Disorder, while depression may be more apt to emerge in adolescence (Bloch-Rosen). Children with Asperger's Disorder are also at risk for other psychiatric problems, including schizophrenia (AACAP, 1999). Mental retardation is not usually observed in children diagnosed with Asperger's Disorder (AACAP).

Other disorders which may co-occur with Asperger's Disorder include obsessive-compulsive disorder, depression, and ADHD (Bloch-Rosen, 1999). Obsessive behavior and restrictive interests are both characteristics of Asperger's syndrome, which can make it difficult to distinguish between Asperger's and other disorders which are also characterized by obsessive-compulsive behaviors (Blacher et al., 2003).

Children with Asperger's have also been identified as having postural instability and motor clumsiness (Blacher et al., 2003). Children with Asperger's can also have silent and independent reading levels below grade level and exhibit problems answering inferential comprehension questions (Blacher et al.).

### ***General Treatment Principles***

Because of the scarcity of research on interventions, there are no evidence-based practices available for treating children with Asperger's Disorder. However, there are guiding principles which may be offered, based on informal observations made by experienced clinicians, intervention strategies used with individuals with high-functioning autism, and suggested interventions for individuals with Nonverbal Learning Disabilities syndrome (Klin & Volkmar, 1995).

Treatment for Asperger's, as for all PDDs, should be focused and individualized in order to appropriately relate to the full range of impairments (AACAP, *Facts for Families, Asperger's Disorder No. 69*, 1999). Treatment planning should include provisions for structured opportunities for learning, along with appropriate generalization of what is being learned in order to ensure comprehension (AACAP).

Specific intervention, including teaching practices and approaches, behavioral management techniques, strategies for emotional support, and activities intended to foster social and communication competence, should be conceived and implemented in a thoughtful, consistent and individualized manner (Klin & Volkmar, 1995). It is critical to involve parents in the intervention process along with other social agents (Blacher et al., 2003). Recently, success has been shown in training parents to manage the behavior of children with Asperger's Disorder (Blacher et al.).

### ***Promising Treatments***

The following is a summary of the treatments indicated to have promising results for children having Asperger's Disorder.

#### **Educational Interventions**

Educational interventions are necessary in treating a child with Asperger's Disorder. Moreover, because securing educational and related services may be difficult due to lack of knowledge about Asperger's, the parents and clinician should work closely together to supply the child and school personnel with the necessary information and help.

Because these children generally do well with memory tasks, teaching in a rote fashion may help the child to retain the information presented (National Alliance for the Mentally Ill [NAMI], 2002).

The most important component of the educational curriculum and treatment strategy involves enhancing communication and social competence (Klin & Volkmar, 1995). Accordingly, the curriculum content for the child should be decided based on long-term goals, so that the utility of each element is evaluated in terms of its long-term benefits for the child's socialization skills, vocational potential, and quality of life.

#### **Behavior Management**

Children with Asperger's exhibit various challenging behaviors. Therapeutic and educational strategies can be beneficial, and training is favorable for assisting the child in recognizing troublesome behaviors (Klin & Volkmar, 1995). Setting appropriate limits in dealing with problematic behaviors such as obsessive behavior, excessive interrupting, or any other disruptive behavior can also be very effective. Moreover, because a child with Asperger's Disorder may require assistance with making safe and appropriate choices, behavior management techniques teach the child how to consider alternative actions (Klin & Volkmar).

As children diagnosed with Asperger's Disorder age, they may demonstrate symptoms of despondency, negativism, and clinical depression due to their feelings of inadequacy in social situations and failures in maintaining relationships (Klin & Volkmar, 1995). Practicing communication and social skills prepares the child to deal with social and interpersonal expectations. This, in turn, enhances the possibility of establishing friendships (Klin & Volkmar).

## **Psychotherapy**

Although insight-oriented psychotherapy has not been shown to be very helpful, it does appear that fairly focused and structured counseling can be useful for individuals with Asperger's, particularly when the child is experiencing overwhelming sadness or negativism, anxiety, family functioning, frustration about vocational goals and placement, and/or ongoing social adjustment.

## ***Unproven Treatments***

No drugs are used routinely to treat Asperger's Disorder. Because little information about pharmacological interventions with individuals with Asperger's is available, pharmacological interventions with young children are probably best avoided (Klin & Volkmar, 1995). Specific medication might be indicated if Asperger's is accompanied by debilitating depressive symptoms, severe obsessions and compulsions, or a thought disorder. Pharmacologic interventions may be used to treat co-morbid disorders, including attention problems, mood disorders, dysthymia, bipolar disorder, and obsessive-compulsive disorder (Klin & Volkmar).

Recent studies suggest Serotonin Selective Reuptake Inhibitors (SSRIs) help treat repetitive behaviors, impulsivity, irritability, and aggression (Brasic, 2002). Controlled clinical trials, based on well-diagnosed populations, are needed to confirm the impression that SSRIs and atypical neuroleptics may alleviate core symptoms of Asperger's and related conditions (Brasic). For further information on the use of SSRIs, see "Antidepressants and the Risk of Suicidal Behavior" section in the *Collection*.

Challenges of utilizing pharmacological treatments for Asperger's include the possibility that individuals may have difficulty tolerating side effects that would be minor to most people and may have difficulty identifying and communicating to others their internal mood states and emotions (Blacher et al., 2003).

## **Vaccines and Autism**

In recent years, there has been concern expressed about vaccines and their role in the development of autism. It was previously theorized that a link may exist between the use of thimerosal, a mercury-based preservative once used in the measles-mumps-rubella (MMR) vaccine, and autism (National Institute of Mental Health [NIMH], 2007). Although mercury is no longer found in childhood vaccines in the United States, some parents still have concerns about vaccinations (NIMH). Carefully performed scientific studies have found no relationship between MMR vaccine and autism. In May 2004, the Institute of Medicine (IOM) released its final report, which found that thimerosal, a mercury-based preservative once used in vaccinations, had no causal relationship with the development of autism (NIMH). Because signs of autism may appear around the same time children receive the MMR vaccine, some parents may worry that the vaccine causes autism. The recommended vaccination course for all children continues to be two doses of MMR vaccine (Centers for Disease Control, 2007).

## **Activities in Virginia**

In recent years, there has been activity in Virginia to address rising concerns about the Commonwealth's ability to provide high quality services to children diagnosed with ASD. In 2006, the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services convened a workgroup to review ways to provide a coordinated response to educating and treating

of individuals with ASD. The workgroup was continued in 2007. Recommendations for services and support were developed, including a recommendation to establish a central agency for ASD.

In 2007, the Joint Commission on Health Care convened the Workgroup Regarding the Commonwealth's Ability to Serve Children and Adults with Autistic Spectrum Disorder (ASD). The workgroup's objective was to recommend a primary agency for developing, coordinating, and overseeing autism services. This agency would serve as the primary entity to oversee the provision of services for individuals diagnosed with ASD. A recommendation was adopted by the Commission to have the Secretary of Health and Human Resources develop an implementation plan to identify the state agency that should be responsible for serving individuals with autistic spectrum disorders, including a recommendation about whether the agency should serve individuals with any or all developmental disabilities.

## Conclusion

Early intervention and treatment are the single most important efforts a parent can make to influence the outcomes for a child with PDD. Proper assessment is crucial in the diagnosis and treatment of PDD. With appropriate intervention, many associated behaviors can be modified and effective strategies can be instilled to allow the child to cope with PDD.

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### **Virginia Resources**

#### **Autism Outreach, Inc.**

703-669-4972

<http://www.autismoutreach.org>

#### **Autism Society of America**

Central Virginia Chapter

P.O. Box 29364 – Richmond, VA 23242-0364

804-257-0192; Fax: 804-290-0286

<http://www.asacv.org>

Northern Virginia Chapter

P.O. Box 1334 – Vienna, VA 22183-1334

703-495-8444

<http://www.asanv.org>

**Commonwealth Autism Service**

2201 West Broad Street, Suite 107 – Richmond, VA 23220  
800-649-8481  
E-mail: [information@autismva.org](mailto:information@autismva.org)  
<http://autismva.org>

**Everybody's Talking**

<http://www.vcuhealth.org/vtcc/everybodytalking>

**Parent Educational Advocacy Training Center (PEATC)**

6320 Augusta Drive, Suite 1200 – Springfield, VA 22150  
703-923-0010 or in VA only 800-869-6782 —Latino Outreach: 703-569-6200  
E-mail: [partners@peatc.org](mailto:partners@peatc.org)  
<http://www.peatc.org>

**People with Attention and Developmental Disabilities Association (PADDA)**

813 Forrest Drive, Suite 3 - Newport News, VA 23606  
888-33PADDA or 757-591-9119  
E-mail: [amoore@padda.org](mailto:amoore@padda.org)  
<http://www.padda.org>

**Virginia Autism Resource Center**

<http://www.varc.org>  
Richmond Office: 4100 Price Club Blvd. - Midlothian, VA 23112  
E-mail: [info@varc.org](mailto:info@varc.org)  
804-674-8888 x 5162 or 877-667-7771

Winchester Office: P.O. Box 2500 - Winchester, VA 22604

E-mail: [shamsi@varc.org](mailto:shamsi@varc.org)  
540-542-1723 x 6405

**Virginia Commonwealth University Health System**

Virginia Treatment Center for Children (VTCC)  
Autism Center of Virginia/Assessment Clinic for Children with Developmental Disorders  
515 N. 10<sup>th</sup> Street – Richmond, VA 23219  
804-828-4725  
<http://www.vcuhealth.org/vtcc/index.html>

**Virginia Department of Education**

Office of Special Education and Student Services  
P.O. Box 2120 - Richmond, VA 23218-2120  
804-225-2402  
<http://www.pen.k12.va.us/VDOE/sess>

**Virginia Department of Health**

Child & Adolescent Health, Division of Child & Adolescent Health  
109 Governor Street, 8<sup>th</sup> Floor - Richmond, VA 23219  
804-864-7685  
<http://www.vdh.state.va.us>

**Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services**  
P.O. Box 1797 - Richmond, VA 23218  
804-786-3921  
<http://www.dmhmrzas.virginia.gov>

**Virginia Institute of Autism**  
1414 Westwood Road - Charlottesville, VA 22903-5149  
E-mail: [information@viaschool.org](mailto:information@viaschool.org)  
434-923-8252  
<http://www.viaschool.org>

**Virginia Kids**  
<http://www.virginiakids.net>

**Organizations/Weblinks**

**Association of University Centers on Disabilities**  
301-588-8252  
<http://www.aucd.org>

**Autism and PDD Support Network**  
<http://www.autism-pdd.net>

**Autism Research Institute (ARI)**  
4182 Adams Avenue – San Diego, CA 92116  
619-281-7165  
<http://www.Autismresearchinstitute.com>

**Autism Society of America**  
7910 Woodmont Avenue, Suite 300 – Bethesda, MD 20814-3067  
301-657-0881 or 1-800-3-AUTISM  
<http://www.Autism-society.org>

**Autism Speaks**  
2 Park Avenue, 11th Floor – New York, NY 10016  
212-252-8584, Fax: 212-252-8676  
[contactus@autismspeaks.org](mailto:contactus@autismspeaks.org)  
<http://www.autismspeaks.org>

**Centers for Disease Control and Prevention**  
Autism Information Center  
<http://www.cdc.gov/ncbddd/dd/ddautism.htm>

**HealthyPlace.com**  
[http://www.healthyplace.com/site/autistic\\_disorder.asp](http://www.healthyplace.com/site/autistic_disorder.asp)

**MAAP Services**  
P.O. Box 524 - Crown Point, IN 46308  
219-662-1311  
<http://www.maapservices.org>

**National Alliance for Autism Research**

99 Wall Street, Research Park - Princeton, NJ 08540  
888-777-NAAR  
<http://www.naar.org/about/contact.asp>

**National Dissemination Center for Children with Disabilities (NICHCY)**

P.O. Box 1492 - Washington, DC 20013-1492  
E-mail: [nichcy@aed.org](mailto:nichcy@aed.org)  
202-884-8200 or 800-695-0285  
<http://www.nichcy.org>

**National Institute on Deafness and Other Communication Disorders**

31 Center Drive, MSC 2320 - Bethesda, MD 20892-2320  
E-mail: [lel@ms.nidcd.nih.gov](mailto:lel@ms.nidcd.nih.gov)  
800-241-1044 - TTD/TTY: 241-1055  
<http://www.nidcd.nih.gov>

**National Institute of Child Health and Human Development**

<http://www.nichd.nih.gov>

**National Institute of Mental Health (NIMH)**

6001 Executive Blvd., Rm. 8184, MSC 9663 - Bethesda, MD 20892-9663  
E-mail: [nimhinfo@nih.gov](mailto:nimhinfo@nih.gov)  
866-615-6464  
<http://www.nimh.nih.gov>

**National Institute of Medicine of the National Academies (IOM)**

202-334-2352  
[www.iom.edu](http://www.iom.edu)

**National Network for Immunization Information (NNii)**

409-772-0199  
<http://www.immunizationinfo.org>

**Online Asperger Syndrome Information and Support**

<http://www.udel.edu/bkirby/asperger>

**Pervasive Developmental Disorders Screening**

Test-Stage I (PDDST), Porter Psychiatric Institute  
415-476-7385

# ADJUSTMENT DISORDERS

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## **Introduction**

## **Classifications**

## **Causes and Risk Factors**

## **Diagnosis**

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## **Introduction**

An adjustment disorder is a behavioral response to a stressful event or variation in a child or adolescent's life that is not a healthy response to the event or change (Medical Center of Central Georgia, 2002). Youth who experience distress in excess of what is expected as a response to a stressor may even experience significant impairment in normal daily functioning and activities (Institute for Health, Health Care Policy and Aging Research, 2002).

Adjustment disorders in children are created by factors similar to those found in adults. Four factors that may contribute to the development of adjustment disorders are the nature of the stressor, vulnerabilities of the child, intrinsic factors, and extrinsic factors (Benton & Lynch, 2002).

In order to be considered and diagnosed as an adjustment disorder, the child's reaction must occur within three months of the identified event (Medical Center of Central Georgia, 2002). Typically, the symptoms do not last more than six months, and the majority of the children quickly return to normal functioning (United Behavioral Health, 2002). Adjustment disorders differ from post-traumatic stress disorder (PTSD) in that PTSD usually occurs in reaction to a life-threatening event and may be longer-lasting (Access Med Health Library, 2002). Moreover, the symptoms are not caused by another mental health disorder (Wood, 2003).

In 1997, the U.S. Department of Health and Human Services, the Substance Abuse and Mental Health Service Administration (SAMHSA) and Center for Mental Health Services conducted a client/patient sample survey of 8,000 children in mental health facilities. These children were randomly selected and surveyed in order to calculate national estimates regarding mental health services. The findings of the study indicated that 16% of the children who were admitted had an adjustment disorder (Institute for Health, Health Care Policy and Aging Research, 2002). In clinical

samples of children and adolescents, boys and girls are equally likely to be diagnosed with an adjustment disorder (American Psychiatric Association, 2000).

The following information is attributed to the University of Chicago Comer Children's Hospital (2005). Adjustment disorders occur at all ages; however, it is believed that characteristics of the disorder are different in children and adolescents than they are in adults. Differences are noted in the symptoms experienced, severity and duration of symptoms, and in the outcome. Adolescent symptoms of adjustment disorders are more behavioral, such as acting out, while adults experience more depressive symptoms.

## **Classifications**

The following six types of adjustment disorders are listed in the *Diagnostic and Statistical Manual, Fourth Edition (DSM-IV)*:

- Adjustment disorder with depressed mood: Symptoms are that of a minor depression.
- Adjustment disorder with anxious mood: Symptoms of anxiety are dominant.
- Adjustment disorder with mixed anxiety and depressed mood: Symptoms are a combination of depression and anxiety.
- Adjustment disorder with disturbance of conduct: Symptoms are demonstrated in behaviors that break societal norms or violate the rights of others.
- Adjustment disorder with mixed disturbance of emotions and conduct: Symptoms include combined affective and behavioral characteristics with mixed emotional features and with disturbance of conduct.
- Adjustment disorder not otherwise specified: This residual diagnosis is used when a maladaptive reaction that is not classified under other adjustment disorders but occurs in response to stress.

Source: Benton & Lynch, 2002.

Table 1 presents further information about these classifications.

## **Causes and Risk Factors**

Adjustment disorders are a behavioral or emotional reaction to an outside stressor and, accordingly, there is no single trigger between the stressor and the child's reaction to it (Medical Center of Central Georgia, 2002). Furthermore, because children possess varying dispositions, as well as different vulnerabilities and coping skills, it is impossible to attribute a single cause to this mental disorder. Thus, the developmental stage of the child and the strength of the child's support system may influence their reaction to a stressor (Medical Center of Central Georgia). There is no evidence to indicate that biological factors influence the cause of adjustment disorders. The common thread in anxiety disorders is stress as the precipitating factor (Benton and Lynch, 2002).

According to Benton and Lynch (2002), the most important factor in the development of an adjustment disorder is the vulnerability of the child. Vulnerability depends on the characteristics of both the child and the child's environment. A reliable assessment is not available to assess this variable.



*Table 1*  
**Common Symptoms of  
 Adjustment Disorders**

|  |
|--|
| Adjustment disorder with depressed mood  |
| depressed mood   |
| tearfulness  |
| feelings of hopelessness   |
| Adjustment disorder with anxiety   |
| nervousness  |
| worry  |
| jitteriness  |
| fear of separation from major attachment figures   |
| Adjustment disorder with anxiety and depressed mood  |
| A combination of symptoms from both of the above subtypes is present (depressed mood and anxiety).                               |
| Adjustment disorder with disturbance of conduct  |
| violation of the rights of others  |
| violation of societal norms and rules (truancy, destruction of property, reckless driving, fighting)                             |
| Adjustment disorder with mixed disturbance of emotions and conduct   |
| A combination of symptoms from all of the above subtypes are present (depressed mood, anxiety, and conduct).                     |
| Adjustment disorder unspecified  |
| Reactions to stressful events that do not fit in one of the above subtypes are present.  |
| Reactions may include behaviors such as social withdrawal or inhibitions to normally expected activities (i.e., school or work). |

Source: University of Chicago Comer Children's Hospital, 2005.

## Diagnosis

Children with adjustment disorder may have a wide variety of symptoms. Symptoms normally include several of those shown in Table 2.

*Table 2*  
**Symptoms of Adjustment Disorders**

|                           |                        |
|---------------------------|------------------------|
| Hopelessness              | Withdrawal             |
| Sadness                   | Inhibition             |
| Crying                    | Truancy                |
| Anxiety                   | Vandalism              |
| Worry                     | Reckless driving       |
| Headaches or stomachaches | Fighting               |
|                           | Other destructive acts |

Source: Turkington, 1995.

Because most features of adjustment disorders are subjective (e.g., the stressor, the maladaptive reaction, the accompanying mood and feature, and the time and relationship between the stressor and the response), these disorders can be particularly difficult to diagnose (Benton and Lynch, 2002). A qualified mental health professional should assess the child for an adjustment disorder following a comprehensive psychiatric evaluation and interview with the child and the family

(Medical Center of Central Georgia, 2002). Specifically, a personal history appraising development, life events, emotions, behaviors, and the identified stressful event is performed during the assessment process in order to correctly diagnose the adjustment disorder (Medical Center of Central Georgia).

*Table 3*

### **Characteristics of Adjustment Disorders**

- Adjustment disorders occur equally in males and females.
- Adjustment disorder stressors and symptoms may vary based on cultural influences.
- The characteristics of adjustment disorder in children differ from those in adults.
- Adolescent symptoms are more behavioral.
- Adult symptoms are more depressive.

Source: Medical Center of Central Georgia, 2002.

## **Symptoms of Adjustment Disorders**

According to the University of Chicago Comer Children's Hospital, in adjustment disorders, the reaction to the stressor is beyond a normal reaction, or the reaction significantly interferes with social, occupational, or educational functioning (2005). There are six subtypes of adjustment disorder that are based on the type of the major symptoms experienced. However, in children and adolescents, there may be a predominance of mixed, rather than discrete, symptom presentations (Newcorn & Strain, 1992). While each child may experience symptoms differently, the most common symptoms of each of the subtypes of adjustment disorder are described in Table 1.

Clinical symptoms in children and adolescents differ from those in adults and elderly persons (Benton & Lynch, 2005). Research has revealed that, in children and adolescents, more serious mental illnesses were present after five years of follow-up (Andreasen & Hoenk, as cited by Benton & Lynch).

## **Comorbidity**

Benton & Lynch (2002) indicate that adjustment disorders are most likely to occur with personality disorders, anxiety disorders, affective disorders, and psychoactive substance abuse disorder. More studies that focus on the association between adjustment disorders and other mental disorders, including substance abuse disorders, are needed. In children, adjustment disorders are also most likely to occur with conduct or behavioral problems (Wood, 2003). Patients with adjustment disorders may engage in deliberate self-harm at a rate that surpasses most other disorders and may be at an increased risk for substance abuse disorders (Benton & Lynch, 2005).

## **Evidence-Based Treatments**

The consensus on treating adjustment disorders is that, because an adjustment disorder is a psychological reaction to a stressor, the stressor must be identified and communicated by the child (Benton and Lynch, 2002). If the stressor is "eliminated, reduced, or accommodated" (Strain, as cited by Benton and Lynch), the child's maladaptive response can also be reduced or eliminated. Accordingly, treatment of adjustment disorder usually involves psychotherapy that seeks to reduce the stressor, remove the stressor, or improve coping ability.

Treatments for adjustment disorders must be customized to the needs of the child, based on the child's age, health and medical history (Medical Center of Central Georgia, 2002). Other determining factors include the extent of the symptoms and the subtype of the adjustment disorder.

### **Psychotherapy**

Psychotherapy is the treatment of choice for adjustment disorders, since the symptoms are a direct reaction to a specific stress (Turkington, 1995). However, the type of therapy depends on the needs of the child, with the focus being on addressing the stressors and resolving the problem.

Interpersonal psychotherapy (IPT) has the most support for treating children with adjustment disorders (Society of Clinical Child and Adolescent Psychology, 2006). For depressed teenagers, IPT is a well-established treatment (Mufson et al., 2004). IPT helps children and adolescents to address problems in their relationships with family members and friends so that they can become less depressed (Society of Clinical Child and Adolescent Psychology). Typically, IPT takes place in an individual format, in which the clinician works one-on-one with the child and his family. One study reported that adolescents who received IPT had significant reductions in their depressive symptoms and noted improvements in their social functioning (Mufson et al.) The largest treatment effect was noted in adolescents who are older and more severely depressed (Mufson et al.). IPT is an effective treatment for youth with adjustment disorders.

Brief treatment using cognitive-behavioral strategies shows promise (Society of Clinical Child and Adolescent Psychology, 2006). Cognitive-behavioral approaches are used to improve age-appropriate problem solving skills, communication skills, impulse control, anger management skills, and stress management skills (Medical Center of Central Georgia, 2002). Additionally, therapy assists with formatting an emotional state and support systems to enhance adaptation and coping (Benton and Lynch, 2002).

Research conducted by Strain, as cited by Benton and Lynch (2002), suggests that the goals of psychotherapy should include the following:

- Analyze the stressors that are affecting the child, and determine whether they can be eliminated or minimized;
- Clarify and interpret the meaning of the stressor for the child;
- Reframe the meaning of the stressor;
- Illuminate the concerns and conflicts the child experiences;
- Identify a means to reduce the stressor;
- Maximize coping skills; and
- Assist the child to gain perspective on the stressor and manage themselves and the stressor.

Stress management and group therapy are particularly beneficial in cases of high work/family stress. Family therapy is frequently utilized, with the focus being on making needed changes within the family system. These changes may include improving communication skills and family interactions and increasing support among family members (Medical Center of Central Georgia, 2002).

Preventive measures to reduce the incidence of adjustment disorders in children are not known at this time. However, early detection and intervention can reduce the severity of symptoms, enhance the child's normal growth and development, and improve the quality of life experienced by children or adolescents with adjustment disorders (University of Chicago Comer Children's Hospital, 2005).

### **Pharmacological Treatment**

Medication is seldom used as a singular treatment for adjustment disorders because the child requires assistance in coping with the stressor that is causing the maladaptive behavior. However, targeted symptomatic treatment of the anxiety, depression, and insomnia that occur with adjustment disorders may effectively augment therapy, but is not recommended as the primary treatment for adjustment disorders. As cited in Benton and Lynch (2002), in a retrospective study of 72 adolescents having adjustment disorder, researchers (Ansari & Matar) found that disappointment in relationships was the primary stressor causing the disorder. Accordingly, the symptoms of the disorder must be addressed through psychotherapy, rather than pharmacology.

If a clinician determines that pharmacotherapy is necessary, short-term use of anxiolytics and hypnotics may be beneficial. Some research findings also suggest that selective serotonin reuptake inhibitors, or SSRIs, may help relieve youth depressive symptoms, especially in adolescents (Society of Clinical Child and Adolescent Psychology, 2006). A more detailed discussion of the use of antidepressants in treating children and adolescents is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

### **Reactive Attachment Disorder**

The American Academy of Child & Adolescent Psychiatry (AACAP) defines reactive attachment disorder (RAD) as a complex psychiatric illness that is characterized by serious problems in emotional attachments to others which usually presents by age 5 (AACAP, 2002). Attachment is the deep and enduring connection established between a child and caregiver in the first several years of life (Attachment Treatment & Training Institute, 2004). Early experiences with caregivers shape a child’s core beliefs about self, others and life in general (Attachment Treatment & Training Institute).

According to the Attachment Treatment & Training Institute each year there are 800,000 children with severe attachment disorders (2004). When secure attachment between a child and a caregiver is disrupted, the child may begin to exhibit the symptoms described in Table 4.

*Table 4*

#### **Early Symptoms of Reactive Attachment Disorders**

- |  |
|--|
| <ul style="list-style-type: none"><li>▪ Severe colic and/or feeding difficulties</li><li>▪ Failure to gain weight</li><li>▪ Detached and unresponsive behavior</li><li>▪ Difficulty being comforted</li><li>▪ Preoccupied and/or defiant behavior</li><li>▪ Inhibition or hesitancy in social interactions</li></ul> |
|--|

Source: American Academy of Child & Adolescent Psychiatry (AACAP), 2002.

### ***Causes and Risk Factors***

The prevalence of RAD is very rare and its cause is unknown (American Psychiatric Association, 2000). Moreover, RAD could go underdiagnosed because of its association with other disorders (New York University Study Center, 2001). However, children may have developed or experienced the following, as shown in Table 5.

Table 5

### Potential Causes of RAD

- Severe problems or disruptions in their early relationships
- Physically or emotionally abused or neglected
- Inadequate care in an institutional setting or out-of-home placement
- Multiple or traumatic losses
- Changes in their primary caregiver

Source: American Academy of Child & Adolescent Psychiatry (AACAP), 2002.

According to the Child Welfare Information Gateway, children who have RAD may be superficially charming, indiscriminately affectionate, impulsive and hyperactive (2007). Table 6 lists the diagnostic criteria for RAD.

Table 6

### Diagnostic Criteria for RAD

- A. Markedly disturbed and developmentally inappropriate social relatedness in most contexts, beginning before age 5 years, as evidenced by either (1) or (2):
- 1) persistent failure to initiate or respond in a developmentally appropriate fashion to most social interactions, as manifest by excessively inhibited, hypervigilant, or highly ambivalent and contradictory responses
  - 2) diffuse attachments as manifest by indiscriminate sociability with marked inability to exhibit appropriate selective attachments.
- B. The disturbance in Criterion A is not accounted for solely by developmental delay (as in Mental Retardation) and does meet criteria for a Pervasive Developmental Disorder.
- C. Pathogenic care as evidenced by at least one of the following:
- 1) persistent disregard of the child's basic emotional needs for comfort, stimulation, and affection
  - 2) persistent disregard of the child's basic physical needs
  - 3) repeated changes of primary caregiver that prevent formation of stable attachments (e.g., frequent changes in foster care)
- D. There is a presumption that the care in Criterion C is responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the pathogenic care in Criterion C).

Source: American Psychiatric Association, 2000.

### Subtypes

There are two subtypes associated with RAD, as shown in Table 4.

Table 4

### Subtypes Associated with RAD

- **Inhibited Type** – Predominant disturbance in social relatedness is the persistent failure to initiate and to respond to most social interactions in a developmentally appropriate way.
- **Disinhibited Type** – predominant disturbance in social relatedness is indiscriminate sociability or a lack of selectivity in the choice of attachment figures.

Source: American Psychiatric Association, 2000.

## ***Comorbidity***

The most common disorders that may co-occur with RAD are substance abuse, conduct disorder, and obsessive-compulsive disorder (National Youth Network, 2007). Moreover, RAD may resemble other disorders such as developmental delays, feeding disorder of infancy and early childhood, pica, or rumination disorder (Child Study Center, New York University Study Center, 2001).

## ***Treatment***

Currently, there are limited evidence-based treatments for RAD. However, due to the nature and seriousness of RAD, the American Academy of Child & Adolescent Psychiatry (AACAP) suggests a comprehensive psychiatric assessment and individualized treatment plan for children who show signs of RAD (AACAP, 2002).

In conclusion, the AACAP (2002) recommends that parents who believe their child shows symptoms of RAD do the following:

- seek a comprehensive psychiatric evaluation prior to any treatment;
- understand the risks and benefits of any intervention; and
- seek a second opinion if questions or concerns about the diagnosis and/or treatment plan.

## **Contraindicated Interventions**

According to the AACAP, there is no scientific evidence to support rebirthing techniques, compression holding therapy, or other coercive interventions as effective treatment (AACAP, 2003). In fact, dangerous practices, such as adults forcibly holding a child in order to improve attachment, using hunger or thirst and/or forcing food or water upon the child, have resulted in six documented child fatalities (AACAP).

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Newcorn, J., & Strain, J. Adjustment Disorder in Children and Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry* 31 (March 1992), 318-327.

Noshpitz, J., & Coddington, R. (Editor). *Stressors and the Adjustment Disorders* (Wiley Series in General and Clinical Psychiatry). Paperback. 1990.

### **Organizations/Weblinks**

**American Academy of Child Adolescent Psychiatry (AACAP)**  
<http://www.aacap.org>

**Attachment Treatment & Training Institute at Evergreen Psychotherapy Center**  
<http://www.attachmentexperts.com>

**Child Welfare Information Gateway**  
<http://www.childwelfare.gov>

**Mental Health.Com**  
<http://www.mentalhealth.com>

**Mental Health Matters**  
[http://www.mental-health-matters.com/disorders/dis\\_details.php?disID=2](http://www.mental-health-matters.com/disorders/dis_details.php?disID=2)

**New York University School of Medicine Child Study Center**  
<http://www.aboutourkids.org>

**U.S. Department of Health and Human Services**  
<http://www.hhs.gov>



# BEHAVIOR DISORDERS

## ATTENTION DEFICIT HYPERACTIVITY DISORDER

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### Introduction

### Causes and Risk Factors

### Comorbidity

### Diagnosis

### Treatments

*Psychosocial Treatments*

*Pharmacological Treatments*

### Unproven Treatments

### Other Important Treatment Elements

## Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is one of several childhood disorders brought into the public arena in recent years. ADHD is the current term for a specific developmental disorder describing specific behavioral difficulties. ADHD is characterized by multiple symptoms of persistent and dysfunctional patterns of overactivity, impulsiveness, inattention, and distractibility (Murphy et al., 2001). A survey conducted of a nationally representative sample of 8- to 15-year-old children in the United States found that close to nine percent met the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* criteria for ADHD (Froehlich, as cited by Busko, 2007). Among children meeting the criteria, only 47% had been diagnosed and only 32% were receiving treatment (Froehlich, as cited by Busko). Table 1 outlines additional facts about ADHD.

Table 1

### Facts about Attention Deficit Hyperactivity Disorder

- ADHD affects an estimated 4.1% of youths age 9 to 17 in a six-month period.
- About 2 to 3 times more boys than girls have ADHD.
- Children with untreated ADHD have higher than normal rates of injury.
- ADHD often co-occurs with other problems, such as depressive and anxiety disorders, conduct disorder, drug abuse, or antisocial behavior.
- Symptoms of ADHD usually become evident in preschool or early elementary years.
- The disorder frequently persists into adolescence and into adulthood.
- Treatment may be required throughout life.

Source: National Institute of Mental Health (NIMH), 2000.

Children with ADHD experience harmful consequences because of their behavior. They frequently experience peer rejection and academic and social difficulties which may have long-term effects. According to the National Institute of Mental Health (NIMH), these children may have conduct disorders, experience drug abuse, exhibit antisocial behavior, and incur injuries of all sorts. For many individuals, the impact of ADHD continues into adulthood (NIMH, 2000).

ADHD has been given numerous names since it was first documented. Some of these names include Minimal Brain Dysfunction, Hyperkinetic Reaction of Childhood, and Attention-Deficit Disorder With or Without Hyperactivity (Children and Adults with Attention Deficit Disorders [CHADD], 2001). With the *Diagnostic and Statistical Manual, Fourth Edition (DSM-IV)* classification system, the disorder has been renamed Attention Deficit Hyperactivity Disorder. The current name reflects the importance of the inattention characteristics of the disorder, as well as hyperactivity and impulsivity (CHADD).

There are three subtypes of ADHD, which are recognized by professionals: predominately hyperactive-impulsive type, predominantly inattentive type, and the combined type (NIMH, 2003). Predominantly hyperactive-impulsive type of ADHD exists when the child or adolescent does not show significant inattention (NIMH). Predominantly inattentive type is based on the child's not showing signs of significant hyperactive-impulsive behavior (NIMH). Predominantly inattentive type is sometimes referred to as ADD, which is an outdated term for the disorder (NIMH). A child with combined type of ADHD displays both hyperactive-impulse and inattentive symptoms (NIMH). This combined type of ADHD is the most common form (Kids Health, 2005). Table 2 outlines the symptoms exhibited by each type.

Table 2

### Symptoms of ADHD

|   |
|---|
| <p><b>Signs of Hyperactive-impulsivity</b></p> <ul style="list-style-type: none"><li>• Feeling restless, fidgeting with hands and feet, cannot sit still</li><li>• Running, climbing or restlessness when quiet behavior is appropriate</li><li>• Blurting answers before hearing the entire question</li><li>• Difficult time taking turns or waiting in line</li></ul> <p><b>Signs of Inattention</b></p> <ul style="list-style-type: none"><li>• Easily distracted by sights and sounds</li><li>• Does not pay attention to details and makes careless mistakes</li><li>• Rarely follows directions</li><li>• Easily loses or forgets things</li><li>• Skips from one unfinished task to another</li></ul> <p><b>Signs of Combined Type</b></p> <ul style="list-style-type: none"><li>• Symptoms of hyperactive impulsivity and inattention are both present</li></ul> |
|---|

Source: National Institute of Mental Health (NIMH), 2003.

## Causes and Risk Factors

ADHD is one of the best-researched disorders in medicine. Studies over the past 20 years involving twins, adoptions, and molecular investigations have revealed that there is a genetic basis for the disorder (MediFocus, 2002). Recent imaging studies have documented the factual etiology of ADHD within specific areas of the brain.

Since ADHD runs in families, inheritance appears to be an important factor. Families with a child diagnosed with ADHD are more likely than those without ADHD offspring to have family members with the disorder. The heritability of ADHD averages approximately 80%, rivaling the heritability factor for the trait of height (Barkley, 2001). Several other developmental

characteristics are associated with ADHD. Perinatal injury, malnutrition, and substance exposure have also been linked to ADHD (Murphy et al., 2001).

A recent brain imaging study has pinpointed where the brains of children with ADHD are different from children who do not have the disorder (Boyles, 2003). This new research can potentially lead to better drugs, as well as behavioral interventions, for children with ADHD (Boyles). Brain imaging has the potential to allow clinicians to better utilize current therapies used for treatment (Boyles).

A recent study conducted by the National Institute of Mental Health (NIMH) found that ADHD was linked to changes in production of the brain's chemical dopamine (2007). NIMH researchers found that ADHD likely originated from several such genes, as well as other non-genetic factors (NIHM). Evidence from several previous studies led scientists to suspect involvement of a gene that codes for a receptor protein, which binds to the brain's chemical messenger dopamine. Children possessing a variant of this gene had an increased risk of having ADHD, but this gene variant could also improve long-term outcomes of the child (NIMH). The report indicated that this version of the dopamine D4 receptor gene, called the 7-repeat variant, accounted for about 30% of the genetic risk for ADHD, making it by far the strongest candidate gene implicated in the disorder (NIMH). Traits linked to the 7-repeat version may include novelty-seeking and impulsiveness (NIMH). Researchers are following up with studies on the relationship between cortex thickness and the cognitive features present in ADHD (NIMH).

Although a diagnostic test for ADHD is not available, there is insurmountable evidence supporting the validity of the disorder (CHADD, 2001). A recent study determined that the process of ADHD diagnosis in the United States takes approximately one year (Reuters, Attention Disorder Diagnosis Often Delayed, Survey Shows, 2004). Diagnosing ADHD early can help to prevent long-term effects in adulthood (Reuters).

## **Comorbidity**

According to the NIMH (2000), ADHD is not usually an isolated disorder and comorbidities may complicate research studies. Specifically, ADHD can occur with learning disabilities (15-25%), language disorders (30-35%), conduct disorder (15-20%), oppositional defiant disorder (up to 40%), mood disorders (15-20%), and anxiety disorders (20-25%). Up to 60% of children with tic disorders also have ADHD.

Difficulties with memory, cognitive processing, sequencing, motor skills, social skills, modulation of emotional response, and response to discipline are commonly associated with ADHD (NIMH, 2000). Sleep disorders are also more prevalent in children who suffer from ADHD.

There may be a causal relationship between ADHD and seizures (Reuters, ADHD is a Risk Factor for Unprovoked Seizures in Children, 2004). Children diagnosed with ADHD have an increased chance (by 2.5%) of experiencing unprovoked seizures (Reuters).

## **Diagnosis**

Some parents notice inattention, hyperactivity and impulsivity in their child before they are school age, although these symptoms may go unnoticed until the child runs into problems at school (NIMH, 2003). Diagnosis of ADHD should be made by a professional with training in ADHD or in the diagnosis of mental disorders (NIMH). Those most often trained in diagnosing ADHD include

child psychiatrists, psychologists, developmental/behavioral pediatricians, behavioral neurologists and, in some cases, clinical social workers (NIMH).

Before diagnosing a child with ADHD, a specialist needs to first rule out other potential reasons for the child's behavior. ADHD-like behavior may be the result of a sudden change in the child's life, undetected seizures, a middle ear infection that causes hearing problems, medical disorders that affect brain functioning, learning disability, anxiety, or depression (NIMH, 2003). In instances of disruptive behavior, it is critical that the clinician determine if the disruptive behavior is the primary diagnosis or if it is secondary to ADHD (American Academy of Child & Adolescent Psychiatry [AACAP], 1994). If ADHD is the primary cause, it must be diagnosed and treated so the secondary disruptive behavioral disorder can also be successfully addressed (AACAP).

The child should be evaluated by the professional for social adjustment and mental health through interviews of the child's teachers, parents, coaches and/or babysitters (NIMH, 2003). Tests on intelligence and learning achievement may be given to rule out a learning disability (NIMH). A correct diagnosis of ADHD often resolves confusion surrounding the child's problems.

## **Treatments**

There is no treatment available to cure this disorder, but many treatments are available that effectively assist with its management. A wide variety of treatments have been used to treat ADHD. Foremost is education of the family and school staff about ADHD and its management.

Among the treatments that result in the greatest degree of improvement in the symptoms, research strongly supports the use of stimulant medications. Methylphenidate (MPH) is the first-line agent, followed by d-amphetamine (Murphy et al., 2001).

Studies on the efficacy of medication and psychosocial treatments for ADHD support the effectiveness of the combination of stimulants and psychosocial treatments for ADHD. Greater improvements have been noted when stimulants were combined with behavior therapy (Society of Clinical Child and Adolescent Psychology, 2006). Studies have indicated the superiority of stimulants when they are compared to psychosocial treatments (NIMH, 2000). However, the combination of stimulants and behavioral treatments did result in improved social skills and, accordingly, parents and teachers judged this treatment more favorably.

A Consensus Statement published by NIMH (1998) maintains that psychosocial treatment for ADHD has included a number of behavioral strategies such as contingency management (e.g., point/token reward systems, and timeout) that typically are conducted in the classroom, parent training (where the parent is taught child management skills), clinical behavior therapy (parent, teacher, or both are taught to use contingency management procedures), and cognitive-behavioral treatment, e.g., self-monitoring, verbal self-instruction, problem-solving strategies, self-reinforcement. Clinical behavior therapy, parent training, and contingency management have also produced beneficial effects. Intensive direct interventions in children with ADHD have produced improvements in key areas of functioning. However, no studies have been conducted on some of these intensive interventions or on how these interventions work with medications prescribed for ADHD.

Treatment of ADHD requires behavioral, psychological, and education components. Education of the child and family regarding the nature of the disorder and the methods proven to manage the disorder is crucial in its management. Treatment must be provided over long periods to assist those with ADHD in the ongoing management of their disorder.

### ***Psychosocial Treatments***

Studies comparing stimulants with psychosocial treatment consistently reported greater efficacy of stimulants (NIMH, 2000). However, several psychosocial treatments do possess good levels of support in the treatment of ADHD. The information in the following paragraph is attributed to the Society of Clinical Child and Adolescent Psychology (2006). One such treatment is behavioral parent training (BPT). BPT teaches parents behavior modification techniques based on social learning principles. Parents are encouraged to provide clear rules and structure in the child's environment. Positive and negative consequences for corresponding child behavior are also encouraged. BPT has been shown to be effective in improving problematic child behavior and negative parent-child interactions.

A number of different strategies also have good levels of support regarding treatment outcomes. These include contingency management (e.g., point/token reward systems, timeout, response cost) that typically is conducted in the classroom, biofeedback, physical exercise, relaxation and physical exercise, and self-verbalization (Chorpita & Daleiden, 2007). These treatment modalities have produced beneficial effects. Further study on these interventions is continuing.

### ***Pharmacological Treatment***

The following is based on information from the National Institute of Health (1998). Stimulants are generally considered to be first line treatment for ADHD and are often prescribed by pediatricians, family physicians, specialized psychiatrists or child psychiatrists. Stimulant medications are very effective at reducing ADHD symptoms in the short-term. Past studies have found that a significant majority of children with ADHD benefit from stimulant medication (Society of Clinical Child and Adolescent Psychology, 2006).

Short-term trials of stimulants have supported the effectiveness of MPH. Few differences have been found among these stimulants. However, MPH is the most studied and the most often used of the stimulants. For a variety of reasons, including side effects, incomplete responses or other circumstances, other medications are often recommended in combination with or following unsuccessful trials of stimulants.

Recently the U.S. Food and Drug Administration (FDA) approved a medication for use in treating ADHD that is not a stimulant (NIMH, 2003). This medication, an atomoxetine, works on the neurotransmitter norepinephrine, as opposed to dopamine, which is what stimulants influence (NIMH). More research is needed to compare the atomoxetine to already available medications, but preliminary evidence suggests that children with ADHD on an atomoxetine exhibit significant improvement in their symptoms (NIMH).

Trials have found beneficial effects on the defining symptoms of ADHD and associated aggressiveness for as long as medication is taken. However, stimulant treatments may not regulate the entire range of behavior problems, and children under treatment may still show a higher level of behavioral problems than children without ADHD. The findings also show that there is little improvement in academic achievement or social skills.

It is critical that all involved with the use of these powerful medications be clear about what the treatment targets are, so a particular medication can be maintained if it is successful and stopped if it is not.

## **Unproven Treatments**

There is a long list of other interventions for the treatment of ADHD. These include dietary replacement, exclusion, or supplementation; various vitamin, mineral, or verbal regimens; and perceptual stimulation. Other treatment approaches that were tested and were found to have no support in recent studies include client centered therapy, self-control training, skill development, and the combination of parent management training and self-verbalization. However, it is important to note that some of these treatments may benefit the accompanying symptoms of ADHD, so further study is needed (Chorpita & Daleiden, 2007).

Anecdotal evidence abounds for the effects of diet on ADHD. Several foods are mentioned, particularly casein (from milk), but more recently gliadin (from wheat gluten) (Lilienfeld, 2005). There are studies that link ADHD to some food sensitivities. Some of the dietary elimination strategies showed intriguing results, suggesting the need for future research. One dietary study determined that food additives might have an impact on a child's hyperactivity level (Warner, 2004). Treatments that focus on mineral supplementation may merit further study, but current data suggests that they are only useful when true deficiency has been demonstrated. Although these treatments have generated considerable interest and there are some controlled and uncontrolled studies using various treatment strategies, the research regarding these interventions is disproportionate.

## **Other Important Treatment Elements**

It is important to realize that simple inattention or hyperactivity by itself is not sufficient for diagnosis. ADHD has been misdiagnosed in both children and adults by parents, teachers, and even by patients themselves. Misbehavior by children or teens has been inappropriately diagnosed and treated by persons looking for a simple solution to personality difficulties, in hopes of avoiding psychotherapy.

While no treatment can cure ADHD, caregivers and parents must educate themselves about this disorder so they can understand it and design an effective treatment plan. It is up to the caregiver to become an informed consumer and learn to distinguish accurate information from the inaccurate. Relatives, teachers, and caretakers need to understand that ADHD is neurobiological and that a child's brain works a bit differently. ADHD is not the result of too much sugar or too little discipline.

Effective treatment involves the use of a multimodal approach that includes an appropriate educational program; behavior modification; parent, child and teacher education; and sometimes counseling and medication (CHADD, 2001). Caregivers need to advocate for their children in academic settings, as well as in their home environment. Children with ADHD may be eligible for special educational services in the public schools under both the Individuals with Disabilities in Education Act (IDEA: Public Law 101-476) and Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112) (Barkley, 2001). IDEA governs special education requirements and Section 504 provides for reasonable accommodations for children with disabilities (Gephart, 2002). Maximizing positive outcomes under these laws is possible with caregiver involvement.

Effective parent training teaches strategies to modify behaviors and improve outcomes. Because ADHD is hereditary, many parents of children with ADHD discover, when their child is diagnosed, that they too have ADHD (CHADD, 2001). Parents with ADHD may need the same types of evaluation and treatment that they seek for their children.

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### **Suggested reading for parents recommended by CHADD**

Barkley, R. (1998). *Attention Deficit Hyperactivity Disorders: A Handbook for Diagnosis and Treatment*. New York: Guilford Press.



**Suggested reading for parents recommended by CHADD (continued)**

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**Organizations/Weblinks - National**

**ADHD.com**

<http://www.adhd.com/index.jsp>

**Attention Deficit Disorder Resources**

<http://www.addresources.org>

**Centers for Disease Control and Prevention (CDC)**

Attention-Deficit/Hyperactivity Disorder

<http://www.edc.gov/ncbddd/adhd>

**Children and Adults with Attention Deficit Disorders (CHADD)**

8181 Professional Place, Suite 201 - Landover, MD 20785

National Call Center – 800-233-4050

<http://www.chadd.org>

**PlanetPsych.com Online Therapist Directory/Virginia**

<http://www.planetpsych.com/zDirectory/virginia.htm>

**Organizations/Weblinks - Virginia**

**Children and Adults with Attention Deficit Disorders (CHADD)**

Central Virginia Chapter

804-423-6332

<http://www.ric-add.com/home.htm>

CHADD of Northern Virginia

P.O. Box 2645 - Fairfax City, VA 22031

24-Hour Information Line - 703-641-5451

Tidewater CHADD

P. O. Box 62686 - Virginia Beach, VA 23466-2686

757-479-9993

<http://www.tidewaterchadd.org>

**Parents Advocacy | ACT**

142 W. York Street, Suite 710 - Norfolk, VA 23510  
757-623-2228

**Parents of Children with ADD and ADHD/Roanoke**

6603 Sherry Road - Roanoke/Botetourt, VA 24019  
Intake 540-366-2809

**People with Attentional and Developmental Disabilities Association (PADDA)**

813 Forrest Drive, Suite 3 - Newport News, VA 23606  
757-591-9119

# **O**PPositional Defiant & CONDUCT DISORDERS

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## **Introduction**

**Oppositional Defiant Disorder (ODD)**

**Conduct Disorder (CD)**

**Relationship Between ODD and CD**

**Causes and Risk Factors**

**Comorbidity**

**Diagnosis**

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## **Introduction**

Although it is normal for both children and adolescents to exhibit some type of oppositional behavior as they mature, some children and adolescents exhibit behaviors that are significantly disruptive to the point where they may impair functioning. Such troublesome and provoking behaviors comprise a host of syndromes and typically are behaviors exhibited by children who are diagnosed with oppositional defiant disorder (ODD) and conduct disorder (CD).

Typically, children who suffer from these mental health disorders display behavior that is disturbing and potentially dangerous, as well as disruptive (Boesky, 2002). ODD and CD are often referred to as the “disruptive disorders” (Boesky).

Disruptive disorders are complex and may lead to long-term adverse consequences affecting academic performance, as well as difficulties in social and emotional development. Children with CD and ODD are also at high risk for criminality and antisocial personality disorders in adulthood (Rutter, 1997).

According to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*, as cited by Loeber (2000), the essential features of ODD are recurrent patterns of negativistic, defiant, disobedient, and hostile behavior toward authority figures, which leads to impairment. The primary features of CD are a repetitive and persistent pattern of behavior in which the basic rights of others and major age-appropriate societal norms or rules are violated (Loeber, 2000).

There has been much debate on the degree that ODD and CD relate to each other and how they are distinguished from one another. The majority of empirical evidence supports a distinction between the two disorders and ADHD (Cohen et al., as cited by Loeber, 2000). Table 1 outlines the prevalence rates of both ODD and CD.

Table 1

### Key Facts for Disruptive Behaviors

#### **Oppositional Defiant Disorder (ODD)**

- ODD is reported to affect between 2 and 16% of children (Medical Center of Central Georgia, 2002).
- ODD is more common in boys than in girls before puberty (U.S. Department of Health and Human Services, 1999).
- After puberty, the rates in both genders are equal. (U.S. Department of Health and Human Services).

#### **Conduct Disorder (CD)**

- Approximately 6% of children have CD.
- CD is more common in boys than in girls by a 4:1 ratio.
- CD is believed to be more prevalent in urban than in rural settings.
- Children with CD often have other psychiatric problems.
- The prevalence of CD has increased over recent decades.
- Aggressive behavior is the reason for one-third to one-half of the referrals made to child and adolescent mental health services.

Source: Medical Center of Central Georgia, 2002.

### **Oppositional Defiant Disorder (ODD)**

ODD is a relatively new diagnosis that describes children with behavior problems that do not meet the criteria for full-blown CD (Murphy et al., 2001). ODD is typically considered a mental disorder where the child exhibits noncompliance towards authority figures (Boesky, 2002). According to Chandler (2002), ODD is a psychiatric disorder that is characterized by two different sets of problems: aggressiveness and a tendency to purposefully bother and irritate others. It is an enduring pattern of uncooperative, defiant, and hostile behavior to authority figures without major antisocial violations (Christophersen & Mortweet, 2001).

ODD often occurs before conduct disorder and may be an early sign of conduct disorder (U.S. Department of Health and Human Services, 1999). ODD is diagnosed when a child's behavior is hostile and defiant for six months or longer and is thought to start in the preschool years, whereas conduct disorder generally appears when children are somewhat older (Lavigne et al., 2001). ODD is not diagnosed if conduct disorder is present (U.S. Department of Health and Human Services, 1998). The diagnostic criteria for ODD are listed in Table 2.

### **Conduct Disorder (CD)**

Children with CD exhibit persistent and critical patterns of misbehavior. These children may indulge in frequent temper-tantrums like children with ODD; however, they also violate the rights of others (Center for the Advancement of Children's Mental Health at Columbia University, 2000). Behaviors exhibited by children with CD include aggression towards people or animals, destruction of property, deceitfulness, theft, or serious violation of rules (Murphy et al., 2001).

Table 2

**DSM-IV Criteria for Oppositional Defiant Disorder**

- A. A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months, during which four (or more) of the following are present:
1. often loses temper;
  2. often argues with adults;
  3. often actively defies or refuses to comply with adults' requests or rules;
  4. often deliberately annoys people;
  5. often blames others for his or her mistakes or misbehavior;
  6. is often touchy or easily annoyed by others;
  7. is often angry and resentful; or
  8. is often spiteful or vindictive.
- Note: Consider a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.
- B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.
- C. The behaviors do not occur exclusively during the course of a Psychotic or Mood Disorder.
- D. Criteria are not met for Conduct Disorder. If the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Source: Christophersen & Mortweet, 2001.

According to research compiled by Christophersen & Mortweet (2001), the diagnosis of CD is usually based on the persistence and the repetition of the behavior. Furthermore, CD may first occur in childhood or in adolescence and may have mild, moderate, or severe classifications. The lack of specific subtyping may result in CD being over-inclusive and associated with other mental disorders.

Children diagnosed with CD have more difficulty in areas of academic achievement, interpersonal relationships, drugs, and alcohol use (Boesky, 2002). They also are often exposed to the juvenile justice system because of their delinquent or disorderly behaviors. For example, Ferguson and Horwood, as cited in Boesky, found that 90% of children with three or more CD symptoms at age 15 were self-reported frequent offenders a year later, compared to 17% of children with no CD symptoms. In addition, according to Murphy (2001), 25 to 40% of children with CD have adult antisocial personality disorder later in life. Table 3 lists the criteria for CD as classified in the *DSM-IV*.

There are two specific subtypes of CD: childhood onset and adolescent onset (Braithwaite et al., 2001). In the first, onset occurs before the age of 10, with the child displaying one criterion (Braithwaite et al.). Children diagnosed with childhood onset CD are typically male, often display physical aggression, have disturbed peer relationships, and may have had ODD during early childhood (Braithwaite et al.). These children typically develop full criteria for CD before they reach puberty (Braithwaite et al.). In the second subtype, onset usually occurs during adolescence, and is defined by the absence of CD at the age of 10 (Braithwaite et al.). These children are less likely to display aggressive behaviors than children in the first subtype. They will also have more normal peer relationships and are less likely to develop adult antisocial personality disorder (Braithwaite et al.). Late-onset is the only type of CD for females (Loeber, 2000).

Table 3

### **DSM-IV Criteria for Conduct Disorder**

- A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months:
- Aggression towards people and animals:**
1. often bullies, threatens, or intimidates others;
  2. often initiates physical fights;
  3. has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun);
  4. has been physically cruel to people;
  5. has been physically cruel to animals;
  6. has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery);
  7. has forced someone into sexual activity.
- Destruction of property:**
8. has deliberately engaged in fire setting with the intention of causing serious damage;
  9. has deliberately destroyed others' property (other than by fire setting).
- Deceitfulness or theft:**
10. has broken into someone else's house, building, or car;
  11. often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others);
  12. has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering, forgery);
- Serious violations of rules:**
13. often stays out at night despite parental prohibitions, beginning before age 13 years;
  14. has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period);
  15. is often truant from school, beginning before age 13.
- B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.
- C. If the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Source: Christophersen & Mortweet, 2001.

## **Relationship between ODD and CD**

ODD and CD are characterized by antisocial behavior and, accordingly, are considered a group of behaviors rather than actual impairments (U.S. Department of Health and Human Services, 1999). The linkage between ODD and CD has been examined in several studies (Biederman et al., Frick et al., Lahey et al., Loeber et al., as cited in Lavigne et al., 2001). These studies indicate that ODD is usually present as a forerunner to childhood-onset CD, but most children with ODD do not develop CD. In a recent study, 56% of males and 62% of males with CD also met criteria for ODD (*The Brown University Child and Adolescent Psychopharmacology Update*, 2004).

While some features of ODD and CD overlap, there are important distinctions (Searight et al., 2001). Children with ODD do not typically display significant physical aggression and may be less likely to have problems with the law (Searight et al.).

According to Boesky (2002), a subset of children diagnosed with ODD may ultimately develop CD. Moreover, because ODD is seen as a disorder of noncompliance and CD involves the violation of another's rights, it is helpful to view these mental health disorders as two points on a continuum, rather than as two separate mental health disorders. Most children with CD begin with ODD-like behaviors (Kazdin, as cited in Boesky). As stated previously, although children with ODD may develop CD, many do not. Although the precise relationship between ODD and CD is not explicit, it is known that early intervention and treatment of ODD may avert the development of CD.

## **Causes and Risk Factors**

According to the Center for the Advancement of Children's Mental Health at Columbia University (2000), research is needed to pinpoint the exact causes of both ODD and CD. It is surmised that a genetic vulnerability, combined with environmental factors, may influence the disorder, as well as its disruptive behaviors. Some of these environmental factors include: family histories of disruptive behavior disorder; antisocial personality disorder; mood disorders or substance abuse; permissive, neglectful, harsh or inconsistent parenting; and poverty. CD may also be associated with a variety of awkward living conditions such as overcrowding, poor housing, and disadvantaged school setting (Hibbs & Jensen, 1996, p. 380). Thus, it is important to account for all of these conditions because the development, maintenance, and course of treating CD may also be impacted by them. Second, there is no one cause or influencing factor. Frequently, the problem behaviors exhibited by children with ODD and CD may be indicative of underlying psychiatric, neurological or learning problems (National Alliance for Mental Health Wisconsin, 2002). Conversely, co-existing conditions have been found to exacerbate behavioral problems.

The symptoms for CD and ODD can vary (Boesky, 2002). Not every child reacts the same way to these various influencing factors. Moreover, viewing both CD and ODD as mental disorders, without considering the factors causing the disorder, is misleading.

Given the high co-morbidity rate of CD with ADHD, Tourette's syndrome, and other disorders known to be due to neurological dysregulations, there is the possibility that CD may also be a result of neurological dysregulations (Braithwaite et al., 2001). However, no studies have investigated neurological disorder to be the basis for CD (Braithwaite et al.).

## **Comorbidity**

ODD and CD are frequently found in children who suffer from ADHD, another disruptive disorder, which is discussed separately in this report (Center for Advancement of Children's Mental Health, 2000). For all children diagnosed with CD, co-occurrence with ADHD is at least 50% (Tynan, 2006). Children who develop CD often show signs of this disorder at an earlier age. The onset of CD typically occurs earlier in boys diagnosed with ADHD (Loeber, 2000). Studies have determined that, in 92% of boys referred with ADHD who developed CD, the onset of CD occurred prior to age 12 (Biederman et al., Hinshaw et al., as cited in Loeber). The co-occurrence of CD and ADHD makes it more difficult to discriminate between the disorders (Tynan).

A recent study of co-morbidity levels for children diagnosed with ODD or CD determined that 36% of females and 46% of males with ODD met criteria for at least one other disorder (*The Brown University Child and Adolescent Psychopharmacology Update*, 2004). Thirty-nine percent of females and 46% of males diagnosed with CD also met criteria for another disorder (*The Brown University Child and Adolescent Psychopharmacology Update*). Cross-sectional studies of

individuals with mood disorders and/or anxiety disorders, along with CD, indicate comorbidity of 32 to 37% (Tynan, 2006).

According to analysis compiled by Lavigne et al., ODD may precede the development of anxiety and mood disorders (2001). Some children may develop co-morbidity of ODD with another disorder in the elementary school age range. Such co-morbidity may develop with ADHD, and some young children with ODD may later develop anxiety or depressive disorders comorbid with ODD. This study found that, in the preschool years, a shift from ODD to either anxiety or depression, without any co-morbidity in the early grades, is uncommon. Several studies have also documented a strong association between CD and substance use (Whitmore et al., Windle, as cited in Loeber, 2000) with CD as the psychiatric disorder most strongly associated with substance abuse.

Loeber (2000) conducted a literature review of the co-morbidity of CD and found that comorbid conditions in girls with CD are relatively predictable. He asserted that, in general, adolescent girls are more at risk for anxiety and depression. Accordingly, there is an increased risk for such disorders in girls with CD. Thus, gender and age are crucial indicators in determining and diagnosing comorbid conditions with CD. Several other features of CD are relevant because children with CD are also more likely to show deficiencies in academics, as well as with a variety of cognitive processes. There is a strong relationship between CD and academic failure and possible learning disabilities (Tynan, 2006). Thus, complexity of this disorder appears to be the norm.

## **Diagnosis**

There are no definitive psychological or biological tests for diagnosis of disruptive disorders (University of British Columbia, 2004). The accurate diagnosis of disruptive disorders requires an assessment involving two different assessment methods (Christophersen & Mortweet, 2001). In addition, such an assessment may help detect patterns of co-occurring disorders. Assessments may include interviews on family history and child-rearing practices, as well as behavior rating scales.

The following diagnosis criteria are outlined by the Center for the Advancement of Children's Mental Health at Columbia University (2003). The mental health provider, after interviewing the child, family, and teachers, should also evaluate the course of the child's development, especially through school records. Particular attention should be paid to any oppositional or aggressive behavior that is not age-appropriate. For a diagnosis of ODD, a pattern of negative, hostile defiant behavior which reflects significant impairment in social and academic functioning and which has persisted for at least six months must be established. It must also be confirmed that the behavior has not occurred in the course of a psychotic or mood disorder.

To make a diagnosis of CD, the mental health clinician must ascertain whether the child has shown at least three major symptoms in the last three months, with one of the symptoms having occurred in the last six months. These symptoms must have occurred in various settings. The behavior must cause significant impairment in the child's social or academic life. Because CD usually occurs with another disorder, mental health clinicians should also look for other co-occurring disorders, such as ADHD. CD has no age limit and, in a child younger than age 10, the repetitive presence of only one of the 15 behaviors in the *DSM-IV* is sufficient for diagnosis (Tynan, 2006).



## **Prevention**

Recent studies pertaining to ODD and CD are focusing on efforts to prevent disruptive disorders from developing (University of British Columbia [UBC], 2004). Goals of prevention programs are to intervene early and mitigate risk factors, thus reducing the number of new cases (UBC, 2004). Prevention programs may be either universal, focusing on entire populations, or targeted, which are directed towards children who have been labeled high-risk (UBC, 2004). More research is needed to determine the effect of prevention programs on disruptive disorders.

## **Treatments**

According to analysis compiled by Burns et al. (1999), disruptive disorders are considered very difficult to treat. Various treatment modalities are utilized for treating these disorders as well as the comorbid disorders, which accompany ODD and CD.

The Center for the Advancement of Children's Mental Health (2000) maintains that, for some children with CD, behavior therapy can be used to teach new ways to resolve conflict through role playing and rehearsal. Furthermore, family functioning and the child's prognosis may be improved by parental management training. Parental management training helps parents to better understand the disorder and to learn strategies for dealing with their child. Further research has found, that among these two behavioral disorders, ODD has shown the best response to psychotherapy. Academic and social rehabilitation are also beneficial, as are certain forms of group therapy that use behavioral therapy techniques.

Murphy et al. (2001) state that treatment for ODD and CD usually involves individual and family therapy. Frequently, some children may need to be removed from the home and placed in foster care. It is also necessary to consider the other comorbid disorders that accompany CD that require treatment, such as ADHD, developmental disabilities, substance abuse disorder, anxiety disorders and mood disorders. CD requires early intervention, extensive treatment in multiple domains, and long-term follow-up (Offord & Bennett, as cited in Children's Mental Health Ontario, 2001). Parents who retain custody of a child with CD are taught limit-setting, consistency, and other behavioral techniques. Medication is only used to treat comorbid ADHD and moods disorder, but not CD itself. Furthermore, early diagnosis and intervention is the key to improved prognosis in the outcome of CD. However, there is no single effective treatment for this disorder. If CD is diagnosed along with another disorder, the other disorder is treated first (Center for the Advancement of Children's Mental Health at Columbia University, 2000).

### ***Evidence-based Treatments***

According to the U.S. Department of Health and Human Services (1999) and Burns et al. (1999), there are several psychosocial interventions that can effectively reduce antisocial behavior in disruptive disorders. After more than 80 studies were performed, two treatments met criteria for well-established treatments and 10 for probably efficacious treatment. These psychosocial interventions, which are proven effective, have had positive results in the treatment of boys (Technical Assistance Partnership, 2002).

### **Parent Management Training Techniques**

The following treatments are discussed by the U.S. Department of Health and Human Services (1999) and Burns et al. (1999) as being well-established. There are two treatments that are directed at training parents and which have been proven successful in reducing problem behaviors; these are particularly effective with children diagnosed with ODD. Parent management training had the most

significant amount of support, with 26 studies supporting this treatment approach (Chorpita & Daleiden, 2007). One of these treatments is a parent-training program based on the manual *Living with Children* (Bernal et al., as cited in Burns and the U.S. Department of Health and Human Services). The other is a videotape modeling parent training (Spaccarelli et al., as cited in Burns and the U.S. Department of Health and Human Services).

*Living With Children* – This treatment approach, which is based on Gerald Patterson’s coercion theory, attempts to change the patterns of interactions between parents and their children and to reduce the child or adolescent’s problem behavior (Society of Clinical Child and Adolescent Psychology, 2006). This treatment appears to be most successful for male and females ages 6 to 16 (Society of Clinical Child and Adolescent Psychology). According to the U.S. Department of Health and Human Services, this treatment teaches parents to reward desirable behaviors and ignore or punish deviant behaviors, based on principles of operant conditioning. Parents are instructed to read parts of these training manuals and therapists use the manuals as a guide for conducting the interventions. The parent training consisted of 8 to 10 clinic sessions in which a parent is taught to pay attention to and reward appropriate behavior and to ignore inappropriate behavior. The parents are then instructed on issuing commands and using reinforcement for compliance and time-out for noncompliance. Teaching procedures involved didactic instruction, modeling, role play, interaction with the child in the clinic, and structured times to practice skills in the home.

This type of parent training and social learning intervention has been found to be an effective method for decreasing deviant behavior. Furthermore, additional review has shown that such parent training has been carefully documented and empirically supported.

*Videotape modeling parent training* – As stated by the U.S. Department of Health and Human Services, this form of treatment provides a series of videotapes covering parent-training lessons, after which a therapist leads a group discussion of the videotape lessons. The information below is taken from the Society of Clinical Child and Adolescent Psychology (2006). This treatment is generally administered in a group setting, led by a therapist, with opportunity to discuss the videotaped lessons after viewing. This treatment is best used with parents of children ages 4 to 8.

Table 4

### **Ways Parents Can Help a Child with ODD**

- Build on the positive; give your child praise and positive reinforcement.
- Be a good model for your child. Take a break if you are about to make a conflict worse, not better.
- Choose your battles wisely. Prioritize things you want your child to do.
- Establish reasonable, age appropriate limits with consequences that can be easily enforced.
- Work with and obtain support from other adults, e.g., teachers, coaches, and spouse.
- Manage your own stress.

Source: American Academy of Child & Adolescent Psychiatry (AACAP), 1999.

The following treatments discussed are efficacious in that they have been successful in treating children, particularly in clinical trials. These treatments are discussed by Burns and outlined in the Technical Assistance Partnership for Child and Family Mental Health, 2002.

### **Cognitive Behavioral Approaches**

According to the Technical Assistance Partnership for Child and Family Mental Health (2002), there are several behavioral approaches for treating CD and ODD. These approaches include: Multisystemic Therapy by Scott Henggeler; Anger Coping Therapy by Lochman and Lochman; Assertiveness Training by Huey and Rank; Delinquency Prevention Program by Tremblay and Vitaro; Rational Emotive Therapy by Block; Videotape Modeling Parent Training by Webster-Stratton; and Parent-Child Interaction Therapy by Eyberg and McNeil.

### **Multisystemic Therapy**

According to the University of Virginia Institute for Law, Psychiatry, and Public Policy, an intervention model with proven success in treating adolescents with CD is Multisystemic Therapy (MST). MST is particularly effective for treating youth with CD because it applies techniques that promote detachment from deviant peers, builds stronger bonds to the family and school, enhances family management skills such as monitoring and discipline, and builds develop greater social and academic competence (Brunk, 2000). Treatment addresses the needs of the youth and family. Results of studies with hostile and antisocial youth have show that MST is effective in reducing conduct problems and improving family functioning. (For more information on MST, please refer to the “Juvenile Offenders” section in the *Collection*.)

### **Pharmacological Treatment**

As found by Boesky (2002), there is no one type of medication usually prescribed for ODD and CD because there has been no one class of medication found to be beneficial. Psychostimulants may be prescribed for concurrent problems with impulsivity and hyperactivity. Antidepressants may also be prescribed to youth with mood disorders. Medication may also help with co-occurring mental health disorders, making it more likely the child will be able to participate and benefit from intervention strategies. In the short term, stimulant medicine has proven effective in controlling symptoms of inattention, impulsivity, and hyperactivity (Tynan, 2006). However, stimulant medication does not result in improved parent-child, teacher-child, or peer relationships (Tynan). Similar to approaches used to treat ADHD, a multidisciplinary and multimodal approach to treatment is required (Tynan). No medication is consistently effective in the treatment of CD when ADHD is not present. Because substance abuse frequently co-occurs with CD, clinicians should use caution when prescribing stimulants.

According to the U.S. Department of Health and Human Services, while no drugs have been found to be consistently effective in treating CD, four drugs have been tested (1999). Lithium and methylphenidate have been found to reduce aggressiveness in children with CD (Campbell et al., Klein et al., as cited by the U.S. Department of Health and Human Services). Some studies; however, could not establish that lithium was effective. Additional research studies found that methylphenidate was superior to lithium and that carbamazepine was frequently effective, but multiple side effects were also reported (Kafantaris et al., as cited by the U.S. Department of Health and Human Services). In studies of Clonidine, patients showed a significant decrease in aggressive behavior, but exhibited significant side effects that would require monitoring of cardiovascular and blood pressure parameters (Kempf et al., as cited by the U.S. Department of Health and Human Services).

As stated by Christophersen & Mortweet (2001), there is limited support for pharmaceutical treatments for ODD. Studies have shown that such a treatment approach is not effective for children with ODD. However, children with ADHD and ODD may benefit from stimulants or tricyclic antidepressants. Pharmacotherapy should not be utilized as the sole treatment for a child with ODD or CD unless prescribed for comorbid disorders. In addition, medications must be prescribed only in conjunction with psychological interventions such as parent training.

### ***Unproven Treatments***

Research indicates that therapy for disruptive disorders should involve treatments that are delivered with enough frequency and duration to produce the desired treatment outcomes (Children's Mental Health Ontario, 2001). There is little research supportive of single-session or brief interventions or for approaches such as boot camps, psychiatric hospitalization, medication trials, or a brief course of cognitive-behavioral therapy (Cowles et al. as cited in Children's Mental Health Ontario). Boot camps have consistently demonstrated good initial results but long-term declines: boot camp graduates experience higher rates of arrests and commit more serious crimes (Tynan, 2006). Poor long-term outcomes following this treatment may be due to group reinforcement of criminal activity accompanied by lack of family or community change (Tynan). Moreover, group treatment may also have possible negative adverse effects.

Individual psychotherapy as a single treatment has not proven effective for CD, although individual sessions may facilitate treatment compliance (Tynan, 2006). Individual counseling may help a child who is trying to follow a more structured and comprehensive treatment program.

### **Other Treatment Issues**

ODD and CD are more prevalent among adolescents from families with low socioeconomic status (Loeber, 2000). CD is more common in neighborhoods characterized by social disorganization and high crime rates (Loeber). More research is needed to assess the differences of CD and ODD in rural and urban environments, given that results from current research are mixed and the poor prognosis of CD is associated with urban areas (Loeber).

The following information is attributed to Tynan (2006). Recent research suggests that the severity of the CDD and ODD, rather than the age of the child, may be a predictor of treatment failure. However, improvements have been documented in all age ranges and all levels of severity. Common elements in successful treatments are high structure, specific goals, and clear behavioral techniques. These treatment components improve communication and problem solving skills, as well as reinforce prosocial behaviors.

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### **Organizations/Weblinks**

#### **Child, Adolescent and Family Branch Center for Mental Health Services**

5600 Fishers Lane, Room 18-49 - Bethesda, MD 20857  
800-789-2647

#### **Focus Adolescent Services**

Teen Behavior Problems and Behavioral Disorders  
<http://www.focusas.com/BehavioralDisorders.html>

#### **Internet Mental Health**

Oppositional Defiant Disorder  
<http://www.mentalhealth.com/dis/p20-ch05.htm>

#### **notMYkid.org**

Oppositional Defiant Disorder  
<http://www.notmykid.org/parentArticles/ODD/default.asp>

#### **University of Virginia Health System**

P.O. Box 800224 - Charlottesville, VA 22908  
434-924-3627  
[http://www.healthsystem.virginia.edu/uvahealth/adult\\_mentalhealth/odd.cfm](http://www.healthsystem.virginia.edu/uvahealth/adult_mentalhealth/odd.cfm)

#### **Virginia Commonwealth University Health System**

1250 East Marshall Street - Richmond, VA 23298  
804-828-9000  
<http://www.vcuhealth.org>

# MALADAPTIVE BEHAVIORS

## SEXUAL OFFENDING

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## **Introduction**

Sexual offenses perpetrated by juveniles are a serious problem. Each year in the United States, an estimated one-fifth of the rapes are committed by juveniles. One-half of the child molestations are committed by juveniles (Hunter, 2000). It is believed that approximately half of all adult sexual offenders began their criminal careers during adolescence (Saleh, 2004). The Federal Bureau of Investigation reported that, in 2001, approximately 12% of all rapes resulted in the arrest of a juvenile (Saleh). In Virginia's Department of Juvenile Justice system, almost 10% of the male population has a sex offense charge (Virginia Department of Juvenile Justice, 2004). Sexual offending is not a disorder per se, but is rather a behavioral problem that may be closely linked to other disorders.

Juveniles who perpetrate sexual offenses are defined as those who commit any sexual act against the victim's will, without consent, or in an aggressive, exploitive, or threatening manner (Matthews, 1997). They are usually between 12 and 17 years of age and are mostly male, although



some studies have found a number of females and prepubescent perpetrators (Hunter, 2000). Sexually abusive behaviors can vary from non-contact offenses to acts of penetration (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2001).

There are two types of juvenile sexual offenders: those who target children and those who offend against their peers or adults (Hunter, 2000). The type of offense is based on factors such as the age and sex of the victim, the relationship between the victim and the offender, and the amount of force used (OJJDP, 2001). Table 1 outlines the characteristics of sexually abusive juveniles.

## Characteristics of Juvenile Sexual Offending

Sexual and physical abuse, child neglect, and exposure to family/domestic violence are associated with juvenile sexual offending (Center for Sex Offender Management, 1999). Juvenile sexual offenders may be characterized as loners with few close friends (Thakur, as cited by Kushner, 2004). Exposure to pornography has also been cited, but studies examining whether pornography leads to juvenile sexual offending have been inconclusive (OJJDP, 2001). Likewise, the association between substance abuse and juvenile sexual offending has not been fully established (Center for Sex Offender Management).

*Table 1*

### Characteristics of Sexually Abusive Juveniles

|  |
|--|
| Typically adolescents, age 12 to 17.                           |
| Mostly male perpetrators.                                      |
| Difficulties with impulse control and judgment.                |
| Up to 80% have a diagnosable psychiatric disorder.             |
| 30-60% exhibit learning disabilities and academic dysfunction. |
| 20 to 50% have histories of physical abuse.                    |
| 40 to 80% have histories of sexual abuse.                      |

Sources: Center for Sex Offender Management, December 1999 and Hunter, 2000.

## Comorbidity

Sexually abusive juveniles share other common characteristics, including:

- high rates of learning disabilities and academic dysfunction;
- the presence of other behavioral problems and conduct disorder (CD); and
- difficulties with impulse control and judgment. (Saleh, 2004)

Juvenile sexual offenders have also been known to demonstrate characteristics of paraphilia, which is an intense, repeated sexual arousal to unconventional stimuli (PsychDirect, 2004). Offenders with paraphilia tendencies were also reported to have high rates of psychiatric disorders (Saleh, 2004). Within a recent study of juvenile offenders, 95% had two or more paraphilias, 82% had a mood disorder, 55% with anxiety disorder, 55% with impulse control disorder, 71% with attention-deficit/hyperactivity disorder, 94% with CD, and 50% had a substance abuse disorder (Saleh).

## **Juvenile Female Sexual Offenders**

There are few studies that address juvenile female sexual offenders. Furthermore, female sexual offending has been under-reported and under-represented in sexual offender literature, due to the difficulty of finding adequate samples of female participants (National Center on Sexual Behavior of Youth, 2004). For instance, re-offense rates for females and males cannot be compared because of unknown sexual and non-sexual re-offense rates for female sexual offenders (National Center on Sexual Behavior of Youth).

These studies have identified implications for treating the juvenile female sexual offender. One implication is that female sexual offenders are usually more likely to have histories of maltreatment, with physical abuse being apparent in 20% of studied cases and sexual abuse in 50% of studied cases (Mathews et al., 1997). Compared to those of juvenile males, the histories of the studied females reflected even more extensive and pervasive childhood maltreatment because many of these females were exposed to interpersonal aggression by both females and males (Mathews et al.). Moreover, the histories of these females revealed that they were victimized at younger ages and were more likely to have had multiple perpetrators (Mathews et al.).

Juvenile female sexual offenders may molest children of both genders, with the victims typically being relatives or acquaintances of the perpetrator (Mathews et al., 1997). Many of the victims of female sexual offenders were frequently molested in the context of baby-sitting. Preliminary research has also revealed that these females had very disruptive and tumultuous childhoods, with high levels of trauma and exposure to dysfunction. High levels of impulsive delinquent behaviors, including substance abuse and other high-risk behaviors, were also observed (Mathews et al.). Studies are being conducted to ascertain effective treatments. However, preliminary results indicate that treatment approaches should be employed to address the early and repetitive developmental traumas experienced by these offenders.

## **Treatments**

Funding problems and ethical issues have made it difficult to conduct controlled outcome studies on the treatment of juvenile sexual offenders. However, a number of encouraging clinical reports have been published. Treatment for young children with sexual behavior problems has been evaluated in two randomized trials (Bonner et al. & Pithers et al., as cited by Chaffin & Friedrich, 2004). Treatments were compared but the key finding from these studies were that the overall prognosis for children with sexual behavior problems is good and that sexually abusive juveniles can benefit from treatment.

Adolescent sex offenders differ from their adult counterparts in that juveniles generally do not present the same kinds or levels of sexual deviancy and psychopathic tendencies that may be observed among adult offenders (Saunders et al., 2001).

Promising sexual offender treatment programs often combine an intensive, multi-modal approach with early intervention. Comprehensive cognitive-behavior programs may focus on taking responsibility for one's sexual behavior, developing victim empathy, and developing skills to prevent future offending. Treatment approaches for juveniles can vary, from biochemical treatment to group therapy to cognitive behavioral therapy (Juvenile Justice Evaluation Center, 2002).

Another promising treatment currently being researched is drug treatment from the opioid antagonists' class. This is being studied to determine the drug's ability to safely control sexual

impulses and arousal in adolescent sexual offenders (Ryback, as cited by Reuters Health Information, 2004).

### ***Goals of Treatment***

According to Saleh (2004), treatment of juvenile sexual offenders focuses on key objectives: confronting the sexual offender's denial; decreasing deviant sexual arousal; developing sexual interests of a nondeviant nature; promoting empathy with the victim; enhancing interpersonal and social skills; clarifying values; clarifying cognitive distortions; and recognizing internal and external antecedents of sexual offending behavior (American Academy of Child & Adolescent Psychiatry [AACAP], 1999). The principal goal of sexual offender treatment is to help the patient gain control over inappropriate and deviant sexual symptoms or impulses so that they may cease offending (Saleh).

### ***Multisystemic Therapy***

There is no array of juvenile sex-offender treatments having clinical trials that validate treatment effectiveness. However, multisystemic therapy (MST), which has been evaluated in two randomized trials treating highly delinquent juvenile sex offenders, has been shown to be beneficial for the treatment of these youth (Borduin & Schaeffer, as cited by Chaffin & Friedrich, 2004).

Multisystemic therapy (MST) is an intensive family and community-based treatment, which addresses the multiple factors of serious antisocial behavior in juvenile abusers. Treatment can involve any combination of the individual, family, and extra familial factors (e.g., peer, school, or neighborhood). MST promotes behavior change in the juvenile's natural environment, using the strengths of the juvenile's family, peers, school, and neighborhood to facilitate change (Center for Sex Offender Management, 1999).

Concepts derived from family systems therapy can be incorporated into service treatments for sexual offending (Schladale, 2002). These family-based treatments do not need to be limited to an intensive home-based approach (Schladale). Parents or guardians need to be involved in the assessment and treatment process (Schladale). The use of family therapy may be most beneficial in instances where incest has occurred, especially when the sexual offender will be rejoining the family after treatment (AACAP, 1999).

In perhaps the best-controlled study to date, MST was compared to individual therapy in the outpatient treatment of 16 adolescent sexual offenders. Using re-arrest records as a measure of recidivism (sexual and non-sexual), the two groups were compared at a three-year follow-up interval. Results revealed that juveniles receiving MST had recidivism rates of 12.5% for sexual offenses and 25% for non-sexual offenses, while those juveniles receiving individual therapy had recidivism rates of 75% for sexual offenses and 50% for non-sexual offenses (Hunter, 2000).

### ***Group Therapy***

Group sessions are often used in hospital or residential treatment settings and for monitoring a behavioral management system. This therapy provides a setting in which it is difficult for the sex offender to minimize, deny, or rationalize his sexual behavior. It can be offered within a variety of settings dependent upon environment, group membership, severity of sexual offenses, group objectives or goals, open or closed, as well as the length of the group experience (AACAP, 1999).

### ***Residential Sexual Offender Treatment***

Juveniles who have significant offending histories and/or are deemed to be at a high risk to sexually reoffend are appropriate for residential sexual offender treatment, which ensures public and community safety, and simultaneously provides juveniles with intensive treatment that addresses both sexual and non-sexual behaviors. Residential programs provide intensive milieu treatment that is delivered by trained staff in a highly structured setting. The key to a successful residential programming is individualizing treatment which allows each juvenile to address the unique and specific issues that are relevant to gaining control over their sexual and nonsexual behaviors. As a result, the length of time a juvenile remains in the program varies, because it is contingent upon the severity of the juvenile's problematic behaviors and motivation in treatment.

In one recent study of 668 juveniles participating in residential sexual offender programs within Virginia's juvenile correctional centers, the recidivism rate based on re-arrests for sexual offenses was four percent (with an average time post-release of 4½ years) (Wieckowski et al., 2005). The projected recidivism rate for sexual offenses was 7.7%, when based on all juveniles reaching the 10-year post-release mark (Waite et al., 2005). Successful integration of juveniles from a residential program is based on continued services in the community. Juveniles who successfully complete a residential program respond best when they are provided a gradual reduction in supervision and treatment services based on their compliance with parole rules and application of material they learned in treatment.

### ***Community-based Programming***

Community-based programming for juvenile sexual offenders is gaining more attention. Recent research suggests that community-based programming can offer certain advantages, including shortening residential lengths of stay, reducing the number of juvenile sexual offenders placed in residential care settings, and improving the post-residential transitioning of youth back into community settings (Hunter et al., 2004). Economic and clinical considerations have also bolstered the need for effective community-based programming. Key concepts guiding community-based programming are recognition of the heterogeneity of the population, establishment of a seamless continuum of care, emphasis on the myriad of problems this population manifests, and integration of legal and clinical management (Hunter, et al.). Community-based programming may be an effective element to the treatment continuum for juvenile sexual offenders.

### ***Virginia's Sexual Offender Treatment Program***

The following information about Virginia's Juvenile Sex Offender programs is taken from the Virginia Department of Juvenile Justice's website (2004). The Virginia Department of Juvenile Justice (DJJ) created a Sexual Offender Treatment Program at the Ellen Allen Cottage at Hanover Juvenile Correctional Center in 1990. DJJ worked with the Division of Prevention Research in the Department of Psychiatric Medicine at the University of Virginia to create an evaluation of the treatment program, collect and analyze data pertaining to juvenile sexual offenders and produce a report that discusses the recidivism data for sexual offenders. With implementation of the program, 14 beds were allocated to the treatment of juveniles having a sexual offense background. Today, the program has grown to treating up to 150 adolescents per year.

Four of Virginia's juvenile correctional centers also provide sexual offender treatment services, utilizing specialized, self-contained units that house 10 to 24 juveniles each. In Fiscal Year 2004, the average length of stay was 28 months. Juveniles entering the program receive a variety of

individualized treatments including psychotherapy, group psychotherapy, family therapy, and treatment team meetings (Wieckowski et al., 2005).

DJJ projects the recidivism rate for those who have completed the program to be 4.7% after five years and 6.9% after 10 years (Wieckowski et al., 2005). The recidivism rate, as of 2006, is outlined in Table 2.

Table 2

**Youth Labeled as Sex Offenders and Rearrested for a Sex Offense**

| Year of Release | Number Released | Number Rearrested Since Release | Percentage Rearrested |
|-----------------|-----------------|---------------------------------|-----------------------|
| 2001            | 115             | 5                               | 4.3%                  |
| 2002            | 115             | 4                               | 3.5%                  |
| 2003            | 92              | 4                               | 4.3%                  |
| 2004            | 98              | 7                               | 7.1%                  |
| 2005            | 101             | 0                               | 0.0%                  |

Source: *Data from DJJ Research Unit, FY 2006*, Virginia Department of Juvenile Justice, 2007.

DJJ study findings indicate that sexual recidivism rates for juvenile sexual offenders are lower than those of adult offenders and that youth participating in a self-contained sexual offender treatment program are less likely to participate in criminal activity after release. This is particularly true for the non-sexual assault offenders. The study offers two important findings:

- rates of recidivism, based on re-arrests, for sexual offenses among juvenile sex offenders are low and are not based on the type of treatment during incarceration, and
- high impulsive/antisocial behaviors significantly increase the probability of recidivism, regardless of type of treatment during incarceration (Wieckowski et al., 2005).

***Psychopharmacological Treatments***

In treating sexual offenders, selective serotonin reuptake inhibitors (SSRIs) have been shown to have an impact on sexual preoccupations, sexual drive, and arousal (AACAP, 1999). Further information about SSRIs is provided in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

Treatment of sexual offenders through the use of antiandrogen drugs should be reserved for the most severe sexual abusers and is discouraged for use for juvenile sexual offenders under the age of 17 (AACAP, 1999). In addition, these drugs should never be used as an exclusive treatment (AACAP).

***Treatment Implications***

According to Saleh, informed consent is critical in treating sexual offenders (2004). Parents, as well as patients, need to be informed about the nature of the condition. The prognosis, nature, and purpose of treatment, as well as the risks associated with treatment, should all be addressed prior to beginning treatment.

Early interruption of a sexual abuse cycle can potentially prevent the sexual behaviors from becoming entrenched and reinforced (Westchester Juvenile Sex Offender and Sexually Aggressive Youth Planning Committee, 2000). Treatment which involves law enforcement, the offending

adolescent and their families can provide a valuable opportunity to reduce the incidents and recidivism of sexual offending (Westchester Juvenile Sex Offender and Sexually Aggressive Youth Planning Committee).

## **Promising Approaches to Intervention**

The following is a review of issues elements to the development of successful community-based and residential treatment programming for sexually abusive juvenile (Center for Sex Offender Management, 1999).

### ***Coordination between the Criminal Justice System and Treatment Providers***

Most treatment specialists believe that successful programming for sexually abusive juveniles requires a coordinated effort between the juvenile justice system staff and treatment providers. As supported by clinical experience, effective motivators for treatment include suspending a low-risk juvenile's sentence contingent upon his or her successful completion of a community-based treatment program, and making the high-risk juvenile's release contingent upon successful completion of a residential program.

### ***Supervision***

To date, no studies have clearly identified which supervision strategies are most effective with juveniles who commit sexual offenses. Adult sexual offender supervision utilizes these management strategies: intensive supervision and sexual offense specific treatment; interagency collaboration, multidisciplinary teams, and the specialization of supervision and treatment staff; the use of the polygraph to monitor therapy and compliance with supervision conditions; and program monitoring and evaluation. However, too little is known as yet about young perpetrators to apply adult standards to them.

### ***Role of Supervision Officers***

In many programs, parole and probation officers play an integral role in assisting treatment providers by addressing critical issues and supervising juveniles' activities in the home and community and being aware of the juveniles' behavior and progress in residential treatment programs. Parole and probation officers are a key element in helping juveniles transition from a residential to community-based treatment program. While there is little agreement among the treatment community about the proper role of supervision officers in the treatment of young sexual abusers, supervision officers should, at a minimum, communicate and collaborate with treatment providers (Center for Sex Offender Management, 1999).

## **Assessment**

Careful screening is critical to match the juvenile's needs to the type and level of treatment, which can range from community-based programming to intensive residential treatment. Ideally, this assessment reflects the careful consideration of the danger that the perpetrator presents to the community, the severity of psychiatric and psychosexual problems, and the juvenile's amenability to treatment. Community-based programs should not compromise community safety by admitting juveniles who are aggressive and violent.

### ***Clinical Assessment***

Professional evaluation of juveniles and their appropriateness for placement should be conducted post-adjudication and prior to court sentencing. Clinical assessments should be

comprehensive and include careful record reviews, clinical interviewing, and screening for co-occurring psychiatric disorders.

### ***Assessment of the Juvenile's Home***

Assessments of the juvenile's appropriateness for community-based programming should include a thorough review of his living arrangements, as well as a determination of whether the parents are capable of providing supervision. It is essential that the community and other children are protected from potential harm, both physical and psychological.

### ***Clinical Programming***

Clinical programming for sexually abusive juveniles typically includes a combination of individual, group, and family therapies. In addition, many programs offer supportive educational groups to families of these juveniles. Juveniles who display more extensive psychiatric or behavioral problems, such as substance abuse, may require additional treatment, including drug or alcohol rehabilitation and psychiatric care. All therapies provided to sexually abusive juveniles should be carefully coordinated within the treatment agency and with external agencies providing case management and oversight.

According to the Center for Sex Offender Management (1999), providers have established these as essential components of the treatment process for juveniles who commit sexual offenses:

- Gaining control of behavior;
- Teaching the impulse control and coping skills needed to successfully manage sexual and aggressive impulses;
- Teaching assertiveness skills and conflict resolution skills to manage anger and resolve interpersonal disputes;
- Enhancing social skills to promote greater self-confidence and social competency;
- Programming designed to enhance empathy and promote a greater appreciation for the negative impact of sexual abuse on victims and their families;
- Provisions for relapse prevention. This includes teaching juveniles to understand the cycle of thoughts, feelings, and events that are antecedent to the sexual acting-out, identify environmental circumstances and thinking patterns that should be avoided because of increased risk of reoffending, and identify and practice coping and self-control skills necessary for successful behavior management;
- Establishing positive self-esteem and pride in one's cultural heritage;
- Teaching and clarifying values related to respect for self and others, and a commitment to stop interpersonal violence. The most effective programs promote a sense of healthy identity, mutual respect in male-female relationships, and a respect for cultural diversity; and
- Providing sexual education to give an understanding of healthy sexual behavior and to correct distorted or erroneous beliefs about sexual behavior.

### ***Qualifications of Sex Offender Treatment Providers***

The following information is taken from a personal communication with Dennis Waite, Ph.D. (December 18, 2007). Due to the potential risk to the community of ineffective treatment for sex offenders, the Virginia General Assembly passed legislation in 1997 to create a certification process for clinicians who provide service to sex offenders. While licensed practitioners are required to practice only within the scope of their expertise (i.e., one could not provide sex offender treatment unless qualified to do so), a certification as a sex offender treatment provider (CSOTP) offers additional evidence of a specific expertise in this area. When seeking professional services for sex

offenders, it is prudent to ensure that the qualifications of the service provider indicate expertise in the treatment of sex offenders. One way to ensure such expertise is to select a professional with this certification (CSOTP). Qualifications include a minimum of a Master's Degree in selected fields, 50 hours of sex offender treatment-specific training, 2,000 hours of post-degree clinical experience, of which 200 must be face-to-face treatment/assessment of sex offenders, and 100 hours of clinical supervision (Virginia Board of Psychology, *Regulations Governing the Certification of Sex Offender Treatment Providers*, 18 VAC 125-30 et seq.).

## **Controversial Treatments**

Some areas of practice are considered ethically and legally controversial and may create special problems for juvenile sexual offending practitioners (Center for Sex Offender Management, 1999). These include pre-adjudication evaluations, sexual offense risk assessments, phallometric assessments, and polygraphs. At issue are these treatments' lack of overall effectiveness and validity within a juvenile population.

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Mathews, F. (1996). *The Invisible Boy: Revisioning the Victimization of Male Children and Teens*. Ottawa: NCFV - Health Canada

Mathews, F. (1995) *Making the Decision to Care: Guys and Sexual Assault*. Ottawa: NCFV - Health Canada

Ryerse, C. (1996). *National Inventory of Treatment Programs for Child Sexual Abuse Offenders*. Ottawa: NCFV - Health Canada

### **Organizations/Weblinks**

#### **The Awareness Center**

Sexually Reactive Children and Juvenile Sex Offenders

<http://www.theawarenesscenter.org/JuvenileSexOffenders.html>

#### **Focus Adolescent Services**

Adolescent Sex Offenders

877-362-8727 or 410-341-4342

<http://www.focusas.com/AdolescentSexOffenders.html>

#### **Institute for Family Centered Services (IFCS)**

<http://www.ifcsinc.com>

#### **Juvenile Forensic Evaluation Resource Center**

Understanding Juvenile Sex Offenders: Research Findings and Guidelines for Effective Management and Treatment

[http://www.ilppp.virginia.edu/Publications\\_and\\_Reports/UndJuvSexOff.html](http://www.ilppp.virginia.edu/Publications_and_Reports/UndJuvSexOff.html)

#### **Virginia Department of Juvenile Justice**

[http://www.djj.state.va.us/index\\_information/treatment\\_sex\\_offenders.php](http://www.djj.state.va.us/index_information/treatment_sex_offenders.php)

# EATING DISORDERS

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## **Introduction**

Eating disorders are a significant problem among children and adolescents in the United States. Anorexia nervosa is fatal 20% of the time, the highest death rate of any mental illness (Maier, Congressional Briefing, U.S. House of Representatives, 2003). Of the millions of Americans who are diagnosed annually with an eating disorder, an estimated 90% are adolescents and young women (Ice, as cited by Eating Disorders Coalition, 2005). Nearly half of all Americans know someone who has an eating disorder (South Carolina Department of Mental Health, 2004). Table 1 outlines the categories of eating disorders.

A study of children aged 8 to 10 found that half the girls and one-third of the boys are dissatisfied with their size (Harvard Eating Disorders Center, as cited by Lang, 2000). A sample of 1,373 high school students also showed that female high school students were four times more likely to try to lose weight than males (63 vs. 16%), whereas male high school students were three times more likely than females to try to gain weight (28 vs. 9%) (Rosen and Gross, as cited by National Eating Disorders Association, 2002).

The prevalence of eating disorders, particularly among adolescent females, has grown at an alarming rate during the last three decades (American Dietetic Association [ADA], 2001). The American Psychiatric Association (APA) (2000) has reported that eating disorders are now the third most common form of chronic illness in the adolescent female population, with an incidence of up to five percent. The APA study indicates that eating disorders are far less likely to occur in males (estimates of the male-female prevalence ratio range from 1:6 to 1:10).

The incidence of both anorexia and bulimia, however, is increasing among boys (Blinder, cited by International Eating Disorder Referral Organization, No Date). In fact, boys represent 19 to 30% of the younger patient populations having anorexia nervosa, suggesting that they are becoming increasingly vulnerable to eating disorders.

Adolescents with eating disorders face the risk of potentially irreversible medical complications (ADA, 2001). These complications include growth retardation when the eating disorder occurs prior to closure of the epiphyses, pubertal delay or arrest, impaired acquisition of peak bone mass during teenage years, and increasing the risk of osteoporosis in adulthood (ADA). Younger children in general become skeletal more quickly because they have less body fat than adolescents (Blinder, as cited by International Eating Disorder Referral Organization).

Typically, females who develop an eating disorder do so because of feelings of being overweight, while in actuality they are more likely to be a normal weight (Andersen, as cited by Something Fishy Website on Eating Disorders [SFWED], *e-Issues for Men with Eating Disorders*, 2005). Males who develop the disease are in fact typically more overweight medically (Andersen, as cited by SFWED, *e-Issues for Men with Eating Disorders*).

Table 1

### Characteristics of Eating Disorders

- **ANOREXIA NERVOSA** – a disorder characterized by a distorted body image that causes individuals to see themselves as overweight even when they are dangerously thin. They often refuse to eat and exercise compulsively. They lose large amounts of weight and often suffer from extreme malnutrition.
- **BULIMIA NERVOSA** – a pattern of behavior in which the individual eats excessive quantities of food and then purges the body by using laxatives, enemas, or diuretics, vomiting, and/or exercising. They often act in secrecy and feel disgusted and ashamed as they binge, yet once their stomachs are empty again feel relieved of tension.
- **BINGE EATING DISORDER** – a disorder in which individuals experience frequent episodes of out-of-control eating. However, unlike those with bulimia, they do not purge their bodies of excess calories.

Sources: American Psychological Association, 1998 and Murphy & Cowan, 2001.

### Precipitating Factors

It is often difficult to isolate the causal factors that precipitate development of eating disorders, although issues of body image are an integral part of all conversations about disorders and appear to be a major variable in predicting eating disorders in males. According to studies, the drive to be thin is a more significant predictor of both adolescent male and female eating disorders than their psychological and/or family profile (Wertheim et al., as cited by International Eating Disorder Referral Organization, No Date).

In many cases, however, the symptoms are brought on by a combination of psychological, physical, emotional and cultural pressures (ADA, 2001). Psychological factors include low self-esteem, feelings of helplessness, and intense dissatisfaction with appearance (APA, 1998). Furthermore, perfectionist or impulsive traits and rigid cognitive styles have been more frequently observed in these populations (American Psychological Association HealthCenter, 2000).

Dieting has the potential to trigger eating disorder in both males and females. One study indicates that up to 70% of high school males diet at some time to improve their appearance (as cited by Anorexia Nervosa and Related Eating Disorders, Inc., 2005). Forty percent of 9-year old girls have dieted. (Maier, 2003).

Studies have also noted a high prevalence of eating disorders among groups such as athletes, models, dancers, and performers, as well as young people who must limit food consumption due to diseases such as diabetes mellitus (ADA, 2001). One recent study concluded that girls participating in aesthetic sports versus non-aesthetic sports or no sports experienced higher weight concerns (Davison, Ernest, Birch, as cited by Natenshon, International Eating Disorder Referral Organization, 1999). Males who participate in sports as jockeys, wrestlers, and runners are also at increased risk of developing an eating disorder (Andersen, as cited by SFWED, *e-Issues for Men with Eating Disorders*, 2005). This suggests that the risk of developing such a disorder increases under circumstances in which dietary restraint or control of body weight assumes great importance.

The American Psychiatric Association has indicated that genetics may play a role in the development of maladaptive eating behaviors (2000). Specifically, first-degree female relatives and identical twin siblings of patients with anorexia or bulimia nervosa have higher rates of eating disorder diagnosis than the general population, suggesting the existence of a biological predisposition (APA). Inheritance patterns, however, remain unclear. Complex behavioral disorders such as anorexia and bulimia are likely to be caused by multiple genes and environmental factors (Eating Disorder Recovery Center, 2004).

Some researchers have found that abnormal serotonin metabolism may play a greater role in patients with bulimia than those with anorexia, suggesting biological differences in individuals with these two diagnoses (Murphy et al., 2001). A London-based study determined that people with anorexia were two times more likely to have variations in the gene regarding serotonin receptors, which in turn has an impact on appetite (BBC News, as cited by SFWED, *Genetics and Biology*, 2005).

In addition, factors such as dysfunctional families and relationships have been highly correlated to eating disorders (American Psychological Association HealthCenter, 1998). Individuals diagnosed with eating disorders are also more likely than the general population to have a history of abuse or trauma (ADA, 2001). Specifically, sexual abuse has been reported in 20 to 50% of patients with anorexia and bulimia nervosa. In addition, females with eating disorders who have suffered from sexual abuse also demonstrate higher rates of comorbid psychiatric conditions, which suggests that abuse may precipitate any number of psychological difficulties, especially those related to self-esteem (APA, 2000).

## **Diagnosis**

Eating disorders are characterized by abnormal eating habits and cognitive distortions related to food and weight. The major characteristic of all eating disorders is a preoccupation with weight and excessive self-evaluation (APA, 2000). There is a relentless obsession with food that is accompanied by an intense fear of weight gain (ADA, 2001). Over a lifetime, an individual may meet the criteria for more than one of the disorders, which suggests a continuum of disturbed eating habits and body image (ADA).

Although the *DSM-IV* criteria call for the diagnosis of a specific eating disorder, the symptoms typically occur along a continuum between those of anorexia nervosa and bulimia nervosa, with many patients demonstrating a mixture of both disorders (APA, 2000). Consequently, as many as 50% of patients are diagnosed with eating disorders not otherwise specified (EDNOS) (ADA, 2001). The diagnosis of EDNOS appears to be particularly prevalent in adolescents. The classification encompasses individuals with symptoms of anorexia and bulimia nervosa who do not meet the threshold for official diagnosis, as well as individuals with binge eating disorder (ADA). Because eating disorders occur less often in males and because males having disorders are not characteristically thin or frail, health professionals may underdiagnose them (Weltzin, as quoted by Anorexia Nervosa and Related Eating Disorders [ANRED], 2002).

One of the first physical signs of an eating disorder can be changes in the mouth, including enlarged salivary glands, changed tooth color, tissue loss or lesions, heightened sensitivity to temperature, and tooth decay resulting from excessive brushing following vomiting (National Eating Disorders Association, 2005). Dental practitioners are often the first to identify signs of bulimia. According to the National Eating Disorders Association, studies indicate that tooth erosion is evident in approximately 89% of bulimic patients.

Clinicians should recognize that the diagnostic criteria for eating disorders may not be entirely applicable to adolescents, due to the wide variability in rate, timing, and magnitude of height and weight gain during puberty (ADA, 2001). Furthermore, the absence of menses, one of the diagnostic criteria for females with anorexia nervosa, is difficult to ascertain during early puberty due to the unpredictability of menstrual periods at this age (ADA). It is also important for clinicians to keep in mind that other medical disorders may account for the low body weight observed in young patients (Murphy et al., 2001). A complete medical assessment should be conducted to rule out any potential underlying medical conditions.

While eating disorders are considered to be psychiatric in nature, they are distinct in the fact that the nutrition and medical-related problems can be life-threatening (ADA, 2001). As noted by the National Institute of Mental Health (NIMH) (2001), of particular concern is the increased mortality rate of individuals having the diagnosis, particularly among those with anorexia nervosa. Specifically, the mortality rate for anorexics has been estimated at 0.56% per year, which is about 12 times higher than the annual death rate for all causes of death among females between the ages of 15 and 24. According to NIMH, the most common causes of death in anorexics are complications of the disorder, such as starvation, cardiac arrest, electrolyte imbalance, and suicide.

## **Comorbidity**

Common comorbid disorders, as listed in Table 2, include mood disorders (i.e., depression), anxiety disorders (i.e., obsessive-compulsive disorder), personality disorders (i.e., borderline personality disorder), and substance abuse disorders (ADA, 2001). Researchers have yet to determine whether these conditions develop because of the isolation, stigma, and physiological changes brought on by eating disorders, or whether these conditions existed prior to the development of unhealthy eating habits (American Psychological Association HealthCenter, 1998).

One recent study of women with eating disorders suggests that women having recurring suicidal thoughts usually developed their disorders at younger ages (Ham, 2004). According to researchers conducting the Swiss National Science Foundation's two-year study, a majority of the participating patients had co-existing psychiatric disorders, as enumerated in Table 2. The researchers speculate

that the link between purging and suicidal attempts might point to a general lack of impulse control, whereas the higher prevalence of suicidal thoughts among anorexic patients suggests chronic self-harming behavior (Ham).

Table 2

### Common Comorbid Disorders

- **Major depression or dysthymia** – diagnosed in 50 to 75% of patients with anorexia and bulimia nervosa
- **Obsessive-compulsive disorder** – as high as 25% in anorexia nervosa patients
- **Personality disorders** – occur in 42 to 75% of individuals diagnosed with eating disorders
- **Substance abuse disorders** – present in as many as 30 to 37% of bulimia patients and 12 to 18% of anorexics

Source: American Psychiatric Association (APA), 1998.

Very young patients frequently display obsessive behaviors and depression and are far more frequently diagnosed with anorexia than bulimia (APA, 2000).

### General Treatment Principles

Individuals with eating disorders are among the least likely to seek treatment (American Psychological Association HealthCenter, 1998). However, once professional help is sought, these disorders can be successfully treated by an interdisciplinary team consisting of professionals from the medical, nutritional, and mental health disciplines (American Psychological Association HealthCenter). The earlier an eating disorder is identified and treated, the better the chances for recovery (Levine and Maine, 2002). It is important to recognize, however, that no single professional or discipline can provide all the necessary care that will improve the patient's chances of recovery (ADA, 2001). Rather, a comprehensive treatment plan should include medical care and monitoring, psychosocial interventions, nutritional counseling, and, when appropriate, medication management (NIMH, 2001).

The APA (2000) reports in its findings that treatment locations range from intensive inpatient settings, in which general medical consultation is readily available through partial hospital and residential programs, to varying levels of outpatient care. The weight, cardiac, and metabolic status of the patient are the most important physical parameters for determining the choice of setting. Patients who weigh less than 85% of their individually estimated healthy weights are likely to require a highly structured program and possibly 24-hour hospitalization. Hospitalization should occur before the onset of medical instability as demonstrated by severely abnormal vital signs, and should be based on psychiatric and behavioral grounds. Specifically, once a patient begins to display a rapid decline in food intake and a dramatic loss of weight despite other treatments, treatment providers should strongly consider hospitalization. Furthermore, the presence of external stressors or comorbid psychiatric problems may have a significant impact on this decision. More important than the particular treatment setting are the expertise and dedication of the members of the treatment team working with adolescents and their families (ADA, 2001).

Research has found that the sooner the disorder is recognized and treatment begins, the better the long-term outcome (NIMH, 2001). In general, adolescents have been found to have better outcomes than adults, with younger adolescents showing the most significant improvement (APA, 2000). It is important to note, however, that many patients display a limited response to treatment and will require long-term monitoring and intervention (U.S. Department of Health and Human Services, 1999). Anorexia nervosa, in particular, is very chronic in nature and may linger for five to ten years or even longer in some patients (Medscape Internal Medicine, 2006). Patients with anorexia may be particularly difficult to treat because they are highly resistant to weight gain (Murphy et al., 2001). They are likely to exhibit a fear of losing control, and therefore are likely to resist all nutritional rehabilitation efforts (Murphy et al.). Thus, ethical considerations may arise during the course of treatment, and involuntary hospitalization may be the necessary course.

While there are similarities in the physical illness precipitated by an eating disorder in males and females and in the initial medical treatment of the illness, gender diversity and sociocultural influences must be acknowledged in long-term treatment of the disorder in males (Andersen, as cited by SFWED, *e-Issues for Men with Eating Disorders*, 2005). There is a lack of treatment centers and therapy groups which offer services and treatments specially designed for males. As clinicians learn more about gender differences in eating disorders and gender-specific treatments, males can better expect to have their treatment needs addressed more fully (Eating Disorder Recovery Center, 2004).

## **ANOREXIA NERVOSA**

Approximately 0.5 to 3.7% of females suffer from anorexia nervosa in their lifetime (NIMH, 2001). Researchers estimate that approximately one% of female adolescents have anorexia (ANRED, 2004). It is the third most common chronic illness among adolescents (South Carolina Department of Mental Health, 2004). Table 3 lists the general symptoms of anorexia nervosa.

*Table 3*

### **General Symptoms of Anorexia Nervosa**

- Resistance to maintaining body weight at or above a minimally normal weight for age and height
- Intense fear of gaining weight or becoming fat, even when underweight
- Disturbance in perceptions of personal body weight, undue influence of body weight and shape in self-evaluation, or denial of the seriousness of the current low body weight

Source: National Institute of Mental Health (NIMH), 2001.

Anorexia nervosa affects predominantly female adolescents and people in their twenties, but there are reports of children as young as six affected by the disorder (ANRED, 2004). Statistics on the incidence of adolescent male anorexia are not readily available, although it is generally cited that society tends largely to expect strong and athletic as the body image for males, rather than the thin/waif-like image associated with females suffering from anorexia. One estimate suggests that 10% of the total population having anorexia and bulimia is male (ANRED).



Behavioral symptoms of anorexia nervosa may include being socially withdrawn, irritable, moody, and/or depressed (University of Virginia Health System, 2004). Table 4 lists several of the physical symptoms of anorexia nervosa.

Table 4

### Physical Symptoms of Anorexia Nervosa

- Dry skin that when pinched and released, stays pinched
- Dehydration
- Abdominal pain
- Constipation
- Lethargy
- Dizziness
- Fatigue
- Infrequent or absent menstrual periods in females who have reached puberty
- Intolerance to cold temperatures
- Emaciation
- Development of lanugo (fine, downy body hair)
- Yellowing of the skin

Source: University of Virginia Health System, 2004 and National Institute of Mental Health (NIMH), 2001.

### Treatment Methods

The treatment of anorexia nervosa generally occurs in three primary phases: (1) restoring the weight lost by severe dieting and purging; (2) treating psychological disturbances such as distorted self-perception, low self-esteem, and interpersonal issues; and (3) achieving long-term, full recovery (NIMH, 2001).

### Evidence-based Treatments

According to the APA (2000), the treatment methods described in the following paragraphs are most commonly utilized for anorexia patients:

- *Nutritional rehabilitation* – Considerable evidence suggests that nutritional monitoring is effective in helping patients return to a healthy weight, as long as it is conducted in the proper setting to meet the particular patient’s needs. For severely underweight patients, inpatient treatment has been found to be most effective. Clinicians have reported that as weight is restored, other eating disorder symptoms diminish; however, they often do not disappear completely.
- *Family psychotherapy* – The goal of family therapy is to involve family members in symptom reduction and to deal with family relational problems that may contribute to the anorexia. Some studies have found that family therapy may actually have greater long-term benefits than individual psychotherapy. However, these findings are limited to generalizations due to the fact that the patients in these studies often were not assigned to receive both family and individual treatment, which commonly occurs in practice.
- *Inpatient behavioral programs* – These programs commonly provide a combination of nonpunitive reinforcers, such as privileges linked to weight goals and desired behaviors. They have been shown to produce good short-term therapeutic effects.

- *Pharmacological treatments* – Medications are used most frequently after weight has been restored in order to maintain weight and normal eating behaviors and to treat psychiatric symptoms. The most typical medications prescribed are antidepressants; however, they should not be used in the acute phase of treatment for severely malnourished patients. Selective serotonin reuptake inhibitors (SSRIs) are frequently used for patients whose depressive, obsessive, or compulsive symptoms persist in spite of or in the absence of weight gain. However, studies have not shown SSRIs to be effective for purposes of restoring weight or preventing relapse (Kuo, 2006). A further description of the use of SSRIs is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

### ***Unproven Treatments***

Unproven treatments for anorexia patients cited by the APA (2000) include:

- *Individual psychotherapy* – The efficacy of this form of treatment remains uncertain. No controlled studies have reported whether cognitive behavioral psychotherapy or other specific psychotherapeutic interventions are effective for nutritional recovery. Clinicians generally agree that psychotherapy is almost always beneficial during acute refeeding; however, in starving patients, who are often negative, obsessional, or mildly cognitively impaired, this form of treatment may often be ineffective. Psychotherapy may, however, be a useful method in treating any co-occurring disorders.
- *Group psychotherapy* – Practitioners have found that group psychotherapy programs conducted during an acute phase among patients with anorexia may be ineffective and can sometimes have negative therapeutic effects, as patients may compete for who can be thinnest or exchange countertherapeutic techniques on simulating weight gain or hiding food.
- *12-Step Programs* – No data regarding the short- or long-term effectiveness of this form of treatment is available. However, use of addiction-based programs in isolation is discouraged, as patients will deprive themselves of the benefits of conventional treatments and may also be exposed to misinformation by well-meaning individuals in these groups.
- *Somatic treatments* – Vitamin and hormone treatments, electroconvulsive therapy, and other somatic treatments have been tried in uncontrolled studies. However, none has shown to have any significant therapeutic value to anorexic patients.

### ***Contraindicated Medications***

Tricyclic antidepressants should be avoided in underweight patients and in patients who are at risk for suicide (APA, 2000).

## **BULIMIA NERVOSA**

An estimated 1.1 to 4.2% of females have bulimia nervosa in their lifetime (NIMH, 2001). Congress has recently heard testimony that 13% of high school girls reportedly purge. (Maier, 2003). According to the *American Journal of Psychiatry* researchers, there is one male for every 8 to 11 females with bulimia. (ANRED, Males with Eating Disorders, 2005). Bulimia generally affects children in their teens, although there are cases reported for children much younger (International Eating Disorder Referral Organization, 1999). There are two subtypes of bulimia: purging and non-purging (exercise and restrictive food intake). Table 5 lists the symptoms of the disorder.

### **Treatment Methods**

The primary goal of treatment with bulimic patients is to reduce or eliminate binge eating and purging behavior. According to NIMH (2001) nutritional rehabilitation, psychosocial intervention, and medication management strategies are therefore often used. Specifically, treatment includes the

establishment of regular, non-binge meals, improvement of attitudes related to the disorder, encouragement of healthy but not excessive exercise, and resolution of any co-occurring disorders such as anxiety or mood disorders.

Table 5

### Symptoms of Bulimia Nervosa

- Recurrent episodes of binge eating, characterized by consumption of excessive amounts of food within a discrete period of time and lack of control over eating during the episode.
- Recurrent inappropriate responses to binges in order to prevent weight gain, such as self-induced vomiting or misuse of laxatives and other medications (often referred to as purging), fasting, or excessive exercise.
- The binge eating and compensatory behaviors both occur, on average, at least twice a week for three months.
- Self-evaluation is unduly influenced by body shape and weight.

Source: National Institute of Mental Health (NIMH), 2001.

### *Evidence-based Treatments*

The following treatments are most commonly utilized in bulimic patients:

- *Cognitive behavioral psychotherapy* – This form of psychotherapy, when specifically directed at the eating disorder symptoms and underlying cognitions, is the intervention for which there is the most evidence of efficacy. It has been found to lead to significant reductions in binge eating, vomiting, and laxative abuse (APA, 2000).
- *Pharmacological treatments* – Bulimia nervosa patients are typically more responsive to pharmacologic interventions than are anorexia nervosa patients (Berkman, et al., 2006). Psychotropic medications, primarily antidepressants such as the selective serotonin reuptake inhibitors (SSRIs), have been found to be helpful in treating bulimia. These medications are intended to reduce the frequency of disturbed eating behaviors, as well as to alleviate symptoms of comorbid disorders. Studies have found the use of antidepressants to be effective in reducing binge/purge behavior by a range of 50 to 75%. Most clinicians recommend continuing antidepressant therapy for a minimum of six months and preferably for a year (APA). Pharmacotherapy has been found to be especially effective for patients with symptoms of depression or anxiety for those who have not responded well to psychotherapy alone. It may also help to prevent relapse (NIMH, 2001).
- *Combined treatments* – There is generally a better response to cognitive behavioral therapy than pharmacotherapy; however, the combination of these two methods has been found to be superior to either alone (APA).

### *Unproven Treatments*

- *Individual psychotherapy* (interpersonal, psychodynamic, and psychoanalytic approaches) – While there is support for these approaches in case studies and reports, the efficacy of these methods has not been supported by scientific data. When directly compared to cognitive behavioral therapy, most have been found in short-term trials to be less effective (APA, 2000).
- *Behavioral therapy* – Evidence regarding the efficacy of this form of treatment is conflicting. Specifically, exposure treatment has not been found to have additive benefits over a foundation of cognitive behavioral therapy (APA).

- *12-Step Programs* – Addiction-based programs are not recommended as the sole treatment approach for patients with bulimia nervosa, as they do not attend to nutritional considerations or behavioral deficits (APA).

### ***Contraindicated Medications***

- Bupropion has been associated with seizures in purging bulimic patients and therefore should not be used in this population (APA, 2000).
- Monoamine oxidase inhibitors (MAOIs) are also potentially dangerous in patients with chaotic bingeing and purging; therefore their use should be limited (APA).

## **BINGE EATING DISORDER**

Between two to five percent of Americans experience binge-eating disorder in a 6-month period (NIMH, 2001). Table 6 outlines the symptoms of binge-eating disorders.

*Table 6*

### **Symptoms of Binge Eating Disorder**

- |  |
|--|
| <ul style="list-style-type: none"> <li>• Recurrent episodes of binge eating, characterized by consuming excessive amounts of food within discrete periods of time and a sense of lack of control.</li> <li>• Marked distress about the binge-eating behavior.</li> <li>• The binge eating occurs, on average, at least two days a week for six months.</li> <li>• The binge eating is not associated with regular use of inappropriate compensatory behaviors, such as purging, fasting, or excessive exercise.</li> </ul> |
|--|

Source: National Institute of Mental Health (NIMH), 2001.

Binge eating disorder, while listed separately in the *DSM-IV* appendix, has not yet been recognized by the American Psychiatric Association as an official psychiatric diagnosis. Researchers have found that the disorder, while relatively rare, is common among patients seeking treatment for obesity and occurs much more frequently in adults than adolescents (APA, 2000).

### **Treatment Methods**

The treatment goals and strategies for binge eating disorder are similar to those for bulimia nervosa. The primary difference in the two disorders is that patients with binge eating disorder present difficulties associated with being overweight, rather than being malnourished. Thus, they suffer from medical ailments which are different from those associated with overweight populations, such as high blood pressure, high blood cholesterol levels, diabetes, and heart disease (APA, 2000). Consequently, the treatment strategies tend to diverge only in the nature of medical interventions.

Little research exists on effective treatment strategies for binge eating disorder (NIMH, 2001). The creation of a diagnostic classification will allow this group of patients to be studied further from a clinical research perspective, and thus allow them to receive more accessible and appropriate treatment (Brewerton, 1997). Research is being conducted to assess treatments that show both decreases in binge eating and in weight for overweight individuals. Some preliminary data shows that SSRIs, tricyclic antidepressants, and anticonvulsants are efficacious in reducing bingeing episodes in weight (Berkman, et al., 2006). Cognitive behavioral therapy and various forms of self-help also have been effective at reducing binge eating, but less effective at controlling weight (Berkman, et al.). Effective treatments disrupt the binge-eating cycle and establish a structured

pattern of eating allow the patient to experience less hunger, deprivation, and negative feelings about food and eating. Additionally, hunger and negative feelings, which most likely to prompt binge eating, must also be reduced, decreasing the frequency of binges (NIMH).

### ***Unproven Treatments***

Unproven treatments for binge eating disorder patients cited by the APA (2000) include:

- *Nutritional rehabilitation and counseling* – Restrictive diets employed with group behavioral weight control programs have been associated with substantial initial weight loss, but are often less effective during or following the refeeding stage. Weight is commonly regained during this period.
- *Psychotherapy* – Behavior therapy, cognitive behavioral therapy, and interpersonal therapy have all been associated with binge frequency reduction rates. However, deterioration follows during the follow-up period for each of these types of therapy.
- *Addiction-based and self-help organization programs* – No systematic outcome studies of these programs are available.
- *Pharmacological treatments* – Antidepressants are typically used in binge eating disorder and related syndromes. However, there is a very high placebo response rate (around 70%), and patients tend to relapse after medication is discontinued.
- *Combined psychosocial and medication treatments* – The combination of medication with psychotherapy has been associated with significantly more weight loss than psychotherapy alone.

### **Cultural and Other Considerations**

A wide range of demographics has been observed in eating disorder patients (ADA, 2001). The disorders appear to be more common among Native Americans, while equally prevalent in Hispanic and Caucasian populations and less common among Asians and African Americans (APA, 2000). Researchers have also found that African American females are more likely to develop bulimia nervosa than anorexia and are more likely to purge with laxatives than by vomiting (APA).

Because values concerning weight and shape vary among cultures, clinicians must be mindful of patients' specific views on beauty, acceptance, and what it means to be "perfect" in the modern world (APA, 2000). Patients who are minorities or are from non-Western or other cultural backgrounds are likely to display different weight and shape concerns.

It is also important to note that anorexia nervosa is detectable in all social classes. Thus, higher socioeconomic status does not appear to be a major factor in the incidence of these disorders, as once was surmised by clinicians (ADA, 2001).

One recent survey of Internet websites indicates that, by a 2003 count, approximately 500 sites offer pro-anorexia and bulimia forums (Pirisi, 2005). An estimated four out of ten teenagers with eating disorders visit these pro-disorder sites (Peebles, as cited by McCook, 2005). These sites are a recent, but disturbing phenomenon.

Males with an eating disorder often go undiagnosed due to their embarrassment about not living up to the image of the ideal male body. In particular, males who binge or overeat compulsively may go undiagnosed, given society's unwillingness to accept such behavior in a male (Knowlton, 1995).

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**Organizations/Weblinks**

**Academy for Eating Disorders (AED)**

6728 Old McLean Village Drive - McLean, VA 22101  
703-556-9222  
<http://www.aedweb.org>

**Caring on line**

<http://www.caringonline.com>

**Dominion Hospital**

2960 Sleepy Hollow Rd. - Falls Church, VA 22044  
703-536-2000  
<http://www.dominionhospital.com>

**Eating Addictions Anonymous**

202-882-6528  
<http://www.eatingaddictionsanonymous.org>

**Eating Disorder Recovery Center**

<http://www.eating-disorder.com>

**Eating Disorders Coalition for Research, Policy & Action (EDC)**

202-543-3842  
<http://www.eatingdisorderscoalition.org>

**EDReferral.com** (Eating Disorder Referral and Information Center)

<http://edreferral.com>

**Girl Power!**

U.S. Department of Health and Human Services  
<http://www.thebodypositive.org/index.html>

**Gurze Books**

<http://www.gurze.com>

**Harvard Eating Disorders Center**

Helping Your Child  
<http://www.hedc.org>

**James Madison University**

University Health Center—<http://www.jmu.edu/healthctr/eatingdisorder>

**Johns Hopkins Eating and Weight Disorders Program**

Johns Hopkins Hospital  
101 Meyer Building, 600 N. Wolfe St. - Baltimore, MD 21205  
410-955-3863  
<http://www.hopkinsmedicine.org/jhhpsychiatry/ed1.htm>

**National Association of Anorexia Nervosa and Associated Disorders**

847-831-3438

<http://www.anad.org>

**National Eating Disorders Association**

<http://www.nationaleatingdisorders.org>

800-931-2237

**National Institute of Mental Health (NIMH)**

<http://www.nimh.nih.gov>

**Overeaters Anonymous**

Northern Virginia

703- 823-6682

<http://www.oanova.org>

DC or Maryland

301-460-2800

<http://www.oadcmetro.org>

**Recovery Center of Richmond**

9323 Midlothian Turnpike – Richmond, VA 23235

804-560-5400

<http://therapistunlimited.com/rehabs/US/VA/RICHMOND/Recovery+Center+of+Richmond>

**Society for Adolescent Medicine**

<http://www.adolescenthealth.org/virginia.htm>

**St. Joseph Medical Center**

7601 Osler Drive - Townson, VA 21204-7582

410- 427-2100

<http://www.sjmcmd.org>

**University of Virginia**

Elson Student Health Center—<http://www.virginia.edu/studenthealth/ailments/eatingdis.html>

Health System—[http://www.healthsystem.virginia.edu/uvahealth/peds\\_adolescent/edhub.cfm](http://www.healthsystem.virginia.edu/uvahealth/peds_adolescent/edhub.cfm)

Office of Health Promotion—[http://www.virginia.edu/ims/forms/fit\\_eating-disorders.pdf](http://www.virginia.edu/ims/forms/fit_eating-disorders.pdf)

**Virginia Action for Healthy Kids**

General Information—<http://www.ext.vt.edu/actionforhealthykids>

Teacher Guide—<http://www.ext.vt.edu/actionforhealthykids/resourceguide/resourceguide.html>

**Virginia Commonwealth University Health System**

<http://www.vcuhealth.org/Content.asp?PageID=P00748>

**Virginia Cooperative Extension**

<http://www.ext.vt.edu/or>

**Virginia Tech Cook Counseling Center**

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# JUVENILE FIRESETTING

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## **Introduction**

When juvenile delinquency is mentioned, arson is not usually the first type of offense that comes to mind. However, juveniles are arrested for a greater share of this crime than any other age group (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 1997). All forms of arson cause hundreds of millions of dollars in damages and thousands of needless injuries and deaths each year. Almost 85% of the victims of fires started by children are the children themselves (Burn Institute, 2004).

Juvenile firesetters are typically defined as children or adolescents who engage in firesetting (Slavkin, 2000). Historically, juvenile firesetting has been viewed as a problem particular to “curious kids” (U.S. Fire Administration [USFA] of the Federal Emergency Management Agency [FEMA], 1997). Fires set by children playing with matches and lighters tend to be categorized as “accidental” or “children playing.” However, juvenile firesetting includes the deliberate destruction of property by juveniles through fire, which sometimes results in casualties (USFA).

Federal Bureau of Investigation statistics for 1995 show that juveniles accounted for 52% of arson arrests (OJJDP, 1997). Although legal definitions of arson vary from state to state, if an evaluation reveals that there is sufficient evidence of malicious and willful firesetting, the juvenile may be charged with arson (OJJDP). Table 1 outlines additional facts on Firesetting.

## **Causes and Risk Factors**

At this point in time, specific information is not available about juvenile firesetting. Most attention to firesetting has been included within broader categories of delinquency and aggression in children (Kazdin, as cited in Slavkin, 2000). However, no separate review of firesetting from a developmental framework has been performed and it is believed that juvenile firesetting, much like other forms of delinquency and aggression in juveniles, can be explained as an example of problem behaviors. To explain a problem behavior as complex as firesetting, both individual and

environmental predictors must be examined simultaneously (Magnusson & Endler, as cited in Slavkin).

*Table 1*

**Facts on Juvenile Firesetting**

- More than 40,000 arson incidents in the U.S. each year are attributable to juvenile arson.
- Children under 18 account for 55% of the arrests for arson in the U.S.; nearly half of these are age 15 or less and five percent of those arrested are under age 10.
- An estimated 300 deaths, 2,000 injuries and \$300 million in property damage in the U.S. result annually from fires set by youth.

Source: National Volunteer Fire Council, 2004.

Researchers are attempting to gather data about the children who are firesetters and their families, factors driving their behavior, and the number of firesetting incidents associated with a child or adolescent who is being screened for firesetting behavior—even if a fire department has never responded to one of these fires (Wilcox, 2000). Further systematic study of this behavior is necessary both to understand this behavior and to design effective interventions.

According to the USFA (1997), there is a general consensus as to what motivates children to become involved with fire. Curiosity motivates a significant portion of fire involvement. Developmental studies report that 40% of all children have engaged in fire play. Children who are firesetters are by nature risk takers and learn by doing. This trait, combined with ready access to matches and lighters, the belief that parents would not punish them, a poor understanding of fire, and lapses in supervision, accounts for many thousands of fires every year (USFA). Table 2 outlines some of the special circumstances surrounding juvenile firesetting.

*Table 2*

**Factors Contributing to Juvenile Firesetting**

|                             |       |
|-----------------------------|-------|
| Peer Pressure               | 25.5% |
| ADHD on Meds                | 22.5% |
| Environmental               | 12%   |
| Curiosity                   | 10%   |
| None                        | 7.5%  |
| Other Learning Disabilities | 5.5%  |
| Mental Health Issues        | 5%    |
| Lack of Adult Supervision   | 5%    |
| Anger                       | 3%    |
| ADHD no Meds                | 1%    |
| Possible ADHD               | 1%    |
| Molestation                 | 1%    |
| Impulsivity                 | 1%    |

Source: 1999/2000 Juvenile Firesetter Statistics, Burn Institute, 2004.

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) has found that fire may be used by youth as both an instrument of power and as a weapon, as opposed to merely being a product of curiosity (Office of Juvenile Justice and Delinquency Prevention, 2005). Moreover, OJJDP makes note of two firesetting behaviors, expressive and instrumental, which may help to explain why juveniles use firesetting to act out a behavior (OJJDP). According to OJJDP, expressive firesetting behavior is an expression of psychopathology or unresolved trauma and instrumental firesetting behavior is a behavior set to achieve an established goal (OJJDP).

### ***Profile of a Firesetter***

According to Slavkin, while only 10% of juveniles who are arrested are juvenile firesetters, juvenile firesetters are more likely to be involved in a greater proportion of arrests overall, when compared to other arrested juveniles (2000). A recent study determined that children classified as firesetters were 3.8 times more likely to be referred to juvenile court than nonfiresetters (Becker et al., 2004). Firesetters also engage in property destruction and crimes of physical aggression, such as forcible rape (11%), nonviolent sexual offenses (18%), vandalism (19%), and arson (35%) (Williams, as cited in Slavkin). Furthermore, adolescent firesetters have higher levels of antisocial behaviors, higher levels of aggression, and are more likely to connect their deviance with covert, aggressive expressions, when compared with other firesetters (Slavkin).

In all juvenile arson cases, the intensity and enormity of the fire tend to escalate with the age of the firesetter, with the “bigger the child, the bigger the fire” (Little, 1998). The average age of a juvenile firesetter is 11 (Little). The majority (80%) of juvenile firesetters are males, with the majority of juvenile arsons being committed by middle class Caucasian males (Little). The most common factor among all juvenile firesetters is a severely disturbed home environment with only one or no biological parents present in the home (Little). However, the strongest predictor of recidivism is the juvenile being in a home with a significant number of family problems (USFA, 1997). A pattern or history of multiple problems exists with firesetters. True juvenile arson is committed by a child who escalates to this stage of destructiveness; then a sequence of firesetting begins (Little).

Another characteristic of many juvenile firesetters is poor school performance. Depending upon the age group, they may also have a history of truancy, disruptive behavior or hyperactivity (Little, 1998). Having poor relationships with peers and an inability to form close friendships are other common features in juvenile firesetters. They lack assertiveness and can be easily manipulated and vulnerable to others. Some statistics show sexual abuse in both males and females is a common pattern for the juvenile arsonist, but the statistics to support this belief are limited, as until recently few questions were ever put to juvenile male firesetters regarding sexual abuse.

### **Environmental Issues**

Further consideration should be given to the environmental characteristics that relate to juvenile firesetting. Variability in problem behaviors stems largely from differences in perceptions of environmental characteristics (Slavkin, 2000). Family, school, and peer problems are major influences that may promote firesetting and the continuation of patterns of firesetting (Kolko & Kazdin, as cited in Slavkin). Moderate youth firesetting has been associated with limited family sociability, whereas recidivism has been associated with lax discipline, family conflict, limited parental acceptance, and family affiliation (Kolko & Kazdin, as cited in Slavkin). Parental influences, such as limited supervision and monitoring, early learning experiences, parental distance

and uninvolvement, and parental pathology, have been identified as predictors of juvenile firesetting (Kolko & Kazdin, as cited in Slavkin).

## **Comorbidity**

Clinical studies that have examined juvenile firesetters find that many of these children have conduct and aggression problems. A recent study researched conduct disorders [CD] in conjunction with firesetting and found that approximately 30% of children participating in firesetting have been diagnosed with CD (Becker et al., 2004). Kolko, as cited by Slavkin (2000), found that early childhood firesetters can be characterized as having multiple behavior problems with few internalizing behaviors, such as depression, but many externalizing behaviors, such as rule breaking, aggression, and destruction. Some children are diagnosed as having attention deficit hyperactivity disorder (ADHD) (USFA, 1997). In a sample of hospitalized firesetters, Dr. David Kolko at the University of Pittsburgh Medical Center performed a study and found a higher level of delinquency, aggressiveness, and hyperactivity among firesetting children than in hospitalized children with no history of firesetting (USFA). Moreover, these children were less socially skilled, more aggressive, and presented with learning disabilities (USFA).

A recent study to investigate the prevalence of self-reported firesetting determined that female firesetters were more likely to have serious antisocial behaviors, participate in risk-taking activities, and have a substance abuse problem (Martin et al., 2004). Another study researched the potential link between firesetting and delinquency in adolescents (Becker et al., 2004). The study indicated that firesetters are more likely to be delinquent than nonfiresetters, while adolescents who continue in the practice of firesetting tend to be chronically criminal. The study also found evidence that firesetting may be related to extreme antisocial behavior which is not always accounted for by the presence of CD (Becker et al.).

## **Elements of Effective Treatments**

Seven components common to effective juvenile firesetter programs have been identified and are described in the following listing (OJJDP, 1997).

1. A program management component to make key decisions, coordinate interagency efforts, and foster interagency support.
2. A screening and evaluation component to identify and evaluate children who have been involved in firesetting.
3. An intervention services component to provide primary prevention, early intervention, and/or treatment for juveniles, especially those who have already set fires or shown an unusual interest in fire.
4. A referral component to link the program with the full range of agencies that might help identify juvenile firesetters or provide services to them and their families.
5. A publicity and outreach component to raise public awareness of the program and encourage early identification of juvenile firesetters.
6. A monitoring component to track the program's identification and treatment of juvenile firesetters.
7. A juvenile justice system component to forge relationships with juvenile justice agencies that often handle juvenile firesetters.

Individual and family-related factors that may predispose the firesetting youth should also be explored and identified in order to effectively treat this behavior. Assessing personality structure

and individual characteristics, family and social circumstances, and immediate environmental conditions allows for more effective treatment (Williams & Clements, 2007). It is important to gather data not only for treatment but also to discover the motivation behind the firesetting behavior (Sharp et al., 2005). Factors to be considered in the assessment include history or frequency of incidents, method, motive, ignition, target, and behavior (Sharp et al.).

## **Promising Treatment Approaches**

There is no single identified treatment that is effective for treating this behavior. However, many treatments have proven beneficial in the management of this behavior. Many of these treatments are appropriately applied to firesetters with consideration for their age (Slavkin, 2000).

### ***Cognitive Behavioral Therapy and Fire Safety Education***

Cognitive behavioral therapy and fire safety education were found to significantly curtail firesetting and match play behaviors up to a year after intervention (*Mental Health Weekly*, 2001). Structured treatments designed to intervene with children who set fires were also found to have greater effect in the long-term than a brief visit with a firefighter (*Mental Health Weekly*). Both cognitive behavioral therapy and fire safety education were also shown to be effective at reducing other activities associated with firesetting, such as playing with matches and being seen with matches or lighters (*Mental Health Weekly*).

Irrespective of the seriousness of an incident or the child's motive in starting a fire, education regarding fire should be part of the intervention strategy. Such education should include information about the nature of fire, how rapidly it spreads, and its potential for destructiveness (USFA, 1997). Information about how to maintain a fire-safe environment, utilizing escape plans and practice, and the appropriate use of fire have been shown to be effective parts of comprehensive arson intervention programs, at least for younger juveniles (USFA).

## **Treatment Settings**

Sometimes it is determined that the juvenile should be confined to a secure facility, residential treatment center, or hospital, although treatment for firesetting usually occurs in the least restrictive environment, depending on the seriousness of the offense and based on the needs of the child (USFA, 1997). Although many juvenile firesetters can be maintained in the community with appropriate supervision, careful assessment is crucial in order to provide the appropriate level of care (USFA). Such an assessment must consider the child, family, environment, facts about the fire and other fire history, as well as the child's reaction to the fire and sense of accountability (USFA). In addition, consideration should be given to ensure that the child does not pose a risk to others and the public safety is protected.

### ***Treatment in a Residential Facility***

Many programs will not admit a child with a history of firesetting for fear that the child will burn the facility (USFA, 1997). However, residential treatment can provide a safe and comprehensive setting for providing treatment to firesetters and provide treatment for any other co-occurring or familial issues.

### ***Foster Care***

There is a strong link between neglect and abuse and firesetting, so placing a child in a safe, supervised family setting can be very effective. When firesetting occurs as a result of neglect or

abuse, the removal of the outside stressors can often cause the firesetting behavior to cease (USFA, 1997). Certain foster homes can be classified as “intensive” foster homes to allow for these difficult types of placements (USFA). Considerable attention is placed on fire safety practices and the foster parents receive in-depth training in working with difficult adolescents. Such training includes communication and problem-solving skills, supervision, and restraint, behavior management, and fire safety education for prevention and intervention (USFA). The children in foster care receive counseling, additional support services and the firesetter’s parents are included as a component in the treatment plan (USFA). It is very important that the risk be acknowledged in this and any other community-based treatment intervention. Emphasis is placed on training and making the firesetter aware of the potential dangers of firesetting (USFA).

### ***Inpatient Hospitalization***

Although inpatient facilities may also be reluctant to accept children with a history of firesetting, inpatient treatment is effective in treating these children when an effective treatment protocol is in place (USFA, 1997).

Dr. David Kolko at the University of Pittsburgh Medical Center has successfully treated firesetters in an inpatient treatment setting using intensive individual, group and family counseling with a cognitive treatment approach (USFA, 1997). This treatment approach challenges the child’s rationalizations of the firesetting behavior. A skills-based approach is employed, with particular emphasis placed on providing interpersonal and problem solving skills (USFA).

### **Ineffective Treatments**

It is important to acknowledge that, while simple curiosity about fire is normal, firesetting is not, and this behavior can be deadly. Leaving the child untreated, as recent studies have shown, is not beneficial, as children usually do not outgrow this behavior (Waupaca Area Fire District, 2002). Accordingly, the problems must be dealt with to prevent the fires from increasing in number and intensity.

Satiation, the practice of repetitively lighting and extinguishing fire, was once thought to be a deterrent to firesetting, based on the idea that a child curious about fire will tire of the exposure. However, the more practice a child has with fire, the more competent he may feel, which may make him more likely to increase the behavior (Sharp, et al., 2005). Satiation, therefore, should not be employed with children who set fires. Ignoring firesetting until the child “outgrows” it also is unwise because it communicates disinterest in the child’s well-being and experiences, which is likely to escalate dysfunctional behavior patterns (Sharp et al.).

### **Conclusion**

In conclusion, current theories suggest that juvenile firesetting stems from the most obvious possible cause, a childhood environment filled with multiple and overwhelmingly negative factors. Furthermore, firesetting behaviors appear to differ as a result of both individual and environmental circumstances. The unique circumstances and characteristics of individual fire setters require extensive evaluation to determine the best course of treatment. An appropriate review of firesetting should include an examination of the firesetter’s history, such as with prior fire learning experiences, cognitive and behavioral reviews, and parent and family influences and stressors (Slavkin, 2000).



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**Organizations/Weblinks**

**Focus Adolescent Services**

Firesetting and Youth  
877-362-8727 or 410-341-4342  
<http://www.focusas.com/Firesetting.html>

**SOS Fires: Youth Intervention Programs**

The Youth Firesetting Intervention Resource Site  
<http://sosfires.com>

**U.S. Department of Justice Juvenile Justice**

Office of Juvenile Justice and Delinquency Prevention  
National Juvenile Firesetter/Arson Control and Prevention Program Clearinghouse  
800-638-8736

**U.S. Fire Administration of the Federal Emergency Management Agency (FEMA)**

<http://www.usfa.fema.gov>.

**Virginia Department of Fire Programs (VDFP)**

<http://www.vafire.com>

**USFA/FEMA Resource List: Primary Prevention School Curriculum and Programs**

|   |   |
|---|---|
| <p><i>CTW'S Fire Safety Project</i><br/><i>Sesame Street Fire Safety Resource Book</i><br/>Children's Television Workshop<br/>1 Lincoln Plaza - New York, NY 10023<br/>212-595-3456</p> <p><i>Learn Not to Burn</i><br/>National Fire Protection Assn.<br/>1 Batterymarch Park, P.O. Box 9101<br/>Quincy, MA 02269<br/>617-770-3000</p> <p><i>Knowing About Fire</i><br/>National Fire Service Support Systems<br/>20 North Main Street - Pittsford, NY 14534<br/>716-264-0840</p> <p><i>Fire Safety Skills Curriculum</i><br/>Program Manager<br/>Office of the State Fire Marshal<br/>3000 Market Street, NE, #534<br/>Salem, OR 97310<br/>503-378-3475</p> | <p><i>The Juvenile Crime Prevention Curriculum</i><br/>Public Relations Department<br/>The St. Paul Companies - 385 Washington<br/>Street - St. Paul, MN 55102</p> <p><i>Follow the Footsteps to Fire Safety</i><br/>City of St. Paul<br/>Department of Fire and Safety Services<br/>Fire Prevention Division<br/>100 East Eleventh Street - St. Paul, MN 55101<br/>612-228-6203</p> <p><i>Project Open House</i><br/>Farmington Hills Fire Department<br/>28711 Drake Road<br/>Farmington Hills, MI 48331-2525<br/>313-553-0740</p> <p><i>Kid 's Safe Program</i><br/>Fire Safety Education Curriculum for Preschool<br/>Children<br/>Oklahoma City Fire Department Public<br/>Education<br/>820 N.W. 5<sup>th</sup> Street - Oklahoma City, OK<br/>73106<br/>405-297-3314</p> |
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# SELF-INJURY

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## **Introduction**

### **Causes and Risk Factors**

*Invalidating Environment*

*Physical Causes*

### **Comorbidity**

### **Diagnosis**

### **Treatment**

*Promising Treatment Approaches*

*Pharmacological Treatment*

*Hospitalization*

*Family Involvement*

### **Conclusion**

## **Introduction**

Self-injury (SI), also called self-mutilation or cutting, is a highly stigmatized emotional disorder. SI is the repetitive, deliberate infliction of harm to one's own body. Injuries are severe enough to cause tissue damage and include cutting, carving, scratching, burning, bruising, biting, hitting, bone-breaking, skin picking, hair pulling, branding, and marking (Martinson, 1998; Boesky, 2002). The information contained in this section specifically addresses non-suicidal self-injurious behaviors.

While SI can occur in people regardless of age, gender, ethnicity, or socioeconomic status, much of the discourse is centered on adolescents, as this behavior tends to begin during adolescence (Boesky, 2002). Self-injurious behavior typically lasts for five to ten years, but can be longer if not properly treated (Conterio & Lader, 1998). Groups at risk for SI have been defined as those with borderline personality disorder (particularly females age 16 to 25), those who are in a psychotic state (mainly young adult males), children who are emotionally disturbed and/or battered, children who are mentally retarded or autistic, those with a history of self-injury, and those with a history of physical, emotional or sexual abuse (Mosby, 1994, cited by Martinson, 1998). Experts in the field believe that females are more likely to be self-injurers, given that females tend to internalize anger, as opposed to males, who externalize it (Engelgau, 2005). It is estimated that, out of every 200 females between the ages of 13 and 19, at least one will engage in SI (Leboeuf, 2003).

A study cited by Engelgau (2005) broke down the statistics for self-injury as follows:

|                    |     |
|--------------------|-----|
| Cutting            | 72% |
| Self-hitting       | 30% |
| Pulling hair       | 22% |
| Breaking bones     | 10% |
| Burning themselves | 5%  |

SI is thought to be a maladaptive coping mechanism that is utilized when the self-injuring youth experiences highly stressful or emotionally overwhelming circumstances. Many youth who engage in SI describe an immediate relief from psychological and physiological tension as the act is

completed (Martinson, 1998; Boesky, 2002). For some, the production of pain is a component of the tension relief.

Adolescents self-injure for a variety of reasons including risk-taking, rebellion, rejection of parental values, or to be accepted (American Academy of Child & Adolescent Psychiatry [AACAP], 1999). Some injure out of desperation, anger, or for attention. Adolescents may attempt to hide the signs of their self-injuries for fear of being rejected or criticized (AACAP).

Additionally, SI is generally not associated with sexual gratification, body decoration (piercing and tattooing), cultural rituals that induce spiritual enlightenment, or trying to be cool or fit in (Focus Adolescent Services, 2001). There are, however, clusters of peer that provide group acceptance of this behavior.

## Causes and Risk Factors

Studies have shown that physical or sexual abuse and trauma are commonly associated with SI. A study found that exposure to sexual or physical abuse, emotional or physical neglect, and chaotic family conditions during childhood, latency, and adolescence strongly predict the number and severity of cutting incidents (Van der Kolk et al., 1991, as cited in Martinson). However, some self-injurers never suffered childhood abuse. Table 1 discusses various risk factors associated with SI.

Table 1

### Risk Factors for Self-Injury

- Being a member of an at-risk group
- Inability to cope with increased psychological/physiological tension in a healthy manner
- Feelings of depression, rejection, isolation, self-hatred, separation anxiety, guilt and depersonalization
- Command hallucinations
- Need for sensory stimuli
- Dysfunctional family

Source: Mosby, 1994, as cited by Martinson, 1998.

A recent study reported in the *Archives of Pediatrics & Adolescent Medicine* details the prevalence of deliberate self-harm (DSH), a term used interchangeably with SI (2007). According to the study, the strongest risk for suicidal behavior, as well as suicidal ideation, takes place in those who engaged in DSH (*Archives of Pediatrics & Adolescent Medicine*). The risk for occasional DSH increased seven times when adolescents reported suicidal thoughts, according to the study (*Archives of Pediatrics & Adolescent Medicine*). The study also points out that, in adolescents where frequent occurrence of suicidal ideation was reported, these youth were 18 times more likely to engage in repetitive DSH (*Archives of Pediatrics & Adolescent Medicine*).

While some believe SI to be in the spectrum of suicidal behavior, there is growing recognition that SI represents a different pattern of interpersonal dynamics that is distinct from clear suicidal intent. Favazza, as quoted in Martinson in 1998, states, "...a person who truly attempts suicide seeks to end all feelings, whereas a person who self-mutilates seeks to feel better." As stated above, studies show that individuals with a history of non-suicidal SI were over nine times more likely to report suicide attempts, and seven times more likely to report a suicide gesture and nearly

six times more likely to report a suicide plan than individuals without a history of non-suicidal self-injury (Whitlock & Knox, as cited by Cornell University, 2007). Nevertheless, most individuals with SI do not consider committing suicide. It may be best understood that, if SI is unsuccessfully addressed, it may lead to suicidal behavior (Cornell University, 2007).

### ***Invalidating Environment***

Abuse aside, it has been suggested that growing up in a chronically invalidating home environment may be a chief factor for SI. Linehan, as cited by Martinson (1998), defines an invalidating environment as one in which the communication of private feelings is met by erratic, inappropriate, or extreme responses. That is, the expression of one's private emotions (painful or otherwise) is not validated, but is instead constantly punished or trivialized, thus dismissing the child's interpretation of his own actions or behaviors, as well as his behaviors' intentions and motivations. Such persistent invalidation, Linehan concluded, can lead to subconscious self-invalidation, distrust, and feelings of low self-worth.

### ***Physical Causes***

Studies have shown that low serotonin levels in the brain are associated with SI in some cases. Researchers have found that self-injurers have fewer platelet imipramine binding sites, which is a marker of serotonin activity. Studies done by Stoff et al., Birmaher et al., and others link low numbers of platelet imipramine binding sites to impulsive behavior and aggression (Martinson, 1998). Thus, it appears that SI may have similarities to other impulse control disorders such as kleptomania or compulsive gambling.

### **Comorbidity**

Children with autism or mental retardation often exhibit self-injuring behavior. Other conditions with which SI is seen are Borderline Personality Disorder, Mood Disorders, Eating Disorders, Obsessive-Compulsive Disorder, Post-Traumatic Stress Disorder, Dissociative Disorders, Anxiety and/or Panic Disorder, Bipolar Disorder and Impulse Control Disorder Not Otherwise Specified. However, it is important to note that, while many self-injurers may be labeled as or diagnosed with one or more of these conditions, not all self-injurers meet the criteria for these conditions. Clinical studies examining the link between SI and some of these conditions have yet to be done (Martinson, 1998).

For some adolescents who engage in SI, development of Borderline Personality Disorder may carry over into adulthood (AACAP, 1999). It is possible that some young children will outgrow their self-injurious behavior. However, children with SI because of mental retardation and/or autism may continue these behaviors into adulthood (AACAP).

### **Diagnosis**

The following symptoms are usually present for a diagnosis of SI: preoccupation with physically harming oneself; inability to resist self-injurious behavior resulting in tissue damage; increased tension before and a sense of relief after self-injury; and having no suicidal intent in self-mutilating (Alan, 2004).

Self-injurers tend to be secretive and are creative in disguising their wounds (*The Columbus Dispatch*, 2005). This makes it particularly difficult to diagnose. According to the National Mental Health Association, possible warning signs include unexplained frequent injury, e.g., cuts and

burns, the wearing of long pants/sleeves in warm weather, low self-esteem, difficulty handling feelings, relationship problems, and poor functioning at work, school or home (1998).

## **Treatment**

In treating SI, understanding the dynamics of the disorder and providing structure, safety, and consistency are crucial. The key to helping an adolescent stop engaging in SI as a coping mechanism or stress reliever is to understand why the youth self-injures. Self-injuring youth should have access to non-judgmental, compassionate medical care for their self-inflicted wounds that does not take away their dignity or autonomy (Dallam, as cited in Martinson, 1998). Current approaches to the successful treatment of SI rely heavily on teaching children and adolescents new ways of coping with stressors so that underlying painful feelings can be dealt with (Martinson). In addition, it is helpful for the mental health provider to assess whether there are any comorbid disorders and ascertain the implications they would have on treatment.

There are neither proven treatments for SI nor certainty about which forms of psychosocial and physical treatments are most effective. To date, studies have been inconclusive, due to the insufficient number of patients in trials (Hawton et al., 2002). There is a need for further study in order to ascertain evidence-based treatments for SI. Efficacy of treatment interventions has been measured by the rate of repeated suicidal behavior, but other measures, such as compliance with treatment, depression, hopelessness, and reduced rates of repetition of deliberate self-harm, need to be examined (Hawton et al.).

### ***Promising Treatment Approaches***

Treatment for SI may depend on the combination of dangerous behaviors that the child displays. Treatments shown to have promising results include the following:

*Cognitive Behavioral Therapy* – Cognitive behavioral therapy is generally recommended for treatment of SI. Cognitive behavioral therapy can be used to help combat the cognitive distortions and the belief that SI is an acceptable way to manage feelings (Beck, as cited in Jones, 2001). Two types of treatments within the cognitive behavioral therapy domain were identified to be promising for treatment of SI: Problem Solving Therapy and Dialectical Behavioral Therapy (Muehlenkamp, 2006). The common features of these treatments are that they are structured, time-limited, and emphasize targeting SI along with resolving identified behavior deficits.

Therapy focuses on helping the self-injuring youth to tolerate greater intensities without resorting to self-harm; develop the ability to articulate emotions and needs; and learn alternative, healthy means for discharging these feelings, such as problem solving, conflict resolution, anger management, and assertiveness training (Rosen, Suyemoto & MacDonald, as cited by the Suicide Information & Education Centre [SIEC], 2001).

*Behavior Modification* – Behavior modification may be used to eliminate some behaviors while establishing others (Jones, 2001). Generating alternative behaviors that can be utilized in lieu of SI and shaping the use of them is an effective method to employ.

*Addictions Model* – An addictions model may be useful in very chronic cases. The addictions model is used to help the child or adolescent develop a sense of control over their life in other, more realistic ways. This model emphasizes techniques that help in building time between having the urges and acting on those urges (Alderman, as cited in Jones, 2001).

*Self-Injury Implicit Association Test* - A performance-based measure of self-injurious thoughts, this test is used as a way of predicting behavior. The behavioral test uses individuals' response times to measure the implicit associations they hold about self-injury (*American Journal of Psychiatry*, 2007).

When working with youth who have engaged in SI, it is important for providers to establish a strong working alliance to more effectively target SI behaviors. Once a strong therapeutic alliance is formed, the primary goal is to reduce and ultimately eliminate SI by replacing SI behaviors with healthier coping skills (Muehlenkamp, 2006). Table 2 outlines alternative behaviors for self-injuring youth.

Table 2

### **Alternative Behaviors and Thinking Strategies for Self-Injuring Youth**

- Increase ability to tolerate emotional distress
- Stay focused in the present
- Develop ways to self-soothe
- Find ways to distract yourself
- Postpone the self-injury
- Seek and try alternatives
- Choose the option that is the least damaging
- Carry only “safe” objects with you
- Find alternative means to express yourself, e.g., art, journaling
- Know what triggers the self-injury

Source: *Healing Magazine*, 2003.

### ***Pharmacological Treatment***

Medications such as Selective Serotonin Reuptake Inhibitors (SSRIs) and opiate antagonists have been studied to control SI, but evidence of the effectiveness of pharmacological treatment of this behavior is inconclusive (Martinson, 1998). However, it appears that the most promising treatments are high-dose SSRIs and, in some cases, atypical neuroleptics (Martinson). For many individuals, a trial of medication may be a part of the treatment. There is virtually no situation in which medication alone would be appropriate treatment.

A more detailed discussion of the use of antidepressants in treating children and adolescents is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

### ***Hospitalization***

Hospitalization is usually used as a last resort in the treatment of SI. Self-injuring youth are hospitalized in order to prevent them from hurting themselves, and intensive individual and group therapy, as well as medications, are readily available (Clarke, as cited by SIEC, 2001). However, hospitals are “artificially safe” environments, and it is more important to understand the feelings

behind the self-injuring behavior and to teach better coping mechanisms that can be practiced in the real world (Martinson, 1998).

### ***Family Involvement***

Establishing and maintaining meaningful connections between family and teens is helpful for treating self-injury (Selekman, 2002). Self-injurious behavior can be especially harmful if the adolescent is also abusing drugs or alcohol; parents may address this issue by setting a model for their teenager, demonstrating responsible use of alcohol and displaying healthy ways of managing stress (Selekman).

## **Conclusion**

A recent survey conducted by Cornell University indicated that SI had become increasingly prevalent in the last several years (Cornell University, 2007). This increase may be due to several combined factors, including an increasing number of youth who are actually engaging in the behavior, the greater likelihood that youth who engage in SI are seeking help, or an improved ability among service providers to correctly identify and report SI (Cornell). SI is very complex and is tied closely with other comorbid disorders, thus treatment effects may be difficult to maintain (Muehlenkamp, 2006). Flexibility and perseverance from the service provider are the most important elements to effectively treating SI.

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### **Organizations/Weblinks**

#### **American Academy of Child & Adolescent Psychiatry (AACAP)**

Self-Injury in Adolescents

<http://www.aacap.org>

#### **Dominion Hospital**

2960 Sleepy Hollow Road - Falls Church VA 22044

703-536-2000

<http://www.dominionhospital.com>

#### **Focus Adolescent Services**

Self-Injury

<http://www.focusas.com/SelfInjury.html>

#### **Kennedy Krieger Institute**

707 North Broadway - Baltimore, MD 21205

443-923-2900

[http://www.kennedykrieger.org/kki\\_staff.jsp?pid=1888](http://www.kennedykrieger.org/kki_staff.jsp?pid=1888)

#### **National Mental Health Association (NMHA)**

2001 N. Beauregard Street, 12th Floor - Alexandria, VA 22311

703-684-7722

Mental Health Resource Center

800-969-NMHA - TTY Line 800-433-5959

#### **S.A.F.E. Alternatives (Self-Abuse Finally Ends)**

7115 W. North Avenue, Suite 319 - Oak Park, IL 60302

800-DON'T CUT (366-8288)

<http://www.selfinjury.com>

# T TOURETTE'S DISORDER

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## **Introduction**

## **Diagnosis**

## **Causes and Risk Factors**

## **Comorbidity**

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### *Behavior Treatments*

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## **Unproven Treatments**

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## **Introduction**

Tourette's disorder is an inherited neurological disorder characterized by repeated involuntary motor and vocal tics (Murphy et al., 2001). A tic is defined as a sudden, quick, recurrent, nonrhythmic motor movement or vocalization (Murphy et al.). Tourette's disorder is related to age and is more prevalent in children than adults (American Psychiatric Association, 2000). The diagnosis of Tourette's disorder is generally made before the child's eighteenth birthday (American Psychiatric Association). The average onset age of Tourette's disorder is between seven and ten years (National Institute of Neurological Disorders and Stroke [NINDS], 2007). Tourette's disorder affects all ethnic groups but males are three to four times more often affected than females (National Institute of Neurological Disorders and Stroke). With time, tics become more frequent and increase in variety, involving more body parts such as the trunk or legs, and often become more disruptive to activities of daily living (Medical Center of Central Georgia, 2002).

Tics can occur in any part of the body (American Academy of Child & Adolescent Psychiatry [AACAP], 2000). Chronic tics are the most prominent feature of Tourette's disorder (Kurlan, 2002). Simple vocal tics include chronic sniffing, grunting, throat clearing, clicking and screaming (Brody, 2005). Complex vocal tics can include speech interruptions such as stuttering and repetition (Brody). Simple motor tics may include eye-blinking, nose wrinkling, jaw thrusting, shoulder shrugging, or neck jerking (Brody). More complex motor tics may take the form of jumping, touching, twirling when walking, retracing steps, imitating someone else's movements, or making sudden obscene gestures (Brody). Expression of tics occurs in bouts that can be separated by seconds, hours, weeks or even months (Brody). Although tics do not go away during sleep, they are often significantly diminished (NINDS, 2007). Much like an itch, the tic provides the child with temporary relief (Brody).

Tourette's manifests itself differently in males and females. Males are more likely to have chronic tics or full-blown Tourette's, while females are more likely to have obsessive-compulsive symptoms (Ohio State University Medical Center, 2005). In all patients diagnosed with Tourette's disorder, sudden, explosive outbursts of behavior are reported in approximately 25% of patients, with such outbursts occurring more frequently in children than in adults (Budman et al., 2000). Such volatile outbursts in children with Tourette's disorder are usually accompanied by feelings of mounting tension and spontaneous activation (Budman et al.). Table 1 outlines basic facts about Tourette's disorder.

Table 1

### Facts about Tourette's Disorder

- Tourette's disorder is a tic disorder.
- It is a rare disorder found more commonly in males.
- When diagnosing Tourette's disorder, Wilson's and Huntington's diseases must be ruled out.

Source: Murphy et al., 2001.

Usually, facial tics, such as rapid eye blinking or twitches of the mouth, are the first indication to parents that their child may have Tourette's disorder (the National Alliance for the Mentally Ill [NAMI], 2002). In other children, tics of the limbs or involuntary sounds, such as throat clearing and sniffing, may be initial signs. Furthermore, vocal tic activity usually involves loud grunting, but may also include word shouting, with the words sometimes being obscenities. This is called coprolalia (Murphy et al., 2001). However, only 15% of all patients diagnosed with Tourette's disorder manifest this symptom (Tourette Syndrome Association, 2002). Complex vocal tics can also include echolalia, a repeating of words or phrases of others (NINDS, 2007). Table 2 lists the categories of tics.

Table 2

### Categories of Tics

#### Simple

Motor—Eye blinking, head jerking, shoulder shrugging and facial grimacing

Vocal—Throat clearing, yelping and other noises, sniffing and tongue clicking

#### Complex

Motor—Jumping, touching other people or things, smelling, twirling about, and only rarely, self-injurious actions including hitting or biting oneself

Vocal—Uttering words or phrases out of context and coprolalia (vocalizing socially unacceptable words)

Source: Tourette Syndrome Association, Inc., 2002.

The natural course of Tourette's disorder varies and, although Tourette's disorder symptoms can be very mild to quite severe, the majority of cases fall in the mild category (NINDS, 1995). Most children experience their worst symptoms of Tourette's disorder during their early teens (NINDS).

Tourette's disorder is a variable expressive disorder, which means that the Tourette's gene will result in differences in expression for different people (Ohio State University Medical Center, 2005). A recent study suggests that potentially 750,000 children in the United States have Tourette's disorder (Brody, 2005).

## **Diagnosis**

An evaluation of the child's family history, along with general observation of the symptoms, is the most common method for diagnosing Tourette's disorder. However, before a diagnosis of Tourette's disorder is made, both motor and vocal tics must have been present for at least one year (NINDS, 1995). Neuroimaging studies may be used to rule out other conditions that might be confused with Tourette's disorder, but there are no specific laboratory tests that definitively diagnose the disorder (NINDS).

## **Causes and Risk Factors**

Tourette's disorder is highly hereditary, with evidence supportive of genetic transmission (Murphy et al., 2001). Scientists have identified a rare gene mutation that could contribute to Tourette's syndrome. A study conducted by Yale University focused on a gene called SLITRK1. A glitch in that gene was observed. Preliminary data supports that this gene plays a role in Tourette's syndrome (Hitti, 2005).

Studies have shown that Tourette's disorder is an autosomal dominant disorder. This means that both males and females are affected, and one copy of the gene is necessary to have the condition (Medical Center of Central Georgia, 2002). A parent with Tourette's disorder has a 50% chance of passing the gene to a child (NAMI, 2002). However, a non-genetic cause for Tourette's disorder may cause up to 10 to 15% of children diagnosed with the disorder (Ohio State University Medical Center, 2005). Complications of pregnancy, low birth weight, head trauma, carbon monoxide poisoning, and encephalitis are thought to be associated with the onset of non-genetic Tourette's disorder (Medical Center of Central Georgia).

## **Comorbidity**

According to NAMI, 40% of children and adolescents who have Tourette's disorder also have attention problems (2002). Thirty percent have academic difficulties. In fact, it is thought that approximately 50% of children with Tourette's disorder meet criteria for attention deficit hyperactivity disorder (ADHD). Most have normal intelligence and do not usually have primary learning disabilities. Some—25 to 30%—also experience symptoms of obsessive-compulsive disorder or have other forms of anxiety. Learning disabilities are common, as well as developmental stuttering. Social discomfort, self-consciousness, and depressed mood frequently occur, especially as children reach adolescence. Adolescents with Tourette's disorder may also display a variety of psychopathological conditions, such as depression, anxiety, and conduct disorder (Kurlan, 2002). Certain personality traits like irritability, argumentativeness, stubbornness and impulsivity may also represent the disorder (Kurlan).

## **Promising Treatments**

There is no standard treatment modality for Tourette's disorder (Christophersen & Mortweet, 2001). Because manifestations of Tourette's disorder can be quite variable, children should be evaluated with great care in order to determine which aspects of the disorder are most disabling. For most children, this can serve as a guide to target specific treatment interventions.

The development of a child diagnosed with Tourette's disorder may proceed normally, with no need for treatment (Medical Center of Central Georgia, 2002). However, if tics interfere with functioning, school performance, or other disorders present, treatment may be necessary. Children with Tourette's disorder can generally function well at home and in school. If they have

accompanying emotional or learning problems, they may require special classes, psychotherapy, and/or medication (Medical Center of Central Georgia).

When symptoms interfere with functioning, medication can effectively improve attention span, decrease impulsivity, hyperactivity, tics, and obsessive-compulsive symptoms. However, behavioral interventions may also be useful for tics and symptoms associated with any co-occurring disorders (NAMI, 2002). Table 3 outlines treatment considerations for Tourette's Disorder.

Table 3

### Treatment for Tourette's Disorder

Specific treatment for Tourette's disorder should be based on:

- age, overall health, and medical history,
- severity of tic behavior,
- tolerance for specific medications, procedures, and therapies,
- predictions for course of the disorder,
- personal opinion and preference.

Source: Ohio State University Medical Center, 2005.

#### **Behavior Treatments**

Positive reinforcement programs appear to be most helpful in the management of tic disorders (Bagheri, 1999). Goals for target behaviors may be categorized into two groups: (1) skill deficiencies, or areas that initially require concentration to build social and academic skills; and (2) behavior excesses, in which the goal is to help the patient decrease the frequency of these behaviors (Bagheri). It is imperative that caution is employed in the management of behavior excesses, since some children who undergo behavior modification to target the Tourette's symptoms have an exacerbation of symptoms (Bagheri). The following is a brief description of treatments for the behaviors associated with Tourette's disorder.

*Habit covariance* – refers to behaviors that, although different, frequently occur together. When one behavior changes, the other will as well. In children with Tourette's disorder, behavior treatments can prove effective for eliminating problem behaviors. However, all behaviors must be evaluated in term of age-appropriateness and properly assessed as not being appropriate for the child's age and relating to the disorder. Treatment of habit disorders must be implemented by a service provider with adequate training in order to be effective.

*Habit reversal* – treats symptoms associated with Tourette's disorder. The complete habit reversal training package involves awareness training, self-monitoring of tics, relation training, competing response training, and motivational techniques (Himle et al., 2006). Habit reversal emphasizes awareness, motivation, correction and prevention and is generally well tolerated. Treatment of habit disorders must be implemented by a service provider with adequate training in order to be effective.

Source: Christophersen & Mortweet, 2001.

Another treatment that has shown some promise is cognitive behavioral therapy (CBT). CBT is used to challenge and restructure the way participants assess their expectations and actions in situations that may cause frequent ticking behavior (Cook & Blacher, 2007). One study conducted to measure the effectiveness of CBT in reducing tics revealed that CBT produced reductions in tics similar to results produced by habit reversal (Cook & Blacher). While this study had certain limitations, CBT was observed as showing some promise in the treatment of Tourette's disorder.

Additional research is being conducted on the effectiveness of CBT in the treatment of Tourette's disorder.

### ***Pharmacological Treatment***

Medication therapy can be utilized if the symptoms of Tourette's disorder are not amenable to non-drug interventions. Medication should be chosen based on the specific symptoms, as well as potential side effects of the medication. For example, in one patient, treatment of the tic may be the goal, while treatment of obsessive-compulsive features may take precedence in another (Kurlin, 2002). Dosages should be adjusted to the lowest appropriate level.

Most children with Tourette's syndrome require medication for up to one to two years, with 15% requiring long-term medication for tic control (Bagheri, 1999). When tics appear to be controlled for a long period, a slow and gradual reduction in medication should follow (Bagheri).

New research is being conducted to determine whether a mixed dopamine agent is safe in treating children with Tourette's disorder (Gilbert et al., 2003). Neuroleptics, which block dopamine transmission, are used to treat children with severe tics (Gilbert et al.). However, major side effects resulted from this treatment (Gilbert et al.). Preliminary results of this study of mixed dopamine agents suggests a potential benefit for children with chronic tic disorders and Tourette's disorder (Gilbert et al.).

As noted by Bagheri (1999), many patients with Tourette's syndrome have comorbid conditions and treatment for these conditions may be necessary. Treatment of comorbid ADHD has been controversial because of reports that stimulants hasten the onset or increase the severity of tics in some patients. However, stimulants alone may not substantially worsen the severity of the disorder and it may prove necessary to treat both the ADHD and the Tourette's syndrome with a stimulant in combination with either clonidine or guanfacine, or with a neuroleptic agent. However, the use of several drugs or medicines together in the treatment of Tourette's disorder should be minimized, especially in children (Bagheri). Table 4 shows the pharmacotherapy currently used to address the symptoms associated with Tourette's disorder.

Furthermore, according to Bagheri (1999), the treatment of the co-occurring obsessive-compulsive disorder with selective serotonin reuptake inhibitors (SSRIs) may prove effective. However, there is often a delay between commencement of medication and the intended pharmacological response. Moreover, this response may take as long as four to six weeks (Bagheri). Behavior therapy may also be used in treating the co-occurring disorder of obsessive-compulsive disorder.

### **Unproven Treatments**

Research has shown the lack of evidence to support several treatments for Tourette's disorder. One such treatment is plasma exchange or intravenous immunoglobulin (IVIG), treatment. In fact, the National Institute of Mental Health (NIMH) and the Tourette Syndrome Association have advised that there is no evidence of their efficacy in children with Tourette's disorder and both treatments carry a potential for significant adverse reactions (NIMH, 2000).

Massed negative practice is based on the premise that over-rehearsal of the tic by the patient leads to its disappearance (Cook & Blacher, 2007). However, studies have shown that massed negative practice has failed to produce reductions in tics comparable to reductions produced by

habit reversal (Cook & Blacher). There are also contradictory studies regarding the effectiveness of contingency management to reduce tic frequency (Cook & Blacher).

Table 4

**Pharmacotherapy of Tourette's Disorder**

|   |                   |
|---|-------------------|
| <b>Tics</b>                                     |                   |
| Neuroleptics                                    | Clonidine         |
| Haloperidol                                     | Other Drugs       |
| Pimozide  | Botulinum Toxin*  |
| Fluphenazine                                    |                   |
| Others  |                   |
| <b>Obsessive-Compulsive Disorder</b>            |                   |
| Clomipramine                                    | Sertraline        |
| Fluoxetine                                      |                   |
| <b>Attention Deficit Hyperactivity Disorder</b> |                   |
| Clonidine                                       | Stimulants        |
| Tricyclic antidepressants                       | Methylphenidate   |
|   | Pemoline          |
|   | Dextroamphetamine |

\*Recent research has shown that, for a small number of patients who prove resistant to the motor medications, injections of botulinum toxin might be helpful.

Source: Kurlan, R., 2002.

Recent studies on treatment for Tourette’s disorder describe attempts to relieve symptoms of the disease through deep brain stimulation (Brody, 2005). This type of treatment involves implanting electrodes in the brain where movement is controlled (Brody). This type of treatment is still highly experimental, with no data on its overall effectiveness, potential complications, side effects, or duration of benefit (Brody).

Another new treatment approach involves temporarily paralyzing the affected muscle group with a botulinum toxin, which has the potential to suppress the tic for several months (Brody, 2005).

**Other Important Treatment Elements**

It is important to realize that simple inattention or hyperactivity by itself is not sufficient for diagnosis.

**Cultural Considerations**

Tourette’s disorder is universally prevalent. However, the understanding of the disorder varies significantly in that tic symptoms are not considered a problem and are not usually mentioned to physicians (Mathews, 2001). Many families may consider the tics to be a bad habit, and health care professionals, when consulted, may concur. In Latin American countries, such as Costa Rica, tics and obsessive symptoms presented by children with Tourette’s disorder may be considered annoying and perhaps unattractive but not otherwise noticed (Mathews). Tics may even be thought to be voluntary in nature.

For example, symptoms that would be reported as causing significant impairment in children in the United States were often reported as having little or no impact, primarily because the needs and



expectations of these cultures were different (Mathews, 2001). Studies reveal that, because concepts such as impairment can be culturally defined, specified diagnostic criteria are not always adequate for purposes of identifying Tourette's disorder as a true mental health disorder. Such views certainly influence diagnosis and treatment.

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### **Organizations/Weblinks**

#### **American Academy of Family Physicians**

Information from Your Family Doctor

Understanding Tics and Tourette's Syndrome

<http://www.aafp.org/afp/990415ap/990415f.html>

#### **Children and Adults with Attention Deficit/Hyperactivity Disorders (CHADD)**

8181 Professional Place, Suite 201 - Landover, MD 20785

National Call Center 800-233- 4050

<http://www.chadd.org>

#### **National Alliance for the Mentally Ill (NAMI)**

Tourette's Syndrome

<http://www.nami.org/Content/ContentGroups/Illnesses/Tourette.htm>

#### **National Institute of Neurological Disorders and Stroke**

<http://www.ninds.nih.gov/>

**National Institutes of Health (NIH)**

NIH Publication No. 95-2163. Tourette Syndrome.

[http://www.ninds.nih.gov/disorders/tourette/detail\\_tourette.htm](http://www.ninds.nih.gov/disorders/tourette/detail_tourette.htm)

**Obsessive-Compulsive Foundation, Inc. (OCF)**

90 Depot St., P.O. Box 70 - Milford, CT 06460-0070

203-878-5669

<http://www.ocfoundation.org>

**Tourette Syndrome Association, Inc.**

42-40 Bell Blvd. - Bayside, NY 11361

718-224-2999.

<http://www.tsa-usa.org>

**Tourette Syndrome “Plus”**

<http://www.tourettesyndrome.net>

**Tourette Syndrome Association, Inc.**

**Greater Washington, DC Chapter** (serving MD, VA, WV, and DC)

E-mail [TSAGW@aol.com](mailto:TSAGW@aol.com)

877-295-2148 or 301-681-4133

<http://www.tsa-usa.org>

**Virtual Hospital**

Tourette Syndrome

<http://www.vh.org/adult/patient/psychiatry/tourettesyndrome/index.html>

# **A**NXIETY DISORDERS

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## **Introduction**

Anxiety disorders are those disorders that cause children to feel frightened, distressed and uneasy for no apparent reason. Although most children have throughout their childhood some fears and worries that can be labeled as anxiety, anxiety disorders occur when such worries or fears impede the child's daily activities or functioning (Christophersen & Mortweet, 2001). When both symptoms of anxiety and impairment are in evidence, an anxiety disorder may be present. Characteristics of anxiety disorders are listed in Table 1.

Problems related to fears and anxiety are relatively common in youth, with lifetime prevalence rates of clinical problems ranging from six to fifteen% (Silverman & Ginsburg, 1998; U.S. Public Health Service, 2000). Youth with anxiety problems experience significant and often lasting impairment, such as poor school performance, social problems, and family conflict (Langley et al. 1998). Anxiety problems often occur with other problems, including behavior problems, depression, or additional anxiety disorders (e.g., Albano et al., 2003). Thus, the problems found in youth with anxiety disorder can be substantial (Costello et al., 1999; Pine et al., 1998). Table 2 lists additional facts about anxiety disorders in youth.

## **Causes and Risk Factors**

Much attention has been given to the risk factors for developing an anxiety disorder in childhood (Albano, Chorpita, & Barlow, 2003). Some researchers have described a "triple vulnerability" model of anxiety development (Barlow, 2002). The model describes how three separate risk factors work together to increase the chance of a child's having an anxiety problem. First, a child may have some biological predisposition to anxiety; that is, some children are more likely to experience higher amounts of anxiety than others (Eaves et al., 1997; Eley et al., 2003). The second risk factor is a psychological vulnerability related to "feeling" an uncontrollable/

unpredictable threat or danger. That is, some children may be more likely to experience situations as more threatening than other children. There are many possible reasons that a child may experience the world in this way, including family or other social (e.g., peers) modeling. Finally, the third risk factor is direct experiences with anxiety provoking situations. In short, a child is at risk for anxiety problems if that child is more anxious or inhibited by nature, interprets many situations as threatening, and has had some anxiety-provoking situations occur. It is also relevant to note that it has not been shown whether biology or environment plays the greater role in the development of these disorders (National Alliance for Mentally Ill [NAMI], 2002).

Table 1

### Characteristics of Anxiety Disorders

*Anxiety* or *fear* is defined as a complex pattern of three types of reactions to a perceived threat.

**Types of Reactions**

1. Overt Behavioral Responses - Running away, trembling voice, closing eyes
2. Physiological Responses - Changes in heart rate and respiration, muscle tension, stomach upset
3. Subjective Responses - Thoughts of being scared, images of bodily harm

Source: Lang, as cited in Winder et al., 2002.

Table 2

### Anxiety Disorders in Children

- The combined prevalence of anxiety disorders is higher than virtually all other mental disorders in children and adolescents (U.S. Department of Health and Human Services, 1999).
- Some research has found that girls tend to show higher levels of trait anxiety than do boys, but these differences may be more related to social expectations (Huberty, 2002).
- Girls may be more concerned about receiving approval from adults, whereas boys appear more concerned about how they are perceived by their peers (Dweck & Bush, as cited in Huberty, 2002).

Source: Virginia Commission on Youth Graphic of Citations Noted, 2002.

## Assessment and Diagnosis

Any attempt to define problematic anxiety in children/adolescents must clearly define what constitutes normal anxiety. Another important consideration is development. As an example, separation anxiety is a normal phenomenon at age 18 months. Similarly, fear of the dark is normal for children around age four. Thus, assessing anxiety in children requires knowledge of normal child development. Because anxiety is a natural and normal human experience, assessment of anxiety in children also requires attention to the level of impairment that a child or adolescent is experiencing because of the anxiety. In other words, experiencing intense levels of anxiety is not a problem in and of itself.

Assessment for anxiety disorders should include a medical history and a physical examination within the past 12 months, with special focus on conditions that may mimic anxiety disorders

(American Academy of Child & Adolescent Psychiatry [AACAP], 1997). As noted by Huberty (2002), the service provider, in diagnosing anxiety disorders in children, should also ensure that the child meets the appropriate *DSM-IV* diagnostic criteria and identify those which may be particularly pertinent to children and adolescents. Assessing anxiety may require using multiple ways to gather information, involve understanding the child's behavior across the many settings that he lives in (e.g., school, home). Typically, questionnaires and interviews are used to assess anxiety. Because there are numerous anxiety related problems, the assessments will involve asking about an array of potential problems.

## Categories

The *DSM-IV* defines several anxiety disorders that children experience. It should be noted that separation anxiety disorder (SAD) is the only anxiety disorder that specifically applies to children (Huberty, 2002). Other anxiety disorder diagnoses may be applied to children and adolescents if their behavior is consistent with the criteria set forth in the *DSM-IV*.

The following anxiety disorders are covered in this section:

- *Separation Anxiety Disorder* — characterized by the child's excessive distress when separated from persons to whom there is a strong attachment and by the avoidance of situations that require separation. This is the only disorder specifically ascribed to children (Huberty, 2002 and Winder et al., 2002).
- *Social Anxiety Disorder* — marked and persistent fear of one or more social or performance situations in which the child/adolescent fears that embarrassment may occur. When in the social or performance situation, the child/adolescent usually experiences a high level of anxiety, sometimes even a panic attack. Children/adolescents with social anxiety disorder typically either avoid these situations or, if they do stay in them, feel extreme distress during them until they are over (American Psychiatric Association, 2000).
- *Obsessive-compulsive Disorder (OCD)* — characterized by unusual, repeated, intrusive, and unwanted thoughts and/or rituals that seem impossible to control. The former are known as obsessions and the latter known as compulsions. Compulsive behaviors often include counting, arranging and rearranging objects, and excessive hand-washing (NAMI, 2002).
- *Post-traumatic Stress Disorder (PTSD)* — Persistent symptoms occur after experiencing a traumatic experience such as abuse, natural disasters, or extreme violence. Three kinds of symptoms are required, including: re experiencing symptoms (such as nightmares or flashbacks), avoidance symptoms (numbing of emotions, avoiding things that remind the person of the traumatic experience), and hyper-arousal symptoms (such as being easily startled, feeling irritable (American Psychiatric Association, 2000).
- *Specific Phobias* — A phobia is a disabling and irrational fear of something that really poses little or no actual danger. The fear leads to avoidance of objects or situations and can cause extreme feelings of terror, dread, and panic, which can substantially restrict one's life. Specific phobias concentrate on particular objects, e.g., certain animals, or situations, e.g., confined spaces.
- *Generalized Anxiety Disorder* — Chronic, exaggerated worry about numerous everyday, routine life events and activities that lasts at least six months is indicative of generalized anxiety disorder. Children and adolescents with this disorder usually anticipate the worst and often complain of fatigue, tension, headaches, and nausea (NAMI).

## Comorbidity

Children and adolescents with anxiety problems very often experience other kinds of problems in addition. Studies have revealed anxiety disorders to be comorbid with other anxiety disorders, attention deficit disorder, conduct disorder, depression, and dysthymia (Southam-Gerow & Chorpita, 2007). Moreover, it has been found that anxiety appears to precede depression. Table 3 lists additional information about comorbidity and anxiety symptoms.

Table 3

### Comorbidity of Anxiety Disorders

- At least 1/3 of children with this disorder meet criteria for two or more anxiety disorders.
- 28 to 69% have comorbid major depression.
- There is an association between ADHD and anxiety disorders.

Source: American Academy of Child & Adolescent Psychiatry (AACAP), 1997.

Substance use and abuse may also co-occur with anxiety disorders (Compton et al., 2002; Grant et al., 2004). Some research has found that alcohol and other substances may be used to reduce the symptoms of anxiety (Jellinek, Patel, & Froehle, 2002). However, the use of substances can ultimately worsen symptoms and certain substances can actually generate anxiety symptoms.

## Evidence-based Treatments

The treatment of anxiety disorders in children is usually multimodal in nature. Wide-ranging treatment may include education of the child and parents about the disorder, consultation with school personnel and primary care physician, behavioral intervention, psychodynamic psychotherapy, family therapy, and pharmacotherapy (AACAP, 1997). The two main components of treatment—behavioral interventions and pharmacologic treatments—will be discussed in the following paragraphs. However, it is important to link treatment to the referring questions and to the desired outcomes that are in the best interests of the child (Huberty, 2002).

Most of the treatments discussed are considered probably efficacious, meaning that they have had positive results in a clinical setting. These apply to the psychotherapies outlined in the paragraphs which follow. For childhood phobias, contingency management was the only intervention deemed to be well-established and which applied the American Psychological Association Task Force criteria (U.S. Department of Health and Human Services, 1999). Accordingly, this particular intervention is deemed effective in a practice setting.

## Psychological Treatments

### *Behavior and Cognitive Behavioral Therapy*

Behavioral and cognitive-behavioral therapies are the most studied and best supported treatment for helping children with an anxiety disorder (Chorpita & Southam-Gerow, 2006). Both forms of treatment involve what is called exposure therapy. Exposure treatment involves exposing children or adolescent to the (non-dangerous) situations that they are afraid of, with a focus on having him/her learn that his/her anxiety will decrease over time. As an example, if children are afraid of talking to other kids, they would practice talking numerous times until they felt less anxious about doing so. Often, exposure therapy involves using a hierarchy or fear ladder such that children start exposure to situations that are moderately stressful and work towards ones that are more difficult.

This approach allows them to experience mastery and increases confidence. Another common element shared by a behavior and cognitive behavioral therapy is what is referred to as psychoeducation. Psychoeducation entails teaching children and parents about the effects of anxiety, how to distinguish between problematic and non-problematic anxiety, and how to overcome problematic anxiety. Psychoeducation teaches parents and children to monitor levels of anxiety across a variety of situations. In addition, both forms of therapy often involve the use of praise and/or rewards to encourage the child's progress in exposure of tasks. Both also involve relationship-building with the parent(s) and the child.

In addition to these common elements, CBT also involves teaching children coping skills, such as modifying the way they think, learning different ways of solving problems related to anxiety provoking situations, or practicing relaxation strategies. All versions of behavior therapy and CBT include parental involvement. However, some versions involve the parents attending all sessions with the child. In these approaches, parents learn the same skills as their children so that they can help them outside the therapy session. In addition, the parent is involved in the exposure situations.

Behavior therapy and CBT can be administered in individual and group formats. Both versions have been found to be helpful to children and adolescents (Chorpita & Southam-Gerow, 2006). In addition, these psychological treatments have been delivered in schools, clinics, hospitals, day care centers, and even in homes with good effects. Evidence for or these two forms of treatment have been found across a variety of racial and ethnic groups including: Caucasian, African American, Hispanic/Latino, Asian, and Multiethnic.

### ***Other Therapies with Research Support***

Although behavior therapy and CBT are by far the treatments with the most research support, there are a few additional treatments that have received modest levels of support. For example, educational support treatments have shown some promise in a few studies. These approaches involve providing support and education about anxiety to parents and children with anxiety problems. There is also some support for the use of hypnosis in children with high levels of test-taking anxiety (Chorpita & Southam-Gerow, 2006).

## **Pharmacological Treatments**

Before the mid-1990's, evidence was mixed regarding the variety of medications (e.g., tricyclic antidepressants, benzodiazepines) used to treat most childhood anxiety disorders (Bernstein & Kinlan, 1997; Coghil, 2002; Kearney & Silverman, 1998; Velosa & Riddle, 2000). The American Academy of Child & Adolescent Psychiatry (AACAP) has suggested that, when pharmacotherapy is used in treating anxiety disorders in children, it should not be used as the sole intervention, but used instead in conjunction with behavioral or psychotherapeutic treatments (AACAP, 1997). These AACAP practice guidelines acknowledge the limits of pharmacological treatments for anxiety in children (Chorpita & Southam-Gerow, 2006). For GAD, SAD, and social anxiety disorder, there is very little controlled research on medication treatments. The studies that have been conducted offer modest support. Further, caution is needed because there are no studies yet that compare any medication to another active treatment.

There is better research support for using medications to treat OCD. Most recent evidence (Geller et al., 2001; Liebowitz et al., 2002; Riddle et al., 1992) has supported the use of selective serotonin reuptake inhibitors (SSRIs). A recent large-scale study that compared medication alone,



CBT alone, and a combination of CBT and medication found that CBT alone and the combination was better than medication alone (Pediatric OCD Treatment Study Team, 2004).

## **Unproven Treatments**

Some treatments are thought to be unproven in treating anxiety disorders or there is no research supporting the effectiveness of treatment. Regarding psychological interventions, there is very little research on the use of play therapy or psychodynamic therapy alone for treating childhood anxiety. In addition, there is minimal support for the use of biofeedback in treating childhood anxiety. All three approaches are relatively common. Although there is very little support for them at this time, future research may demonstrate their positive effects on children with anxiety problems.

Regarding psychopharmacological interventions, there are several medications with little evidence or with high levels of risk. For example, there are no controlled studies evaluating the efficacy of antihistamines for anxiety disorders in children (AACAP, 1997). Furthermore, due to the risks of impaired cognitive functioning and tardive dyskinesia (an involuntary movement disorder caused by the long-term use of neuroleptic drugs), neuroleptics are not recommended for treating anxiety symptoms in children who do not have a co-occurring diagnosis of Tourette's syndrome or psychosis (AACAP, 1997; AACAP, 2000). The benefits of herbal remedies are also considered to be unproven.

## **Cultural Considerations**

The understanding of anxiety disorders may vary significantly from culture to culture. Studies with participants from diverse ethnic backgrounds have become more common in recent years; however this literature is greatly lacking (e.g., Austin & Chorpita, 2004; Safren et al., 2000). For example, some studies have found differing levels of anxiety symptoms in African American youth and Caucasian youth, although the differences have not been consistent across studies (e.g., Compton et al., 2000; Last & Perrin, 1993).

Culture and ethnicity are important to consider in the assessment of childhood anxiety because they play an important role in determining how child behaviors are perceived within a cultural group. For example, not all cultural groups will use the term "anxiety". Chen et al., (2002) noted that, within some Asian groups, the term "anxiety" is rarely used, with terminology such as "being nervous" or "being tense" more commonly used. The cultural and ethnic background of a family will impact emotional development; not all cultures share the same views on emotion expression and regulation (e.g., Matsumoto, 1990; Fredrickson, 1998; Friedlmeier & Trommsdorff, 1999). Therefore, Asian cultures may describe symptoms of anxiety as physical complaints, since physical problems are more acceptable. Furthermore, the authors purport that cultures may understand their symptoms as a defined illness known only to that specific native culture, which can make diagnosis more complex.

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### **Organizations/Weblinks**

#### **Anxiety & Depression Resource Organization**

<http://www.freedomfromfear.com>

#### **AnxietyCoach.com**

<http://www.anxietycoach.com/resources.htm>

#### **Anxiety Disorders Association of America (ADAA)**

8730 Georgia Avenue, Suite 600 - Silver Spring, MD 20910

240-485-1001

<http://www.adaa.org>

#### **Anxiety-Panic.com**

<http://www.anxiety-panic.com>

#### **Anxiety-Panic-Stress**

<http://www.anxiety-panic-stress.com>

**Freedom from Fear**

<http://www.freedomfromfear.com/treatment.asp?data=2>

**National Anxiety Foundation**

<http://www.lexington-on-line.com/naf.html>

**National Center for PTSD**

<http://www.ncptsd.org>

**Obsessive-Compulsive Foundation, Inc. (OCF)**

90 Depot Street, P.O. Box 70 - Milford, CT 06460-0070

203-878-5669

<http://www.ocfoundation.org/indright.htm>

**PTSD Support Services**

<http://www.ptsdsupport.net>

**Social Phobia/Social Anxiety Association**

<http://www.socialphobia.org>

**Virginia Resources**

**Anxiety Disorders**

SeniorNavigator.com

<http://www.seniornavigator.com/content/HealthInformation/anxiety.asp>

**Family Help in Virginia**

Focus Adolescent Services

<http://www.focusas.com/Virginia.html>

**University of Virginia Health System**

P.O. Box 800224 - Charlottesville, VA 22908

434-924-3627

[http://www.healthsystem.virginia.edu/uvahealth/peds\\_mentalhealth/gad.cfm](http://www.healthsystem.virginia.edu/uvahealth/peds_mentalhealth/gad.cfm)

**Virginia Commonwealth University Health System**

1250 East Marshall Street - Richmond, VA 23298

804-828-9000

<http://www.vcuhealth.org/Content.asp?PageID=P01605>

**Virginia Commonwealth University Anxiety Clinic**

Center for Psychological Services and Development

612 North Lombardy Street - Richmond, VA 23284

804-828-8069

[http://www.has.vcu.edu/psy/cpsd/research/specialty\\_clinics.html](http://www.has.vcu.edu/psy/cpsd/research/specialty_clinics.html)

# Mood Disorders

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## **Introduction**

Children, like adults, experience depression and accompanying feelings of frustration, disappointment or sadness. The American Academy of Child & Adolescent Psychiatry (AACAP) estimates that, at any given time, approximately five percent of children and adolescents suffer from depression (2004). Unfortunately, children may not be able to accurately describe their symptoms or how they feel and frequently do not understand the concepts associated with being depressed.

According to research conducted by the Virginia Treatment Center for Children (2002), mood disorders in children are prevalent but often poorly recognized. Mood disorders manifest themselves in varying forms and with varying intervals and intensity. Also, the symptoms of mood disorders in children are different from those in adults, with mood disorders often accompanied by other psychiatric disorders which can mask depressive symptoms (Brown, 1996). Furthermore, many physicians regard depression and bipolar disorder as illnesses affecting adults. Until the 1980's, mood disorders were not included in the category of childhood diagnosed psychiatric illnesses (Brown). Table 1 lists the prevalence of mood disorders in children.

According to Brown (1996), the following behaviors may be associated with mood disorders in children:

### Preschool Children

These children exhibit a dismal appearance and may be less lively when compared to their peers. They also may be tearful or spontaneously irritable, not just upset when they do not get their way. Furthermore, these children make frequent negative self-statements and are often self-destructive.

### Preschool Children (continued)

The following information is taken from Luby et al. (2003). A key symptom for identifying depression in preschoolers is anhedonia—the inability to experience pleasure from activities and play. Another symptom is the use of play to explore themes about death and even suicide. Preschool children suffering from depression experience less joy from the pleasures of daily life and do not derive pleasure from the same things that typically please a 3 to 5 year old child.

### Elementary School-Aged Children and Adolescents

These children may exhibit disruptive behavior, academic difficulties, and peer problems. Other symptoms include irritability and aggression, suicidal threats, and worsening school performance. Parents often say that nothing pleases the children; the children may state that they hate themselves and everything around them.

Table 1

### **Prevalence of Mood Disorders in Children**

- 10 to 15% of all children and adolescents will experience some symptoms of depression.
- 7 to 14% of children will experience an episode of major depression before the age of 15.
- 20 to 30% of adult bipolar patients report having their first episode before the age of 20.
- Out of 100,000 adolescents, 2,000 to 3,000 will have mood disorders; of this number, 8 to 10 will commit suicide.

Source: Brown, 1996 and the Substance Abuse and Mental Health Services Administration (SAMHSA), *Major Depression in Children and Adolescents*, 2003.

The following paragraphs address major depression, dysthymia and bipolar disorders. The following are descriptions of these classifications as outlined by the Center for Advancement of Children's Mental Health at Columbia University (2000) and Wisconsin United for Mental Health (2002):

**Major depressive disorder** – Major depressive disorder is characterized by one or more major depressive episodes, lasting from 7 to 9 months on average. Depressed children exhibit symptoms of sadness, disinterest, and are critical of themselves. They may feel unloved, pessimistic, or hopeless. Additionally, they think that life is not worth living and have suicide thoughts. Depressed children and adolescents are often irritable and aggressive and may be indecisive, have concentration problems, lack energy, and exhibit irregular sleep habits. Associated anxiety symptoms include fears of separation or reluctance to meet people, and physical symptoms, such as general aches and pains, stomachaches, and headaches. In fact, such physical symptoms are more common in depressed children than in adults with depression.

**Dysthymia** – This disorder is less severe than major depressive disorder, but still involves long-term, chronic symptoms that are not disabling, but keeps a child from functioning well or feeling good. Many children with dysthymia also experience major depressive episodes at some time in their lives. The average duration of a dysthymic period in children is about four years and, frequently, the child is depressed for such a long period that they do not perceive that their mood is unusual. Accordingly, they may not complain of feeling depressed. Seventy percent of children and adolescents with dysthymia eventually experience an episode of major depression.

**Bipolar disorder** – Bipolar disorder is another type of depression, also called manic-depressive illness. This disorder is not as prevalent as other forms of depressive disorders. Bipolar disorder is characterized by shifts of mood with severe highs (mania) and extreme lows (depression). Frequently the mood



switches are rapid, but are usually gradual in nature. When in a depressed episode, the child may have any or all of the symptoms of a depressive disorder. When in the manic episode, the child may be overactive, over talkative, and have a great deal of energy. Symptoms of mania may affect thinking, judgment, and social behavior in ways that cause serious problems and even embarrassment. Episodes of mania may develop into psychosis, which causes the child to lose touch with reality. Moreover, hallucinations or delusions may accompany mania.

Once regarded as a rare occurrence in children, bipolar disorder is indicated in approximately seven percent of children in treatment in psychiatric facilities (National Alliance for the Mentally Ill [NAMI], 2004). Frequently, the bipolar disorder begins in adolescence, with the first onset being a depressive episode. The first manic features may not occur for months or years later. There may be behavioral differences in children having bipolar disorder, which distinguishes it from the disorder in adults (Child and Adolescent Bipolar Foundation, 2002). Frequently, the symptoms of both states occur together in varied stages (depressed mood with high energy) or in quick succession within a single day (called rapid cycling) (Child and Adolescent Bipolar Foundation). The cycling may be fast (often many times a day) and the episodes are short (rarely more than days of any one state) (Chandler, 2001). Evidence indicates that bipolar disorder beginning in childhood or adolescence may also be more severe than the form of bipolar disorder associated with older adolescent and adult-onset (Focus on Adolescent Services, 2000).

## Causes and Risk Factors

According to the U.S. Department of Health and Human Services (1999), the exact causes of mood disorders are not known. While research on adults indicates that contributing factors may be both biological and psychosocial, there has been little research on the causes of depression in children. Research has been conducted on children admitted in mental health clinics diagnosed with major depressive disorder and, while these may be the more severe cases, this research revealed that 20 to 50% of these children have a family history of depression (Puig-Antich et al., Todd et al., Williamson et al., Kovacs, as cited by the U.S. Department of Health and Human Services). Children who develop major depression are more likely to have a family history of the disorder than children having onset of depression in adolescence or adulthood (National Institute of Mental Health [NIMH], 2000). However, research did not shed light on whether the ties between family history and childhood onset of depression stem from genetic factors, or whether depressed parents create an environment that increases the likelihood of their children developing a mental disorder (U.S. Department of Health and Human Services, 1999).

Research has revealed that bipolar disorder may have a significant genetic connection. Study data cited in 2002 by the Child and Adolescent Bipolar Foundation indicated that

- When one parent has bipolar disorder, the risk to each child is 15 to 30%;
- When both parents have bipolar disorder, the risk increases to 50 to 75%;
- The risk in siblings and fraternal twins is 15 to 25%. The risk in identical twins is approximately 70%; and
- Bipolar disorder can skip generations and take different forms in different individuals;

In addition, family history of drug or alcohol abuse may also be associated with bipolar disorders in teens (AACAP, 1998).

According to Murphy et al. (2001), neurotransmitter evidence points to “abnormalities amine neurotransmitters as mediators of depressive states.” Furthermore, the evidence strongly points to deficiencies in norepinephrine and serotonin. Finally, other neuroendocrine anomalies in the

hypothalamic-pituitary-adrenal axis are present in depression, which indicates a link to neuroendocrine.

The U.S. Department of Health and Human Services (1999) outlines several different causes for mood disorders and indicates that the prevailing hypothesis is that mood disorders are caused by an absolute or relative deficiency of monoamine transmitters in the brain. Although there are questions about this being the primary cause, findings have confirmed that monoamine impairment is one the manifestations, or correlates, of depression.

Women are two or three times more likely to experience a major depressive episode in the course of their lifetime (Obesity, Fitness & Wellness Week, 2004). A new study examining the link between mood disorders and females has determined that there may be a connection between mood disorders and fluctuating estrogen and progesterone levels (Obesity, Fitness & Wellness Week). The Child and Adolescent Bipolar Foundation has suggested that the onset of menstruation may trigger the disorder in females (2002). Additional research is needed to determine specific genetic markers to understand the balance between estrogen, progesterone, testosterone, and other reproductive hormones and the increase of women's susceptibility to depression (Obesity, Fitness & Wellness Week).

According to research compiled by NIMH (2000), during childhood boys and girls are equally at risk for mood disorders. However, during adolescence, girls are twice as likely as to develop depression. Other risk factors compiled by the NIMH include:

- Stress;
- Cigarette smoking;
- Loss of a parent or loved one;
- Break-up of a romantic relationship;
- Attention, conduct or learning disorders;
- Chronic illnesses, such as diabetes;
- Abuse or neglect; and
- Other trauma, including natural disasters.

## **Comorbidity**

Research compiled by the U.S. Department of Health and Human Services (1999) asserts that two-thirds of children with mood disorders usually have another mental disorder. These findings also assert that the most commonly associated disorders are dysthymia, anxiety disorders, disruptive disorders, and a substance abuse disorder. Additional research indicates that, when more than one diagnosis is present, depression is more likely to begin after the onset of the comorbid disorder. The exception to this is substance abuse. Additionally, conduct disorder may arise independently in response to inadequate parental supervision and control. Depression is also often comorbid with eating, reading, and developmental disorders, as well as general medical conditions (Klein et al., 2005). As noted previously, there are a number of possible reasons for these high comorbidity rates, including one disorder causing another or splitting what is really a single category, such as internalizing disorders, into multiple subtypes, such as depression and generalized anxiety disorder (e.g., some forms of anxiety leading to depression) (Klein). Table 2 outlines comorbidity and mood disorders.

Table 2

### Comorbidity and Mood Disorders

- 40 to 70% of depressed children and adolescents may have comorbid psychiatric disorders.
- 30 to 80% have comorbid anxiety disorders.
- 10 to 80% have disruptive disorders (ADHD, oppositional defiant disorder).
- 20 to 40% involve substance abuse.

Source: Yaylayan, 2002.

Individuals diagnosed with bipolar disorder have an alcoholism rate and a drug-abuse rate that is triple the rest of the population (Kluger & Song, 2002). Accordingly, this must be considered in the evaluation of children for bipolar disorder.

## Diagnosis

Proper assessment of mood disorders in children is essential in early intervention and treatment. According to the AACAP (1998), various mechanisms may be employed in diagnosing mood disorders in children. One of the most useful methods is the comprehensive psychiatric diagnostic evaluation, including interviews with the child, parents, and additional interviewees such as teachers and social services personnel. The behavior of depressed children and adolescents differs from that of depressed adults, making diagnosis more difficult (AACAP, 2004). The psychiatric assessment of depressed children must be performed by a clinician trained to consider how developmental and cultural factors impact the display of symptoms and the child. Additionally, it is important for the clinician to appraise the child's functioning, as well as symptoms both initially and on an ongoing basis. This is necessary in order to monitor the child's response to treatment.

### *Bipolar Disorder*

The following information is attributed to the Substance Abuse and Mental Health Services Administration (*Mood Disorders*, 2003). Even though research indicates that bipolar disorder may be caused by a chemical imbalance, currently there are no lab tests used for diagnosis. This disease may often go unrecognized by the individual, as well as by family and friends. A complete medical evaluation is needed in order to rule out other possible mental or physical disorders. A psychiatrist trained for diagnosis and treatment of bipolar disorder should be consulted for accurate diagnosis. When diagnosing bipolar disorder, evaluations of frequency, intensity, number of symptoms are essential (Hitti, 2005).

In diagnosed bipolar disorder, one of the biggest challenges has been to differentiate children with mania from those with attention deficit hyperactivity disorder (ADHD). Both groups of children present with irritability, hyperactivity and distractibility, these symptoms are not useful for the diagnosis of mania because they also occur in ADHD. Elated mood, grandiose behaviors, flight of ideas, decreased need for sleep and hypersexuality occur primarily in mania and are uncommon in ADHD (NAMI, 2004).

### *Depression*

For diagnosis of depression, four or more of the following symptoms should be present for more than two weeks: a change in appetite, change in sleeping patterns, feelings of worthlessness, inappropriate guilt, loss of pleasure or interest in activities, fatigue, lack of concentration, sadness, disturbed thinking, headaches, stomach aches, or suicidal thoughts or behaviors (SAMHSA, *Mood*

*Disorders*, 2003). Major depression is characterized by far more severe symptoms, such as being unable to get out of bed (SAMHSA). Other symptoms include tearfulness, insomnia, obsessive rumination, and physical complaints (American Psychiatric Association, 2000). If one or more of these indicators are present, parents should seek professional guidance immediately.

## **Treatment Considerations**

### ***Mood Disorders and Suicide in Children***

The U.S. Department of Health and Human Services (1999) asserts that mood disorders dramatically increase the risk of suicide. Accordingly, the potential for suicidal behavior is a grave matter and must be taken into account by service providers treating the child. Studies have shown that 90% of children who commit suicide have a mental disorder. In a 10- to 15-year study of 73 adolescents diagnosed with major depression, seven percent of the adolescents had committed suicide sometime later. The depressed adolescents were five times more likely to have attempted suicide, compared to adolescents who do not have depression (Weissman et al., as cited by the U.S. Department of Health and Human Services). The relationship between mood disorders and suicide is explained in the *Collection's* "Youth Suicide" section.

### ***Recurrence of Mood Disorders***

Additionally, the U.S. Department of Health and Human Services (1999) states that most children with depression will encounter a recurrence. Data indicates that 20 to 40% of depressed children relapse within two years, and 70% relapse by adulthood (Garber et al., Velez et al., Harrington et al., Fleming et al., Kovacs et al., Lewinsohn et al., Garrison et al., as cited by the U.S. Department of Health and Human Services). The reasons for relapse are not known, but evidence supports the theory that depression may render some type of psychological imprint which can increase vulnerability to relapse. Depression which co-occurs with conduct disorder appears to worsen this outcome, as does the presence of conflict in the family.

Variables that may impact recovery time include age of onset, severity of depression, suicidality, the presence of comorbid anxiety or conduct disorders (CD), and an adverse family environment (Birmaher et al., as cited by Klein, 2005). Most of these factors also predict recurrence. Variables that have been associated with an increased risk of recurrence include the above-listed factors as well as the presence of symptoms after recovery, recent stressful life events, and a family history of depression, particularly if it is recurrent (Birmaher et al., as cited by Klein).

### ***Prognosis of Mood Disorders in Treatment***

The U.S. Department of Health and Human Services (1999) states that the prognosis for dysthymia (Klein et al., as cited by the U.S. Department of Health and Human Services) is dim, with most children experiencing depression and other difficulties even after they have apparently recovered. The prognosis for major depressive disorder plus dysthymia is significantly worse than for either condition alone (Kovacs et al., as cited by the U.S. Department of Health and Human Services).

### ***Development of Other Mood Disorders***

Research compiled in the Surgeon General's Report (1999) reveals that 20 to 40% of children with depression may develop bipolar disorder. Contributing factors predicting this outcome include young age at the time of the first depressive episode, psychotic features in the initial depression, a family history of bipolar illness, and symptoms of hypomania developing during treatment with

antidepressant drugs (Garber et al., Strober et al., as cited by the U.S. Department of Health and Human Services).

## **Selection of Appropriate Interventions**

Based on studies reviewed by the AACAP (1998), treatment should be tailored and based on several factors. These include the treatment setting, the chronic nature of the disorder, the classification of the mood disorder (e.g., bipolar, dysthymia, and major depressive disorder), the age of the child, and family issues. Based on the formation and context of mood disorders in general, pharmacotherapy is usually not advised without accompanying psychosocial treatments. Moreover, with the high rate of comorbidity and the potential for serious outcomes, such as suicidal ideation or behavior, a multi-modal treatment approach is preferred. The practice parameter published by the AACAP recommends children continue therapy for at least six to twelve months to help achieve remission and to prevent recurrence.

The following information is taken from Klein et al. (2005). There are high rates of relapse and recurrence when psychosocial and pharmacological treatments are terminated. Unfortunately, there are few studies on maintenance of treatment for depressed children and adolescents. Based on findings from adult studies, it may be beneficial to consider continuation and maintenance treatment for children and adolescents with partial recovery or characteristics associated with an increased risk of recurrence. These factors include history of recurrent episodes, double depression, family history, ongoing family conflict, or other stressors. Data on predictors of treatment response in depressed children and adolescents is limited. However, it appears that many of the same variables that predict a more protracted recovery in naturalistic studies also predict a poorer response to treatment. A strategy may be to incorporate the child or adolescent's deficits to guide treatment.

## **Treatment of Depressive Disorders**

Analysis conducted by Burns et al. (1999) indicates that evidence-based treatments have emerged for childhood mood disorders. Furthermore, such treatments are well established for both psychosocial and pharmacological interventions. This is beneficial in that combining the two offers maximum therapeutic benefits.

Because children who experience the onset of mood disorders at a younger age have a worse prognosis, early intervention is crucial in treatment (Brown, 1996). Early clinical intervention is critical in order to prevent additional functional breakdown, relapse and suicidal behavior (Burns et al., 1999).

The NIMH (2000) asserts that treatment for depressive disorders in children and adolescents often involves short-term psychotherapy, medication, or a combination, and targeted interventions involving the home or school environment. There are specific treatments for depression that have displayed efficacious results.

### ***Psychosocial Treatments***

In an analysis of research of major depressive disorder and children, Burns et al. (1999) found that cognitive behavioral therapy (CBT) was efficacious in rendering positive treatment results. Almost all of the clinical trials in school-aged children have used CBT for children with symptoms of, but not necessarily a diagnosis of, depression. The majority of studies have reported evidence supporting the efficacy of CBT (Klein et al., 2005). Little is known about the mechanisms

underlying the effects of CBT and interpersonal therapy on depression in children and adolescents (Klein et al.). In addition, despite the efficacy of psychosocial interventions for depressed children and adolescents in clinical trials, there is evidence that this may not translate into effectiveness in community settings (Weisz et al., as cited by Klein et al.).

Among the numerous studies reviewed in the Surgeon General's Report (1999), one form of CBT—coping skills—was judged probably efficacious. However, this intervention, based on the “Coping with Depression” course, was developed originally in Oregon for adults by Lewinsohn and colleagues (Lewinsohn, as cited by the U.S. Department of Health and Human Services). It was later utilized effectively in school-based programs to treat depression in children. The children receiving this treatment, when compared with control groups, had lower rates of depression, less self-reported depression, improvement in cognitive activity and increased activity levels.

Further findings revealed that interpersonal therapy (IPT) showed promise in the treatment of children with major depressive disorder (Society of Clinical Child and Adolescent Psychology, 2006). For depressed teenagers, IBT is a well-established treatment which helps adolescents understand and address problems in their relationships so that they can become less depressed. Typically, IPT takes place in an individualized format, in which the clinician works one-on-one with the child and his or her family.

### ***Pharmacological Treatments***

According to the U.S. Department of Health and Human Services (1999), the medications formerly selected for treating major depression in children were the tricyclic antidepressants. However, trials in children, unlike trials performed on adults, did not indicate that tricyclic antidepressants were efficacious. Additionally, tricyclic antidepressants have a higher risk of toxicity than selective serotonin reuptake inhibitors (SSRIs) (Walsh et al., Kutcher, as cited by the U.S. Department of Health and Human Services). Therefore, tricyclic medications are not the medication of choice for treating major depressive disorder in children and should be avoided in youth who are at risk for suicidal behaviors (Benton, 2006). Recent research indicates that young people with depressive disorders may respond more favorably to SSRIs than to tricyclic antidepressants. However, controlled clinical trials of antidepressant medications in children and adolescents are limited, and data on SSRIs and atypical antidepressants is mixed (Klein et al., 2005).

Some studies have found SSRIs to be effective for the treatment of children and adolescents with depression. Moreover, SSRIs have a relatively safe adverse effect profile and typically require only once daily administration (Benton). Some studies reported only partial improvements when SSRIs were utilized (Benton, 2006). One explanation for the partial response is that the effective treatment may involve varying the dosage or length of treatment (Benton). Findings from these studies also indicate that the ideal treatment likely involves a combination of pharmacologic and psychosocial interventions (Benton). As stated previously, there is great promise with several types of CBTs for children, along with efficacy being established that supports the utilization of SSRIs (U.S. Department of Health and Human Services, 1999).

There is no data on the efficacy of treatments for very young children with depression (Weisz et al., as cited by Klein et al., 2005). There is also limited evidence regarding the use of stimulants, antidepressants and other psychiatric drugs in preschoolers (Weisz et. al, as cited by Klein et al.). However, child mental health professionals have developed recommendations to help clinicians who are considering medications for children ages three to six (Lifespan, 2007). These guidelines

emphasize family-focused assessment by experienced clinicians, the use of psychosocial interventions, and the value of monitoring of symptoms and side effects (Klein).

### ***Antidepressants and the Risk of Suicidal Behavior***

The information discussed below is attributed to Gould et al. (2004). There has been considerable debate about the use of antidepressants in treating children and adolescents with depression and whether the use of SSRIs increases the risk of suicidal behaviors. Some researchers assert that increased prescriptions of SSRIs have resulted in decreased suicide rates. However, findings from randomized controlled trials reveal that certain medications are contraindicated for youth under 18 years of age. Manufacturers in the United States are now required to place a “black box” warning label on these medications. Clinicians must weigh the risks of SSRIs against the potential benefits that these drugs may offer their patients. A further description of the use of antidepressants in treating children and adolescents is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

## **Treatment of Bipolar Disorder**

### ***Psychosocial Treatments***

According to analyses conducted by the Center for the Advancement of Children’s Mental Health of Columbia University (2000), there are no consistent positive trials of psychosocial treatments for children diagnosed with bipolar disorder. However, children with bipolar disorder show benefit from a combination of psychosocial treatments and medication (Kutcher, 2002). Treatment planning should include pharmacologic, social, vocational, academic and interpersonal components. This is due to the fact that the depressive episodes are more frequent occurrences than the manic episodes and also more difficult to treat (Kutcher).

### ***Pharmacological Treatments***

According to the NIMH (2000), treatment of children diagnosed with bipolar disorder is modeled after treatment experiences with adults because there is limited research on the safety and efficacy of mood stabilizing medications in youth. The treatment of bipolar disorder in adults involves the use of appropriate doses of mood stabilizing medications, typically lithium or valproate, both of which are found to be effective for controlling mania and preventing recurrences of manic and depressive episodes in adults. Researchers currently are evaluating both pharmacological and psychosocial interventions for bipolar disorder in children and adolescents.

The U.S. Department of Health and Human Services (1999) indicates that recent research conducted on the use of lithium in children has shown this intervention to have promising results in treating children with bipolar disorder. However, children experience the same safety problems with lithium that adults may experience, such as toxicity and impairment of renal and thyroid functioning (Geller & Luby, as cited by the U.S. Department of Health and Human Services). Lithium is not recommended for families unable to keep regular appointments that would ensure monitoring of serum lithium levels and of conflicting effects. Relapse also is high for those patients who discontinue the medication.

The NIMH (2000) emphasizes that use of antidepressants to treat depression in a child with bipolar disorder may induce manic symptoms if it is taken without a mood stabilizer, such as lithium or valproate. Also, psychostimulant medications used in treating co-occurring ADHD in a child with bipolar disorder may exacerbate manic symptoms (Focus Adolescent Services, 2000).

The child's psychiatrist should be consulted if this occurs and treatment for bipolar disorder may need to be evaluated.

## **Treatment of Dsythymic Disorder**

According to the AACAP (1998), research supports the use of psychotherapies of varying degrees, including psychoanalysis, psychodynamic, psychotherapy, and cognitive behavioral therapy (CBT). Because there is an absence of specific studies on treatment of children with dysthymia, clinicians are advised to utilize treatment modalities appropriate for children diagnosed with major depressive disorder.

## **Unproven Treatments**

Several treatments have been found to be ineffective in treating depression. Available evidence indicates that the cyclic antidepressants are not efficacious (Emslie & Mayes, as cited by Klein et al., 2005). The National Depressive and Manic-Depressive Association (2001) recognizes that various alternative treatments may have a positive effect on mood disorders but assert that such treatments ought not to be endorsed. The Association asserts there is no scientific data supporting the use of dietary supplements such as Omega-3, St. John's Wort, or SAM-e. Furthermore, these supplements may have harmful side effects. Accordingly, such supplements and their use must be discussed with the clinician treating the child.

## **Cultural Considerations**

As indicated by Yaylayan (2002), culture can influence how children communicate symptoms of mood disorders. Complaints of nervousness and headaches are more common among Latino and Mediterranean cultures. Furthermore, complaints of weakness or weariness are more prevalent among the Asian culture.

As noted by Kaslow & Thompson (1998), there is a noticeable deficit of cultural information regarding the treatment of mood disorders in children, as most studies conducted were with children who were middle-class and Caucasian. Moreover, little attention was paid to the relevance of the materials and interventions employed in treatment, as well as to the clinician's education about cultural differences. More research is being conducted into the impact of culture on the assessment and treatment of mood disorders.

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### **Organizations/Weblinks**

#### **American Academy of Child & Adolescent Psychiatry**

Virginia Council of AACAP - P.O. Box 71656 - Richmond, VA 23255-1656  
804-754-1200  
<http://www.aacap.org>

#### **American Foundation for Suicide Prevention (AFSP)**

120 Wall Street, 22nd Floor - New York, NY 10005  
888-333-AFSP (2377)  
E-mail: [inquiry@afsp.org](mailto:inquiry@afsp.org)  
<http://www.afsp.org>

#### **The Bipolar Child**

<http://bipolarchild.com>

#### **Bipolar Kids Home**

<http://www.geocities.com/EnchantedForest/1068>

#### **Center for Effective Collaboration and Practice (CECP)**

1000 Thomas Jefferson St., NW, Suite 400 – Washington, DC 20007 888-457-1551  
<http://cecp.air.org>

#### **Child & Adolescent Bipolar Foundation**

1187 Wilmette Ave., P.M.B. #331 - Wilmette, IL 60091  
<http://www.bpkids.org>

**Depression and Bipolar Support Alliance (DBSA)** (formerly the National Depressive and Manic Depressive Association)

730 Franklin Street, Suite 501 - Chicago, IL 60610

888-288-1104

<http://www.dbsalliance.org>

**Depression and Related Affective Disorders Association (DRADA)**

2330 West Joppa Road, Suite 100 - Lutherville, MD 21093-4605

888-288-1104

<http://www.drada.org>

**Federation of Families for Children's Mental Health**

National: 703-684-7110

<http://www.ffcmh.org/index.htm>

State: Richmond PACCT (Parents and Children Coping Together)

P.O. Box 26691 - Richmond, VA 23261-6691

800-477-0946; 804-559-6833

E-mail: [pacct@infionline.net](mailto:pacct@infionline.net)

<http://www.pacct.net>

**Georgetown University Center for Child and Human Development**

<http://gucchd.georgetown.edu>

# SCHIZOPHRENIA

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## **Introduction**

Schizophrenia is a neurodevelopmental disorder associated with deficits in cognition, affect, and social functioning (American Academy of Child & Adolescent Psychiatry [AACAP], 2001). Psychotic symptoms, along with social and occupational dysfunction which persists for at least six months, must be evident in those children who are diagnosed with the disorder (Murphy et al., 2001). Schizophrenia, which is classified as a psychotic disorder, meaning psychosis—a gross impairment in reality—predominates in the continuum of symptoms (Murphy et al.). Psychosis disorders differ from other mental disorders in that the psychotic symptoms—delusions, hallucinations, and disorders of thought—are the primary symptoms. Schizophrenia may occur in children over the age of five, but it very rarely occurs before adolescence (National Institute of Mental Health [NIMH], 1999). Hallucinations and delusions, the psychotic symptoms of schizophrenia, are unusual prior to adolescence. The average age of onset is 18 in men and 25 in women (NIMH, 2001).

As described by NIMH (2001), children with schizophrenia have extreme difficulty managing daily activities and exhibit the same symptoms as adults. These symptoms include hallucinations, delusions, social withdrawal, lack of emotion, and loss of social skills, as well as a loss of the ability to care for themselves. Furthermore, children with schizophrenia and children with autism or other pervasive developmental disabilities (PDD) may share the same symptomology, thus making it extremely difficult to diagnose.

## **Diagnosis**

NIMH research (2001) reveals that schizophrenia normally originates with intense psychotic episodes in adults; however, the disorder usually emerges more gradually in children. For example, motor and speech or language delays may precede the development of the disorder. Further, children and adults share the same diagnostic criteria, except that symptoms in children appear prior to age twelve, rather than the late teens or early 20s. Children with schizophrenia often see or hear

things that are non-existent, exhibit improper behavior, such as laughing at inappropriate times, and exhibit an absence of body language or eye contact.

Table 1

### Facts about Schizophrenia

- Schizophrenia is rare in children, affecting only about 1 in 40,000 compared to 1 in 100 in adults (Nicolson & Rapoport, as cited by NIMH, 2001).
- Adolescent schizophrenia is more common, although the onset typically occurs in late adolescence and early 20s (Findling, Boorady, & Sporn, 2007).
- The average age of onset is 18 in men and 25 in women.
- Schizophrenia ranks among the top 10 causes of disability in developed countries worldwide (Murray, C., & Lopez, A., as cited in NIMH, 2001).
- Children with schizophrenia may also share some symptoms with—and be mistaken for—children who suffer from autism or other pervasive developmental disabilities, which affect about 1 in 500 children.

Source: National Institute of Mental Health (NIMH), 2001.

Several factors make it difficult to diagnose children with schizophrenia. First, hallucinations are pervasive when the disorder is not adequately treated. In addition, children with other conditions, such as mood disorders may report hallucinations as well when they experience stress (National Alliance for the Mentally Ill [NAMI], *Early Onset Schizophrenia*, 2000). In general, the medical community is reluctant to diagnose a child with schizophrenia due to the stigma associated with the diagnosis and because hallucinations in children may be attributable to other causes (McKenna et al., as cited in Schaeffer, 2002). When symptom development is examined in children who meet the criteria for schizophrenia, a gradual progression is seen from infancy which usually affects several functional areas including social, cognitive, sensory, and motor (Alaghband-Rad et al., Watkins et al., as cited in Schaeffer).

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* recognizes five subtypes of schizophrenia. These are outlined in Table 2.

Schizophrenia is characterized by positive and negative symptoms (Murphy et al., 2001). This is to clarify the impact of the symptoms on diagnosis of subtypes and for treatment (Crow et al., Klosterkotter et al., Maziade et al., as cited by the U.S. Department of Health and Human Services, 1999). Positive symptoms are those characterized by the presence of unusual thoughts, perceptions, and behaviors and appear to reflect an excess or distortion of normal functions (Murphy et al. and the U.S. Department of Health and Human Services). Negative symptoms are those that appear to reflect a diminution or loss of normal functions (U.S. Department of Health and Human Services).

The diagnosis of schizophrenia, according to the *DSM-IV*, requires at least a one-month duration of two or more positive symptoms, unless hallucinations or delusions are especially bizarre, in which case one alone suffices for diagnosis. Negative symptoms are difficult to appraise because they are not as extreme or abnormal and are potentially caused by a variety of other factors (U.S. Department of Health and Human Services, 1999). These symptoms are described in Table 3. Children, like adults, may exhibit both positive and negative symptoms simultaneously (Murphy et al., 2001).

Table 2

### Subtypes of Schizophrenia

|  |
|--|
| <p><b>Paranoid Type</b>—Paranoid delusions, frequent auditory hallucinations, affect not flat</p> <p><b>Catatonic Type</b>—Motoric immobility and excessive purposeless motor activity, maintenance of a rigid echolalia</p> <p><b>Disorganized Type</b>—Disorganized speech, disorganized behavior, flat or inappropriate affect; not catatonic</p> <p><b>Undifferentiated Type</b> (probably most common) —Delusion, hallucinations, disorganized speech, catatonic behavior, negative symptoms but the criteria are not met for the Paranoid, Disorganized, or Catatonic Type</p> <p><b>Residual Type</b>—Met criteria for schizophrenia, now resolved, i.e., no hallucinations, no prominent delusions, etc., but residual negative symptoms or attenuated delusions, hallucinations or thought disorder</p> |
|--|

Source: Murphy et al., 2001.

In diagnosing a child with schizophrenia, potential organic conditions for psychotic symptoms need to be ruled out as a possible cause. Such conditions that need to be considered include acute intoxication, delirium, central nervous system lesions, tumors or infections, metabolic disorders, and seizure disorders (AACAP, 2001).

Table 3

### Positive and Negative Symptoms of Schizophrenia

|  |
|--|
| <p><b><u>Positive symptoms</u></b></p> <p>Delusions – Often described by content</p> <p>Hallucinations – Auditory, visual, tactile and olfactory hallucinations; voices that are commenting</p> <p>Bizarre behavior – Aggressive/agitated, strange appearance, odd clothing and social behavior, repetitive-stereotyped behavior</p> <p><b><u>Negative symptoms</u></b></p> <p>Affective flattening – Decreased expression of emotion</p> <p>Algoia – Lack of words, including poverty of speech</p> <p>Asociality – Few friends, activities, interests, impaired intimacy</p> |
|--|

Source: Murphy et al., 2001.

## Assessment and Other Implications

An individualized approach should be taken in assessing and diagnosing a child who may have schizophrenia (Psychiatry in Practice, 2002). Making a formal diagnosis of schizophrenia is only the first step in the process of clinical evaluation and treatment planning. Multidimensional assessments of psychopathological, psychosocial, and personal functioning are also vital elements in acquiring an understanding of the complexity of the illness (Psychiatry in Practice).

Schizophrenia patients have a high risk for suicide. Although the statistics apply to the adult population, the high prevalence rate for suicide should be considered in treating children. Table 4 outlines statistics regarding schizophrenia and suicide.

*Table 4*

### **Schizophrenia and Suicide**

- Approximately one third of those with schizophrenia will attempt suicide;
- 10% will actually complete suicide;
- Those considered high risk include those with a history of depression, those with a recent hospital discharge, and those with a chronic course of the disorder; and
- Males under age 30 are especially susceptible.

Note: These statistics reflect rates for both children and adults.

Source: Murphy et al., 2001.

## **Causes and Risk Factors**

The etiology for schizophrenia is unknown, although it is generally believed that schizophrenia is a biological disease resulting from some combination of structural brain abnormalities, abnormalities in the prenatal environment, genetic factors, or an imbalance of chemicals in the brain (PSYweb Mental Health Site, No Date). It is thought that an inherited chemical imbalance in the brain may need to be present for schizophrenia to develop (Murphy et al., 2001). The most noted theory is that schizophrenia is due to hyperactivity in the brain dopaminergic pathways (Murphy et al.).

It is likely that genetic, behavioral and environmental factors impact the development of schizophrenia (University of Utah Health Sciences Center, 2002). Research has begun to show that neurodevelopmental disruptions may be the result of both genetic and environmental stressors that occur early in development, leading to slight changes in the brain (U.S. Department of Health and Human Services, 1999). Also, environmental factors later in development can either intensify or restructure genetic or neurodevelopmental deficiencies; thus, findings point to the combination and interaction between genetic and environmental influences (U.S. Department of Health and Human Services). Unfortunately, researchers have not been able to identify the genes responsible for the disorder (Kendler & Diehl, Levinson et al., as cited by the U.S. Department of Health and Human Services). Studies have shown schizophrenia spectrum disorders are about twice as prevalent among first-degree relatives of childhood onset patients (U.S. Department of Health and Human Services). Compared to the general population, the risk is five-fold higher for second-degree relatives of schizophrenia patients, ten- to fifteen-fold higher for first-degree family members, as well as dizygotic (fraternal) twins, and forty- to fifty-fold higher for monozygotic (identical) twins or for someone with both parents having schizophrenia (Carpenter, 2004). Environmental factors associated with schizophrenia include maternal malnutrition, infections during critical periods of fetal development, fetal hypoxia, and other birth and obstetric complications (Carpenter).

It has been established that, both structurally and functionally, the brains of persons with schizophrenia are measurably different from persons without (Torrey, as cited by the Treatment Advocacy Center, 2002). The initial findings of a NIMH (2001) study of the early onset of schizophrenia in children showed that children who had psychotic episodes before puberty



demonstrated evidence of progressively abnormal brain development. Major changes occur in the brain during puberty, which could trigger symptoms of schizophrenia (NIMH, 2007). This study revealed that filled cavities in the middle of the brain enlarged abnormally in children between ages 14 and 18, suggesting a shrinking of brain tissue volume. This research is significant because losses in the rear of the brain areas are influenced primarily by environmental factors and research suggests that a non-genetic cause may have played a role in the initial progression of the disorder (NIMH). Moreover, the findings reveal that the final brain loss pattern is consistent with that seen in adults with schizophrenia.

## **Comorbidity**

Until recently, there was little information on the prevalence of comorbid medical illnesses in those with schizophrenia (Jeste et al., as cited by the U.S. Department of Health and Human Services, 1999). Studies have shown that 68% of children and adolescents with schizophrenia have some other mental health disorder. Depression is the most common comorbid diagnosis; in fact, having a schizophrenic disorder may place children at much greater risk for developing a mood disorder (Alexander, 1996). Moreover, comorbid mood disorders are so prevalent in this patient group that they may be considered a fundamental characteristic of schizophrenic disorders (Alexander). Conduct disorder (CD) and/or oppositional defiant disorder (ODD) are the next most likely comorbid diagnoses.

Comorbid substance abuse disorder may be present in 30 to 50% of all children, with commonly used substances being marijuana (15 to 25%) and cocaine (5 to 10%) (Continuing Medical Education Online Monograph, 1999). Nicotine is the most common form of substance abuse among people with schizophrenia (NIMH, 2007). Unfortunately, these comorbidities are associated with poorer medication compliance, higher rehospitalization rates, and poorer treatment responses (Continuing Medical Education Online Monograph).

Additional studies have shown a significant prevalence of obsessive-compulsive disorder (OCD) in schizophrenia (Tibbo & Warneke, 1999). The prevalence of the two disorders has led to the introduction of a new term *obsessive-compulsive schizophrenia* (Kim et al., 2004). There is significant overlap in the proposed functional circuits of OCD and schizophrenia, which may lead to co-expression of symptoms and have implications in treatment (Tibbo & Warneke). Recent research has shown that there are brain abnormalities present in OCD, as well as in the first episode of schizophrenia (Kim et al.). There are some pathophysiological similarities, such as deficit of the frontostriatal circuit, but more structural abnormalities with schizophrenia (Kim et al.). There have been only a few studies directly comparing the similarities and disparities between schizophrenia and OCD (Kim et al.).

## **Treatment Considerations**

In treating children with schizophrenia, the goal of treatment is to enable the child to resume a lifestyle that is as normal as possible (The Royal College of Psychiatrists, 1999). Recently, the treatment of schizophrenia has advanced considerably, allowing the child to have an improved quality of life.

In order to adequately treat individuals with schizophrenia, service providers must be able to recognize the various phases of the disorder. These phases include the following:

- **Prodrome**—Prior to developing overt psychotic symptoms, most children will experience some period of deteriorating function, which may include social isolation, idiosyncratic or bizarre preoccupations, unusual behaviors, academic problems and/or deteriorating self-care skills. However, while the presence of these problems should raise concerns, psychotic symptoms must be present before a diagnosis of schizophrenia can be made.
- **Acute Phase**—This is the phase in which children often present, and is dominated by positive psychotic symptoms (i.e., hallucinations, delusions, formal thought disorder, bizarre psychotic behavior) and functional deterioration.
- **Recovery Phase**—This follows the acute phase, as the active psychosis begins to remit. This phase often has some ongoing psychotic symptoms, and may also be associated with confusion, disorganization and dysphoria.
- **Residual Phase**—During this phase, positive psychotic symptoms are minimal. However, children will still generally have ongoing problems with “negative symptoms”, i.e., social withdrawal, apathy, and/or flat affect.
- **Chronic Impairment**—Some children remain chronically impaired by persistent symptoms that have not responded adequately to treatment.

Source: AACAP, 2001.

Standard treatment includes pharmacotherapy with antipsychotic medication, typically combined with a variety of psychosocial interventions (U.S. Department of Health and Human Services, 1999). Adequate treatment requires the combination of psychopharmacologic measures with psychosocial ones. Treatment protocols may vary depending on the phase of illness (AACAP, 2001). Treatment recommendations are based on findings for adults because there is a lack of treatment research on children and adolescents with schizophrenia. However, study findings emphasize the need for coordinating treatment by an interdisciplinary treatment team to ensure continuity of services (U.S. Department of Health and Human Services).

The specific treatment for schizophrenia in children will be determined by the physician and will be based on a number of circumstances, such as the child’s age, overall health, and medical history. Other factors include extent of the condition, type of schizophrenia, tolerance for specific medications or therapies, expectations for the course of the condition, and preference (University of Virginia Health System, 2004). Follow-up studies have shown that family acceptance, appropriate medication management, and appropriate school placement are predictors of good response to treatment (Findling et al., 2007).

## Evidence-based Treatments

The Agency for Healthcare Research and Quality and NIMH co-sponsored the Schizophrenia Patient Outcomes Research Team (PORT) which has offered 30 treatment recommendations. Recommendations were selected on topics ranging from antipsychotic medications and the treatment of depression and other co-occurring symptoms to consumer and family education and support, vocational rehabilitation, and assertive community treatment (NAMI, *Schizophrenia Patient Outcomes Research Team*, 2000).

The PORT treatment recommendations are based on substantial scientific evidence and a comprehensive review of the treatment outcomes literature (Lehman et al., as cited by the U.S. Department of Health and Human Services, 1999). Therefore, there are more recommendations made about pharmacological treatments than psychosocial treatments. The researchers contend that

this reflects only that less is known about psychosocial treatments, but that future research may shed light on other components of care (Lehman et al., 1998). The Schizophrenia PORT also found potentially important treatment domains for which the scientific evidence is inadequate to develop specific treatment recommendations. The PORT treatment recommendations, as edited in the Surgeon General’s Report (1999), are outlined in Table 5.

Table 5

**Selected Treatments  
from Schizophrenia PORT Recommendations**

|   |   |
|---|---|
| No. 1   | Antipsychotic medications, other than clozapine, should be used as the first-line treatment to reduce psychotic symptoms for persons experiencing an acute symptom episode of schizophrenia.  |
| No. 2   | The dosage of antipsychotic medication for an acute symptom episode should be in the range of 300–1,000 chlorpromazine (CPZ) equivalents per day for a minimum of 6 weeks. Reasons for dosages outside this range should be justified. The minimum effective dose should be used.   |
| No. 8.  | Persons who experience acute symptom relief with an antipsychotic medication should continue to receive this medication for at least 1 year subsequent to symptom stabilization to reduce the risk of relapse or worsening of positive symptoms.  |
| No. 9.  | The maintenance dosage of antipsychotic medication should be in the range of 300–600 CPZ equivalents (oral or depot) per day.   |
| No. 12.   | Depot antipsychotic maintenance therapy should be strongly considered for persons who have difficulty complying with oral medication or who prefer the depot regimen.   |
| No. 23.   | Individual and group therapies employing well-specified combinations of support, education, and behavioral and cognitive skills training approaches designed to address the specific deficits of persons with schizophrenia should be offered over time to improve functioning and enhance other target problems, such as medication noncompliance. |
| No. 24.   | Patients who have ongoing contact with their families should be offered a family psychosocial intervention that spans at least 9 months and that provides a combination of education about the illness, family support, crisis intervention, and problem-solving skills training. Such interventions should also be offered to nonfamily members.   |
| No. 27.   | Selected persons with schizophrenia should be offered vocational services.*   |
| No. 29.   | Systems of care serving persons with schizophrenia who are high users should include assertive case management (ACM) and assertive community treatment (ACT) programs.  |
| * Edited by the U.S. Department of Health and Human Services, 1999. |   |

Source: Lehman et al., as cited and edited by the U.S. Department of Health and Human Services.

**Pharmacological Treatments**

Pharmacotherapy is the most extensively evaluated intervention for schizophrenia because it plays such a necessary role in treating schizophrenia. Pharmacotherapy is utilized to control the symptoms of schizophrenia, which may ultimately allow the child an opportunity to live a more normal life. The various pharmacotherapy agents will be outlined in the following paragraphs.

Both children and adults have benefited from the use of antipsychotic medications in that these drugs reduce hallucinations and delusions (National Institute of Mental Health [NIMH], 2001). Studies have indicated that antipsychotics tend to have more success in treating the positive symptoms of the disorder and less so with negative symptoms (Royal College of Psychiatry, 1999). Research has also been conducted on the newer “atypical” antipsychotics. These studies have shown that the newer atypicals are successful in improving incentive and clarity (AACAP, 2001). Furthermore, these drugs also have shown a lower prevalence of side effects that produce movement disorders. They are at least as effective for treating positive symptoms and may be more helpful for negative symptoms (AACAP). When a schizophrenic patient is being treated for aggression, antipsychotic drugs are regarded to be the best treatment option (Carpenter, 2004). Although newer antipsychotic medications show great promise in treatment of schizophrenia, they do not cure schizophrenia (NIMH, 2007).

Clozapine is one of the atypical drugs which has documented efficacy for treatment of schizophrenia in adults, but is usually not considered a “first-line” agent in children due to its considerable potential for adverse effects (AACAP, 2001). Such side effects include excess weight gain (NIMH, 2001) and seizures (AACAP). In a double-blind study outlined in the *Journal of the American Academy of Child Psychiatry*, Clozapine was found to be effective in the treatment of childhood schizophrenia. Children taking the drug showed continued improvement six months after the trial period (Findling et al., 2007).

These agents have promise for treating children where the older school of antipsychotics medications may not be effective (Ballus, as cited by the U.S. Department of Health and Human Services, 1999). Although the newer, more broadly effective medications have increased hopes for improvement, they also have resulted in greater treatment complexity for patients and providers (U.S. Department of Health and Human Services).

Evidence indicates that the newer antipsychotics are more clinically beneficial than the older ones, due to the combination of their effective treatment of positive (and perhaps negative) symptoms, their treatment of comorbid disorder such as anxiety and depression, and their more favorable side effect profile (Lieberman, as cited by the U.S. Department of Health and Human Services, 1999). According to Dixon, as cited by the U.S. Department of Health and Human Services, effectiveness in real-world settings may be lower than efficacy in clinical trials, but this may be attributed to other external factors such as patient heterogeneity, prescribing practices, and issues of noncompliance.

In 2007, the NIMH stated that Aripiprazole, an atypical antipsychotic medication, could be used to treat symptoms of schizophrenia and manic or mixed episodes of bipolar disorder (NIMH, 2007). Preliminary reports have shown it to be useful in children and adolescents; however, several case reports suggest that careful monitoring for adverse effects is needed (Buck, 2004).

### ***Using Antipsychotics in Children***

Parameters set forth by the AACAP (2001) recommend that the following occur in utilization of antipsychotic agents in treating children with schizophrenia:

- Adequate informed consent from the parent/youth (depending on the legal age requirements and/or legal status of the patient);
- Documentation of target symptoms;
- Documentation of any required baseline and follow-up laboratory monitoring, dependent on the agent being used;

- Documentation of treatment response;
- Documentation of suspected side effects, including monitoring for known side effects (e.g., extrapyramidal side effects, weight gain, agranulocytosis and seizures with clozapine);
- Adequate therapeutic trials, which generally require the use of sufficient dosages over 4–6 weeks; and
- Long-term monitoring to reassess dosage needs, dependent on the stage of illness. Higher dosages may be required during the acute phases, with smaller dosages during residual phases. The decision to lower dosages (which minimizes the side-effect risks), or undergo medication-free trials, must be balanced by the potential increased risk for relapse. In general, first-episode patients should receive some maintenance psychopharmacological treatment for one to two years after the initial episode, given the risk for relapse.

According to the NIMH (2007), a child should never stop taking an antipsychotic medication without talking to the doctor who prescribed it. Additionally, it is crucial that the medication dosage should be reduced only under a doctor's supervision.

### ***Other Pharmacological Agents***

The AACAP (2001) also maintains that some children may benefit from the use of adjunctive agents, including antiparkinsonian agents, mood stabilizers, antidepressants or benzodiazepines. These medications are used either to attend to side effects of the antipsychotic agent or to alleviate associated symptoms. Although these medications are commonly used, there are no studies that address the use of adjunctive agents in children and adolescents.

### ***Psychosocial Treatments***

Psychosocial treatments are vital complements to medication for individuals with schizophrenia in that they assist with increasing functioning and recovery (U.S. Department of Health and Human Services, 1999). The PORT treatment recommendations, as cited in Table 5, stipulate that patients should receive pharmacotherapy in conjunction with supportive psychotherapy, family treatment, psychosocial rehabilitation and skill development, and vocational rehabilitation (Lehman & Steinwachs, as cited by the U.S. Department of Health and Human Services, 1999). This is particularly evident in periods of remission because psychosocial treatments continue to help improve quality of life. Psychosocial treatments assume even greater importance for children and adolescents who do not respond to, cannot endure, or do not adhere to medications (U.S. Department of Health and Human Services).

Various psychosocial interventions are recommended, in accordance to the practice parameters set forth by the AACAP (2001):

**Psychoeducational** therapy for the child, including ongoing education about the illness, treatment options, social skills training, relapse prevention, basic life skills training, and problem solving skills strategies.

**Psychoeducational** therapy for the family to increase the understanding of the illness, treatment options, prognosis, and developing strategies to cope with the symptoms of the patient.

Several professionally-operated family intervention programs have been developed to help family members address issues associated with severe mental disorders. Such programs have also been developed to assist families in understanding schizophrenia (Hogarty et al., Cazzullo et al.,

Mari & Streiner, McFarlane, as cited by the U.S. Department of Health and Human Services, 1999). Studies have been conducted to ascertain the effectiveness of programs that educate families about schizophrenia, provide support and crisis intervention, and offer training in effective problem solving and communication (U.S. Department of Health and Human Services, 1999). These interventions have strong evidence demonstrating their value in preventing or delaying symptom relapse and appear to improve the patient's overall functioning and family well-being (U.S. Department of Health and Human Services). Community support programs that emphasize social acceptance, such as day programs, school programs, and Boy and Girl Scouts, may also have a positive impact (Findling et al., 2007). The importance of a multimodal approach to treatment should not be ignored.

### ***Other Treatments***

Specialized educational programs and/or vocational training programs may be indicated for some children to address related cognitive and functional deficits (AACAP, 2001).

Some children will likely require more intensive community support services. There are some cases where the severity of symptoms necessitate long-term placement in a residential facility (AACAP). However, as in treatment for all disorders in children, the least restrictive setting option should always be utilized as appropriate.

In addition to those treatments provided specifically for schizophrenia, other treatments may be needed to address comorbid conditions or other treatment implications, such as substance abuse, depression and thoughts of suicide (AACAP).

## **Service Settings and Other Considerations**

The following two treatment considerations and setting discussions are set forth by Weiden et al., 1999:

**Assertive community treatment (ACT)** – The ACT multidisciplinary team enables children to stay at home and in the community. ACT can help with many things like medication, money management, living arrangements, problem solving, shopping, jobs, and school. ACT is a long-term program that can continue to follow the person through all phases of the illness and is especially beneficial for patients who have a severe and unstable course of illness.

**Rehabilitation** – Different types of rehabilitation programs may help patients during the long-term recovery and maintenance phase of the illness. Rehabilitation may be especially important for those who need to improve their job skills, want to work, have worked in the past, and have few remaining symptoms.

A number of residential options have been developed for patients with schizophrenia. These treatment considerations and setting discussions are discussed in the *Expert Consensus Treatment Guidelines for Schizophrenia: A Guide for Patients and Families* (1999).

**Brief respite/crisis home** – an intensive residential program with on-site nursing/clinical staff that provides 24-hour supervision, structure, and treatment. This level of care can often help prevent hospitalization for children who are relapsing. Brief respite/crisis homes can be a good choice for children during acute episodes and sometimes during the stabilization phase after an acute episode.

**Transitional group home** – an intensive, structured program that often includes in-house daily training in living skills and 24-hour awake coverage by paraprofessionals. Treatment may be provided in-house or the resident may attend a treatment or rehabilitation program during the

day. Transitional homes can help children while they are stabilizing after an acute episode and can also be helpful during an acute relapse if a brief respite/crisis home is not available.

**Foster homes** – a supportive group living situation owned and operated by laypeople. Foster homes are recommended for children during long-term recovery and maintenance, especially if other options, such as living with the family, are not available.

## **Unproven Treatments**

Psychodynamically-oriented therapies are considered to be potentially harmful; therefore, their use is not recommended (U.S. Department of Health and Human Services, 1999).

The AACAP (2001) reports electroconvulsive therapy being used for children of severe cases of schizophrenia. However, electroconvulsive therapy does not appear to be as effective for schizophrenia as it is for mood disorders. The use of electroconvulsive therapy should be seen as a last resort and reserved for cases where several trials of medication therapy have failed.

## **Cultural Considerations**

Although the incidence rates for schizophrenia are very similar across cultures, clinicians must be made aware that what is considered delusional in one culture may be accepted as normal in another (Lu et al., as cited by the U.S. Department of Health and Human Services, 1999). In some cultures, certain delusions and hallucination, i.e., “voices” of religious figures, are part of a standard or normal religious practice. Therefore, classifying an experience as a schizophrenic episode requires the clinician to be both discerning and aware of cultural variations (U.S. Department of Health and Human Services).

Clinicians can misinterpret and misdiagnose patients who possess behavior that may vary from the culture of the diagnosing service provider. For example, clinicians may misinterpret a patient’s avoidance of direct eye contact as a symptom of a mental disorder or, conversely, as a normal emotional reserve explained by cultural differences (U.S. Department of Health and Human Services, 1999). African American patients are more likely than Caucasian patients to be diagnosed with severe psychotic disorders in clinical settings (Snowden et al., as cited by the U.S. Department of Health and Human Services).

Both service providers and researchers have acknowledged the challenge in addressing cultural differences in treating mental illness (U.S. Department of Health and Human Services, 1999). In addition, there is growing awareness that ethnicity and culture influence patients’ response to medications. Thus a new field has emerged, the field of “ethnopharmacology.” Due to racial and ethnic variation in pharmacokinetics, Asians and Hispanic children with schizophrenia may require lower doses of antipsychotics than Caucasians to achieve the same blood levels. As cited by the U.S. Department of Health and Human Services, “... medication differences are the result of underlying biological mechanisms of mental illness related to ethnicity, culture, and gender variations.” Although knowledge in this area is scant, cultural patterns should be considered in prescription practices.

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Torrey, E. *Surviving Schizophrenia: For Families, Consumers, and Providers (Third Edition)*. Harper and Row, 1995.

### **Organizations/Weblinks**

#### **American Psychiatric Association (APA)**

[http://www.psych.org/public\\_info/schizo.cfm](http://www.psych.org/public_info/schizo.cfm)

#### **MentalWellness.com**

<http://www.mentalwellness.com>

#### **National Alliance for the Mentally Ill (NAMI)**

Colonial Place Three - 2107 Wilson Blvd., Suite 300 - Arlington, VA 2201-3042

800-950-NAMI (6264) or 703-524-7600

<http://www.nami.org>

#### **National Alliance for Research on Schizophrenia and Depression (NARSAD)**

60 Cutter Mill Road, Suite 404 - Great Neck, NY 11021

800-829-8289 and 516-829-0091

<http://www.narsad.org>

#### **National Institute of Mental Health (NIMH)**

Office of Communication and Public Liaison

Information Resources and Inquiries Branch

6001 Executive Boulevard, Room 8184, MSC 9663 - Bethesda, MD 20892-9663

301-443-4513 or TTY 301-443-8431

E-mail: [nimhinfo@nih.gov](mailto:nimhinfo@nih.gov)

<http://www.nimh.nih.gov>

*(Direct link to Schizophrenia section:*

*<http://www.nimh.nih.gov/healthinformation/schizophreniamenu.cfm>)*

#### **National Mental Health Association (NMHA)**

1021 Prince Street - Alexandria, VA 22314-2971

800-969-6942 or 703-684-7722

<http://www.nmha.org>

#### **National Schizophrenia Foundation**

403 Seymour Avenue, Suite 202 - Lansing, MI 48933

1-800-482-9534

<http://www.NSFoundation.org>

**Open the Doors**

<http://www.OpentheDoors.com>

**Schizophrenia: A Handbook for Families**

<http://www.mentalhealth.com/book/p40-sc01.html>

**Schizophrenics Anonymous (SA)**

403 Seymour Avenue, Suite 202 - Lansing, MI 48933

800-482-9534

E-mail: [inquiries@nsfoundation.org](mailto:inquiries@nsfoundation.org)

<http://www.nsfoundation.org/sa/index.html>

**The Schizophrenia Home Page**

<http://www.schizophrenia.com>

**Treatment Advocacy Center (TAC)**

200 N. Glebe Road, Suite 730 - Arlington, VA 22203

703-294-6001/6002

E-mail: [info@psychlaws.org](mailto:info@psychlaws.org)

<http://www.psychlaws.org>

**Understanding Schizophrenia: A Guide for People with Schizophrenia and their Families**

[http://www.narsad.org/dc/patients\\_families](http://www.narsad.org/dc/patients_families)

**University of Virginia Health System**

*UVa Pediatric Health Topics A to Z, Adolescent Medicine*

[http://www.healthsystem.virginia.edu/uvahealth/peds\\_adolescent/schiz.cfm](http://www.healthsystem.virginia.edu/uvahealth/peds_adolescent/schiz.cfm)

# C O-OCCURRENCE OF SUBSTANCE ABUSE AND MENTAL ILLNESS

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## **Introduction**

### **Co-occurrence of Substance Abuse and Mental Illness**

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## **Introduction**

Children and adolescents may be involved with substances in a variety of ways. Experimentation with substances during adolescence is not uncommon. However, studies have shown that children who experiment with substances at a young age are more likely to use other drugs later in life (Focus Adolescent Services, 2000). Some adolescents' exposure may be limited to experimentation, but others will develop a dependency, even moving on to more dangerous drugs, and causing significant harm to themselves and possibly others.

The following information is attributed to Snyder & Sickmund (2006). In a national survey conducted in 2003, half of all high school seniors surveyed said they had tried illicit drugs at least once. The figure was slightly lower for 10th graders at 41% and for 8th graders at 23%. Marijuana was the most common drug used, with 46% of seniors saying they had tried it. More than three-quarters of seniors said they had tried alcohol. Recent heavy drinking was reported by 28% of seniors, 22% of 10th graders, and 12% of 8th graders.

Children and adolescents who become chronic substance users often develop psychological or social problems. Studies of males entering the juvenile justice system confirm the link between substance use and crime (Gehshan, 2001). Complicating matters even further is the fact that many adolescents who abuse substances also have a diagnosable mental health disorder. The Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) asserts that co-occurring substance abuse and mental health disorders are characterized by the simultaneous presence of two independent medical disorders, at least one psychiatric disorders, as well as the presence of alcohol and other drug use disorders (*Report to Congress on the Prevention*

*and Treatment of Co-occurring Substance Abuse Disorders and Mental Disorders*, as cited by DMHMRSAS, 2005). According to the National Comorbidity Study, 41 to 65% of individuals with a lifetime substance abuse disorder also have a lifetime history of at least one mental disorder, and about 51% of those with one or more lifetime mental disorders also have a lifetime history of at least one substance use disorder (U.S. Department of Health and Human Services, 1999). These rates are highest in the 15 to 24 year-old age group (Kessler et al., as cited by the U.S. Department of Health and Human Services). One theory suggests that this population abuses drugs in an effort to self-medicate for a co-occurring mental disorder. In 2004, it was estimated that 1.4 million youth nationwide were in need of substance abuse treatment and less than 10% of those youth received services (Hills, 2007).

A co-occurring disorder refers to co-occurring substance-related and mental disorders (Center for Substance Abuse Treatment, 2005, p. 3). Co-occurring disorders exist when at least one disorder of each type can be established independent of the other and is not simply a cluster of symptoms resulting from a single disorder (Center for Substance Abuse Treatment, p. 3).

Substance use may be perceived differently than substance abuse. In the *DSM-IV-TR*, substance abuse is defined as a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances (American Psychiatric Association, 2000, p. 198). This section will utilize both terms as they were each utilized within the literature.

## **Co-occurrence of Substance Abuse and Mental Illness**

According to epidemiologic data, nine percent of adolescent females and 20% of adolescent males meet the adult diagnostic criteria for an alcohol use disorder (Cohen et al., 1993). Among adolescents and young adults with a substance abuse disorder, 41 to 65% also have a mental health disorder (U.S. Department of Health and Human Services, 1999). Overall, the lifetime co-occurrence of mental and addictive disorders has been estimated at approximately 50% (Kessler et al., 1996).

In recent years, evaluations of youth with co-occurring substance abuse and mental health disorders reveal very distinct patterns. Adolescents with co-occurring disorders typically have an earlier onset of substance use, engage in substance use more frequently, use substances for longer periods, and have greater rates of family, school and legal issues (Hills, 2007).

As noted by the President's New Freedom Commission on Mental Health, if either the substance abuse or co-occurring disorder remains untreated, both usually worsen (2003). Additional complications often arise, including the risk for other medical problems, unemployment, homelessness, incarceration, suicide, and separation from families and friends (New Freedom Commission on Mental Health).

This co-morbidity and lack of adequate treatment have significant clinical implications. First, these children and adolescents are particularly vulnerable to relapses and rehospitalization (Mueser et al., 1997). Studies have found that the most common cause of psychiatric relapse today is the use of alcohol, marijuana, and cocaine; the most common cause of relapse to substance use is an untreated psychiatric disorder (Substance Abuse and Mental Health Services Administration [SAMHSA], 1997). In addition, individuals with co-occurring disorders exhibit greater depression and suicidality, violence, and noncompliance with medications and other treatments (Mueser et al.). They also face greater difficulties with social problems, such as housing instability and

homelessness, increased family burden, and increased vulnerability to HIV infection (Mueser, et al.). Thus, in order to ensure more positive outcomes, it is important that service providers recognize that adolescents with a dual diagnosis have special needs and may require a greater number of interventions and community resources.

## **Causes and Risk Factors**

The National Comorbidity Survey is a large-scale government project designed to increase knowledge about the prevalence and characteristics of co-occurring disorders in the United States. According to Kessler et al. (1996), data from this study indicates that, in nearly 90% of individuals with a dual diagnosis of mental illness and substance use disorder, the mental disorder develops before the substance use disorder. In particular, children will often receive the diagnosis of mental illness in the pre-teen or early teen years, with the median age of around age 11. The substance use disorder has been found to develop a few years later, between the ages of 17 and 21.

It is important to note that a mental illness diagnosis does not ensure that a child will abuse alcohol or other drugs. However, the high statistical coincidence occurring in these two conditions is significant. This information has strong implications for early intervention efforts, as it demonstrates that a window of opportunity may exist for detecting a co-occurring disorder. Early identification and intervention with children and adolescents who have developed mental disorders may preclude the potential of later development of a substance-related disorder if prompt and effective treatment is provided (SAMHSA, 1997).

Certain mental health diagnoses have been associated with an increased risk of later substance abuse. Children with a diagnosis of attention deficit hyperactivity disorder (ADHD) and learning disorders, in combination with depression and anxiety disorders, have a high risk of having a co-occurring substance use disorder.

Adolescents with substance abuse disorders commonly suffer from co-occurring major depression, which impairs functioning, contributes to the severity of substance abuse, and interferes with substance treatment (Riggs & Davies, 2002). Unlike depression in many alcohol-dependent adults, depression in adolescents with substance abuse disorders does not appear to subside with abstinence, indicating that substance treatment alone is not adequate treatment for this type of depression (Riggs & Davies).

In response to these findings, experts have recommended that children and adolescents with these disorders be assessed carefully for substance-related disorders on a periodic basis (Belfer, 1993). Table 1 presents the psychiatric disorders commonly found in children and adolescents diagnosed with substance abuse disorders.

Research has been conducted to better understand the relationship between substance abuse and mental health disorders. Table 2 describes four possible reasons for the connection.

Due to scientific advances and study, a core concept has evolved, suggesting that addiction is a brain disease that develops over time as a result of the initially voluntary behavior of using drugs. Long-term substance use causes profound changes in brain structure and function that result in uncontrollable compulsive drug or alcohol craving, seeking, and using (Leshner, 2001). Recent studies have also shown that one form of substance abuse, binge drinking, damages the adolescent

Table 1

**Psychiatric Disorders Commonly Found Among Children and Adolescents  
Diagnosed with Substance Use Disorders**

|   |
|---|
| <p><b>Behavior Disorders</b></p> <ul style="list-style-type: none"><li>• Conduct Disorder</li><li>• Oppositional Defiant Disorder</li><li>• Attention Deficit/Hyperactivity Disorder</li></ul> <p><b>Mood Disorders</b></p> <ul style="list-style-type: none"><li>• Major Depressive Episodes</li><li>• Dysthymic Disorder</li><li>• Bipolar Disorder</li></ul> <p><b>Anxiety Disorders</b></p> <ul style="list-style-type: none"><li>• Generalized Anxiety Disorder</li><li>• Social Phobia</li><li>• Posttraumatic Stress Disorder</li></ul> <p><b>Eating Disorders (Bulimia Nervosa)</b></p> |
|---|

Source: Bukstein, 1998.

brain more than the adult brain. Examination of differences in the effects of alcohol on receptor activity in the hippocampus of adolescents and adults reveals the impact of alcohol on these age groups (White, 2004). These differences suggest that adolescents are more vulnerable than adults to the impact of alcohol on learning and memory. Heavy drinking in early or middle adolescence, with this consequent cortical damage, can lead to diminished control over cravings for alcohol and to poor decision-making (White). Thus, addiction must be viewed as a multifaceted disease.

Studies have also linked a gene to alcohol addiction. The CREB gene, so-named because it processes a protein called CREB, is involved in the process of alcohol tolerance, dependence, and withdrawal symptoms (Davis, 2004). Studies have linked this gene with anxiety-like behaviors and preference to alcohol. There is also data that supports the idea that some persons who abuse alcohol have different brain chemistries that predispose them to drinking (Personal Communication with Dr. Anita Everett, Former Inspector General for the Commonwealth of Virginia, July 2002).

According to Leshner (2001), over time the person abusing substances loses substantial control over his or her voluntary behavior. For many people these behaviors are truly uncontrollable, just like the behavioral demonstration of other brain diseases. Thus, once one is addicted, the nature of the illness, as well as treatment approaches, is not that different from other brain diseases.

While the relationship between mental illness and substance abuse has yet to be fully established, there are certain risk factors that increase the possibility of a child being dually-diagnosed. The first and possibly most significant of these elements is family influence. This may include various risk factors, such as genetic predispositions, parental psychopathology, parental substance abuse, and the availability of substances (SAMHSA, 1999). Parental substance use, troubled family relationships, and emotional or behavioral problems have been reported to be most

predictive of escalation to more serious abuse of alcohol or drugs (SAMHSA). It is important to note that addiction involves inseparable biological and behavioral components (Leshner, 2001).

Table 2

### **Theories behind the Relationship Between Substance Abuse and Mental Health Disorders**

**1. One disorder directly causes the other.**

For example, the repeated use of cocaine may induce panic attacks, psychotic episodes, and depression that would not have occurred otherwise (Ciraulo & Shader, 1991).

**2. The substance abuse is an attempt at self-medication.**

This explanation appears to be the most prevalent. It suggests that the mental disorder indirectly leads to the substance abuse. Under this hypothesis, an individual attempts to diminish psychological distress or improve social functioning by using substances (Substance Abuse and Mental Health Services Administration [SAMHSA], 1997). The self-medication hypothesis is supported by the fact that in the vast majority of cases, the mental disorder develops before the substance abuse begins. However, a related view is that the substance use is the result of psychological difficulties such as impulsivity or impaired judgment (SAMHSA, 1999).

**3. The two disorders develop independently, but have a significant impact on each other.**

This explanation is best demonstrated by those youth who develop substance abuse early, and then later independently develop a mental health disorder such as schizophrenia. While the substance abuse may be a stressor or may further decrease the youth's coping abilities, it cannot be considered a direct cause of the schizophrenia (SAMHSA, 1997).

**4. The development of both disorders is related to the existence of an independent external factor.**

A strong example of this is a youth who has suffered from severe childhood trauma, and consequently exhibits multiple psychological, emotional, and social difficulties (SAMHSA, 1997).

Source: Commission on Youth Graphic of Citations as noted, 2002.

This vulnerability to substance use may then be enhanced by the child's social development and peer influences. A child who is highly susceptible to peer pressure and negative influences is at a greater risk of developing a substance abuse problem (Leshner, 2001). These risk factors may differ in significance during different phases of development. Parental and peer influences are often critical in early phases of substance use, while the influence of peers may increase as the child gets older (SAMHSA, 1999). Recent studies have also revealed an association between higher levels of substance use and an adolescent's pubertal stage (not necessarily chronological age) because adolescents entering puberty sooner enter the risk period earlier than late maturers (Patton et al., 2005).

Another major risk factor for adolescent substance abuse is the presence of childhood conduct problems (Brook et al., as cited by Kamon, Budney, & Stanger, 2005). Substance abuse and conduct problems share important risk factors, including family conflict, poor parental monitoring, parental substance use, academic problems, and association with deviant peers (Anderson and Henry, Brook et al., as cited by Kamon, Budney, & Stanger). More than half of adolescents with substance abuse problems also experience conduct problems; such problems make treatment for substance abuse particularly challenging (Kaminer et al., as cited by Kamon, Budney, & Stanger).



## Assessment

A large number of adolescents experiment with alcohol and other drugs before becoming adults (Bukstein, 1998). However, in order to receive a diagnosis of substance use disorder, these youth must demonstrate significant levels of impairment in their daily lives, such as poor social relationships, declining academic performance, or chronic substance-related absences, suspensions, or expulsions from school (Bukstein).

When assessing youth suspected of co-occurring disorders, the primary goal is to determine whether the use of substances exists and whether it fits the *DSM-IV* diagnostic criteria for substance use disorders (Bukstein, 1998). This determination should be based on a comprehensive developmental, social, and medical history. Evaluators should obtain the necessary information from a variety of sources, including the youth, parents, family members, school personnel, previous treatment records, and perhaps other involved agencies (SAMHSA, 1997).

Once clinicians have established that the child is using substances, they must then determine the nature of the use pattern. Under the *DSM-IV*, substance use disorders generally follow one of two tracks. The first diagnosis, substance abuse, is ascribed to a child when their repeated use of alcohol or other drugs leads to physical, emotional, or social problems, but does not include compulsive use or addiction. Further, when an individual persists in using alcohol or other drugs despite symptoms of tolerance and withdrawal or attempts to control the use, substance dependence is generally the diagnosis. Information regarding patterns of use, including age of onset, progression of use for specific substances, frequency, and variability of use, and the types of substances used, is necessary in making this diagnosis (Bukstein, 1998).

Because the most common feature of substance use disorders in adolescents is impairment in psychosocial and academic functioning, the evaluator must determine whether the difficulties the youth displays are attributable to the substance use, are the result of preexisting or current problems or are a combination of both (Bukstein, 1998). During a preliminary evaluation, clinicians should routinely screen for any co-occurring mental disorders. In addition, the assessment should also attempt to bring out any social and environmental factors, such as family or academic problems, that may be affecting the child or adolescent's functioning.

Recognition of co-occurring substance-related and mental disorders is often difficult, and clinicians will have to keep in mind several issues when conducting an evaluation. First, the youth may display denial, distortion, and minimization when discussing substance use; therefore, the details provided may not be reliable. Furthermore, in cases of co-occurring mental illness, the reasons for the distressing symptoms and behaviors may not be fully understood by the child and family, and therefore the information provided during the evaluation may not be particularly revealing (Bukstein, 1998). Moreover, the reports of substance use may be distorted by the cognitive and emotional aspects of any underlying mental illness, further decreasing the validity of any self-reports (Mueser et al., 1997).

Clinicians must also consider the fact that dually-diagnosed patients often present different symptoms than substance abusers who do not have mental illness (Mueser et al., 1997). They may use lower amounts of alcohol and/or drugs and experience different consequences from use. Furthermore, some research shows that the dually-diagnosed are less likely to develop dependence and tend to report less subjective distress resulting from their use (Mueser et al.). Based on these

differences, standard instruments may not identify the substance use disorder in these individuals, and the clinician may have to rely primarily on clinical interviews and patient histories.

## **Best Practices in Treatment**

There are very few programs specifically designed to treat co-occurring disorders, and those that do exist are relatively new. Consequently, most methods have not been objectively evaluated for effectiveness with children and adolescents (SAMHSA, 1997). The studies that have been done have failed to demonstrate the superiority of any one treatment approach over another, and instead have shown only that some treatment is better than no treatment (Bukstein, 1998). However, researchers have identified certain treatment characteristics that are associated with more successful outcomes in dually-diagnosed children and adolescents (Bukstein). They include:

- Treatment of sufficient duration, intensiveness, and comprehensiveness to address the chronic nature of the disorders;
- Presence of after-care or follow-up treatment;
- Sensitivity to cultural, racial, and socioeconomic factors;
- Family involvement;
- Collaboration among service providers and agencies;
- Promotion of prosocial activities and drug-free lifestyle; and
- Involvement in self-help groups such as Alcoholics Anonymous and Narcotics Anonymous

The SAMHSA Best Prevention and Treatment Practices Expert Panel has also recommended that the following principles be used to form the basis of treatment for children and adolescents with a dual diagnosis (SAMHSA, 1997):

- *Prevention* – Early detection, education, and provision of services to high risk populations (i.e., children with learning disorders, persons experiencing trauma, including child or domestic abuse, persons with predisposing family conditions, etc.).
- *Education* – Both mental health and substance abuse treatment programs should educate clients regarding the risks and symptoms of dual disorders.
- *Cross-training* – Service providers should be trained to evaluate and treat mental illness and substance abuse concurrently.
- *Evaluation* – All elements of the treatment program should be thoroughly evaluated on a periodic basis.

Preliminary studies also support the use of integrated mental health and substance abuse treatment programs (Mueser et al., 1997). Under the integrated treatment approach, both the mental health and the substance abuse treatments are provided simultaneously within the same treatment plan, rather than being conducted in a consecutive or parallel manner (Mueser et al.). Integrated treatment is typically provided by same team, person, or organization, and most models include a variety of services within the treatment plan, such as case management, group interventions (persuasion groups, social skills training), behavioral strategies, and family/social intervention (Mueser, et al.). SAMHSA is informing health professionals to expect patients to present with simultaneous substance abuse and mental health disorders (Wachter, 2005). SAMHSA's Treatment Improvement Protocol 42: Substance Abuse Treatment for Persons with Co-occurring Disorder recommends the coordination of substance abuse and mental health interventions (Wachter). Although the effects of integrated mental health and substance abuse disorder treatment require additional study, optimal treatment involves an integration of treatment modalities rather than merely concurrent or consecutive treatment with specific modalities for either substance abuse

disorder or psychiatric disorders (*Journal of the American Academy of Child & Adolescent Psychiatry*, 2005).

Research has found that the integrated approach offers several advantages. Participants are more likely to maintain a connection with the program, which has been found to result in decreases in rehospitalization, increased sobriety, and decreased psychiatric symptoms (Hellerstein et al., 1995). In addition, participants have been found to demonstrate modest improvements in the areas of immediate and extended social relationships, self-reported satisfaction with family relationships, and psychiatric symptoms (Jerrell & Ridgely, 1995).

It is also important to note that different approaches to integrated treatment have been found to result in similar rates of improvement (Mueser et al., 1997). If supported, this finding could have important policy implications, because the choice of approach could then be based on the ease of implementation and the cost of the intervention method (Mueser et al.).

The research supporting integrated treatment programs can only be generalized, however, due to the existence of certain limitations (Mueser et al., 1997). Most of the studies used small sample sizes, lacked an experimental design, and failed to employ standardized instruments to assess diagnosis of substance abuse (Mueser et al.). Furthermore, most incorporated relatively brief follow-up periods (typically 18 months or less). This short-term design may downplay the effectiveness of the approach, as research shows that the benefits of this form of treatment become more visible as time progresses (Durrell et al., 1993).

## **Treatment**

Children and adolescents with a dual diagnosis should be treated in the least restrictive environment possible. Consequently, several treatment settings are necessary to ensure an adequate continuum of care. The following paragraphs describe the most typical treatment settings.

***Inpatient treatment*** – This is generally limited to children and adolescents with three types of difficulties: severe psychiatric disorders (such as acute psychosis and/or dangerous behaviors), a history of treatment failure in less restrictive environments, and a risk of withdrawal. Inpatient services include alcohol and drug detoxification programs, which typically accept active and often unmotivated users for a period of 3 to 7 days and provide medication to alleviate withdrawal (Sciacca, 1991). Completion of detoxification is frequently a criterion for admission to other forms of treatment. However, patients with dual diagnosis who have severe mental illness are often excluded from detoxification programs due to the lack of adequate staffing and staff training.

***Residential treatment*** – This includes group homes as well as therapeutic communities. The environment is typically less restrictive than hospitalization, but still provides the youth with intensive services and support.

***Partial hospitalization or day treatment*** – These programs allow the youth to remain in the community while receiving intensive treatment. They are often used as a transition for youth from a more restrictive setting back into the community.

***Outpatient treatment*** – This form of treatment is most appropriate for youth whose history, clinical status, and environment allow for less intensive level of care. Treatment is focused

on the primary problem, and commonly uses a single method, such as individual or family therapy, or a limited combination of the two.

**Community treatment** – This may include school-based counseling and self-help groups, as well as pro-social organizations and recreational opportunities that are made available to the youth. It may be used either in conjunction with outpatient treatment, or as a transition from long-term treatment in more restrictive settings. The basic purpose of these programs is to facilitate transition to a drug-free lifestyle.

Source: Bukstein, 1998 and Sciacca, 1991.

Table 3 discusses the various factors that influence the choice of treatment setting for children and adolescents with dual diagnoses.

Table 3

### **Factors Influencing Choice of Treatment Setting For Children and Adolescents**

- **Motivation and willingness of adolescent and family to cooperate with treatment**

Treatment, however, does not need to be voluntary to be effective, as sanctions or enticements from the family, the justice system, or other sources may increase treatment entry and retention rates (National Institute on Drug Abuse, 1999).

- **Adolescent's need for structure or limit-setting that cannot be provided in less restrictive environment**
- **Need to provide a safe environment for the youth**
- **Ability of the adolescent to care for him/herself**
- **Existence of complicating medical or psychiatric conditions**
- **Availability of services**

The number of facilities offering special programs for dually-diagnosed clients, has grown, but still remains inadequate. By 1999, 57% of facilities with a mental health focus provided dual diagnosis programs, and nearly half of substance abuse treatment facilities provided these programs (Drug and Alcohol Services Information Systems [DASIS] Report, 2002). Facilities offering hospital inpatient care have been found to be more likely to provide service for dually-diagnosed clients than other types of facilities (DASIS).

- **Placement preferences of the family**
- **Child or adolescent's treatment history**

Source: Bukstein, 1998, for listing of factors; description sources as noted.

## **Treatment Methods**

Numerous methods are used to treat children and adolescents with a dual diagnosis. The most prevalent are discussed in the following paragraphs.

### ***Cognitive Behavioral Therapy***

This goal of cognitive behavioral therapy (CBT) is the identification and modification of maladaptive thinking patterns to reduce negative thoughts, feelings and behavior. For substance abusers, the focus of this intervention is generally relapse prevention (U.S. National Institute on Drug Abuse [NIDA], 1999). It is intended to help the adolescent develop greater self-control,

identify environmental and internal triggers leading to relapse, and develop strategies for dealing with stressors, triggers, and lapses into substance use. The role of the service provider is to aid the youth in anticipating the problems that they are likely to meet, and to help them to develop effective coping strategies. Studies have indicated that CBT has positive effects with adolescents treated for mental health disorders such as depression (Bukstein, 1998).

Studies have also shown that CBT is effective for adolescents who have been diagnosed with conduct disorder and co-existing substance abuse disorders (Kazdin, as cited by the *Journal of the American Academy of Child & Adolescent Psychiatry*, 2005). Cognitive behavioral therapy includes elements directed toward substance use such as relapse prevention, but also addresses social skills, anger control, and problem solving (*Journal of the American Academy of Child & Adolescent Psychiatry*).

### ***Behavioral Therapy***

The underlying goal of behavioral therapy is to allow the youth and the treatment provider to identify specific problems and areas of deficit and to work on improving these behaviors (Bukstein, 1998). Therapeutic activities are designed to achieve these goals, and may include fulfilling specific assignments, rehearsing desired behaviors, and recording and reviewing progress (NIDA, 1999). Positive reinforcers are provided at intervals based on attainment of the specified goals. This form of treatment is often incorporated into inpatient, residential, or partial hospitalization programs (Bukstein).

Once the youth leaves the residential or day treatment setting, parents must continue to exercise supervision of the adolescent's behavior and provide negative consequences for rule violations and rewards for desired behavior. Research shows that, if consistently applied, this type of therapy helps adolescents become drug-free and increases their ability to maintain abstinence after treatment ends (NIDA, 1999). Participants have also been found to show improvement in areas such as employment, school attendance, family relationships, depression, and institutionalization (NIDA). It is important to note that these gains have been largely attributed to the inclusion of family members in treatment and the use of a reward system to achieve substance abstinence (NIDA).

### ***Skill Development***

Because co-occurring disorders often disrupt normal skill development, treatment, and rehabilitation often include assistance in developing needed skills and functions that were passed by while the child was struggling with the untreated disorders (SAMHSA, 1997). Skill development is often delivered in the cognitive-behavioral format (Bukstein, 1998). The general focus of treatment includes educating the youth with relapse prevention skills, substance refusal skills, communication skills, problem-solving, anger control, and leisure time management. While it is frequently incorporated in treatment plans, there is little research available regarding which methods are most effective in dually-diagnosed populations.

### ***Family Therapy***

This type of therapy is often considered an essential part of treatment for adolescents with substance use disorders (Bukstein, 1998). While many theoretical approaches have been utilized, the goal of most programs is to provide education, to improve communication and functioning among family members, and to reestablish parental influence through parent management training (Bukstein). One popular form is multidimensional family therapy (MDFT), which is an outpatient, family-based treatment for teenagers with serious substance abuse issues (NIDA, 1999). This approach views drug use in terms of network of influences (individual, family, peer, community)

and encourages treatment across settings in multiple ways. Sessions may be held in a clinic, home, court, school, or other community locations.

For the affected youth, the emphasis of treatment is on skill-building, and the treatment plan often incorporates developmental tasks such as decision-making, negotiation, problem-solving skills, vocational skills, communication, and dealing with stress (NIDA, 1999). Parallel sessions are held with family members, in which parents examine their parenting style, learn to distinguish influence from control, and learn to have a positive and developmentally appropriate influence on their child. Research supports the use of this type of therapy for teenagers with substance use disorders, but there are no reports of its efficacy in populations with dual diagnosis (Schmidt et al., 1996; NIDA, 1999).

### ***Multisystemic Therapy***

One promising intervention program for youth with dual disorders is multisystemic therapy (MST). MST aims to address the multifaceted nature of antisocial behavior at the individual, family, and community levels (Ouimette, 2007). This form of therapy is intended to address serious antisocial behavior in children and adolescents who abuse substances. Therapeutic efforts target the child's behavior within the context of the family environment, the school environment, and the neighborhood and community (NIDA, 1999). Treatment occurs in each of the child's natural settings. Research has shown that MST significantly reduces adolescent drug use during treatment and for at least six months after treatment (NIDA). It has also been found to reduce the number of juvenile incarcerations and out-of-home placements (NIDA); however, this form of therapy has not been tested specifically in dually-diagnosed populations.

MST is associated with significant, long-term reduction of aggressive behaviors with chronic and violent juvenile offenders (Henggeler & Brondino, 2002). Clinical trials indicate that MST is an effective intervention for substance-abusing youth, particularly for marijuana abstinence (Henggeler & Brondino).

### ***Individual Psychotherapy***

Interpersonal therapy and psychodynamic therapies are methods of individual counseling that are often incorporated into the child or adolescent's treatment plan. The effectiveness of these two forms of treatment is suggested from case reports and clinical experience, but no controlled studies support the use of these methods in children and adolescents with dual-diagnosis (Bukstein, 1998).

### ***Pharmacotherapy***

Medications are often an important element of treatment for dually-diagnosed patients. The children who are most often prescribed medication are those with depression and mood disorders, ADHD, severe aggressive behavior, and anxiety disorders (Bukstein, 1998). Other factors that may prompt the use of medication are a significant family history of psychiatric disorder, past treatment failures and relapses, and past success using medication in treating the symptoms of the disorder (Bukstein).

According to NIDA (1999) conclusions, pharmacotherapy should be combined with counseling and other therapies. NIDA stipulates, however, that the use of medication should only be pursued as a last resort in the dually-diagnosed population, as substance use disorders may increase the potential for misuse and overdose. Further, medications should be prescribed only to those children and adolescents who displayed psychiatric symptoms prior to the substance use or only if the

symptoms are present during periods of abstinence. A definitive assessment requires that the youth remain abstinent from the use of substances for a set period, typically several weeks.

Research is being conducted on the effectiveness of medications in adolescents with co-occurring substance use and psychiatric disorders. Clinical trials with pemoline and bupropion for ADHD and fluoxetine for depression have shown promise (*Journal of the American Academy of Child & Adolescent Psychiatry*, 2005). Pemoline has shown promise in safely treating youth with ADHD and co-occurring substance use (Riggs, 2003). Pemoline is considered a significant treatment option for ADHD because of its low abuse potential and once-per-day dosing (Riggs). More recently, a trial of a stimulant medication demonstrated the efficacy of medication improving ADHD symptoms in adolescents with comorbid ADHD and substance abuse disorder. This study also demonstrated that medication treatment of ADHD alone, without specific substance abuse disorder or other psychosocial treatment, did not decrease substance use (*Journal of the American Academy of Child & Adolescent Psychiatry*).

Preliminary trials with lithium and selective serotonin reuptake inhibitors (SSRIs) produced considerable improvements in adolescents with substance abuse disorders and comorbid mood disorders (*Journal of the American Academy of Child & Adolescent Psychiatry*, 2005). Preliminary data shows that SSRIs are safe in treating adolescents with depression even if they are still using substances (Riggs, 2003). Conversely, tricyclic antidepressants are contraindicated for the treatment of depression and substance use due to their high potential for adverse interactions with substances, particularly marijuana (Riggs).

One controlled study was conducted to ascertain the effectiveness of lithium for adolescents with bipolar disorder and co-occurring substance abuse disorder. Lithium was found to be effective in stabilizing mania, even that which is accompanied by ongoing substance use (Riggs, 2003). However, it was not effective in treating the substance use or in inducing abstinence. It is important that the adolescent receive concurrent treatments for substance use and bipolar disorder (Riggs).

According to the Practice Parameter for the assessment and treatment of children and adolescents with substance use disorders, some commonly used pharmacological agents, such as psychostimulants and benzodiazepines, have valid abuse potential (*Journal of the American Academy of Child & Adolescent Psychiatry*, 2005). Alternative agents to psychostimulants should be considered because they possess lower potential for abuse. Behavior therapy, SSRIs, tricyclic antidepressants, or bupropion are preferred (*Journal of the American Academy of Child & Adolescent Psychiatry*).

When medication is utilized for the treatment of a co-occurring mental health disorder, a cautious approach, as well as an integrated treatment strategy, is crucial for effective treatment of the mental health and substance abuse disorder.

### ***Medical Detoxification***

This is a form of pharmacotherapy that may be pursued as the first stage in addiction treatment. The goal is to treat any withdrawal effects by substituting a legal drug for an illicit one during prolonged periods of abstinence. This approach is most frequently used for chronic abusers of highly addictive substances such as opium (i.e., methadone treatment) (Bukstein, 1998). Research has shown that detoxification will not by itself change long-term drug use, and must be incorporated into a long-term treatment plan (NIDA, 1999). Furthermore, it is important to note that substitutions such as methadone are infrequently used in children and adolescents, and are often

limited by law (Bukstein). Detoxification should be reserved for only the most severely dependent adolescents who have been resistant to other forms of treatment (Bukstein).

## **Complicating Factors in Treatment Efforts**

There are many factors that can impact the success of treatment efforts in children with multiple diagnoses. One of the most significant is the national prevalence of separate mental health and substance abuse service delivery systems. Research has found that “coordination of treatment plans is the exception, not the rule” (SAMHSA, 1997).

Rather than utilizing the integrated treatment approach, many service agencies pursue parallel mental health and substance abuse treatment plans for dually-diagnosed children. Under this framework, the child receives concurrent treatment from two separate providers: one for substance abuse and the other for mental health. As a result, efforts are often complicated by a clash of treatment philosophies. Clinicians in the mental health system tend to support the self-medicating hypothesis, and place less emphasis on treating the substance abuse disorder and more on the mental disorder, believing that the substance abuse will subside once the mental disorder is treated (SAMHSA, 1997). However, substance abuse clinicians tend to adopt the opposite view, believing that the symptoms of the mental disorder are brought on by the use of substances. They will consequently focus their efforts on abstinence and relapse prevention (SAMHSA). Children being treated on these parallel tracks can easily get caught in the middle, and are often confronted with conflicting strategies, goals, and activities.

However, it is important to note that there are also difficulties presented for those agencies that pursue the integrated treatment approach. Mental health and substance abuse treatments often fall into separate funding streams, and the integrated approach may therefore complicate the funding process and cause the child to become ineligible for certain resources (SAMHSA, 1997). Agencies that adopt the integrated approach must support a policy of coordinated funding streams in order to ensure that children remain eligible for all available resources in the community.

There are also certain issues that impact the recognition and diagnosis of co-occurring disorders. First of all, parents often do not bring children in for treatment of an initial disorder if the behavior is not dangerous or disruptive (Greenbaum et al., 1966). Consequently, opportunities for prevention and early intervention are often missed. Furthermore, many clinicians are trained in either mental health or substance abuse exclusively and may not recognize the symptoms of the co-occurring disorder. As a result, one problem may be diagnosed, while the other is missed (SAMHSA, 1997).

The probability of successful outcome is also significantly impacted by the duration of treatment. Substance abusers who fail to complete treatment programs have a much higher likelihood of relapse (NIDA, 1999). Factors that have been associated with noncompletion of treatment in children and adolescents with dual diagnosis include a younger age of onset, more extensive alcohol use, abuse of multiple drugs, and deviant behavior (Bukstein, 1998). Clinicians should therefore make every effort to ensure that children and families remain engaged in treatment and should be alert for common predictors of relapse, such as specific thoughts, feelings, and cravings, less improvement in school or work, and less satisfactory leisure activities (NIDA). It is also important that clinicians recognize that treatment or improvement in one disorder may not lead to the improvement of the other. Rather, the interaction between mental illness and substance abuse may be negative, with the deterioration or relapse related to one disorder causing the other disorder



to be exacerbated. It is for this reason that experts emphasize the importance of long-term treatment plans that incorporate the possibility of relapses and rehospitalization (SAMHSA, 1997).

## **Contraindicated Treatments**

Benzodiazepines, typically prescribed for anxiety, are usually contraindicated in the presence of a substance abuse disorder due to their addictive properties (SAMHSA, 1997). Tricyclic antidepressants are contraindicated for the treatment of depression or ADHD in adolescents who engage in substance use because of the risk of death in the event of an overdose (Riggs, 2003).

The following information is from the 2007 Biennial Report of the Hawaii Department of Health (Chorpita & Daleiden, 2007). For the treatment of substance abuse, studies have found no support for the following treatments: Client-Centered Therapy, Education, Group Therapy, Project CARE, or the Twelve-Step Program. Moreover, these findings also indicate that Group Therapy and Project CARE treatment approaches may negatively affect treatment outcomes for substance abuse.

## **Cultural Considerations**

In research cited by Walton (2001), studies suggest that females may enter substance abuse treatment with unique needs. They present symptoms of greater psychological distress, such as low self-esteem and depression, and are much more likely to report prior physical and/or sexual abuse than their male counterparts. These issues must be effectively addressed within the context of treatment in order to improve outcomes.

In addition, Walton (2001) cites research which has found that women and minorities often enter treatment with fewer financial resources and positive social supports. For example, studies have found that many African Americans are at a higher risk of relapse because they often face more difficult social situations following treatment, such as high-stress and low-support environments resulting from low-income urban neighborhoods with higher crime rates.

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### **Additional Resources**

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### **Organizations/Weblinks**

#### **Governor's Office for Substance Abuse Prevention (GOSAP)**

P.O. Box 1475 - 202 North Ninth Street, Fourth Floor - Richmond, VA 23219  
804-786-9072  
E-mail: [gosap@governor.virginia.gov](mailto:gosap@governor.virginia.gov)

#### **Mid-Atlantic Addiction Technology Transfer Center (ATTC)**

VCU Department of Psychiatry  
P.O. Box 980469 - Richmond, VA 23298-0469  
804-828-9910  
E-mail: [mid-attc@mindspring.com](mailto:mid-attc@mindspring.com)  
<http://www.midatcc.org>

#### **National Alliance for the Mentally Ill (NAMI)**

Colonial Place Three - 2107 Wilson Boulevard, Suite 300 - Arlington, VA 22201-3042  
703-524-7600  
<http://www.nami.org>

#### **National Clearinghouse for Alcohol and Drug Information**

P.O. Box 2345 - Rockville, MD 20847-2345  
800-729-6686  
<http://www.health.org>

#### **National Institute on Alcohol Abuse and Alcoholism (NIAAA)**

6000 Executive Boulevard, Willco Building - Bethesda, MD 20892-7033  
301-443-1124  
<http://www.niaaa.nih.gov>

#### **National Institute on Drug Abuse (NIDA)**

6001 Executive Boulevard - Bethesda, MD 20892-9561  
301-443-1124  
<http://www.nida.nih.gov>

**National Mental Health Association (NMHA)**

2001 North Beauregard Street, 12th Floor - Alexandria, VA 22311

800-969-NMHA (6642)

E-mail: [infoctr@nmha.org](mailto:infoctr@nmha.org)

<http://www.nmha.org>

**Substance Abuse and Mental Health Services Administration (SAMHSA)**

U.S. Department of Health and Human Services

5600 Fishers Lane - Rockville, MD 20857

800-487-4890

<http://www.samhsa.gov>

**The National GAINS Center for People with Co-Occurring Disorders in the Justice System  
Policy Research, Inc.**

262 Delaware Avenue - Delmar, NY 12054

518-439-7415

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<http://www.prainc.com>

# YOUTH SUICIDE

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## **Introduction**

### **Contributing Factors in the Rise of Youth Suicide**

### **Mental Health Disorders and Youth Suicide**

### **Virginia's Suicide Prevention Plan**

### **Evidence-based Practices in Youth Suicide Prevention**

#### *Pharmacological Treatment*

### **Antidepressants and the Risk of Suicidal Behavior**

### **Contraindicated Treatments**

### **Cultural Considerations**

## **Introduction**

Suicide and suicide attempts by children and adolescents constitute a major public health problem in the United States. Each year in the United States, thousands of teenagers commit suicide. Suicide is the third leading cause of death for 15 to 24 year-olds, and the sixth leading cause of death for 5 to 14 year-olds (American Academy of Child & Adolescent Psychiatry [AACAP], 2004). Moreover, the middle teenage years are the period in the life cycle where the incidence of suicide attempts is the greatest (Fritz, 2001).

According to Garland and Zigler, as cited by the Virginia Commission on Youth (2001), the adolescent suicide rate increased 200% over the last three decades, compared with a 17% increase in the general population. In 1998, an average of one young person every two hours took his or her own life (National Center for Health Statistics, as cited by the Virginia Commission on Youth). Furthermore, the actual number of deaths caused by suicide is likely to be higher because some deaths may have been classified as accidental. Chart 1 shows the suicide rates for persons in the U.S. ages 10 to 24 between 1991 and 2004.

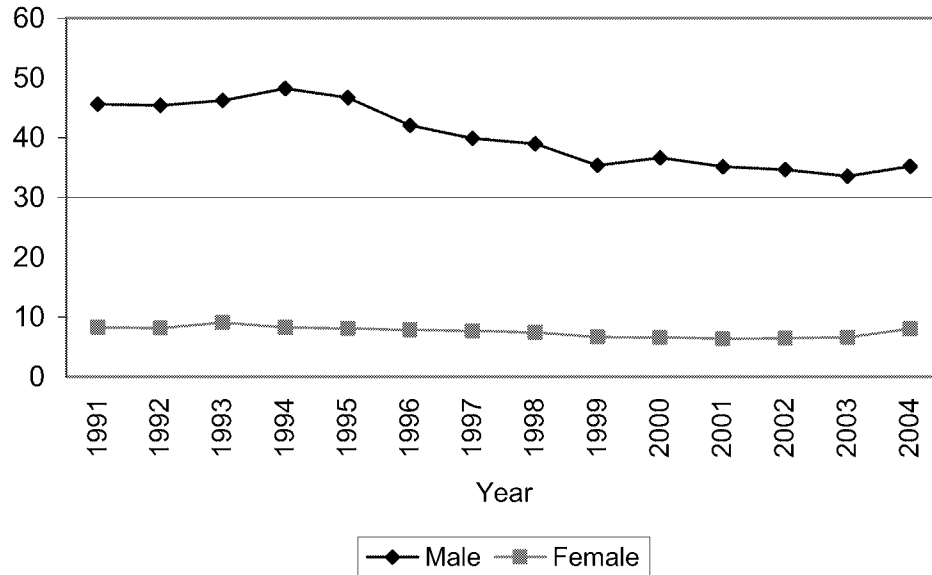
In 2007, the U.S. Centers for Disease Control and Prevention (CDC) reported the largest one-year increase in youth suicide rate in 15 years (Centers for Disease Control and Prevention, Suicide Trends among Youths and Young Adults, 2007). According to the CDC report, there are three gender-age groups—10 to 14 year-old females, 15 to 19 year-old females, and 15 to 19 year-old males—which account for the overall increase in suicide rates for youth. The report includes the following statistics for increased suicide rates among youth from 2003 to 2004:

- For 10 to 14 year-old females, the rate increased from 0.54 to 0.95 per 100,000;
- For 15 to 19 year-old females, the rate increased from 2.66 to 3.52 per 100,000; and
- For 15 to 19 year-old males, the rate increased from 11.61 to 12.65 per 100,000.

The CDC also reported a change in the methods used to attempt suicide. Firearms were the most common method for both females and males in 1990. However, in 2004, hanging/suffocation was the most common method of suicide for females, resulting in 71% of suicides among girls aged 10 to 14 and 49% among both males and females ages 15 to 19 (CDC, 2007). Although the use of firearms has changed for females, firearms remain the most common method of suicide for males (CDC).

Chart 1

### U.S. Suicide Rates\* for Persons 10-24 Years of Age



\*Per 100,000 persons

Source: Commission on Youth Analysis of Centers for Disease Control and Prevention Data, 2007.

There has been increasing attention paid to the issues of suicide and suicide prevention and, in 1999, the U.S. Surgeon General issued a "Call to Action" emphasizing the need for greater awareness of this national problem (U.S. Department of Health and Human Resources, 2001). Shortly thereafter, the *National Strategy for Suicide Prevention* was published by the U.S. Department of Health and Human Services, addressing issues such as collaboration with agencies and stakeholders (Vetter, 2002).

Table 1 sets forth Virginia's suicide statistics.

Table 1

### Virginia Suicide Statistics

In Virginia, suicide is:

- the third leading cause of death for ages 10-24,
- the second leading cause of death for ages 25-34, and
- the fourth leading cause of death for ages 35-54.
- In almost all age groups, Virginia's suicide rates are slightly higher than the national average.
- One teenager a week, two adults each day, and one older adult every 3 days are lost to suicide.
- There are an estimated 25 suicide attempts for every death by suicide.
- In 2000, the total cost for hospitalizations due to suicide attempts in Virginia was over \$25 million.

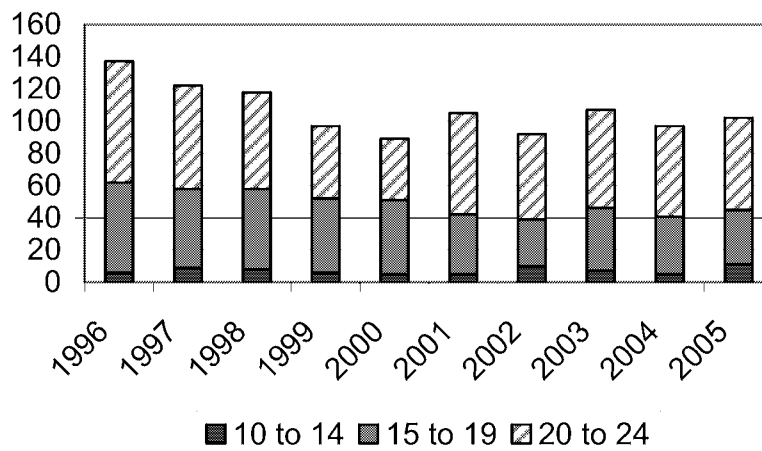
Source: Vetter, 2002.



In Virginia, five suicides were reported in the 10 to 14 age group in 2004, resulting in a 1.0 suicide rate. In that same period, 38 suicides were reported in the 15 to 19 age group, resulting in a 7.3 suicide rate (Virginia Department of Health, Office of the Chief Medical Examiner, 2006). Chart 2 outlines Virginia deaths from suicides from 1996 to 2005.

Chart 2

**Virginia Deaths from Suicides 1996-2005  
Ages 10-24**



Source: Virginia Department of Health, Division of Injury and Violence Prevention, 2007.

**Contributing Factors in the Rise of Youth Suicide**

According to NAMI, suicide is the result of many complex factors (2004). More than 90% of youth suicide victims have at least one major psychiatric disorder (Gould et al., as cited by NAMI, 2004). Hopelessness appears to be an important mediating variable between depression and suicide (Gould et al., 2004). Anxiety, particularly when it co-occurs with depression, also increases the risk of suicide (Gould et al.).

Several factors contribute to a child or adolescent attempting or completing suicide. The American Academy of Pediatrics, as cited by the Virginia Commission on Youth (2001), identifies a number of factors, which may explain the increase in youth suicide in recent years:

- Ease in obtaining the tools for suicide;
- The pressures of modern life are greater;
- Competition for good grades and college admission is stiff;
- More violence is seen in the media; and
- Parents may be less involved in their children’s lives.

Warning signs for suicide are evidenced in changes in a person’s normal behavior and may include loss of interest in activities once thought of as pleasurable, giving away possessions of personal value, substance abuse, change in weight, apathy about appearance, personality changes and an increase in self-harming behaviors (Better Health Channel, 2000).

Other important risk factors for suicide and suicidal behavior, according to NAMI (2004), include:

- Prior suicide attempt;
- Co-occurring mental and alcohol or substance abuse disorders;
- Family history of suicide;
- Parental psychopathology;
- Hopelessness;
- Impulsive and/or aggressive tendencies;
- Easy access to lethal methods, especially guns;
- Exposure to the suicide of a family member, friend, or other significant person;
- History of physical or sexual abuse;
- Same-sex sexual orientation (shown only for suicidal behavior, not suicide);
- Impaired parent-child relationships;
- Life stressors, especially interpersonal losses and legal or disciplinary problems; and
- Lack of involvement in school and/or work ("drifting").

If adolescents are currently receiving psychiatric treatment for a mental health disorder, these risk factors can be discussed with the family and the treatment team so that the adolescent can be appropriately monitored.

Table 2 presents statistics addressing risk factors for youth suicide.

*Table 2*

### **Facts about Youth Suicide**

- |   |
|---|
| <ul style="list-style-type: none"><li>• Suicide is much more common in adolescent and young adult males than females.</li><li>• The ratio for male to female suicides is 3:1 in the rare prepubescent suicides to approximately 5.5:1 in 15 to 24 year-olds.</li><li>• Mood disorders, poor parent communication, and a previous suicide attempt are risk factors for suicide in both boys and girls.</li><li>• Previous suicide attempts are more predictive in male.</li><li>• Substance and/or alcohol abuse significantly increases the risk of suicide in teenagers aged 16 and older.</li><li>• Family pathology and a history of family suicidal behavior may also increase risk and should be investigated.</li></ul> |
|---|

Source: American Academy of Pediatrics, as cited by the Virginia Commission on Youth, 2001.

Research reveals that youth suicide is neither random nor inevitable. The Virginia Commission on Youth, in its study report on youth suicide (2001), suggested that, in order to address youth suicide, one must also be made aware of the dynamics surrounding this issue. In its report, *Suicide Fatalities among Children and Adolescents in Virginia 1994-95*, the Virginia State Child Fatality Review Team found that more than 40% of the youth who took their lives had told someone about their intent to die (Virginia Commission on Youth). Unfortunately, for various reasons, the opportunities to intercede were lost. Also discussed in the report were the significant findings that the warning signs for youth suicide were not recognized, the extent of the problem was not understood, the means for conducting the act were not removed, and families often thought they could handle the problems themselves. Contributing to the problem was that families may not have known where or how to get help or that help, in fact, was not available.

There has been considerable debate about the use of antidepressants in treating youth and about whether their use increases the risk of suicidal behaviors. A further description of the use of antidepressants is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

## **Mental Health Disorders and Youth Suicide**

The factors that predispose children and adolescents to complete suicide are numerous. The American Academy of Child & Adolescent Psychiatry’s (AACAP) *Practice Parameter for the Assessment and Treatment of Children and Adolescents with Suicidal Behavior* (2000) discusses the importance of understanding the various risk factors for potential suicidal behavior. The following elements are discussed in the following paragraphs.

One such risk factor that may indicate potential suicidal behavior is pre-existing psychiatric disorders. More than 90% of adolescents who commit suicide suffered from an associated psychiatric disorder at the time of their deaths. More than half had suffered from a psychiatric disorder for at least two years preceding the event.

Another potential risk factor is the presence of disruptive disorders. Disruptive disorders increase the risk of suicidal thoughts in children 12 years old and younger. Moreover, substance use or separation anxiety may incite adolescents to attempt suicide. Mood and anxiety disorders increase the risk of suicidal ideation in children and adolescents. Panic attacks are a risk factor for both ideation and attempts in females, while aggressiveness increases the risk of suicidal ideation or attempt in males.

As indicated in a Joint Statement of the AACAP (2001) and the American Psychiatric Association, some of the behavioral health issues in adolescents associated with suicidal thoughts or behaviors include depression, ADHD, and bipolar disorder (2001). Depression has been identified as the top risk factor in youth suicide, with estimates of five percent of children and adolescents in the general population being depressed at any point in time. Children at a higher risk for depression are those under stress, those experiencing loss, and those with attention, learning, conduct or anxiety disorders. In addition, studies disclose that teenagers with bipolar disorder may have an ongoing combination of moods, which may increase the risk.

Adolescents with a combination of mood disorders and disruptive behaviors are also at a significantly increased risk of suicide (Basco, 2006). Data from the 1999 National Youth Risk Behavior Survey showed that 17% of teens surveyed demonstrated at least three problem behaviors; this group comprised 60% of those who attempted suicide (Basco). Stress events often precede adolescents' suicides; however, it is difficult to discern whether the stress is a result of the mental disorder or is related to events with which the child or adolescent having a mental disorder is unable to cope (AACAP, 2000). Furthermore, an adolescent with a mental disorder may be faced with a greater number of stressful events and may perceive the events that occur as more stressful than an adolescent who does not have a diagnosed mental disorder (AACAP).

A recent study has shown that many adolescents who report having suicidal thoughts or behaviors are not recognized by school officials to be at risk (Moyer, 2004). One study found that 35% of youth suicides occurred the same day youth experienced a crisis such as a relationship breakup or an argument with a parent (Suicide Prevention Resource Center, as cited by the Virginia Department of Health, 2006). Identifying these students would help to diagnose potential mood disorders and treat symptoms sooner, before any serious suicide attempts occurred (Moyer).

Even the most capably trained clinician can find it difficult to differentiate between those youth who have thoughts of engaging in suicide and those intending to commit the act of suicide. Many adolescents who have made a medically serious attempt will never do so again, while others who have made what seemed like only a mild attempt may eventually commit suicide (American Academy of Child & Adolescent Psychiatry and American Psychiatric Association, 2001). However, research has provided some broad indicators about risk factors and means for assessing the risk.

## **Virginia's Suicide Prevention Plan**

Senate Joint Resolution 148, introduced in the 2000 General Assembly, directed the Commission on Youth, with the assistance of the Departments of Health, Education, and Mental Health, Mental Retardation and Substance Abuse Services, to develop a comprehensive youth suicide prevention plan. With the support of the departments identified above and significant input from survivors, service providers, and other stakeholders, the Commission undertook development of the plan.

The goals of the Virginia Youth Suicide Prevention Plan, as presented by the Virginia Commission on Youth (2001), were:

- To prevent suicidal behavior among youth in Virginia;
- To reduce the impact of suicide and suicidal behavior on individuals, families, and communities; and
- To improve access to and availability of appropriate prevention services for vulnerable individuals and groups.

The Commission on Youth conducted an extensive review of the research and, in the Suicide Prevention Plan, discussed the evidence for effectiveness of various youth suicide prevention strategies in place around the country. General recommendations were made, based on research compiled by the U.S. Centers for Disease Control and Prevention, as cited by the Virginia Commission on Youth (2001):

- Ensure that new and existing suicide prevention programs are linked as closely as possible with professional mental health resources in the community.
- Avoid reliance on one prevention strategy.
- Incorporate promising but underused strategies into current programs where possible.
- Expand prevention efforts for young adults, aged 20-24 years of age.
- Incorporate evaluation efforts into all new and existing suicide prevention programs.

Universal prevention strategies were recommended as part of Virginia's Youth Suicide Prevention Plan. The Commission on Youth model for Virginia's Youth Suicide Prevention Plan was adapted from the model developed by the Institute of Medicine and the National Institutes of Health. The prevention scheme included three levels of prevention strategies: universal, selective, and indicated.

Universal prevention is the provision of needed interventions to keep communities healthy. These programs provide general awareness information and education. The most effective programs integrate suicide prevention into a competence-promotion and stress-protection frameworks (Virginia Office of the Secretary of Health and Human Resources, 2004).

The mission of selective prevention is to prevent the onset of suicidal behavior in targeted risk groups. These strategies include screening and assessment, training of “gatekeepers,” and community-based mental health treatment. Early treatment for child abuse victims, as well as early family-based interventions to reduce child abuse, can be expected to reduce suicide since childhood sexual abuse is a risk factor in 9 to 20% of suicide attempts (Virginia Office of the Secretary of Health and Human Resources, 2004). Effective screening and treatment can potentially prevent incidents of suicide attempts.

Indicated prevention strategies target individual youth known to be at high risk for suicide in order to provide skill building and supportive services and treatment. Family support training, case management, and skill building for high-risk youth have been found to be successful in reducing depression, hopelessness, and suicidal behaviors (Virginia Office of the Secretary of Health and Human Resources, 2004).

Upon the recommendation of the Virginia Commission on Youth, the 2001 General Assembly enacted legislation which designated the Virginia Department of Health as the lead agency for directing youth suicide prevention activities across the Commonwealth. The Department of Health was charged with coordinating the activities of agencies pertaining to youth suicide prevention to address various preventive and support issues. Currently, the Department of Health and the Virginia Department of Mental Health Mental Retardation and Substance Abuse Services actively participate in the Virginia Suicide Prevention Council, a public-private partnership designed to concentrate on suicide prevention in the Commonwealth. These activities assist with education and the implementation of prevention practices found to be crucial in reducing youth suicide. Under the leadership of the Virginia Department of Health, over 100,000 Virginians have been trained to identify the warning signs of suicide in others and to know the proper procedures for getting help for a person in distress.

## **Evidence-based Practices in Youth Suicide Prevention**

As interventions for preventing suicide are developed and implemented, several key factors must be considered. It is critical that youth with psychiatric disorders or otherwise at increased suicidal risk receive adequate assessment, treatment, and follow-up care (U.S. Department of Health and Human Services, 2001).

The following finding emerged from information reported by the U.S. Department of Health and Human Services (2001):

Clinical studies have shown the efficacy of training emergency department staff to treat suicide attempts with gravity and to emphasize to family members the dangers of ignoring suicide attempts. Furthermore, the benefits of follow-up treatment to reduce the recurrence of attempted suicide should be emphasized. Such training has been linked to greater completion of treatment on the part of persons having sought care in emergency departments.

According to the American Academy of Child & Adolescent Psychiatry (AACAP) and American Psychiatric Association (APA) (2001), clinicians should be prepared to admit suicide attempters who express a persistent wish to die or are exhibiting symptoms of severe mental disorders. Discharging the youth should occur only after the following three issues have been addressed. These include: making certain adequate supervision is available; ensuring that the level of suicidality has stabilized; and gaining assurance that the youth’s environment will be rid of all

potentially-lethal items, such as guns or medications. Following up with appropriate psychotherapy is vital in order to appropriately treat the mental disorders associated with suicidal behavior. Additionally, psychotherapy must be tailored to meet the needs of the youth appropriately and to treat any diagnosed mental disorders effectively.

Coping behaviors developed during adolescence may be precursors of patterns of coping through adulthood, so it is imperative that service providers and researchers understand the range and associated coping behaviors that adolescents may establish (Gould et al., 2004). Thus, cognitive behavioral approaches may provide a method to assess coping strategies and beliefs that may be associated with maladaptive beliefs (Gould et al.). This is based on study findings indicating that adolescents who are at risk of suicidal behavior are less likely to employ appropriate coping strategies (Gould et al.). Gould asserts that high-risk adolescents may possess beliefs that support the use of maladaptive coping strategies (such as substance use) to deal with depression and suicidal thoughts and behaviors.

### ***Pharmacological Treatment***

U.S. Department of Health and Human Services (2001) has outlined pharmacological interventions thought to be effective in reducing suicide. However, it must be emphasized that any medications prescribed to the suicidal child or adolescent must be carefully monitored by a third party and any change of behavior or side effects immediately reported. New interventions are being developed and tested for the treatment of disorders associated with suicidal behaviors. Because few studies of treatments for mental disorders have included suicidal individuals, treatments need to be assessed for their potential to reduce suicide and suicidal behaviors. Furthermore, the youth must be thoroughly assessed for any mental disorders, and psychopharmacological interventions must be tailored to address any diagnosed disorders.

To date, there are only two psychopharmacological treatments associated with reduced suicide—lithium and clozapine (Baldessarini et al., as cited by the U.S. Department of Health and Human Services, 1999). Research into lithium, which is shown to have a significant impact on the reduction in the suicide rate, is extensive.

According to the AACAP and the American Psychiatric Association (2001), selective serotonin reuptake inhibitors (SSRIs) may be successful in reducing suicidal ideation and suicide attempts in non-depressed adults with certain personality disorders. However, it is necessary to closely monitor children and adolescents on SSRIs to insure that no new suicidal ideations are noted.

### **Antidepressants and the Risk of Suicidal Behavior**

The information discussed below is attributed Gould et al. (2004). There has been considerable debate about the use of antidepressants in treating children and adolescents with depression and whether SSRIs increase the risk of suicidal behaviors in these youth. Some researchers assert that increased prescriptions of SSRIs have resulted in decreased suicide rates. However, findings from randomized controlled trials reveal that certain medications are contraindicated for youth under 18 years of age. As directed by the Food and Drug Administration in September of 2004, manufacturers in the United States are now required to place a “black box” warning label on these medications.

A more detailed discussion regarding the use of antidepressants in treating children and adolescents is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

## **Contraindicated Treatments**

As noted by the AACAP and the American Psychiatric Association (2001), tricyclic antidepressants should not be prescribed for the suicidal youth as a first line of treatment because the potential for toxic effect outweighs the therapeutic effects. Studies have not found these drugs to be effective in reducing suicide in children or adolescents. Furthermore, other medications that may increase disinhibition or impulsivity, such as the benzodiazapines and Phenobarbitol, should be prescribed with caution.

## **Cultural Considerations**

The following is taken from a synopsis of proceedings of a NIMH conference held in 2004 at the Annenberg School for Communications and Inn at the University of Pennsylvania.

According to the Centers for Disease Control and Prevention, valid measurement of suicidality for many cultures remains a critical need. Research with populations who are culturally and linguistically diverse raises a number of issues including variation in concepts and language for suicide, measurement correspondence, and communication of internal processes related to suicide concepts. This includes how emotional and cognitive states are communicated and addresses the variations that exist in language usage. Cultural relevance must be addressed in both concept and intervention (e.g., the role of family, religious traditions, and values or rituals).

The rate of suicide among African American youth has declined from 11.48 to 7.22% from 1994 to 2004, resulting in a 59% decrease (American Association of Suicidology, 2007). In addition, suicide in African American males was 5.6 times higher than suicide in African American females (American Association of Suicidology).

According to *Health, United States, 2004*, as reported by the Technical Assistance Partnership for Child and Family Mental Health, adolescent Hispanic females are significantly more likely than adolescent Hispanic males to consider suicide, attempt suicide, and injure themselves in attempting suicide. The rate of suicide attempts among female Hispanic youth also exceeds that for their African American and Caucasian female counterparts. For example, Hispanic female students in grades 9 through 12 have a greater percentage of suicide attempts, at 14.9%, which is greater than the reported attempts of their Caucasian, non-Hispanic counterparts, at 9.3%, and African American counterparts, at 9.8% (Eaton et al., 2006 as cited by Centers for Disease Control and Prevention, *Facts at a Glance*, 2007). This disparity has been attributed to sex role socialization, acculturation, social and linguistic isolation, and depression.

Youth who engage in suicidal behavior vary considerably with respect to specific forms of risk factors. Barriers to treatment may exist due to differences in language, the degree of alienation and isolation that may be present, and other existing cultural stressors (Barnes, 2004). It is evident that these risk factors can be lethal; sustained attention to the problems evidenced by this vulnerable population is needed across the lifespan.

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### **Organizations/Weblinks**

#### **American Association for Suicidology**

1-800-273-TALK (8255)

<http://www.suicidology.org>

#### **American Foundation for Suicide Prevention**

<http://www.afsp.org>

#### **Centers for Disease Control and Prevention**

##### **National Center for Injury Prevention and Control**

1-800-CDC-INFO

[www.cdc.gov/injury](http://www.cdc.gov/injury)

#### **Central Shenandoah Youth Suicide Prevention**

[www.preventsuicidecsv.org](http://www.preventsuicidecsv.org)

#### **Crisis Line of Central Virginia**

[www.crisislineofcentralvirginia.org](http://www.crisislineofcentralvirginia.org)

#### **The Children's Safety Network**

<http://www.childrenssafetynetwork.org>

#### **Florida Initiative for Suicide Prevention**

<http://www.fisponline.org>

#### **Jason Foundation**

<http://www.jasonfoundation.com>

#### **The Link's National Resource Center for Suicide Prevention**

<http://www.thelink.org>

#### **National Hopeline Network and the Kristin Brooks Hope Center**

800-SUICIDE 784-2433

<http://www.hopeline.com>

#### **National Organization for People of Color against Suicide (NOPCAS)**

P.O. Box 75571 - Washington, DC 20013

202-549-6039 - Fax/Voicemail: 1-866-899-5317

#### **National Suicide Prevention Resource Center**

1-800-273-TALK (8255)

<http://www.sprc.org>

#### **National Youth Violence Prevention Resource Center**

<http://www.safeyouth.org>

**National Alliance for the Mentally Ill (NAMI)**

<http://www.nami.org>

**Organization of Attempters and Survivors of Suicide in Interfaith Service (OASSIS)**

<http://www.oassis.org>

**Prevent Suicide Virginia**

[www.preventsuicideva.org](http://www.preventsuicideva.org)

**Suicide Awareness Voices of Education**

<http://www.save.org>

**Suicide Prevention Advocacy Network USA, Inc. (SPAN)**

<http://www.spanusa.org>

**U.S. Department of Health and Human Services**

National Strategy for Suicide Prevention

<http://www.mentalhealth.org/suicideprevention/strategy.asp>

**Virginia Department of Health Center for Injury and Violence Prevention**

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804-864-7736 - Fax 804-864-7748

[calvin.nunnally@vdh.virginia.gov](mailto:calvin.nunnally@vdh.virginia.gov)

<http://www.vahealth.org/civp/preventsuicideva/index.asp>

**Youth Suicide Prevention Program (YSPP)**

<http://www.yspp.org>

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**National Suicide Hotlines**

Toll-Free / 24 hours / 7 days a week

National Hopeline Network

*1-800-SUICIDE*

*1-800-784-2433*

National Suicide Prevention Lifeline

*1-800-273-TALK*

*1-800-273-8255*

<http://suicidehotlines.com/national.html>

TTY: 1-800-799-4TTY (4889)

## Crisis Centers in Virginia Localities

*Information is provided by the Virginia Department of Health's  
Suicide and Youth Violence Prevention Program and local providers.  
November 2007*

### Arlington

#### **CrisisLink**

703-527-4077 (TTD Accessible)

### Blacksburg

#### **Access Emergency and Emergency Services**

540-961-8400

### Charles City County

804-261-8484

804-966-2496

### Chesterfield County

804-748-6356

### Clarke

540-667-0145

### Dumfries

703-368-4141

Teen line 703-368-8069

Spanish 703-368-6544 (6:00 p.m.-10:00 p.m. M-F)

### Frederick

540-667-0145

### Goochland County

804-556-3716

### Hampton

757-380-9024

### Hanover County

804-752-4200

### **Henrico Mental Health**

804-261-8484

804-966-2496

### Lynchburg

#### **Crisis Line of Central VA**

888-947-9747 or 804-947-4357

Teen talk 888-299-7277

### Martinsville

#### **Contact for Martinsville/Henry County**

540-489-5490 - Franklin

### Middle Peninsula

804-758-9398

### New Kent County

804-261-8484

804-966-2496

### Norfolk

757-622-1126

### Northern Neck

800--542-2673 (COPE)

804-693-2673

### Powhatan County

804-598-2697

### Richmond

804-819-4100

### Roanoke & New River Valley

540-961-8400

### Shenandoah County

540-459-4742

### Warren County

540-635-4357

### Winchester

540-667-0145

# SCHOOL-BASED MENTAL HEALTH SERVICES

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## **Introduction**

### **National Overview**

### **Implementation Issues**

*Integration of Mental Health Professionals into the School Environment*

*Creation of a "System of Care" within the School Environment*

*Engagement of Families in Educational Planning and Services*

*Consistent Program Implementation*

*Other Environmental and Community Factors*

*Use of Medication in School Settings*

### **Federal Activity on School-Based Mental Health**

### **Conclusion**

## **Introduction**

It should come as no surprise that schools nationally are the major providers of mental health services for children (Rones & Hoagwood, 2000). Although only 16% of all children receive mental health services, 70 to 80% of this number receives that care in the school setting (Center for Health and Health Care in Schools, 2002). Schools provide a setting for the early identification of emotional and behavioral problems and provision of services, due to the critical, daily role they play in the growth and development of children. Furthermore, services offered in the school environment are more convenient to children and families and, therefore, are far more likely to be utilized than many services in the community.

Although schools are not the primary agency responsible for addressing emotional and behavioral issues, they cannot ignore them if they intend to fulfill their mandate to educate all children. The Individuals with Disabilities in Education Act (IDEA) requires that schools follow specific procedures to meet the educational needs of children with disabilities. While a discussion of the requirements of IDEA is beyond the scope of this document, it is important to recognize that children who are impaired by mental health disorders often have a diminished capacity to learn and must be adequately accommodated in the school setting in order to receive the benefits of educational services.

Section 504 of the Rehabilitation Act of 1973 is another federal statute designed to protect the rights of qualified school-aged persons who have a disability. This law protects students having a disability who require modifications to their educational program, but who do not require or are not eligible for special education (National Association of School Psychologists, 2002). Section 504 also requires schools that receive federal funds to provide a free appropriate public education to each qualified person (Virginia Department of Education, 2001). Further, Section 504 requires schools to provide students with disabilities appropriate educational services designed to meet their individual needs to the same extent as the needs of students without disabilities are met (Office for Civil Rights, 2001).

In addition to providing the accommodations required under IDEA and Section 504, schools have responded to the needs of these special populations by implementing numerous programs and

services designed to foster prevention, risk-reduction, and intervention/treatment for children with emotional and behavioral difficulties. These services are generally designed to meet one of two broad purposes: universal protection or targeted prevention and intervention. Programs that are intended to provide universal protection are broader in scope, and typically include modification of school policy, implementation of classroom management strategies, development of curricular changes, and facilitation of parent-school communication. In contrast, targeted prevention and intervention efforts involve the identification of at-risk children and adolescents and the creation of accessible services to address their specific needs (Rones & Hoagwood, 2000).

While a broad range of school-based programs is reported to exist, the nature and effects of these services remain largely undocumented. There is very little research available to guide the efforts of school officials and policymakers in planning effective school-based services. The bulk of the research is focused on two areas: preventive strategies to manage disruptive behaviors among younger children and interventions for mood disorders among high school students. Consequently, the effectiveness of the treatment programs targeting other populations remains largely untested. Furthermore, many studies have underemphasized school-relevant outcomes, such as the effects of programming on student achievement, attendance, school-related behavior, and dropout prevention (Mattison, 2000). This is especially problematic because these issues are often directly related to serious emotional and behavioral disturbance (Mattison). For example, research has found that students who demonstrate school refusal or truancy often have anxiety disorders, mood disorders, or conduct disorder (Mattison). However, the available research does little to guide school officials in determining how to address these issues as manifestations of mental health disorders. Accountability provisions in the federal *No Child Left Behind* suggest the urgent need for schools to gather evidence and inform policymakers of the positive academic outcomes that result from their activities as mental health service providers (Charvat, 2004). Moreover, a sense of student “connectedness” to schools has been found to have positive effects on academic achievement and to decrease risky behaviors (American Academy of Pediatrics [AAP], 2004).

In response to these gaps in research, analysts have made greater efforts to document the components of successful school-based programs (Mattison, 2000). These studies have identified several factors that appear to be common elements of successful school initiatives. These elements are outlined in the following paragraphs. However, as stated above, it is important to note there are few studies that examine any of the topics that concern schools, including absenteeism, disciplinary referral, retention, and dropping out (Mattison).

## **National Overview**

There are several different models for the delivery of school-based services. One of these approaches is the school-based health center model. A school-based health center is a safe, easily accessible location on a school campus where students can go for comprehensive preventive and primary health care services (Center for Mental Health in Schools, 1998). While comprehensive school-based health centers vary in staffing and patterns and services provided, they share some common features. The following is a listing of such features, as outlined by the Center for Mental Health in Schools:

- The health center is located in the school.
- Parents sign written consents for their children to enroll in the health center.
- An advisory board of community representatives, parents, youth and family organizations participate in planning and oversight of the health center.

- The health center works cooperatively with school staff to assure that the health center is an integral part of the life of the school.
- Clinical services are the responsibility of a qualified health provider.
- A multidisciplinary team providing health care for students.
- The health center provides a comprehensive range of services that specifically meets the serious health problems of young people.

School-based health centers have increasingly become a key provider of health services for children and adolescents (Association for Supervision and Curriculum Development, 2001). This is particularly true for receiving mental health services. The need for appropriate mental health services in schools was documented in a 1997-1998 survey which found that the primary reason students visited the center was to obtain mental health services (Association for Supervision and Curriculum Development).

School nurses also have a key role in assisting children and adolescents in accessing health care within the school system. According to the National Association of School Nurses, ensuring access to quality health care is an important component of school nursing practice (2002). By providing and supervising health care services, in addition to assisting with entry into community sources of health care, the school nurse plays a pivotal role in improving the health and educational success of the school-age child (National Association of School Nurses).

Other delivery approaches include expanding the current role of the school counselor or school psychologist to provide mental health services in school. School-based health services may also be provided by certified nurse practitioners, physician assistants, or licensed or credentialed mental health professionals (social workers, psychologists, etc.) (AAP, 2001). Table 1 shows a listing of various national delivery models.

## **Implementation Issues**

### ***Integration of Mental Health Professionals into the School Environment***

Research supports the integration of clinicians, behavior specialists, school psychologists, and social workers into the schools to work directly with students, their families, and members of the school faculty and administration. These professionals offer intensive mental health services, and thereby enable schools to more effectively identify at-risk students and provide early intervention to prevent further emotional and behavioral difficulties (Woodruff et al., 1999).

### ***Creation of a “System of Care” Within the School Environment***

School-based wraparound services have also been found to support learning and transition for children with special needs. Wraparound services in this context may include assistance in getting a child to school, after-school care, and successful transitions from more restrictive educational placements into the regular classroom setting. These services may be coordinated through the creation of service planning teams consisting of family members, school-based clinicians, and agency representatives (Woodruff et al., 1999).

Within this school-based system of care, research has found that the use of school-based case management is highly beneficial. Case managers can support the planning process by working with parents and school staff to establish behavioral management and long-term academic goals. They can also be used to coordinate school- and community-based services for students and families to ensure that the child successfully remains in the school and in the home (Woodruff et al., 1999).

Research has shown that the use of monitors of this type can increase the participation and performance of at-risk students in school (Mattison, 2000).

*Table 1*

**Delivery Mechanisms for  
U.S. School-Based Mental Health Programs**

1. **School-Financed Student Support Services** – Most school districts employ pupil services professionals such as school psychologists, counselors, social workers, and school nurses to perform services related to mental health and psychosocial problems (including related services designated for special education students). The format for this delivery mechanism tends to be a combination of centrally-based and school-based services.
2. **School-District Mental Health Unit** – A few districts operate specific mental health units that encompass clinic facilities, as well as providing services and consultation to schools. Some others have started financing their own school-based health centers with mental health services as a major element.
3. **Formal Connections with Community Mental Health Services** – Some schools have developed connections with community agencies, often as the result of the school-based health center movement, school-linked services initiatives (e.g., full service schools, family resource centers), and efforts to develop systems of care (wraparound services for those in special education).
4. **Classroom-Based Curriculum and Special “Pull Out” Interventions** – Most schools include a focus on enhancing social and emotional functioning. Specific instructional activities may be designed to promote healthy social and emotional development and/or prevent psychosocial problems such as behavior and emotional problems, school violence, and drug abuse. Special education classrooms always are supposed to have a constant focus on mental health concerns.
5. **Comprehensive, Multifaceted, and Integrated Approaches** – Some districts have assessed their fragmented approaches to addressing barriers that interfere with students having an equal opportunity to succeed at school. They have restructured their student support services with community resources and integrated all this with instructional efforts that effect healthy development. Mental health and psychosocial concerns are a major focus.

Source: Policy Leadership Cadre for Mental Health in Schools, 2001.

School-based wraparound services have also been found to support learning and transition for children with special needs. The concept of wraparound is a strength-based approach to service delivery (Milwaukee County Mental Health Division, 1999). Wraparound, as defined by the Wraparound Milwaukee Project, focuses on planning and utilizes an approach based on identifying what services families really need to take care of a child with mental health disorders or severe emotional problems. Personal, community, and professional resources are identified to meet these needs and then those services are "wrapped" around the child and family (Milwaukee County



Mental Health Division). Wraparound services in this context may include assistance in getting a child to school, after-school care, and successful transitions from more restrictive educational placements into the regular classroom setting. These services may be coordinated through the creation of service planning teams consisting of family members, school-based clinicians, and agency representatives (Woodruff et al., 1999).

The system of care should also incorporate the three-stage approach to mental health services: prevention, early intervention, and targeted intervention. Successful school-based programs incorporate school wide programs to help identify students with or at risk of developing emotional or behavioral disorders and assist them in behavior management and treatment. However, they also provide prevention programming designed to enable students who are not at risk to learn the skills and behaviors that help them to follow school rules and perform well both academically and socially (Woodruff et al., 1999).

Research also supports the creation of “centers” within the school to provide support to children and youth with emotional and behavioral needs. Much like a clinic, these centers are described as areas set aside to provide students with a place to go to meet with clinicians when they feel they need emotional, behavioral, or academic support (Woodruff et al., 1999). School-based health center models are discussed in “National Overview” within this section.

Although schools are a major provider of mental health services for children, many schools are not offering a system of care that creates an adaptive continuum of services (Rones & Hoagwood, 2000). This may be attributed to a variety of reasons, including lack of resources to offer these services. There are several gaps that have been identified in the types of mental health and social problems targeted by school-based mental health programs. For example, Rones & Hoagwood found a lack of school-based programs related to anxiety prevention or intervention. This is problematic, because anxiety is one of the most common mental disorders among children and adolescents, and has often been found to lead to lost school days due to somatic complaints and school refusal. The study also identified a need to develop a greater number of interventions targeted toward middle and high school students with conduct disorder, as well as elementary school students with depression. In addition, the study found a significant lack of programs focusing on special education students, particularly those diagnosed with serious emotional disturbance (Rones & Hoagwood).

### ***Engagement of Families in Educational Planning and Services***

Families are a critical component in the provision of mental health services for children. Because of the central role the family plays in the lives of their children, involvement in their child’s educational planning and services ensures that services are responsive to the needs of the child and of the community. The inclusion of parents, teachers, and peers in treatment efforts is vital to enhancing wraparound effect of services. Furthermore, gathering information and assistance from family members ensures that the potential needs of students are effectively identified and treated in all contexts. Consequently, schools need to ensure that families are fully engaged in the educational and mental health services that are provided to the child, and must make every effort to assist them in understanding and navigating the system and services available in the community (Woodruff et al., 1999).

Schools may enhance this process by utilizing family liaisons or advocates. These individuals may attend meetings with family members and assist them in locating resources. Their role may also include conducting courses to educate and empower families and working with the clinicians to

ensure that families are meeting the academic, behavioral, and emotional needs of their children (Woodruff et al., 1999). Such an approach promotes family involvement and ensures that the child receives the most favorable treatment and educational experience.

### ***Consistent Program Implementation***

Poor program implementation can mitigate the potential benefits of services (Rones & Hoagwood, 2000). Therefore, schools must ensure that the programs they design are being carried out in the most efficient manner possible. Several elements have been identified as crucial to effective program implementation. These are described in Table 2.

*Table 2*

### **Elements Crucial to Effective Program Implementation**

- The program goals, rationale, and components should be communicated clearly to faculty, staff, and students. The policy should provide a detailed description of individual responsibilities and expectations, and should include an explanation of all rules, consequences, and any reward system (Rones & Hoagwood, 2000).
- The components of the program should be developmentally appropriate. Services should be designed to address specific concerns within a particular age group based on the students' maturity level and social skills (Rones & Hoagwood).
- The most effective programs target specific behaviors and skills, e.g., depression, conduct problems, drug use (Rones & Hoagwood). Consequently, there should be an objective identification and screening process within the school system to identify at-risk students and clarify their intervention needs (Mattison, 2000).
- The program should include multiple approaches to changing behavior. For example, effective school-based programs have been found to incorporate skill building, academic tutoring, parent training, and home visits within the overall service plan (Rones & Hoagwood).
- The program should offer recreational opportunities in non-traditional learning environments such as summer camps and after-school programs, in order to provide learning and exposure to other children in less formal environments. These experiences can also be used to reinforce the pro-social behaviors taught in school-based clinics in other environments (Woodruff et al., 1999).
- The program content should be integrated into the general classroom curriculum. Separate and specialized lessons have been found to be less effective than the incorporation of program elements into the normal educational routine of the school (Rones & Hoagwood).
- All of the parties affected by the service should receive the necessary training and instruction. For example, programs should include teacher training in classroom management techniques, parent training in child management, and child cognitive-social skills training (Rones & Hoagwood).
- The staff involved in these programs should remain continuous in order to allow for stable, long-term relationships with the children and their families (Woodruff et al.).
- Feedback should be provided on a regular basis. The program effects should be continuously evaluated, and consultation and support should be provided to teachers, including refresher training, classroom observation, and small group discussions (Rones & Hoagwood).

Source: Commission on Youth Graphic of Citations as noted, 2002.

### ***Other Environmental and Community Factors***

Other factors can also have a significant impact on program success. In order to foster a climate of acceptance, school administrators should create a mission statement that explicitly recognizes the needs of special education students and ensures commitment to specialized programming

(McLaughlin, 1993). In addition, it is important that the school leadership supports all efforts and demonstrates willingness to contribute staff and resources to these programs. Furthermore, school officials should remain committed to ensuring that teachers and staff are properly trained and that professional development programs are available (McLaughlin).

The establishment of new school-based initiatives may require administrators and policymakers to be creative in their pursuits of additional funding and resources within the community. Sources of funding may include private health insurance plans, traditional school health funds, the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program, Medicaid, and other local, state and federal resources. It is extremely important that the funding issues be addressed during the planning phases of program development, as under funded, poorly implemented programming will do little to assist these children and adolescents. The shortage of qualified mental health professionals is another element that cannot be ignored.

Another area that is crucial in the successful delivery of services is the delicate relationship between mental health providers and schools. The lack of functional collaboration between community-based mental health systems and the schools is most problematic. Furthermore, there is limited transition planning for children entering into hospitals or returning to school. There is a definite need for coordination among mental health providers and schools to encourage transition planning. This can be accomplished through improved interagency involvement. Such coordination is crucial and enables the individual student to reap maximum benefits from treatment (Virginia Commission on Youth, SJR 99 Advisory Group Meeting, August 14, 2002).

### ***Use of Medication in School Settings***

Another issue surrounding school-based mental health services that must be addressed is medication delivery. Medication is a customary, evidence-based treatment modality for children and adolescents with certain diagnosed mental health disorders. While once-daily medications are becoming more common, psychotropic drugs may require multiple daily doses, which necessitates taking these medications at school (National Conference of State Legislatures [NCSL], 2005). A report by an urban school district in Minnesota indicated that administration of medications had increased from 1,294 in 1985 to 35,111 in 2000 (NCSL). This same report estimates that it takes 22.5 hours per year to administer medication safely to one student diagnosed with attention deficit hyperactivity disorder (NCSL).

As outlined by Superintendent Memorandum Number 54, the Virginia Board of Education issued a policy in 2002 that prohibited school personnel from recommending the use of psychotropic medications for any student. However, school health staff, classroom teachers, or other school professionals could recommend that an appropriate medical practitioner evaluate a student (Virginia Department of Education, 2002).

In Virginia, many school divisions have registered nurses employed by the school board or the public health districts in the area. However, school districts frequently have unlicensed and/or untrained individuals administering medications to students (Virginia Department of Health and Department of Education, 1999). Children with mental health needs receive medication in the same manner as children with other medical needs (Sherry Shrader, R.N., B.S.N., Richmond City Health District, Personal Communication, July 18, 2005).

## **Federal Activity on School Mental Health**

School-based mental health delivery has been addressed at the federal level. The President's New Freedom Commission on Mental Health report asserts that schools can clearly assist in addressing mental health problems of school-age youth (2003). No single agency or system has clearly delineated responsibility for children or adolescents with serious emotional disturbances. Moreover, these children are usually involved with more than one system, including mental health, special education, child welfare, juvenile justice, substance abuse, and health (New Freedom Commission on Mental Health).

The President's New Freedom Commission on Mental Health indicated that schools must become partners in mental health care because schools are where children spend a majority of their day (2003). Every day, more than 52 million students attend over 114,000 schools in the United States. When combined with the six million adults working at those schools, almost one-fifth of the population passes through the nation's schools on any given school day (New Freedom Commission on Mental Health). Recommendation 4.2 of this report addresses the promotion and expansion of school mental health programs.

The detailed recommendations contained in this report for improving school-based mental health programs are:

- Collaboration between schools and parents, local providers, and local agencies to support screening, assessment, and early intervention;
- Ensuring that mental health services are part of school health centers;
- Provision of federal funding for health, mental health, and education programs;
- Implementation of empirically-supported prevention and early intervention approaches at the school district, local school, classroom, and individual student levels; and
- Creating a state-level structure for school-based mental health services to provide consistent state-level leadership and collaboration between education, general health, and mental health systems (New Freedom Commission on Mental Health, 2003).

The New Freedom Report reflects a trend for towards the adoption of approaches that address risk and protective factors within the school environment. Effective school-based programs, as outlined in the Report, employ a full continuum of mental health services and supports to help address the needs of all students and their families. Effective school mental health programs can promote connections between education and other systems, including mental health, child welfare, and juvenile services. School mental health programs may be a crucial first step in identifying those students who may suffer from mental health disorders.

## **Conclusion**

It is important that policy makers recognize the tremendous potential that exists in reaching children with mental health needs through school-based programming. The increased involvement of the educational system in the process of mental health intervention and treatment could dramatically influence the accessibility and utilization of services, and result in substantial growth in the number of positive child outcomes.

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## **Organizations/Weblinks**

### **Center for Health and Health Care in Schools**

<http://www.healthinschools.org/home.asp>

### **National Association of School Psychologists**

4340 East West Highway, Suite 402 - Bethesda, MD 20814

E-mail: [center@naspweb.org](mailto:center@naspweb.org)

<http://www.nasponline.org>

### **National Technical Assistance Center for Children's Mental Health**

<http://www.gucdc.georgetown.edu>

### **School Mental Health Project**

<http://smhp.psych.ucla.edu>

### **UCLA Center for Mental Health in Schools**

Department of Psychology

P.O. Box 951563 - Los Angeles, CA 90095-1563

310-825-3634

E-mail: [smhp@ucla.edu](mailto:smhp@ucla.edu)

<http://smhp.psych.ucla.edu>

### **University of Maryland**

Center for School Mental Health Assistance

680 West Lexington St, 10th Floor - Baltimore, MD 21201

<http://csmha.umaryland.edu>

### **U.S. Office of Special Education Programs (OSEP)**

Center on Positive Behavioral Interventions and Supports (PBIS)

<http://www.PBIS.org>

## **Virginia Resources**

Joint Commission on Health Care. (2003). *Review of Emergency Medical and Mental Health Services in Public Schools.*

### **Parent Educational Advocacy Training Center (PEATC)**

6320 Augusta Drive, Suite 1200 - Springfield, VA 22150

703-923-0010 or (VA only) 800-869-6782; Latino Outreach: 703-569-6200

E-mail: [partners@peatc.org](mailto:partners@peatc.org)

<http://www.peatc.org>

### **Virginia Department of Education**

Office of Special Education and Student Services

P.O. Box 2120 - Richmond, VA 23218-2120

804-225-2402

<http://www.pen.k12.va.us/VDOE/sess>

**Virginia Department of Health**

Division of Child & Adolescent Health  
P.O. Box 2448 - Richmond, VA 23218  
804-786-7367  
<http://www.vdh.state.va.us>

**Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services**

P.O. Box 1797 - Richmond, VA 23218  
804-786-3921  
<http://www.dmhmrzas.virginia.gov>

**Virginia Office of Comprehensive Services**

1604 Santa Rosa Road, Wythe Building, Ste 137 - Richmond, VA 23229  
804-662-9815  
E-mail: [csa.office@dss.virginia.gov](mailto:csa.office@dss.virginia.gov)  
<http://www.csa.state.va.us>



# JUVENILE OFFENDERS

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## **Background**

### **Comorbid Disorders**

### **Findings from Studies**

### **Evidence-based Approaches**

*Wraparound*

*Integrated Systems of Care*

*Multisystemic Therapy*

*Functional Family Therapy*

*Cognitive Behavioral Therapy*

*Multidimensional Treatment Foster Care*

### **Components of Effective Treatment for Youth in the Juvenile Justice System**

### **Incarcerated Juveniles**

### **Virginia's Mental Health/Juvenile Detention Pilots**

### **Conclusion**

## **Background**

The responsibility for children's mental health is dispersed across multiple systems: schools, primary care, the juvenile justice system, child welfare, and substance abuse treatment (U.S. Department of Health and Human Services, 1999). Unfortunately, an increasing number of youth with mental health disorders continue to enter and remain involved in the juvenile justice system.

The National Center for Mental Health and Juvenile Justice and the Council of Juvenile Correctional Administrators conducted a study of mental health prevalence among youth involved in the juvenile justice system. According to this study, 70% of youth meet the criteria for at least one mental health disorder (National Center for Mental Health and Juvenile Justice, 2006).

Estimates provided by both state and local juvenile justice facilities throughout the U.S. suggest that juvenile offenders have significant mental health treatment needs. A study conducted by the Virginia Department of Juvenile Justice (DJJ) showed that more than 40% of males and almost 60% of females in detention homes were in need of mental health services; more than seven percent of males and more than 15% of females had urgent mental health treatment needs (Joint Commission for Behavioral Health Care, Virginia State Crime Commission and Virginia Commission on Youth, 2002).

Data compiled from multiple national studies reveal that the rate of mental health disorders is higher among youth in the juvenile justice population than in the general population, as illustrated in Table 1. The most common psychiatric disorders seen in juvenile offenders are listed in Table 2.

Juveniles entering the justice arena typically manifest complex mental health and behavioral health needs. According to a national report released by the National Alliance for the Mentally Ill (NAMI), 36% of respondents to a nationwide survey of families having children with severe mental illnesses said that their children were in the juvenile justice system because of the unavailability of mental health care services (NAMI, 1999).

Table 1

**Prevalence of Mental Disorders  
in the Juvenile Population and General Populations**

| Disorders                                | General Population (%) | Juvenile Justice Population (%) |
|--|------------------------|---------------------------------|
| Mood Disorders                           | 5-9                    | 10-88                           |
| Attention Deficit Hyperactivity Disorder | 3-7                    | 2-76                            |
| Learning Disorder                        | 4-9                    | 36-53                           |
| Mental Retardation                       | 1                      | 13                              |
| Posttraumatic Stress Disorder            | 6                      | 5-49                            |
| Conduct Disorder                         | 1-10                   | 32-100                          |
| Psychotic Disorders                      | .05-5                  | 1-16                            |
| Substance Abuse/Dependence               | 5.5-9                  | 46-88                           |

Source: American Psychiatric Association, as cited by Boesky, 2002.

Table 2

**Most Common Psychiatric Disorders  
Seen Among Juvenile Offenders**

|                               |  |
|-------------------------------|--|
| Conduct Disorder              | Attention Deficit Hyperactivity Disorder |
| Oppositional Defiant Disorder | Posttraumatic Stress Disorder            |
| Major Depression              | Mental Retardation                       |
| Dysthymic Disorder            | Learning Disorders                       |
| Bipolar Disorder              | Fetal Alcohol Syndrome                   |

Source: Boesky, (2002).

**Comorbid Disorders**

As reported by the National Mental Health Association (NMHA), co-occurring disorders are a significant problem for youth in the nation’s justice system (2004). One study found that 79% of youth in the juvenile justice system who met criteria for one mental health disorder also met criteria for two or more diagnoses. In addition, 60% met criteria for a substance use disorder (National Center for Mental Health and Juvenile Justice, 2006). Co-occurring mental health and substance abuse problems place distinct demands upon treatment programs. Solutions for treating co-occurring disorders for youth in the justice system are complicated, particularly because adolescents often return to the peer, family, and community environments that supported and promoted their substance use.

**Findings from Studies**

The findings of a study by the Research & Training Center on Family Support and Children’s Mental Health (2001) compare mental health needs and demographics among a sample of youth.

These are based on data gathered on youth who were involved in the system but not confined, youth incarcerated for their crimes, as well as youth adjudicated to residential treatment. The study results indicate that children at risk for institutional placement are placed according to the primary type of dysfunction they evidence, with behaviorally-disordered children becoming incarcerated and emotionally-disordered children placed into the state mental health system. Other factors related to subsequent institutional placement included chronic school truancy, prior outpatient substance abuse or mental health treatment, and prior use of a firearm.

Youth within the juvenile justice system are at high risk for psychiatric conditions that may have contributed to the risk of offending or which may interfere with rehabilitation (Columbia University, 2002). Studies also reinforce a high need for mental health services and a lack of systematic assessment (Research & Training Center on Family Support and Children's Mental Health, 2001). Juvenile courts can have a positive mental health orientation and provide a foundation to build a stronger system of care collaboration and the establishment evidence-based practices in the juvenile justice system (Columbia University).

## **Evidence-Based Approaches**

There are promising approaches in providing mental health services in the juvenile justice system. Heightened awareness of mental health disorders has led to increased research and new treatment practices. Among delinquent juveniles who receive structured, meaningful and sensitive treatment, recidivism rates are 25% lower than those in untreated, control groups. Highly successful programs reduce rates of re-offense by as much as 80% (Coalition for Juvenile Justice, 2000).

The National Center for Mental Health and Juvenile Justice (NCMHJJ) (2002) has compiled information on best practices for treatment of juvenile offenders. These interventions incorporate several treatment components and are discussed in the following paragraphs. Although several of these treatment approaches may be applied and utilized in the institutional setting, the following discussion refers to the application of these approaches in the community setting.

### ***Wraparound***

The wraparound approach focuses on treating children with serious emotional problems and developing individualized, child-centered, family-focused, community-based, and culturally competent services (NCMHJJ, 2002). The design is enhanced to promote programs that provide integrated service systems for youth with serious emotional problems operating across the mental health, juvenile justice, child welfare and education systems (Kamradt, as cited by the NCMHJJ). Wraparound improves public safety while keeping youth in their family systems, close to home and community (Research & Training Center on Family Support and Children's Mental Health, 2001).

Research shows that, while implementing wraparound can be challenging, it is a promising practice in treating youth involved with the juvenile justice system. An example of a successful program is Wraparound Milwaukee in Milwaukee County, Wisconsin (NMHA, 2004). Preliminary evaluation data indicates that children served by this program have shown significant improvements.

### ***Integrated Systems of Care***

Integrated systems of care typically involve collaboration across a number of agencies such as juvenile justice and mental health, with the goal of developing coordinated plans for family-centered services, and building upon youth and family strengths.

### ***Multisystemic Therapy***

Multisystemic Therapy (MST) provides an integrative, cost effective, family-based treatment with focus on improving psychosocial functioning for youth and families so that the need for out-of-home placements is reduced or eliminated. MST addresses the numerous factors of serious antisocial behavior in juvenile delinquency. MST interventions focus on the individual child and their family, peers, school and neighborhood/community support (Henggeler, as cited by the NCMHJJ, 2002).

The underlying premise of MST is that the behavioral problems of children and adolescents are maintained through problematic interactions within or between two or more of these systems. MST has an extensive body of research supporting its effectiveness with juvenile populations with emotional and behavioral problems. Evaluations have shown reductions up to 70% in long-term rates of re-arrest and reductions up to 64% in out-of-home placements, along with improvements in family functioning and decreased mental health problems (NMHA, 2004).

### ***Functional Family Therapy***

Functional Family Therapy (FFT) is a family-based prevention and intervention program that combines and integrates established clinical therapy, empirically supported principles, and extensive clinical experience. This model allows for intervention in complex problems through clinical practice that is flexibly structured, culturally sensitive and accountable to families (Sexton and Alexander, as cited by the NCMHJJ, 2002).

FFT focuses on the delinquency problem and seeks to reduce it by identifying obtainable changes (NMHA, 2004). A research study indicates that, after a year, youth who participated in FFT had a re-arrest rate of approximately 25% versus 45 to 70% for youth who did not (NMHA).

### ***Cognitive Behavioral Therapy***

Cognitive Behavioral Therapy (CBT) is based on the idea that thoughts, beliefs and attitudes determine emotion and behavior. It is an excessively instructive approach that involves teaching youth about the thought-behavior link and working with them to modify their thinking patterns in a way that will lead to more adaptive behavior in challenging situations. This approach is especially beneficial for youth in the juvenile justice system because it is very structured and focuses on the triggers for disruptive or aggressive behavior (NMHA, as cited by the NCMHJJ, 2002). CBT addresses poor interpersonal and problem-solving skills in teaching participants social skills, coping, anger management, self-control, or social responsibility (NMHA, 2004).

### ***Multidimensional Treatment Foster Care***

Multidimensional Treatment Foster Care recruits, trains and supervises foster families to provide youth with close supervision, fair and consistent limits and consequences and a supportive relationship with an adult (NCMHJJ, 2002). As an alternative to corrections, it places juvenile offenders who require residential treatment with these carefully trained foster families. It promotes both rehabilitation and public safety (Chamberlain, 1998). During the placement timeframe, the youth's biological or adoptive family is also receiving family therapy to further the goal of returning the youth to that family (NMHA, 2004).

## **Components of Effective Treatment for Youth in the Juvenile Justice System**

According to the Coalition for Juvenile Justice (2000), there are nine components of effective treatment for juvenile offenders:

- Highly structured, intensive programs focusing on changing specific behaviors;
- Development of basic social skills;
- Individual counseling that directly addresses behavior, attitudes, and perceptions;
- Sensitivity to a youth's race, culture, gender, and sexual orientation;
- Family member involvement in the treatment and rehabilitation of children;
- Community-based, rather than institution-based treatment;
- Services, support and supervision that "wrap around" a child and family in an individualized way;
- Recognition that youth think and feel differently than adults, especially under stress; and
- Strong aftercare treatment.

## **Incarcerated Juveniles**

The juvenile justice system has long been used as a secure setting for juveniles with a variety of mental health issues and disorders. Youth with severe emotional disorders often continually get in trouble and end up being incarcerated for their own or society's protection. The juvenile justice system is the "last stop" for juveniles with mental health disorder, especially when they are seen as untreatable or when appropriate mental health services have not been available or accessed (Boesky, 2002). The institutional setting offers effective mental health interventions based on the treatment needs for the child. It is important to note that many juvenile justice facilities have managed their youth with mental health disorders so well that they need not rely upon community-based mental health agencies (Boesky).

In 2003, the U.S. House of Representatives Committee on Government Reform Special Investigations Division conducted a survey of every juvenile detention facility in the United States. This survey was to ascertain what occurs when community mental health services are not readily available. The survey revealed that two-thirds of the juvenile detention facilities responding to the survey have in their custody youth waiting for community mental health services (U.S. House of Representatives Committee on Government Reform Special Investigations Division, 2004).

The National Center for Mental Health and Juvenile Justice (NCMHJJ) reported that female offenders in the juvenile justice system are at a higher risk for mental health disorders than males (Wasserman, et. al., 2005, as cited by NCMHJJ, 2006). However, they do experience comparable rates of disruptive disorder and substance use disorders (NCMHJJ). Furthermore, youth in the juvenile justice system are also believed to have experienced varying rates of trauma such as post traumatic stress disorder (PTSD) (NCMHJJ). Traumatic events include physical abuse, sexual abuse, domestic violence, community violence, and/or other disturbing acts (NCMHJJ).

## **Virginia's Mental Health/Juvenile Detention Center Projects**

The information contained in this section is taken from the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services' *Integrated Policy and Plan to Provide and Improve Access to Mental Health, Mental Retardation and Substance Abuse Services for Children, Adolescents and their Families* (2007).

Virginia's local juvenile detention facilities were not equipped or funded to provide adequate behavioral health care services to juvenile offenders. In response to this, the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) and the Department of Juvenile Justice (DJJ) funded five projects with a combination of federal and state funding to allow Community Service Boards (CSBs) to provide mental health screening, assessment services, and community-based referrals for youths in local juvenile detention facilities. The 2006 General Assembly appropriated \$1.14 million for nine additional projects and also covered the federal share of funding for the others, to bring the total number of projects to 14. The 2007 General Assembly provided \$900,000 additional funding. The programs serve approximately 2,500 youth annually. Programs in operation include:

- Alexandria CSB/Northern VA Detention Home
- Blue Ridge Behavioral Health/Roanoke Detention Center
- Colonial CSB/Merrimac Detention Center
- Danville CSB/W.W. Moore Detention Center
- New River Valley CSB/New River Valley Detention Center
- Region 10 CSB/Blue Ridge Detention Center
- Chesapeake CSB/Chesapeake Juvenile Justice Center
- Chesterfield CSB/Chesterfield Juvenile Detention Home
- Crossroads CSB/Piedmont Juvenile Detention Home
- Norfolk CSB/Norfolk Juvenile Detention Home
- Planning District One Behavioral Health/Highlands Juvenile Detention Home
- Richmond Behavioral Health/Richmond Juvenile Detention Home
- Valley CSB/Shenandoah Juvenile Justice Center

Programs that commenced in Fiscal Year 2007 are:

- Henrico CSB/James River Juvenile Detention Home
- Fairfax CSB/Fairfax County Juvenile Detention Center
- Loudoun CSB/Loudoun Juvenile Detention Home
- Northwestern CSB/Northwestern Juvenile Detention Home
- Prince William CSB/Prince William Juvenile Detention Home
- Virginia Beach CSB/Virginia Beach Juvenile Detention Center
- District 19 CSB/Crater Juvenile Detention Center
- Rappahannock CSB/Rappahannock Juvenile Detention Center

These projects have been successful in providing the following mental health services to juvenile offenders:

- 2,531 mental health screenings were completed;
- 1,091 youth received case management services from mental health case managers;
- 1,299 youth received individual counseling with mental health clinicians;
- 1,113 youth received group counseling with mental health clinicians;
- 238 youth received crisis intervention services with mental health clinicians;
- 99 youth were prescribed medications; and
- 568 service plans were developed and follow-up at the respective CSB.

## **Conclusion**

Community agencies, such as social services, public school divisions, and juvenile justice, frequently serve youth with untreated or under-treated mental health problems. The juvenile justice system serves those youth whose behavior or actions bring them under the purview of the court.

The juvenile justice system can neither select its service population nor refuse to accept a child based on his mental health diagnosis (Boesky, 2002). Although juvenile offenders with mental health disorders are a challenging population, promising intervention strategies do exist. However, it is important to remember that, although the juvenile justice system should respond to the mental health needs of children in its care, the juvenile justice system cannot supplant the mental health system (Boesky).

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### **Organizations/Weblinks**

#### **Cognitive Behavioral Therapy**

<http://www.cognitivetherapy.com/index.html>



**Functional Family Therapy Online**

Holly DeMaranville, FFT Communications Coordinator  
206-369-5894  
E-mail: [hollyfft@comcast.net](mailto:hollyfft@comcast.net)  
<http://www.fftinc.com/contact.php>

**Licensed Functional Family Therapy Programs in Virginia**

**York County Department of Community Services  
Juvenile Services Division - Functional Family Therapy**  
224 Ballard Street - Yorktown, VA 23690-0532  
757-564-2487  
E-mail: [stump1@yorkcounty.gov](mailto:stump1@yorkcounty.gov)

**Loudoun County Department of Mental Health, Mental Retardation and Substance Abuse Services**

**Functional Family Therapy**  
102 Heritage Way, Suite 302 - Leesburg, VA 20176  
703-771-5239

**Licensed Multisystemic Therapy Programs in Virginia****Services provided by these projects**

- Functional Family Therapy (Alexandria, Cumberland Mountain and Planning District One)
- Multi Systemic Therapy (Richmond)
- Alternative Day Support Services (Cumberland Mountain)
- Crisis Response Services (Planning District One)
- Psychiatric Services (Planning District One)

**Central Virginia Community Services**

2241 Langhorne Road - Lynchburg 24501  
434-847-8050 or TTD 434-847-8062  
<http://www.cvcsb.org>

**Henrico Area Mental Health and Retardation Services**

10299 Woodman Road - Glen Allen 23060  
804-261-8585 or TTD 261-8484  
<http://www.co.henrico.va.us/mhmr>

**Richmond Behavioral Health Authority**

107 South Fifth Street - Richmond, VA 23219  
804-819-4000 or 804-819-4100 Crisis  
<http://www.rbha.org/mentalhealth.htm>

**Virginia Beach Community Services Board**

297 Independence Boulevard Pembroke Six, Suite 208 - Virginia Beach, VA 23462  
757-437-6100 or TTD 757-437-6157

**Multidimensional Treatment Foster Care**

<http://www.mtfc.com>

**Multisystemic Therapy Services**

710 J. Dodds Boulevard - Mt. Pleasant, SC 29464

843-856-8226

E-mail: [marshall.swenson@mstservices.com](mailto:marshall.swenson@mstservices.com)

# **A**NTIDEPRESSANTS AND THE **RISK OF SUICIDAL BEHAVIOR**

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## **Introduction**

**Increases in the Use of Psychotropic Medications**  
**Food and Drug Administration Advisory Statement**  
**Study Activities on Antidepressants and Suicidality**  
**Responses to FDA Advisory**  
**Implications for Families**  
**Cultural Considerations**  
**Conclusion**

## **Introduction**

Research has indicated that early identification and comprehensive treatment of mental health disorders can significantly improve the prognosis for children. Clinical trials are being conducted to ascertain which treatments are the most successful in treating children and adolescents with mental health disorders. Many of these are outlined in the *Collection* and are highlighted in the *Collection's* "Reference Chart of Disorders and Evidence-based Treatments." These evidence-based treatment modalities include cognitive-behavioral therapy, family therapy, group therapy, and pharmacological approaches, including the use of antidepressants. One major research finding, as indicated in previous studies, is that a combination of psychotherapy and antidepressant medication has been the most efficacious in treating depression in children and adolescents (March, Silva, Petrycki, as cited by Lock et al., 2005). Moreover, additional findings have revealed that antidepressant medication may have almost as much benefit as other treatments combined (March, Silva, Petrycki, as cited by Lock et al.).

While there are several different types of medications used for treating mental health disorders in children, this section will concentrate on the use of antidepressant medications by children and adolescents, as well as information both caregivers and clinicians need to know regarding the use of these medications.

## **Increases in the Use of Psychotropic Medications**

In recent years, research has been conducted to review the patterns and effects of psychotropic medication use by children and adolescents. One such study conducted in the United States showed that the overall rate of psychotropic medication use by children has increased significantly in recent decades (Olfson, et al., 2002). Significant increases were found in the rate of stimulant use, antidepressant use, other psychotropic medications, and coprescription of different classes of medication, especially antidepressants and stimulants (Olfson, et al.). The common types of medications used for treating mental disorders are outlined in Table 1.

Table 1

## Common Types of Psychotropic Medications

**Stimulants** are often used as part of treatment for attention deficit hyperactivity disorder (ADHD).

**Antidepressants** are used in the treatment of depression, school phobias, panic attacks, and other anxiety disorders, bed wetting, eating disorders, obsessive compulsive disorder, personality disorders, post-traumatic stress disorder, and ADHD. There are several types: tricyclics (TCAs); selective serotonin reuptake inhibitors (SSRIs); monoamine oxidase inhibitors (MAOIs); and atypical medications.

**Antipsychotics** can help control psychotic symptoms (delusions or hallucinations) or disorganized thinking. They may also help muscle twitches or verbal outbursts. Occasionally, they may be used to treat severe anxiety and may help reduce very aggressive behavior.

**Mood Stabilizers** and **Anticonvulsants** may help treat manic-depressive episodes, mood swings, aggressive behavior, impulse-control disorders and severe mood symptoms in schizophrenia.

**Anti-anxiety** medications can help treat severe anxiety. There are several types of anti-anxiety medications, including benzodiazepines, antihistamines, and atypical medications.

Source: American Academy of Child & Adolescent Psychiatry (AACAP), 2000.

Antidepressant use rapidly increased among adolescents, with use among very young children increasing at even faster rates (Delate, as cited by DeNoon, 2004). Analysis from pharmacy benefit management databases, as outlined by DeNoon for WebMD, has revealed the following:

- Child antidepressant use increased by 9.2% each year between 1998 and 2002.
- Antidepressant prescriptions increased faster for girls than for boys.
- Serotonin-specific reuptake inhibitors (SSRIs) were more commonly prescribed than other antidepressants.
- Data shows doctors prescribed antidepressants more frequently for depression than for anxiety disorders.

There are differing opinions about the increased use of antidepressants in children and adolescents, as discussed by Delate (DeNoon, 2004). One view is that antidepressants were being prescribed to youth without adequate information about their safety and efficacy in this population. A second viewpoint asserts that, in recent years, rigorous efforts to identify and aggressively treat depression in children and adolescents have caused this increase (DeNoon). Both perspectives point toward the need for greater study and analysis of the use of antidepressants among children and adolescents.

## Food and Drug Administration Advisory Statement

In September 2004, the U.S. Food and Drug Administration (FDA) released a statement based on the recommendations of the Psychopharmacologic Drugs and Pediatric Advisory Committees regarding antidepressant use in pediatric patients (Wolf, 2005). The Advisory Committees concluded that there was an increased risk of suicidality in pediatric patients for all antidepressants in controlled pediatric antidepressant trials. In response to this concern, the FDA directed

manufacturers to add a black-box warning to the health professional label on antidepressants to describe the increased risk of suicidal thoughts and behavior in children and adolescents.

The FDA (2004) determined that the following points were to be included on the boxed warning:

- Antidepressants increase the risk of suicidal thinking and behavior (suicidality) in children and adolescents with Major Depressive Disorder (MDD) and other psychiatric disorders.
- Anyone considering the use of an antidepressant in a child or adolescent for any clinical use must balance the risk of increased suicidality with the clinical need.
- Patients who are started on therapy should be observed closely for clinical worsening, suicidality, or unusual changes in behavior.
- Families and caregivers should be advised to closely observe the patient and to communicate with the prescriber.
- A statement regarding whether the particular drug is approved for any pediatric indication(s) and, if so, which one(s).

The FDA warning instructs clinicians prescribing antidepressants to children to inform parents and custodial adults of the black-box warning about the increased risk of suicidality. While an advisory statement was issued, the Advisory Committees did have a split decision (15 yes, 8 no) regarding recommendations for a black-box warning for the increased risk of suicidality (Wolf, 2005). In response to this, some practitioners have ceased prescribing antidepressants to children and have begun to refer patients to child and adolescent psychiatrists (Virginia Joint Commission on Health Care, 2005). On May 2, 2007, the FDA expanded the black-box warning by incorporating information about an increased risk of suicidal symptoms in young adults 18 to 24 years of age (FDA, 2007).

## **Study Activities on Antidepressants and Suicidality**

In response to the FDA's advisory statement, a study was conducted by researchers at the Injury Control Research Center at Harvard School of Public Health. The study revealed that 11% of 123 youth suicide completers and 21% of 2,674 adults who died by suicide tested positive for the presence of an antidepressant (Jancin, 2005). This study effort was conducted by obtaining data from the Centers for Disease Control and Prevention's National Violent Death Reporting System. The findings from this study indicated that: study subjects' sensitivity to toxicology tests may be low; patients who committed suicide may have received psychotherapy without medication; or the progress of these patients was not being carefully monitored (Jancin). Patient compliance to treatment and the need for improved case management were two findings cited in this study that must also be considered in evaluating patients risk for suicide (Jancin).

The following information is taken from the National Institute of Mental Health (NIMH) (2008). Researchers are evaluating the relationship between antidepressant medications and suicide, but study results are mixed. Findings from a comprehensive review of pediatric trials conducted between 1988 and 2006 suggest that the benefits of antidepressant medications likely outweigh their risks to children and adolescents with major depression and anxiety disorders (Bridge et al., 2007). Another study, using national Medicaid files, found in adults, the use of antidepressants did not seem to be related to suicide attempts or deaths. However, this analysis revealed that the use of antidepressant medications might be related to suicide attempts and deaths among children and adolescents (Olfson et al., 2006). Another study analyzed health plan records for 65,103 patients treated for depression. After starting treatment, there was no significant increase

in the risk for suicide with newer antidepressant medications (Simon et al., 2006). A third study analyzed suicide data from the National Vital Statistics and commercial prescription data. This study found that, among children ages five to 14, suicide rates from 1996 to 1998 were actually lower in areas of the country with higher rates of SSRI antidepressant prescriptions (Gibbons et al., 2006). The relationship between the suicide rates and the SSRI use rates remains unclear.

## **Responses to FDA Advisory**

The American Medical Association (AMA) Council on Scientific Affairs responded to the FDA advisory by conducting a separate analysis and issued a statement to address the concerns raised by the FDA. Based on their preliminary analysis, the AMA asserted that antidepressants could be advantageous in treatment of depression in pediatric patients, but indicated that longer-term studies were needed to better address safety concerns (AMA, 2005). They requested the FDA to evaluate the black-box warning's impact on treatment patterns, patient compliance and patient access to the drugs.

According to the New York State Office of Mental Health (2004), researchers are currently analyzing all available information in order to provide families and clinicians with the most current information. However, they caution that the risks associated with not treating depression must be considered in all future activity. Failure or refusal to treat significant psychiatric disorder in children and adolescents, which may include reluctance to utilize medications, is a cause for concern (New York State Office of Mental Health).

Since the issuance of the advisory statement, antidepressant use among children declined by approximately 10% (Reuters Health Information, 2005). This occurrence was noted in the final quarter of 2004 by various pharmacy benefit firms.

## **Implications for Families**

According to the New York State Office of Mental Health, families and physicians must carefully monitor a child for any behavioral changes if they are taking antidepressants (2004). The New York State Office of Mental Health has informed parents that, in most instances, the increased risk of suicidal behavior occurs during the first four to six weeks of treatment. Families must have careful dialogue with their child's physician if their child is being prescribed antidepressant medications. Discussion should include the possible benefits, as well as the possible risks, including increased suicidal behavior (New York State Office of Mental Health). Caregivers should proceed with caution if their child or adolescent is taking antidepressants. Table 2 outlines recommendations for families while their child or adolescent is taking antidepressants.

## **Cultural Considerations**

The following observations are taken from a study conducted by Olfson, Marcus, Weissman, & Jensen (2002). The authors of this study noted that the increase in the use of psychotropic medication has been observed in all age, racial/ethnic, geographic, gender and insurance groups. While there has been an overall increase in antidepressant use in all children and adolescents, African-American children are somewhat less likely than Caucasian children to receive stimulants and antidepressants. This is despite lack of evidence supporting racial differences in prevalence of ADHD or childhood depression. Thus, the authors of this study note that the source of racial and ethnic disparities in the prescribing of medication to treat mental disorders requires further study. The absence of independent diagnostic data prevents the authors of this study from evaluating the

quality of the prescribing practices. Moreover, further study must also address medication usage in the treatment of nonpsychiatric disorders. The practice of combining psychotropic medications from several classes also warrants further research for better understanding of the significance of this trend.

Table 2

### What a Parent/Caregiver Needs to Know about their Child and Antidepressant Use

- Be clear and honest when talking with your child about the possible risks and benefits of taking an antidepressant medication.
- Talk to your child or adolescent about whether they are having any suicidal thoughts, and let them know they should come to you immediately if they start having suicidal thoughts or any other troubling symptoms while they are taking antidepressant medication.
- Working with your child and your child's physician, you should develop a "safety/crisis plan" for your child. This can include identifying an adult your child can call if he/she is thinking about suicide.
- You and your child's physician should closely monitor your child - especially during the first months of treatment. Any child or adolescent starting an antidepressant medication should be followed weekly (in person or by telephone) for the first month, every other week (preferably in person) for the second month, and at least once a month (in person) thereafter by the treating physician to check for the severity of depressive symptoms, suicidal behavior and any other problems.
- It is important that you do not suddenly stop or change the dose of your child's antidepressant medication without first talking to your child's physician.

Source: New York State Office of Mental Health, 2004.

## Conclusion

Controversy regarding the use of antidepressants in children and adolescents continues. As stated above, there is a need for further study of antidepressant use in children and adolescents to address the concerns outlined in the FDA advisory. The AMA has asserted that its review of various studies supports the view that antidepressants reduce suicidal behavior and completed suicide attempts overall (2005). The organization does acknowledge, however, that the risk of such behavior appears to be highest during the initial course of drug therapy. Its position is that antidepressants should continue to be available, with their use guided by sensible clinical judgment (AMA). The decision-making regarding the treatment of a child or adolescent patient must ultimately address all the circumstances and symptoms that are present in the patient, as well as their family supports and the diagnostic and treatment resources available to both families and clinicians (AMA).

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### **Additional Resources**

American Academy of Child & Adolescent Psychiatry (AACAP)  
Children and Psychiatric Medications  
<http://www.aacap.org/publications/childMed>

Cuffe, S. (2004). *Do Antidepressants Increase the Risk of Suicide in Children and Adolescents?* American Academy of Child & Adolescent Psychiatry (AACAP) DevelopMentor.  
[http://www.aacap.org/training/DevelopMentor/Content/2004Fall/f2004\\_a2.cfm](http://www.aacap.org/training/DevelopMentor/Content/2004Fall/f2004_a2.cfm)

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MayoClinic.com  
Children and Antidepressants: Sorting through the Warnings  
<http://www.mayoclinic.com/invoke.cfm?id=MH00059>

National Institute of Mental Health (NIMH)  
Report on the Treatment of Children with Mental/Emotional Disorders; Includes Sections on Medications and Other Treatments; Info on Commonly Prescribed Psychotropic Medications, Side Effects, and the Approved Ages for Prescriptions.  
<http://www.nimh.nih.gov/publicat/childqa.cfm>

National Mental Health Association  
Antidepressant Medication and Children: Tips for Parents  
<http://www.nmha.org/infoctr/factsheets/antidepressantsChildrenTips.cfm>

New York University Child Study Center  
Guide to Psychiatric Medications for Children and Adolescents  
<http://www.aboutourkids.org/aboutour/articles/guidetopsychmeds.html>

ParentsMedGuide  
*The Use of Medication in Treating Childhood and Adolescent Depression: Information for Patients and Families*  
<http://www.parentsmedguide.org/parentsmedguide.htm>

U.S. States Food and Drug Administration (FDA)  
*Proposed Medication Guide to Using Antidepressants in Children or Teenagers*  
<http://www.fda.gov/cder/drug/antidepressants/SSRIMedicationGuide.htm>.

**Organizations/Weblinks**

**American Academy of Child & Adolescent Psychiatry (AACAP)**

3615 Wisconsin Avenue, N.W. - Washington, DC 20016-3007  
202-966-7300  
<http://www.aacap.org>

**American Academy of Pediatrics (AAP)**

141 Northwest Point Blvd. - Elk Grove Village, IL 60007-1098  
847-434-4000  
<http://www.aap.org>

**American Counseling Association**

5999 Stevenson Avenue - Alexandria, VA 22304-3300  
800-347-6647; TDD 703-823-6862  
<http://www.counseling.org>

**American Psychological Association (APA)**

750 First Street, N.E. - Washington, DC 20002-4242  
800-374-2721  
<http://www.apa.org>

**Center for Healthier Children, Families, and Communities**

1100 Glendon Ave., Suite 850 - Los Angeles, CA 90024  
310-794-2583  
<http://healthychild.ucla.edu>

**The Child Trauma Academy**

5161 San Felipe, Suite 320 - Houston, TX 77056  
713-818-3967  
<http://www.childtrauma.org>

**National Institute of Mental Health (NIMH)**

Treatment of Children with Mental Disorders  
6001 Executive Blvd. - Room 8184, MSC 9663 - Bethesda, MD 20892-9663  
301-443-4513  
<http://www.nimh.nih.gov>

**National Mental Health Association (NMHA)**

1021 Prince Street - Alexandria, VA 22314-2971  
800-969-NMHA (6642)  
<http://www.nmha.org>

# **G**ENERAL DESCRIPTION OF PROVIDERS

*See also "Providers Licensed in Virginia"*

## **Psychiatrist**

A medical doctor whose education includes a medical degree and at least four additional years of study and training. Psychiatrists are licensed as physicians by their states. Psychiatrists who pass the national examination administered by the American Board of Psychiatry and Neurology become board certified in psychiatry. Psychiatrists provide medical/psychiatric evaluation and treatment for emotional and behavioral problems and psychiatric disorders. As physicians, psychiatrists can prescribe and monitor medications.

## **Child Psychiatrist**

A licensed physician who is a fully trained psychiatrist and who has two additional years of advanced training beyond general psychiatry in work with children, adolescents and families. Child and adolescent psychiatrists who pass the national examination administered by the American Board of Psychiatry and Neurology become board certified in child and adolescent psychiatry. Child and adolescent psychiatrists provide medical/psychiatric evaluation and a full range of treatment interventions for emotional and behavioral problems and psychiatric disorders. As physicians, child and adolescent psychiatrists can prescribe and monitor medications.

## **Psychologist**

A mental health professional with an advanced degree in psychology. Some psychologists possess a Master's Degree (M.S.) in psychology while others have a Doctoral Degree (Ph.D., Psy.D., or Ed.D.) in clinical, educational, counseling, developmental or research psychology. Psychologists are licensed in most states. Psychologists can provide psychological evaluation and treatment for emotional and behavioral problems and disorders. Psychologists can also provide psychological testing and assessments, but are unable to prescribe medications.

## **Child Psychologist**

A licensed psychologist who specializes in providing psychological services to infants, toddlers, children, and adolescents. A child psychologist is specifically trained to diagnose and treat the psychological, cognitive, emotional, developmental, behavioral, and family problems of children.

## **Primary Care Physician**

A physician, such as a family physician or internist, who has completed medical school, is licensed by a medical board, and is able to prescribe medications. Although a primary care physician is trained to spot mental health problems and often prescribes medications, the primary care physician does not specialize in mental health treatment.

## **Pediatrician**

A primary care physician who focuses on the care of children from birth to 21 years of age and who specializes in preventive health maintenance for healthy children and medical care for those who are seriously or chronically ill. Pediatricians are also increasingly involved with the prevention, early detection, and management of behavioral, developmental, and functional social problems that affect children and adolescents.

**Psychiatric Clinical Nurse Specialist**

A registered nurse with a Master's Degree in psychiatric mental health nursing who is licensed by the state to provide care, counseling, and therapy to persons with psychological, emotional, and behavioral needs. An accreditation as an Advanced Practicing Registered Nurse (APRN) by an appropriate credentialing body is necessary for this provider to receive third party reimbursement.

**Physician Assistant**

A professional who is licensed to practice under the supervision of a physician and who may perform physical examinations, diagnose illnesses and, in most states, write prescriptions. The education program required for licensure is shorter in duration than medical school.

**Nurse Practitioner**

A nurse who has completed advanced training and who may perform physical examinations, take medical histories, and prescribe certain medications.

**Clinical Nurse Specialist**

A nurse who has had formal clinical preparation resulting in a Master's Degree. A clinical nurse specialist manages, supports, and coordinates the care of acutely and critically ill patients with episodic illness or acute exacerbation of chronic illness.

**Occupational Therapist**

A professional who has received training in helping people recover and gain or regain skills to promote normal growth and development.

**Licensed Clinical Social Worker (L.C.S.W.)**

A professional who has earned a degree in social work and has been licensed to provide counseling/therapy to individuals with emotional, psychological, and/or behavioral needs. Some social workers have a bachelor's degree (B.A., B.S.W., or B.S.); however most social workers have earned a Master's Degree (M.S. or M.S.W.). In most states, social workers can take an examination to be licensed as clinical social workers. Social workers provide counseling/therapy to individuals with emotional, psychological, and/or behavioral needs.

**Licensed Professional Counselor (L.P.C.)**

A professional with a Master's (M.A. or M.S.) or Doctoral Degree who has been licensed to provide counseling to individuals with psychological, emotional, and behavioral needs. L.P.C.'s must obtain supervised clinical experience and must pass a state licensing exam. L.P.C.'s are regulated by federal and state laws, as well as their own code of ethics as developed by various national organizations such as the American Counseling Association. The L.P.C. can be found in private practice, counseling centers, group practices, family service centers, health maintenance organizations (HMOs), hospitals, and government agencies.

**Sources**

American Academy of Child & Adolescent Psychiatry (AACAP). (2004). *Where to Find Help for Your Child*. [Online]. Available at: [http://www.aacap.org/cs/root/facts\\_for\\_families/where\\_to\\_find\\_help\\_for\\_your\\_child](http://www.aacap.org/cs/root/facts_for_families/where_to_find_help_for_your_child). [January 2008].

National Mental Health Consumers' Self-Help Clearinghouse, Technical Assistance Guide Systems Advocacy. [Online]. Available at:  
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# **P**ROVIDERS LICENSED IN VIRGINIA

Mental Health professionals in Virginia are regulated by:

- the Board of Counseling,
- the Board of Psychology,
- the Board of Medicine,
- the Board of Social Work, or
- the Board of Nursing.

## **Professionals regulated by the Board of Counseling**

### **Certified Substance Abuse Counselors (CSAC)**

Professionals who are certified to perform the substance abuse treatment functions, which generally include screening, intake, orientation, assessment, recovery and relapse prevention planning, substance abuse treatment, and case management. However, these activities must be conducted under the supervision of a degree-licensed substance abuse treatment practitioner. C.S.A.C.s may also be responsible for supervising certified substance abuse counseling assistants.

*Type of degree held:* B.A., along with additional coursework and supervised experience in substance abuse treatment.

*Where they can be found:* Inpatient substance abuse treatment centers, community services boards, private outpatient mental health, and substance abuse clinics.

### **Certified Substance Abuse Counseling Assistants**

Professionals who are certified to perform the substance abuse treatment functions of orientation, implementation of substance abuse treatment plans, case management, substance abuse or dependence crisis intervention, record keeping, and consultation with other professionals. Certified substance abuse counseling assistants may participate in recovery group discussions, but cannot engage in counseling with either individuals or groups or engage in independent or autonomous practice. They act under the supervision of a licensed substance abuse treatment practitioner or a C.S.A.C.

*Type of degree held:* High school diploma or equivalent, along with additional coursework and supervised experience in substance abuse treatment.

*Where they can be found:* Inpatient substance abuse treatment centers, community services boards, private outpatient mental health, and substance abuse clinics.

### **Licensed Professional Counselors (LPC)**

This is a specific legal license that a psychotherapist, usually at the Master's level of training, can get. Educational and experiential standards to achieve the L.P.C. license are lower than the requirements for Psychologist or Psychiatrist licensure. Not all counselors are L.P.C.s.

*Type of degree held:* M.A. or M.S., along with coursework and a supervised residency in counseling and psychotherapy.

*Where they can be found:* Residential treatment centers, community services boards, private outpatient mental health and substance abuse clinics.

### **Licensed Substance Abuse Treatment Practitioners**

Professionals who are licensed to provide advanced substance abuse treatment and independent, direct and unsupervised treatment to such individuals or groups of individuals, and to plan, evaluate, supervise, and direct substance abuse treatment provided by others.

*Type of degree held:* M.A. or M.S., along with additional coursework and a supervised residency in substance abuse treatment.

*Where they can be found:* Inpatient substance abuse treatment centers, community services boards, private outpatient mental health, and substance abuse clinics.

### **Marriage and Family Therapists**

Persons trained in the assessment and treatment of cognitive, affective, or behavioral, mental and emotional disorders within the context of marriage and family systems through the application of therapeutic and family systems theories and techniques.

*Type of degree held:* M.A. or M.S., additional coursework and a supervised residency in marriage and family counseling.

*Where they can be found:* Community services boards, private outpatient mental health and substance abuse clinics, private practice.

### **Certified Sex Offender Treatment Providers**

These are psychologists who specialize in providing sex offender treatment services.

*Type of degree held:* M.A., Ph.D., Psy.D., M.D., with additional coursework and supervision in sex offender treatment.

*Where they can be found:* Residential treatment centers, therapeutic group homes, community services boards, private outpatient mental health clinics.

### **Clinical Psychologists**

These are psychologists who specialize in the practice of psychotherapy in individual, family, marital, and group settings.

*Type of degree held:* Ph.D., Psy.D.

*Where they can be found:* Psychiatric hospitals, residential treatment centers, community services boards, private outpatient mental health and substance abuse clinics, private practice.

### **School Psychologists**

These are psychologists who are specifically licensed to practice in a school setting.

*Type of degree held:* M.A. with an endorsement in psychology.

*Where they can be found:* Public and private schools, special education residential schools, special education day schools, therapeutic day treatment centers.

### **Professionals regulated by the Board of Medicine**

#### **Psychiatrists**

These are medical doctors or physicians. Psychiatrists are experts in the use of medications to treat mental disorders and also experts in the diagnosis and treatment of mental illnesses.

*Type of degree held:* M.D., as well as completion of a multi-year residency in psychiatry (treatment of mental illness), usually in a hospital setting and under supervision of senior psychiatrists.

*Where they can be found:* Hospitals (regular and psychiatric), community services boards, private outpatient mental health clinics, private practice.

## **Professionals regulated by the Board of Social Work**

### **Licensed Clinical Social Worker (L.C.S.W.)**

These are social workers who, by education and experience, are professionally qualified at the autonomous practice level to provide direct diagnostic, preventive and treatment services that may include psychotherapy and counseling for mental disorders, substance abuse, marriage and family dysfunction, and problems caused by social and psychological stress or health impairment.

*Type of degree held:* M.S.W. or D.S.W., along with supervised experience in a treatment setting.

*Where they can be found:* Local social service agencies, hospitals (both regular and psychiatric), residential treatment centers, group homes, community services boards, private outpatient mental health and substance abuse clinics.

### **Licensed Social Workers**

These are persons who are trained to provide diagnostic, preventive and treatment services, but on a supervised rather than independent basis.

*Type of degree held:* B.A. or M.S.W., along with supervised experience in a treatment setting.

*Where they can be found:* Local social service agencies, hospitals (both regular and psychiatric), residential treatment centers, group homes, community services boards, private outpatient mental health and substance abuse clinics.

## **Professionals Regulated by the Board of Nursing**

### **Psychiatric Clinical Nurse Specialist**

A registered nurse with a Master's Degree in psychiatric mental health nursing who is licensed by the state to provide care, counseling, and therapy to persons with psychological, emotional and behavioral needs. An accreditation as an Advanced Practicing Registered Nurse (A.P.R.N.) by an appropriate credentialing body is necessary for this provider to receive third party reimbursement.

*Type of degree held:* R.N. and Master's Degree in Psychiatric/Mental Health Nursing

*Where they can be found:* Psychiatric hospitals, community services boards, private outpatient mental health clinics, and private practice.



# FREQUENTLY-USED TERMS IN VIRGINIA'S MENTAL HEALTH DELIVERY SYSTEM

**504 Plan** – An individualized plan developed for a student with a disability that specifies what accommodations and/or services they will get in school to "level the playing field" so that they may derive as much benefit from their public educational program as their nondisabled peers. The plan follows from the requirements of Section 504 of the Rehabilitation Act of 1973, and also applies to extracurricular activities and non-student situations such as employment. Section 504 applies to all public entities receiving federal monies or federal financial assistance.

**Acute** – Refers to an intense illness or affliction of abrupt onset.

**Adjustment Disorder** – A disorder which occurs when a child experiences emotional and behavioral symptoms of depression and/or anxiety that is clearly in response to an identifiable stressor or stressors. The diagnosis of Adjustment Disorder is most appropriate when the child is experiencing distress above the normal amount that might be expected in response to stressor(s) and/or when the stressor(s) cause school grades to drop or impede daily activities. *See "Adjustment Disorders" section.*

**Advanced Practice Registered Nurse (APRN)** – A registered nurse who has earned either a Master's or Doctoral Degree in order to specialize in psychiatric nursing. An APRN can provide the full range of psychiatric care services to individuals, families, groups and communities, function as psychotherapists, and in most states they have the authority to prescribe medications. Psychiatric-mental health nurses in advanced practice are qualified to practice independently. Some APRNs practice consultation/liaison nursing, delivering direct mental health services to physically ill patients or consultation to staff in general medical settings. *See "General Description of Providers" and "Providers Licensed in Virginia" sections.*

**Age Appropriate** – At the right level for the chronological (actual) age of the child.

**Anhedonia** – Inability to experience pleasure from activities and play.

**Anxiolytic** – Any drug used in the treatment of anxiety.

**Anxiety Disorder** – Disorder characterized by worries or fears that become exacerbated to the point of causing significant impairment in the child's functioning. When their fears do not fade and begin to interfere with the child or adolescent's daily life and activities, an anxiety disorder may be present, and parents should promptly seek the evaluation of their child or teen by a physician. *See "Anxiety Disorders" section.*

**Anorexia Nervosa** – Eating disorder characterized by low body weight (less than 85% of normal weight for height and age), a distorted body image, and an intense fear of gaining weight. *See "Maladaptive Behaviors, Eating Disorders" section.*

**Anti-depressants** – Medications used in the treatment of depression, as well as other psychiatric disorders.

**Antipsychotics** – Medications commonly used in medical and psychiatric practices to treat positive psychotic symptoms (e.g., hallucinations, bizarre behavior, delusions) regardless of diagnostic category. There are two classes of antipsychotics: typical antipsychotics (neuroleptics) and newer agents' atypical antipsychotics (e.g., risperdone and clzapine) with fewer side effects.

**Asperger's Syndrome** – is a type of pervasive developmental disorder (PDD) characterized by problems in development of social skills and behavior and is commonly recognized after the age of three. The *DSM-IV* classification defines Asperger's on the basis of the presence of qualitative impairments in social interaction like those observed in autism, but without the significant delay in language or cognitive behavior. See "*Pervasive Developmental Disorders*" section.

**Assessment** – A professional review of the child and family's needs conducted when they first seek services from a caregiver. It typically includes a review of physical and mental health, intelligence, school performance, family situation, and behavior in the community. The assessment identifies the strengths of the child and family. Together, the caregiver and family decide what kind of treatment and supports, if any, are needed.

**Assistive Technology** – Any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, which is used to increase, maintain, or improve the functional capabilities of children with disabilities.

**Attention Deficit Hyperactivity Disorder (ADHD)** – Behavior disorder, usually first diagnosed in childhood that is characterized by inattention, impulsivity and, in some cases, hyperactivity. See "*Behavior Disorders, Attention Deficit Hyperactivity Disorder*" section.

**At Risk of Serious Emotional Disturbance (SED)** – Children aged birth through seven are considered at risk of developing serious emotional disturbances if they meet at least one of the following criteria:

- 1) The child exhibits behavior or maturity which is significantly different from most children of that age and which is not primarily the result of developmental disabilities or mental retardation; or
- 2) Parents, or persons responsible for the child's care, have predisposing factors themselves that could result in the child developing serious emotional or behavioral problems (e.g., inadequate parenting skills, substance abuse, mental illness, or other emotional difficulties); or
- 3) The child has experienced physical or psychological stressors that have put him or her at risk for serious emotional or behavioral problems (e.g., living in poverty, parental neglect, physical or emotional abuse).

See also "*Serious Emotional Disturbance*" definition.

**Autism** – A lifelong developmental disability that typically appears during the first three years of life. A child with autism appears to live in his/her own world, showing little interest in others, and a lack of social awareness. Autistic children often have problems in communication, avoid eye contact, and may show limited attachment to others. No known factors in the psychological environment of a child have been shown to cause autism. See "*Pervasive Developmental Disorders*" section.

**Behavior Therapy** – A form of psychotherapy in which a therapist analyzes a person's problematic behavior in terms of what reinforces or punishes that behavior. The behavioral therapist will systematically alter the reinforcers or punishers to get the person to change their behaviors. Behavior therapy has been adapted over the years to create Cognitive Behavioral Therapy (CBT), which looks at the role of both thinking (cognition) and behavior in the context of human problems.

**Behavior Intervention Plan (BIP)** – A formalized plan that targets specific behaviors for alteration and that follows a functional behavioral assessment. Usually appended to a student's individualized educational plan, a public school must attempt such a plan before changing a student's placement to a more restrictive environment (unless there is an emergency situation). The plan is supposed to be based on positive inducements, if possible. A behavior intervention plan should also include the environmental or proactive changes the staff will make to decrease the likelihood of the undesirable behavior or symptom.

**Behavioral Health Authorities (BHAs)** – Agencies functioning in the same capacity and operating under the same requirements as community services boards.

**Beta-blocker** – Agent inhibiting the action of beta-adrenergic receptors, which modulate cardiac functions, respiratory functions, and the dilation of blood vessels. Beta-blockers are of value in the treatment of hypertension, cardiac arrhythmias, and migraine. In psychiatry, they are used in the treatment of aggression and violence, anxiety-related tremors and lithium-induced tremors, social phobias, panic states, and alcohol withdrawal.

**Binge Eating Disorder** – Disorder resembling bulimia nervosa and which is characterized by episodes of uncontrolled eating (or bingeing). It differs from bulimia, however, in that its sufferers do not purge their bodies of the excess food, via vomiting, laxative abuse, or diuretic abuse. *See “Maladaptive Behaviors, Eating Disorders” section.*

**Biofeedback** – A technique for controlling bodily functions usually thought to be involuntary (not under conscious control). The procedure utilizes electronic equipment to monitor continuously some feature of physiological response (e.g., heart rate, breathing, or muscle tension) and convert the measurements into signals which a person can easily perceive.

**Bipolar Disorder** – A mood disorder causing a child's moods to swing between states of depression (low mood and energy) and mania (heightened elevated, ecstatic mood and energy). *See “Mood Disorders” section.*

**Body Image** – One's sense of the self and one's body.

**Bulimia Nervosa** – Pattern of behavior in which the individual eats excessive quantities of food and then purges the body by using laxatives, enemas, or diuretics, vomiting, and/or exercising. *See “Maladaptive Behaviors, Eating Disorders” section.*

**Case Management** – Service that assists children and their families in identifying and accessing services that meet their individual needs. The primary purpose of case management is to ensure that the needed services are delivered in an effective and efficient manner. The activities of a case manager may include identifying and reaching out to individuals in need of assistance, assessing

needs and planning services, linking the individual to supports and services, coordinating services with other providers, monitoring service delivery, and advocating for these children in response to their changing needs. Case management services are typically provided by community services boards, private clinics, and social services agencies.

**Case Manager** – Health care professional who works directly with clients, coordinates various activities, and acts as the clients' primary contact with other members of their treatment teams. Case managers are often social workers.

**Certified Sex Offender Treatment Provider** –Psychologist specializing in providing sex offender treatment services.

*Type of degree held:* M.A., Ph.D., Psy.D., M.D., with additional coursework and supervision in sex offender treatment.

*Where they can be found:* Residential treatment centers, therapeutic group homes, community services boards, private outpatient mental health clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Certified Substance Abuse Counseling Assistant** – A professional certified to perform the substance abuse treatment functions of orientation, implementation of substance abuse treatment plans, case management, substance abuse or dependence crisis intervention, record keeping, and consultation with other professionals. A certified substance abuse counseling assistant may participate in recovery group discussions, but cannot engage in counseling with either individuals or groups or engage in independent or autonomous practice. They act under the supervision of a licensed substance abuse treatment practitioner or a CSAC.

*Type of degree held:* High School Diploma or equivalent, along with additional coursework and supervised experience in substance abuse treatment.

*Where they can be found:* Inpatient substance abuse treatment centers, community services boards, and private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Certified Substance Abuse Counselor (CSAC)** – A professional certified to perform the substance abuse treatment functions, which generally include screening, intake, orientation, assessment, recovery and relapse prevention planning, substance abuse treatment, and case management. However, these activities must be conducted under the supervision of a licensed substance abuse treatment practitioner. A CSAC may also be responsible for supervising certified substance abuse counseling assistants.

*Type of degree held:* B.A., along with additional coursework and supervised experience in substance abuse treatment.

*Where they can be found:* Inpatient substance abuse treatment centers, community services boards, and private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Children's Advocacy Center** – A model for investigation and intervention in child abuse cases. A facility-based, child-friendly, multidisciplinary approach to the investigation, treatment, and prevention of child abuse cases is utilized.

**Child and Adolescent Psychiatrist** – Licensed physician (M.D. or D.O.) specializing in the evaluation, diagnosis, and treatment of mental disorders in children and adolescents. Their medical and psychiatric training with children and adolescents prepares them to treat children and

adolescents either individually, as part of and involving the family unit, and/or in a group setting. Child and adolescent psychiatrists can prescribe medications, if needed. *See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Chronic** – A term used to describe long-term persistence. In some mental health disorders, *chronic* is specified as persisting for six months or longer.

**Clinical Psychologist** – A psychologist specializing in the practice of psychotherapy in individual, family, marital, and group settings.

*Type of degree held:* Ph.D., Psy.D.

*Where they can be found:* Psychiatric hospitals, residential treatment centers, community services boards, private outpatient mental health and substance abuse clinics, private practice.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Cognitive Behavioral Therapy (CBT)** – A form of psychotherapy that helps people learn to change inappropriate or negative thought patterns and behaviors associated with their illness. The goal is to recognize negative thoughts or mind-sets (mental processes such as perceiving, remembering, reasoning, decision making, and problem solving) and replace them with positive thoughts, which will lead to more appropriate and beneficial behavior. For instance, cognitive behavioral therapy tries to replace thoughts that lead to low self-esteem ("I can't do anything right") with positive expectations ("I can do this correctly").

**Community-based Care** – Care and supports rendered outside the institutional setting. Treatment is provided where the child lives, works and plays. It may be a school or home.

**Community Policy and Management Teams (CPMTs)** – These are teams that operate under the Comprehensive Services Act to coordinate agency efforts, manage available funds, and see that eligible youths and their families get the assistance they need. The CPMTs coordinate long-range, community wide planning which ensures the development of resources and services needed by children and families in its community. CPMTs establish policies governing referrals and reviews of children and families to the Family Assessment and Planning Teams (see FAPTs). Each CPMT establishes and appoints one or more Family Assessment and Planning Teams based on the needs of the community. CPMTs also authorize and monitor the use of funds by each Family Assessment and Planning Team. The CPMT includes a representative from the following community agencies: Community Services Board, Juvenile Court Services Unit, Department of Health, Department of Social Services, and the local school division. The team also includes a parent representative and a private provider organization representative for children or family services, if such organizations are located within the locality.

**Community Services Boards (CSBs)** – These agencies serve as the single point of entry into the publicly-funded mental health system. They provide comprehensive mental health, mental retardation, and substance abuse services. There are 39 CSBs throughout the Commonwealth. Because these agencies are affiliated with local governments, there is tremendous variation in the number and types of services offered by each. However, CSBs usually provide certain core services: crisis intervention services, local inpatient services, outpatient services, case management, day support, residential services, and early intervention services.

**Comorbidity** – A condition in which a child is diagnosed with more than one disorder at the same time.

**Comprehensive Services Act (CSA)** – Virginia law creating a collaborative system in which state and local agencies work together and draw on the same pool of funds to plan and provide services for at-risk youth. The purpose of the act is to provide high quality, child centered, family focused, cost effective, community-based services to high-risk youth and their families. In each community, local teams decide how to do this. There are two primary teams that operate under the CSA are the Family Assessment and Planning Teams (FAPTs) and Community Policy and Management Teams (CPMTs).

**Conduct Disorder (CD)** – Children with CD exhibit persistent and critical patterns of misbehavior. These children may indulge in frequent temper-tantrums like ODD children; however, they also violate the rights of others (Center for the Advancement of Children’s Mental Health at Columbia University, 2000). Disordered behaviors include aggression towards people or animals, destruction of property, deceitfulness, theft or serious violation of rules (Murphy, et al., 2001). *See “Behavior Disorders, Oppositional Defiant & Conduct” section.*

**Consolidated Omnibus Budget Reconciliation Act (COBRA)** – Federal legislation requiring employers to allow former employees to continue their insurance coverage up to 18 months (three years for divorced or separated spouse and children). The insured must reimburse the employer for the cost of the coverage, plus up to 5% in administrative fees.

**Continuum of Care** – Term that implies a progression of services that a child would move through, probably one at a time. The more up-to-date idea is one of comprehensive services. See systems of care and wraparound services.

**Contraindicated** – To indicate the inadvisability of a medical treatment.

**Co-occurring Disorder (COD)** – Refers to co-occurring substance-related and mental disorders. Clients said to have COD have one or more substance-related disorders as well as one or more mental disorders. The definition of a person with COD (individual-level definition) must be distinguished from a person who requires COD services (service definition). At the individual level, COD exist when at least one disorder of each type can be established independent of the other and is not simply a cluster of symptoms resulting from [a single] disorder. (CSAT, 2005, p. 3).

**Coprolalia** – Vocal tic activity that usually involves loud grunting, but may also include word shouting, with the words sometimes being obscenities. *See “Tourette’s Disorder” section.*

**Counseling** – A service that incorporates care consultation, evaluation, and outpatient treatment to those experiencing concerns about their mental health.

**Court Service Units (CSU)** – Local agencies operated by the Department of Juvenile Justice which serve as gatekeepers for children and families served by the local Juvenile and Domestic Relations Court. These units are responsible for handling petitions, intakes, investigations and reports, custody investigations, and probation supervision.

**Crisis Intervention (Emergency) Services** – 24-hour services that may be provided in either residential or nonresidential settings. They are short term interventions designed for children and adolescents who are basically well-functioning but experience periodic crisis, or who have

problems that are more serious and are prone to acute episodes which require special services. The underlying goal of these services is to assist the child and family in resolving the situation so that inpatient hospitalization is unnecessary. Nonresidential crisis services include telephone hotlines, walk-in crisis intervention services, mobile crisis outreach services, and intensive home-based interventions. Residential services include runaway shelters, crisis stabilization units, and temporary placements in programs such as therapeutic foster care and crisis group homes. Treatment typically includes evaluation and assessment, crisis intervention and stabilization, and follow-up planning. To the extent possible, families are included in all phases of the treatment. These programs are typically provided by community services boards, private clinics and providers, and psychiatric hospitals.

**Cultural Competence** – Help that is sensitive and responsive to cultural differences. Caregivers are aware of the impact of their own culture and possess skills that help them provide services that are culturally appropriate in responding to people's unique cultural differences, such as race and ethnicity, national origin, religion, age, gender, sexual orientation, or physical disability. They adapt their skills to fit a family's values and customs.

**Day Treatment Services** – See “*Therapeutic Day Treatment*” definition.

**Depression** – A depressive disorder characterized by extreme feelings of sadness, lack of self-worth, and dejection. See “*Mood Disorders*” section.

**Developmental Disorders** - Category of mental health problems which identifies children who have difficulty accomplishing early developmental tasks such as language, communication, socialization, and motor skills. These disorders are believed to have a genetic cause and are rare. See “*Pervasive Developmental Disorders*” section.

**Diagnostic and Statistical Manual of Mental Disorders Revised (DSM-IV)** – Official manual listing psychiatric and psychological disorders, published by the American Psychiatric Association in 1994 and recognized by the insurance industry as the primary authority for the diagnosis of mental disorders.

**Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision Revised (DSM-IV-TR)** – Revision of the fourth edition of the manual published by the American Psychiatric Association in 2000, replacing the *DSM-IV*.

**Discharge Plan** – Document which identifies relevant features of admission including diagnosis, clinical course while admitted, and results of relevant investigations. Additionally, required elements for the ongoing treatment and medical care and maintenance of the patient which are to occur post-discharge are also listed.

**Disruptive Disorders** – These disorders are the most common reasons children are referred for mental health evaluations and treatment. Disruptive disorders include mental health problems with a focus on behaviors that both identify emotional problems and create interpersonal and social problems for children and adolescents in the course of their development. Conduct disorder and Oppositional defiant disorder are two classes of disruptive disorders. Attention deficit hyperactivity disorder is also considered a disruptive disorder. See “*Behavior Disorders*” section.

**Dual Diagnosis** – Having more than one major clinical psychological/psychiatric diagnosis. The term is often used to describe people who have a severe mental illness such as Major Depression, Bipolar Disorder, or Schizophrenia and a co-existing substance abuse problem (alcohol dependence, cocaine dependence, opioid dependence, etc.).

**Dysfunction** – Abnormal or impaired functioning, especially of a bodily system or social group.

**Dyslexia** – Inability or difficulty in reading, including word-blindness and a tendency to reverse letters and words in reading and writing.

**Dysthymia** – Type of affective disorder (or mood disorder) that often resembles a less severe, yet more chronic form of major (clinical) depression. However, persons with dysthymia may also experience major depressive episodes at times. *See “Mood Disorders” section.*

**Early Intervention Services** – Services intended to improve functioning or change behavior in children identified as experiencing problems, symptoms, or behaviors. The goal is to improve the child’s behaviors in order to prevent a future need for more extensive treatment. This approach also includes infant and toddler intervention, which provides family-centered, community-based early intervention services designed to meet the developmental needs of infants and toddlers and their families to enhance the child’s development and to prevent or minimize the potential for developmental delays. These types of services are most often provided by social service agencies, community services boards, pediatricians and nurses in health clinics, and schools.

**Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)** – Early and Periodic Screening, Diagnosis, and Treatment, Medicaid’s comprehensive and preventive child health program for individuals under the age of 21. The ESPDT program covers screening and diagnostic services to determine physical or mental defects in recipients and health care, treatment, and other measures to correct or ameliorate any defects and chronic conditions discovered. Services include health and developmental history screening, immunization, nutritional status assessment, vision and hearing testing, dental services for children three years and older, and visual treatment including eyeglasses.

**Eating Disorders** – Refers to a variety of disorders characterized by is abnormal eating behaviors, which are serious mental health problems and can be life threatening. *See “Maladaptive Behaviors, Eating Disorders” section.*

**Efficacy** – Studies are directed at establishing how well a particular intervention works in the environment and under the conditions in which treatment is typically offered.

**Electroconvulsive Therapy (ECT)** – A treatment method usually reserved for very severe or psychotic depressions or manic states that often are not responsive to medication treatment. A low-voltage alternating electric current is sent to the brain on an anesthetized patient to induce a convulsion or seizure, which has a therapeutic effect.

**Emergency Services** – *See “Crisis Intervention Services” definition.*

**Ethnopharmacology** – Treatment acknowledging racial and ethnic variation in pharmacokinetics, Asians and Hispanic children with schizophrenia may require lower doses of antipsychotics than



Caucasians to achieve the same blood levels. Although knowledge in this area is scant, cultural patterns should be considered in prescription practices.

**Etiology** – A process that describes how a problem or diagnosis developed to its current condition. It typically answers the question “how did the child get that way?”

**Evidence-based** – Programs that have undergone scientific evaluation and are proven to be effective. See “*Evidence-based Treatment Section.*”

**Exposure Therapy** – A form of psychotherapy in which a patient is deliberately exposed to the problem or event that triggers psychological problems under controlled conditions. The consumer is then taught techniques to avoid performing the compulsive rituals or to work through the trauma.

**Family Access to Medical Insurance Security (FAMIS)** – Virginia’s Title XXI Plan that helps families provide health insurance to their children.

**Family Assessment and Planning Teams (FAPTs)** – Local teams which operate through the Comprehensive Services Act. The purpose of the team is to assess the strengths and needs of troubled youths and families who are approved for referral to the team and identify and determine the services that are necessary to meet these unique needs. They are responsible for developing an individual family services plan (IFSP) for youths and families reviewed by the team that provides for appropriate and cost-effective services, and for monitoring the child’s progress under this plan. Members of the team include parents as well as staff from local agencies including the community services board, court service unit, Department of Social Services, Department of Health, schools, and private providers. Children and adolescents may be referred to the FAPT teams from any of these agencies, and they receive services based on available funding.

**Family Preservation Services** – See “*Home-Based Services*” definition.

**Family Support Services** – Services that are designed to assist families in dealing with the pressures and demands of raising children with severe emotional disturbance. A variety of services are provided to assist families in achieving balanced lives, including respite care, family self-help, support, and advocacy groups, and assistance with financial or family survival needs (food, housing, transportation, home maintenance). Family support services may also include providing caregivers with the necessary education, information, and referrals to ensure that they are informed decision-makers. These services are typically provided by social service agencies, community services boards, and private agencies and organizations.

**Family Systems Therapy** – A form of psychotherapy that focuses on how a child interacts with his/her most important social environment, the family. The underlying premise of the therapy is that the child’s problems are best understood by observing how they fit into the larger scheme of relationships among the members of the family group.

**Fetal Alcohol Syndrome** – Condition affecting the children of mothers who consume large quantities of alcohol during pregnancy; it can involve cognitive delays, attention difficulties, and physical and emotional disability. Deficits range from mild to severe, including growth retardation, brain damage, mental retardation, anomalies of the face, and heart failure.

**Free Appropriate Public Education (FAPE)** – A statutory requirement that children and youth with disabilities receive a public education appropriate to their needs, at no cost to their families.

**Functional Family Therapy (FFT)** – A family-based prevention and intervention program that combines and integrates established clinical therapy, empirically supported principles, and extensive clinical experience.

**Generalized Anxiety Disorder (GAD)** – Mental disorder characterized by chronic, excessive worry and fear that seems to have no real cause. Children or adolescents with generalized anxiety disorder often worry a lot about things such as future events, past behaviors, social acceptance, family matters, their personal abilities, and/or school performance. *See “Anxiety Disorders” section.*

**Group Homes** – *See “Therapeutic Group Homes” definition.*

**Halfway Houses** – *See “Therapeutic Group Homes” definition.*

**Hallucinations** – A strong perception of an event or object when no such situation is present; may occur in any of the senses (i.e., visual, auditory, gustatory, olfactory, or tactile).

**Health Maintenance Organization (HMO)** – A medical care organization organized to deliver and finance health care services through a network of participating providers. An HMO provides comprehensive health care services to its members for a fixed prepaid premium. A primary care physician must provide or authorize all services provided to members. Members must use in-network physicians.

**Home-Based Services (Family Preservation Services)** – Services typically provided in the residence of an individual who is at risk of being moved into an out-of-home placement or who is being transitioned back into the home from an out-of-home placement. The treatments are family-focused, and involve working within the home environment to preserve the family structure. The services may include crisis treatment, intensive case management, individual and family counseling, skill building (life, communication, and parenting), 24 hour emergency response, and assisting in obtaining and coordinating needed services, resources, and supports. Services vary based on the goals of the program and the needs of the family. The services tend to be of short duration (1 to 3 months) but highly intensive (5 to 20 hours per week). They are usually provided only when other interventions have proven unsuccessful. They are typically offered through child welfare agencies, community services boards, mental health centers, hospitals, juvenile justice agencies, or private providers.

**Incidence** – Measure of morbidity or other events as they happen over a period of time. It usually refers only to the number of new cases, particularly of chronic diseases.

**Independent Living Services** – Programs specifically designed to help adolescents make the transition to living independently as an adult. They provide training in daily living skills (financial, medical, housing, transportation) as well as vocational and job training. They are offered by therapeutic group homes, residential treatment centers, day treatment programs, community services boards, and private clinics.

**Individualized Educational Plan (IEP)** – Plan developed by parents, teachers, school administrators, and the student to meet the unique educational needs of a student with a disability. It should contain specific objectives and goals that are based upon the student’s current level of educational performance in a variety of areas. It should also describe the services that are to be provided by the school system within the context of the educational program.

**Individuals with Disabilities Act (IDEA)** – Federal law mandating that a free and appropriate public education be available to all school-age children with disabilities. Also known as Public Law 105-17.

**Inpatient Hospitalization** – Services provided on a 24-hour basis in a hospital setting and the most restrictive placement that a child can receive. It tends to be reserved for children with difficult and ongoing problems. Hospitals use a variety of interventions, including individual, group, and family therapy, medication management, and behavior modification.

**Institute for Mental Disease (IMD)** – Residential facility with more than 16 beds which specializes in psychiatric care.

**Intellectual Disabilities** – *See Mental Retardation.*

**Intensive Outpatient Therapy (IOP)** – A form of partial hospitalization that is more intense than regular once-per-week outpatient therapy and less intense than full inpatient hospitalization. Patients come for therapy, which is often conducted in a group setting, several days per week for several hours at a time. This type of treatment is typically shorter in duration than full partial hospitalization programs.

**Intermediate Care Facility (ICF)** – An intermediate care facility is an institution furnished health-related care and services to individuals who do not require the degree of care provided by hospitals or skilled nursing facilities as defined under Title XIX (Medicaid) of the Social Security Act.

**Intermediate Care Facilities for Persons with Mental Retardation (ICF/MR)** – Facilities providing a community-based residential setting for individuals with mental retardation who also have severe medical needs. They offer rehabilitative services designed to maximize independence and enhance the resident's quality of life. They provide residential care, skilled nursing, and specialized training, and may include training programs in language, self-care, independent living, socialization, academic skills, and motor development. While ICF/MRs most often serve adults, adolescents can sometimes be placed in these programs.

**Interpersonal Therapy** – A form of psychotherapy that focuses on improving interpersonal skills by exploring the relationships that the child or adolescent has with others. The therapist actively teaches the youth to evaluate their interactions with others and to become aware of self-isolation and social difficulties. The therapist offers advice and helps the youth make decisions about the best way to interact with other people.

**Intrusive Aversive Therapy** – A formal behavior management technique designed to reduce or eliminate severely maladaptive, violent, or self-injurious behavior by using negative stimuli when problem behaviors are exhibited. It does not include verbal therapies, seclusion, physical or

mechanical restraints used in conformity with the applicable human rights regulations, or psychotropic medications.

**Juvenile Correctional Centers (JCCs)** – Secure residential facilities operated by the Virginia Department of Juvenile Justice. Juvenile offenders are committed to JCCs by the Juvenile and Domestic Relations District Courts and Circuit Courts for rehabilitation and confinement. These facilities provide programs to address the treatment, disciplinary, medical, and recreational needs of the juveniles.

**Juvenile Firesetting** – Deliberate destruction of property by juveniles through fire, which sometimes results in casualties. *See “Maladaptive Behaviors, Juvenile Firesetting” section.*

**Juvenile Sex Offender** – Juvenile perpetrating sex offense(s) by committing any sexual act against the victims’ will, without consent, or in an aggressive, exploitive, or threatening manner. *See “Juvenile Offenders” section.*

**Lesch-Nyhan Disease (LND)** – a rare and devastating genetic disorder characterized by severe dystonia (over-activity of a specific group of muscles), spasticity, speech impairment, renal disease, varying degrees of cognitive deficit, and the characteristic symptom, compulsive self-injury.

**Licensed Clinical Social Worker (LCSW)** – A social worker who, by education and experience, is professionally qualified at the autonomous practice level to provide direct diagnostic, preventive and treatment services that may include psychotherapy and counseling for mental disorders, substance abuse, marriage and family dysfunction, and problems caused by social and psychological stress or health impairment.

*Type of degree held:* M.S.W. or D.S.W., along with supervised experience in a treatment setting.

*Where they can be found:* Local social service agencies, hospitals (both regular and psychiatric), residential treatment centers, group homes, community services boards, and private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Licensed Professional Counselor (LPC)** – The specific legal license that a psychotherapist, usually at the Master’s level of training, can get. Educational and experiential standards to achieve the LPC license are lower than the requirements for Psychologist or Psychiatrist licensure. Not all counselors are LPCs.

*Type of degree held:* M.A. or M.S., along with coursework and a supervised residency in counseling and psychotherapy.

*Where they can be found:* Residential treatment centers, community services boards, private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Licensed Social Worker (LSW)** – These are persons who are trained to provide diagnostic, preventive and treatment services, but on a supervised rather than independent basis.

*Type of degree held:* B.A. or M.S.W., along with supervised experience in a treatment setting.

*Where they can be found:* Local social service agencies, hospitals (both regular and psychiatric), residential treatment centers, group homes, community services boards, private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Licensed Substance Abuse Treatment Practitioner** – Professionals who are licensed to provide advanced substance abuse treatment and independent, direct and unsupervised treatment to such individuals or groups of individuals, and to plan, evaluate, supervise, and direct substance abuse treatment provided by others.

*Type of degree held:* M.A. or M.S., along with additional coursework and a supervised residency in substance abuse treatment.

*Where they can be found:* Inpatient substance abuse treatment centers, community services boards, private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**License/licensure** – Permission granted to an individual or organization by a competent authority, usually public to engage lawfully in a practice, occupation, or activity. Licensure is the process by which the license is granted. It is usually granted based on examination and/or proof of education rather than on measures of performance. A license is usually permanent, but may be conditioned on annual payment of a fee, proof of continuing education, or proof of competence.

**Major Depression (also known as clinical depression or unipolar depression.)** – Type of affective disorder (or mood disorder) that goes beyond the day's ordinary ups and downs, and has become a serious medical condition and important health concern in this country. *See “Mood Disorders” section.*

**“Mandated”** – Designation provided to children receiving funding under the Comprehensive Services Act. State and local governments are required by law to appropriate sufficient funds for services for these youth. Children and adolescents who fall within this category are generally those who receive individualized services from the education and foster care systems.

**Marriage and Family Therapist** – Person trained in the assessment and treatment of cognitive, affective, or behavioral mental and emotional disorders within the context of marriage and family systems through the application of therapeutic and family systems theories and techniques.

*Type of degree held:* M.A. or M.S., additional coursework and a supervised residency in marriage and family counseling.

*Where they can be found:* Community services boards, private outpatient mental health and substance abuse clinics.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Medicaid** – Federal program (Title XIX of the Social Security Act) that pays for health services for certain categories of people who are poor, elderly, blind, disabled, children under the age of 19, pregnant women and caretaker relatives of children under the age of 18 and who meet financial eligibility criteria.

**Mental Retardation** – Characterized both by a significantly below-average score on a test of mental ability or intelligence and by limitations in the ability to function in areas of daily life, such as communication, self-care, and getting along in social situations and school activities. Mental retardation is sometimes referred to as a cognitive or intellectual disability. *See “Mental Retardation” section.*

**Mentorship Services** – Individuals who serve as role models and caring adult support figures outside of the immediate family, and often serve a protective role in the lives of at-risk youth. They can be citizen volunteers or paid paraprofessionals. Their primary role is to assist the

youth's development of social support and social skills, competencies and confidence, and to provide school support. Some specific activities include crisis intervention and problem solving, academic assistance, vocational support and recreation, and most importantly, developing a supportive and helpful relationship with the child. This is accomplished through regularly scheduled contact, which is often daily. These types of services may be provided by community services boards, social service agencies, private clinics, and volunteer agencies.

**Methadone Detoxification and Maintenance** – Services that combine outpatient treatment with the administering of methadone as a substitute narcotic drug, in decreasing doses, until the individual reaches a drug-free state. These treatments usually do not last longer than 180 days. They are typically provided by substance abuse treatment centers.

**Mood Disorders** – Category of mental health problems including all types of depression and bipolar disorder. See “*Mood Disorders*” section.

**Mood Stabilizer** – Psychiatric medication used in the treatment of bipolar disorder to suppress swings between mania and depression.

**Multidimensional Family Therapy (MDFT)** – an outpatient, family-based treatment for teenagers with serious substance abuse issues. This approach views drug use in terms of network of influences (individual, family, peer, community) and encourages treatment across settings in multiple ways. Sessions may be held in a clinic, home, court, school, or other community locations. See “*Co-occurrence of Substance Abuse and Mental Illness*” section.

**Multisystemic Therapy (MST)** – An integrative, family-based treatment with focus on improving psychosocial functioning for youth and families so that the need for out-of-home placements is reduced or eliminated.

**Non-mandated** – Designation given to youths who are referred for services under the Comprehensive Services Act for which the Commonwealth is not required to provide complete funding. Children and adolescents who fall into this category are generally referred for treatment by the juvenile justice or mental health systems.

**Neurotransmitters** – In the brain, these chemicals transfer messages from one nerve cell to another and affect mood.

**Norepinephrine** – A hormone that regulates blood pressure by causing blood vessels to narrow and the heart to beat faster.

**Obsessive-compulsive disorder (OCD)** – Anxiety disorder in which a person has an unreasonable thought, fear, or worry that he/she tries to manage through a ritualized activity to reduce the anxiety. Frequently occurring disturbing thoughts or images are called obsessions, and the rituals performed to try to prevent or dispel them are called compulsions. See “*Anxiety Disorders*” section.

**Office of Juvenile Justice and Delinquency Prevention** – Federal agency within the U.S. Department of Justice which coordinates and provides resources to state and communities pertaining to juvenile justice system.

**Operant Conditioning** – Process of behavior modification in which the likelihood of a specific behavior is increased or decreased through positive or negative reinforcement each time the behavior is exhibited, so that the subject comes to associate the pleasure or displeasure of the reinforcement with the behavior.

**Oppositional Defiant Disorder (ODD)** – An enduring pattern of uncooperative, defiant and hostile behavior to authority figures that does not involve major antisocial violations. *See “Behavior Disorders, Oppositional Defiant & Conduct Disorders” section.*

**Outpatient Psychiatric Services** – Services provided to individuals, groups, or families on an hourly schedule. Outpatient services are the most frequently used treatment method for children, and may either be provided for a short term (6 to 12 sessions) or a longer duration (a year or longer). Services are generally provided on a weekly basis, if not more often, depending on the individual needs of the child and family. However, under managed care and most insurance plans, brief therapy is likely to be mandated. It is the least restrictive form of service for children and families, and it is provided in a number of settings, including community services boards, outpatient psychiatry departments of hospitals, and private offices. It is most often provided by psychiatrists, psychologists, social workers, and counselors. Treatment efforts may include diagnosis and evaluation, intake and screening, counseling, psychotherapy, behavior management, psychological testing and assessment, and medication management. These services are typically offered in community services boards, private clinics and offices, and outpatient psychiatry departments of hospitals.

**Parent** – A parent, a guardian, or a person acting as a parent in the absence of a parental guardian. The term "parent" also means a surrogate parent appointed pursuant to Virginia regulations.

**Partial Hospitalization** – A form of therapeutic day treatment that is based in a psychiatric hospital. It provides the use of a psychiatric hospital setting during the day, with children returning to their home each night. It is frequently used for those children who are being released from a psychiatric hospital and must transition back into the community and the school system. It is also used to assist youths at risk of inpatient hospitalization. *See also “Therapeutic Day Treatment” definition.*

**Pervasive Developmental Disorders (PDD)** – These disorders can usually be identified in the early years of a child's life. Children with PDD have difficulty in areas of development or use of functional skills such as language, communication, socialization, and motor behaviors. Examples of PDD include:

- autism (autistic disorder)
- Asperger's disorder
- Rett's disorder
- childhood disintegrative disorder (also called disintegrative psychosis)

*See “Pervasive Developmental Disorders” section.*

**Pharmacology** – The study of the nature, actions and uses of drugs.

**Phobia** – An uncontrollable, irrational, and persistent fear of a specific object, situation, or activity.

**Plan of Care** – Treatment plan designed for each child or family. The caregiver(s) develop(s) the plan with the family. The plan identifies the child and family's strengths and needs. It establishes goals and details appropriate treatment and services to meet his or her special needs.

**Post-traumatic Stress Disorder (PTSD)** – A debilitating condition that often follows a terrifying physical or emotional event causing the person who survived the event to have persistent, frightening thoughts and memories, or flashbacks, of the ordeal. Persons with PTSD often feel chronically, emotionally numb.

**Prader-Willi Syndrome (PWS)** – An uncommon inherited disorder characterized by mental retardation, decreased muscle tone, short stature, and an insatiable appetite which can lead to life-threatening obesity.

**Prevalence** – The number of cases of disease, infected persons, or persons with some other attribute, present at a particular time and in relation to the size of the population from which drawn. It can be a measurement of morbidity at a moment in time.

**Prevention Services** – Services that promote families, communities, and systems working together to reduce the incidence of mental illness, mental retardation, other developmental disabilities, and substance abuse disorders. Emphasis is on the enhancement of protective factors and reduction of risk factors. Activities may include information dissemination, prevention education, and problem identification and referral. Services are most often provided by social service agencies, community services boards, pediatricians and nurses in health clinics, and schools.

**Private Inpatient Units** – Privately-owned hospitals which offer inpatient psychiatric and/or substance abuse services to children and adolescents with severe, acute disturbances. They are licensed as hospitals under state regulations.

**Private Providers** – Mental health professionals who provide services in private offices or within the context of private mental health centers. The services that they provide are not publicly-funded, and therefore treatments are usually paid for either through private insurance, Medicaid, or the FAMIS program, or through contracts with public agencies.

**Private Residential Units** – Privately-owned residential facilities that provide intensive treatment services to children and adolescents with emotional or mental disorders. They are somewhat less restrictive than private inpatient units, but still tend to be highly structured and secure, and should be reserved for children and adolescents in crisis. However, the level of security and restrictiveness tend to vary across facilities.

**Psychiatric Social Worker** – A core mental health professional, who has earned the Master's of Social Work degree, and is trained to appreciate and emphasize the impact of environmental factors on mental disorders. See "*General Description of Providers*" and "*Providers Licensed in Virginia*" sections.

**Psychiatrist** – A medical doctor or physician. Psychiatrists are experts in the use of medications to treat mental disorders and also experts in the diagnosis and treatment of mental illnesses. *Type of degree held:* M.D., as well as completion of a multi-year residency in psychiatry (treatment of mental illness), usually in a hospital setting and under supervision of senior psychiatrists.



*Where they can be found:* Hospitals (regular and psychiatric), community services boards, private outpatient mental health clinics, private practice.

*See “General Description of Providers” and “Providers Licensed in Virginia” sections.*

**Psychoeducational Services** – The process of providing information to parents, children, and teachers about the features of the child’s diagnosis, the most effective management strategies, and the services available to provide the necessary treatment.

**Psychological Evaluation** – A clinical examination conducted by a mental health professional that is used to determine the nature of a child’s psychological difficulties. It often includes an analysis of components of the child’s life such as his/her development, behavior, education, medical history, and family and social relationships. An evaluation usually requires several hours to complete and is often best performed over several sessions, including sessions for the child and parents separately and together. In addition, a full evaluation usually requires the collection of information from a variety of outside sources, such as the school, child's pediatrician, psychological testing, and social service agencies.

**Psychopathology** – The science that studies mental diseases.

**Psychopharmacology** – Use of medication to treat mental disorders. These medications work to control the symptoms of mental illness by correcting or compensating for some malfunction in the body. Medications do not cure mental illness--they reduce the burdensome effects.

**Psychosis** – A disruption of thinking that impairs an individual’s reality contact and social perception. It is frequently associated with the diagnosis of schizophrenia.

**Psychosocial treatments** – Services that focus on the relationship between psychological, environmental, and social factors. They include certain forms of psychotherapy as well as social and vocational training, and are intended to provide support, education, and guidance to people with mental illnesses and their families. A psychiatrist, psychologist, social worker, or counselor typically provides these psychosocial therapies. The therapist and a psychiatrist may work together as the psychiatrist prescribes medications and the therapist monitors the consumer's progress. The number, frequency, and type of psychotherapy sessions a consumer has should be based on his or her individual treatment needs.

**Psychotherapy** – An intervention that involves regularly scheduled sessions between the patient and a mental health professional such as a psychiatrist, psychologist, psychiatric social worker, or psychiatric nurse. Licensed Clinical Social Workers and Advanced Practice Psychiatric Nurses may also provide psychotherapy. The goal of this treatment is to help consumers understand why they are acting and thinking in ways that are troubling or dangerous to themselves or others so they have more control over their behaviors and can correct them. It is commonly used in the treatment of children and youth with emotional and behavioral problems, either in conjunction with or in place of prescribed medications. This form of therapy varies with regard to theoretical approach, with the most prevalent of these being the psychodynamic, behavioral, cognitive-behavioral, interpersonal, supportive, and family systemic approaches.

**Psychotropic Medications** – Prescribed drugs that reduce the symptoms of biologically based psychological disorders. They are most often prescribed for the following diagnoses:

schizophrenia, bipolar disorder, depression, anxiety disorders, obsessive-compulsive disorder, and panic disorder. *See also "Psychopharmacology" definition.*

**Purging** – Children with bulimia nervosa engage in a destructive pattern of ridding their bodies of the excess calories (to control their weight) by vomiting, abusing laxatives or diuretics, taking enemas, and/or exercising obsessively - a process called purging. *See "Maladaptive Behaviors, Eating Disorders" section.*

**Reactive Attachment Disorder of Infancy or Early Childhood (RAD)** – A complex psychiatric illness that is characterized by serious problems in emotional attachments to others and usually presents by age 5.

**Regression** – Partial or symbolic return to earlier patterns of reacting or thinking. Manifested in a wide variety of circumstances such as normal sleep, play, physical illness, and in many mental disorders.

**Reinforcement** – The strengthening of a response by reward or avoidance of punishment. This process is central in operant conditioning.

**Residential Services** – Services which provide overnight care in conjunction with intensive treatment or training programs. They are typically provided in psychiatric hospitals, residential treatment centers (RTCs), and therapeutic foster homes.

**Residential Treatment Center (RTC)** – 24-hour facilities providing short-term intermediate care, crisis stabilization, and intensive mental health treatment programs. They are not licensed as hospitals and serve as an alternative to inpatient psychiatric hospitalization. The settings vary, with some highly structured like psychiatric hospitals, while others are similar to group homes or halfway houses. They also vary in the range of services they offer, as some offer a full range of treatment services while others are more limited or specialized. While these facilities were originally designed to serve as long-stay institutions, under managed care they are serving youth for periods as brief as 1 month, serving only as a source for intensive evaluation and stabilization.

**Respite Care** – A type of family support service. Parents are given relief from childcare by either placing the child with another family or bringing a caretaker into the home for a few days. This service is usually provided on a planned basis under circumstances in which either there has been a prolonged crisis in which the child has exhausted the family resources, or there has been another family crisis, such as illness or death of another family member. This service may be provided by community services boards, social service agencies, or private clinics.

**Risk or Risk Factor** – Term used to quantify the likelihood that something will occur. A risk factor is something, which either increases or decreases an individual's risk of developing a disorder or disease. However, it does not mean that, if exposed, an individual will definitely contract a particular disease.

**Satiation** – the practice of repetitively lighting and extinguishing fire. *See "Juvenile Firesetting" section.*

**School Psychologists** – Psychologists licensed to practice in a school setting.

*Type of degree held:* M.A. with an endorsement in psychology or Ph.D.

*Where they can be found:* Public and private schools, special education residential schools, special education day schools, therapeutic day treatment centers. *See* “*General Description of Providers*” and “*Providers Licensed in Virginia*” sections.

**School-based Services** – Any program, intervention, or strategy applied in a school setting that was specifically designed to influence students’ emotional, behavioral, or social functioning. *See* “*School-based Mental Health Services*” section.

**Schizophrenia** – A severe, chronic, and disabling disturbance of the brain that causes distorted thinking, strange feelings, and unusual behavior and use of language and words. *See* “*Schizophrenia*” section.

**Secure Treatment Service** – Provision of services for people with mental disorders or serious mental health problems who, based on clinical assessment, require treatment in a closed setting to ensure the safety of the person, the staff and the community. Three levels of treatment are provided: acute inpatient secure treatment, extended secure treatment and high security treatment.

**Sedatives** – A group of drugs used to produce sedation (calmness). Sedatives include sleeping pills and anti-anxiety drugs.

**Selective Serotonin Reuptake Inhibitors (SSRIs)** – A commonly prescribed class of drugs for treating depression. SSRIs work by stopping the reuptake of serotonin, an action that allows more serotonin to be available to be taken up by other nerves.

**Self-help and Support Groups** – Groups designed for people and families dealing with life difficulties such as mental illness or substance abuse. Typically, they are not led by a professional therapist; however, these groups may be therapeutic because members give each other ongoing support. They provide support to both the child and the family, as they learn that others have problems similar to theirs and share in their experiences and coping mechanisms.

**Self-Injury (SI)** – The repetitive, deliberate infliction of harm to one’s own body. *See* “*Maladaptive Behaviors, Self-Injury*” section.

**Separation Anxiety Disorder (SAD)** – Excessive worry and fear about being apart from family members or individuals to whom a child is most attached. Children with separation anxiety disorder fear being lost from their family or fear something bad happening to a family member if they separated from them.

**Serious Emotional Disturbance (SED)** – Serious emotional disturbance in children ages birth through 17 is defined as a serious mental health problem that can be diagnosed under the *DSM-IV*, or the child must exhibit all of the following:

- Problems in personality development and social functioning that have been exhibited over at least one-year’s time;
- Problems that are significantly disabling based upon the social functioning of most children that age;
- Problems that have become more disabling over time; and
- Service needs that require significant intervention by more than one agency.

**Serotonin** – A chemical that transmits nerve impulses in the brain (neurotransmitter) causes blood vessels to narrow at sites of bleeding and stimulates smooth muscle movement in the intestines. It is thought to be involved in controlling states of consciousness and mood.

**Serotonin and Norepinephrine Reuptake Inhibitors** – Commonly prescribed class of drugs for treating depression, which work by inhibiting the reuptake of serotonin and norepinephrine, an action that allows serotonin and norepinephrine to be available to be taken up by other nerves.

**Social History** – When children and adolescents become involved with the juvenile justice system, a social history is performed by personnel of the Court Service Unit. The social history describes the social adjustment of the person before the court, which is used to help the court to select the most appropriate disposition for the case. The social history is also used by the court service unit to develop appropriate services for the juvenile and the family. A social history may also be conducted by other health care providers for purposes of conducting a mental health evaluation.

**Special Education** – Specially designed instruction, which adapts, as appropriate, to the needs of a disabled child. Such education must ensure access for the child to the general curriculum, so that he or she can meet the educational standards that apply to all children. This education is to be provided at no cost to the parents and is implemented under the guidelines of the Individuals with Disabilities Act (IDEA), which requires school to identify children with disabilities in need of special education.

**Special Education Day Schools** – A form of therapeutic day treatment. These are schools that are specially designed to meet the needs of children with severe behavior disorders who are unable to function adaptively in the regular school system. The programs allow for collaboration between teachers and mental health professionals, and provide low student-teacher ratios and additional family services with the ultimate goal of returning the child to the regular school setting.

**Standards of Learning (SOLs)** – The outline of the basic knowledge and skills that Virginia children will be taught in grades K-12 in the four academic subjects of English, math, science, and social studies.

**State Mental Health Facilities** – State-run facilities providing a range of psychiatric, psychological, rehabilitative, nursing, support, and other necessary services for children and adolescents with significant and acute psychiatric concerns. Two in the Commonwealth are designated for children and adolescents: the Southwestern Virginia Mental Health Institute and the Commonwealth Center for the Treatment of Children and Adolescents.

**Stuttering** – Speech characterized by abnormal hesitations, prolongations, and repetitions which are developmentally inappropriate for the age or mental ability of the speaker.

**Substance Abuse Medical Detoxification** – A form of inpatient services in which doctors and other medical personnel use medication to eliminate or reduce effects of alcohol or other drugs in the patient's body. These services are available in local hospitals or other emergency care facilities.

**Suicidal Behavior** – Actions taken by one who is considering or preparing to cause their own death. *See "Youth Suicide" section.*

**Suicidal Ideation** – Thoughts of suicide or wanting to take one's life. *See "Youth Suicide" section.*

**Suicide** – The intentional taking of one's own life. *See “Youth Suicide” section.*

**Suicide Attempt** – An act focused on taking one's life that is unsuccessful in causing death. *See “Youth Suicide” section.*

**Supportive Therapy** – Psychotherapy focusing on the management and resolution of current difficulties and life decisions using the individual's strengths and available resources.

**Symptom** – A reported feeling or specific observable physical sign of a patient's condition that indicates a physical or mental abnormality.

**Syndrome** – A grouping of signs and symptoms, based on their frequent co-occurrence, that may suggest a common underlying pathogenesis, course, familial pattern, or treatment selection.

**System of Care** – A method of delivering mental health services that helps children and adolescents with mental health problems and their families get the full range of services in or near their homes and communities. These services must be tailored to each individual child's physical, emotional, social, and educational needs. In systems of care, local organizations work in teams to provide these services.

**Tardive Dyskinesia** – An involuntary movement disorder caused by the long-term use of neuroleptic drugs.

**Temporary Assistance for Needy Families (TANF)** – A block grant program designed to move recipients into work and turning welfare into a program of temporary assistance. TANF replaced the national welfare program known as Aid to Families with Dependent Children (AFDC) and the related programs known as the Job Opportunities and Basic Skills Training (JOBS) program and the Emergency Assistance (EA) program. TANF recipients are usually eligible for full Medicaid benefits and include children younger than 18 (or expected to graduate from high school by age 19). One of the child's parents must be dead, absent, disabled or unemployed.

**Therapeutic Camp Services** – A special form of therapeutic group care in which youth and staff live together in a wilderness environment. The nature of the living situation requires that participants demonstrate responsible and independent behavior in order to take care of the basic necessities of living, including food and shelter. The primary emphasis of the treatment is the encouragement of each participant to be a contributing member of the group. The goal of this form of treatment is to build skills in dealing with immediate situations of both a social and nonsocial nature.

**Therapeutic Day Treatment** – An outpatient treatment program that serves children with diagnoses that range from severe emotional disturbance to developmental delay. These services provide an integrated set of psychoeducational activities, counseling, and family treatments which involve the young person for several hours each day. Services typically include special education, individual and group counseling, family counseling and training, crisis intervention, skill building, behavior modification, and recreational therapy. However, the nature of these programs may vary widely due to factors such as setting, the population being served, the intensity of treatment, the theoretical approach, and the treatment components. The integration of this broad range of services is designed to strengthen both individual and family functioning and to prevent a more

restrictive placement of the child. The child is able to receive the benefits of a structured setting while being able to return home at night and continue involvement with family and peers. These services may be offered in regular school settings, special education day schools, community services boards, and hospitals. Currently, Medicaid is the only third party source that routinely covers this service.

**Therapeutic Foster Care** – The least restrictive form of residential treatment, placing children in private homes with specially trained foster parents. It is typically provided to children and adolescents with emotional or behavioral disturbances. The intent of these programs is to provide treatment within a family context. Children are placed with foster parents who have been carefully selected to work with children with special needs. These parents receive education and training to assist in working effectively with the child, including topics such as active listening, behavioral management and programming, and age-appropriate behavioral expectations. These parents become part of a support structure that exists among the foster parents and case managers work in close connection with the child and family. During this placement, efforts are made to provide the biological family with counseling, support, and other types of assistance so that the child can be returned to the home as quickly as possible. Programs tend to differ in approach, structure, intensity and type of training. Most serve youth from birth to 18 years, with most youth entering during early adolescence.

**Therapeutic Group Homes** – Facilities which provide emotionally and behaviorally disturbed adolescents with an environment to learn social and psychological skills. These homes are located in the community, and residents attend the local schools. In Virginia, a group home is defined as a community-based, home-like single dwelling, or its acceptable equivalent, other than the private home of the operator, and serves up to 12 residents. An array of services is provided, such as individual psychotherapy, group therapy, and/or behavior modification. Vocational training and work experiences are typically included as part of the treatment program for adolescents. The amount of structure incorporated into the program varies based on the level of need of the youths served.

**Tic** – An involuntary, sudden, rapid, recurrent, nonrhythmic, stereotyped motor movement or vocalization.

**Title IV-E** – The Federal Social Security Act authorizing financial assistance for foster children and for families receiving adoption assistance.

**Title V** – Title 5 of the Social Security Act, which became the Maternal and Child Health Services Block Grant in 1981.

**Title XVIII** – Social Security Act Pertaining to Medicare.

**Title XIX** – Medicaid. A federally aided, state-operated and administered program which provides medical benefits for certain indigent or low-income persons in need of health and medical care. Authorized by Title XIX of the Social Security Act.

**Title XXI** – The State Children’s Health Insurance Program (SCHIP) that authorizes states to provide health insurance coverage to uninsured children up to 200% of the federal poverty level (FPL). States may provide this coverage by expanding Medicaid or by expanding or creating a state children’s health insurance program. FAMIS is Virginia’s SCHIP program.

**Tourette's Disorder** – Disorder characterized by multiple motor tics and at least one vocal tic. A tic is a sudden, rapid movement of some of the muscles in the body that occurs over and over and does not serve any purpose. See “*Tourette’s Disorder*” section.

**Transactional Medical Assistance** – Provides short-term Medicaid coverage for people who lose assistance when they secure a job that does not provide health benefits.

**Transitional Services** - Services which help children leave the system that provides help for children and move into adulthood and the adult service system. Help includes mental health care, independent living services, supported housing, vocational services, and a range of other support services.

**Trauma** – Any injury, physical or emotional.

**Tricyclic anti-depressants (TCA)** – Drugs used in the treatment of clinical depression. Tricyclic refers to the presence of three rings in the chemical structure of these drugs.

**Virginia Independence Program (VIP)** – Virginia’s Welfare Reform program.

**Virginia Initiative for Work not Welfare (VIEW)** – Work component of Temporary Assistance for Needy Families (TANF) program.

**Wraparound Services** – Child- and family-driven services and supports which are community-based. They address the child’s needs in the home, school, and community, and are developed through collaboration between the child, family, and all of the service providers who provide support to the child. The underlying purpose is to provide services that follow the child as he/she interacts in different environments in the community. The organizations involved in collaboration can include mental health, education, juvenile justice, and child welfare. Case management is usually necessary to coordinate services.

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# COMMONLY-USED ACRONYMS AND ABBREVIATIONS

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|--|--|
| <b>AAA</b> – Area Agency on Aging  | <b>COY</b> – Commission on Youth (Virginia)  |
| <b>AACAP</b> – American Academy of Child & Adolescent Psychiatry   | <b>CPMT</b> – Community Policy and Management Team (Virginia)  |
| <b>AAIDD</b> – American Association on Intellectual and Developmental Disabilities (formerly American Association on Mental Retardation) | <b>CPS</b> – Child Protective Services   |
| <b>AAP</b> – American Academy of Pediatrics  | <b>CSA</b> – Comprehensive Services Act for At Risk Youth and Families (Virginia)                    |
| <b>ACT</b> – Assertive Community Treatment   | <b>CSAC</b> – Certified Substance Abuse Counselor  |
| <b>AD</b> – Autistic Disorder  | <b>CSB</b> – Community Services Board (Virginia)   |
| <b>ADA</b> – Americans with Disabilities Act   | <b>CSU</b> – Court Services Unit   |
| <b>ADD</b> – Attention Deficit Disorder  | <b>CSOTP</b> – Certified Sex Offender Treatment Provider   |
| <b>ADHD</b> – Attention Deficit Hyperactivity Disorder   | <b>DARE</b> – Drug Abuse Resistance Education  |
| <b>AFDC</b> – Aid to Families with Dependent Children  | <b>DCSE</b> – Div. of Child Support Enforcement (Virginia)   |
| <b>AG</b> – Auxiliary Grant  | <b>DCE</b> – Dept. of Correctional Education (Virginia)  |
| <b>ALF</b> – Assisted Living Facility  | <b>DCJS</b> – Dept. of Criminal Justice Services (Virginia)  |
| <b>ALOS</b> – Average Length of Stay   | <b>DD</b> – Developmental Disability or Dually Diagnosed   |
| <b>ANRED</b> – Anorexia Nervosa and Related Eating Disorders   | <b>DHP</b> – Dept. of Health Professions (Virginia)  |
| <b>APA</b> – American Psychiatric Association  | <b>DJJ</b> – Dept. of Juvenile Justice (Virginia)  |
| <b>APA</b> – American Psychological Association  | <b>DMAS</b> – Dept. of Medical Assistance Services (Virginia)  |
| <b>Arc of Virginia</b> – Association for Retarded Citizens of Virginia   | <b>DMHMRSAS</b> – Dept. of Mental Health, Mental Retardation and Substance Abuse Services (Virginia) |
| <b>AS</b> – Asperger Syndrome  | <b>DOC</b> – Dept. of Corrections (Virginia)   |
| <b>ASD</b> – Autism Spectrum Disorder  | <b>DOE</b> – Dept. of Education (Virginia)   |
| <b>ASFA</b> – Adoption and Safe Families Act of 1997 (U.S.)  | <b>DRS</b> – Dept. of Rehabilitative Services (Virginia)   |
| <b>ATOD</b> – Alcohol, Tobacco and Other Drugs   | <b>DSM-IV</b> – <i>Diagnostic and Statistical Manual (Mental Disorders), Fourth Edition</i>          |
| <b>BB-BS</b> – Big Brothers-Big Sisters  | <b>DSH</b> – Deliberate Self-harm  |
| <b>BH-MCO</b> – Behavioral Health Managed Care Organization  | <b>DSS</b> – Dept. of Social Services (Virginia)   |
| <b>BHA</b> – Behavioral Health Authority   | <b>DUI</b> – Driving Under the Influence   |
| <b>BHO</b> – Behavioral Health Organization  | <b>EA</b> – Emergency Assistance   |
| <b>BHRS</b> – Behavioral Health Rehabilitative Services  | <b>EAP</b> – Employee Assistance Program   |
| <b>BIP</b> – Behavior Intervention Plan  | <b>EBT</b> – Electronic Benefits Transfer  |
| <b>BPT</b> – Behavioral Parent Training  | <b>ECT</b> – Electroconvulsive Therapy   |
| <b>CAFAS</b> – Child and Adolescent Functional Assessment Scale  | <b>EDNOS</b> – Eating disorders not otherwise specified  |
| <b>CAM</b> – Complementary and Alternative Medicine  | <b>EPSDT</b> – Early and Periodic Screening, Diagnosis, and Treatment                                |
| <b>CAST</b> – Childhood Asperger Syndrome Test   | <b>ESL</b> – English as a Second Language  |
| <b>CASA</b> – Court Appointed Special Advocate   | <b>FAMIS</b> – Family Access and Medical Insurance Security Plan, Virginia’s Title XXI Plan          |
| <b>CBC</b> – Community Based Care  | <b>FAMIS CPU</b> – Application-processing unit for FAMIS (Virginia)                                  |
| <b>CBT</b> – Cognitive behavioral therapy  | <b>FAPE</b> – Free Appropriate Public Education  |
| <b>CD</b> – Conduct Disorder   | <b>FAPT</b> – Family Assessment and Planning Team  |
| <b>CDC</b> – Centers for Disease Control and Prevention  | <b>FAS</b> – Fetal Alcohol Syndrome  |
| <b>CHADD</b> – Children and Adults with Attention Deficit Disorders  | <b>FC</b> – Foster Care  |
| <b>CHINS</b> – Child in Need of Services   | <b>FDA</b> – Food and Drug Administration  |
| <b>CMS</b> – Centers for Medicare and Medicaid Services  | <b>FFS</b> – Fee for Service   |
| <b>COBRA</b> – Consolidated Omnibus Budget Reconciliation Act  | <b>FFT</b> – Functional Family Therapy   |
| <b>COLA</b> – Cost of Living Adjustment  | <b>FPL</b> – Federal Poverty Level   |
|  | <b>FS</b> – Food Stamp Service   |

## COMMONLY USED ACRONYMS AND ABBREVIATIONS *(continued)*

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| <b>GAD</b> – Generalized Anxiety Disorder  | <b>PDDNOS</b> – Pervasive Developmental Disorder not<br>Otherwise Specified  |
| <b>GOSAP</b> – Governor’s Office for Substance Abuse<br>Prevention (Virginia)              | <b>PEATC</b> – Parent Educational Advocacy Training<br>Center (Virginia)   |
| <b>HCBS</b> – Home and Community Based Services  | <b>POS</b> – Point of Service  |
| <b>HIPAA</b> – Health Insurance Portability and<br>Accountability Act (U.S).               | <b>PPO</b> – Preferred Provider Organization   |
| <b>HMO</b> – Health Maintenance Organization   | <b>PTS</b> – Post Traumatic Stress   |
| <b>I&amp;R</b> – Information and Referral  | <b>PTSD</b> – Post Traumatic Stress Disorder   |
| <b>ICF</b> – Intermediate Care Facility  | <b>PRWORA</b> – Personal Responsibility and Work<br>Intermediate Care Facility for persons with<br>Opportunity Reconciliation Act of 1996 (U.S)                    |
| <b>ICF/MR</b> – Intermediate Care Facility for Persons with<br>Mental Retardation          | <b>RAD</b> – Reactive Attachment Disorder of Infancy or<br>Early Childhood   |
| <b>ICJ</b> – Interstate Compact on Juveniles   | <b>RCF</b> – Residential Care Facility   |
| <b>ICM</b> – Intensive Case Manager  | <b>RTC</b> – Residential Treatment Center  |
| <b>IDEA</b> – Individuals with Disabilities Education Act                                  | <b>SAD</b> – Separation Anxiety Disorder   |
| <b>IEP</b> – Individualized Educational Plan   | <b>SAMHSA</b> – Substance Abuse and Mental Health<br>Services Administration   |
| <b>IMD</b> – Institute for Mental Disease  | <b>SCHIP</b> – The State Children’s Health Insurance<br>Program, Title XXI of the Social Security Act, created<br>by the Balanced Budget Act of 1997. (See FAMIS.) |
| <b>IOP</b> – Intensive Outpatient Therapy  | <b>SED</b> – Serious Emotional Disturbance   |
| <b>IPT</b> – Interpersonal Psychotherapy   | <b>SI</b> – Self-injury  |
| <b>ISP</b> – Individualized Service Plan   | <b>SI</b> – Sensory Integration  |
| <b>JCC</b> – Juvenile Correctional Centers   | <b>SOLs</b> – Standards of Learning  |
| <b>JCHC</b> – Joint Commission on Health Care (Virginia)                                   | <b>SSBG</b> – Social Service Block Grant   |
| <b>LCSW</b> – Licensed Clinical Social Worker  | <b>SSDI</b> – Social Security Disability Insurance   |
| <b>LPC</b> – Licensed Professional Counselor   | <b>SSI</b> – Supplemental Security Income  |
| <b>LPR</b> – Lawful Permanent Resident   | <b>SSN</b> – Social Security Number  |
| <b>MCO</b> – Managed Care Organization   | <b>SSRI</b> – Selective Serotonin Reuptake Inhibitors  |
| <b>MDD</b> – Major Depressive Disorder   | <b>STD</b> – Sexually Transmitted Disease  |
| <b>MDFT</b> – Multidimensional family therapy  | <b>SW</b> – Social Worker  |
| <b>MH</b> – Mental Health  | <b>TANF</b> – Temporary Assistance for Needy Families  |
| <b>MI</b> – Medically Indigent   | <b>TEACCH</b> – Treatment and Education of Autistic and<br>Related Communication Handicapped Children  |
| <b>MMR</b> – Measles-Mumps-Rubella   | <b>TDO</b> – Temporary Detention Order   |
| <b>MP-NN</b> – Middle Peninsula-Northern Neck  | <b>TMA</b> – Transactional Medical Assistance  |
| <b>MR</b> – Mental Retardation   | <b>VACO</b> – Virginia Association of Counties   |
| <b>MR/MI</b> – Mentally Retarded/Mentally Ill (dual<br>diagnosis)                          | <b>VALHSO</b> – Virginia Association of Local Human<br>Services Officials  |
| <b>MSW</b> – Master of Social Work   | <b>VDFP</b> – Virginia Department of Fire Programs   |
| <b>MST</b> – Multisystemic Therapy   | <b>VDH</b> – Virginia Dept. of Health  |
| <b>MTFC</b> – Multidimensional Treatment Foster Care                                       | <b>VHCA</b> – Virginia Health Care Association   |
| <b>NAMI</b> – National Alliance for the Mentally Ill                                       | <b>VIEW</b> – Virginia Initiative for Work not Welfare.<br>Work component of Temporary Assistance for Needy<br>Families (TANF) program.                            |
| <b>NCMHJJ</b> – National Center for Mental Health and<br>Juvenile Justice                  | <b>VIP</b> – Virginia Independence Program   |
| <b>NCSBY</b> – National Center on Sexual Behavior of Youth                                 | <b>VISSTA</b> – Virginia Institute for Social Services<br>Training Activities (VCU)  |
| <b>NIMH</b> – National Institute of Mental Health  | <b>VJCCCA</b> – Virginia Juvenile Community Crime<br>Control Act   |
| <b>OCD</b> – Obsessive-compulsive Disorder   | <b>VOPA</b> – Virginia Office for Protection and Advocacy  |
| <b>ODD</b> – Oppositional Defiant Disorder   | <b>VPCA</b> – Virginia Primary Care Association  |
| <b>OJJDP</b> – Office of Juvenile Justice and Delinquency<br>Prevention                    | <b>WIC</b> – Supplemental Nutrition Program for Women,<br>Infants, and Children.   |
| <b>PACCT</b> – Parents and Children Coping Together  | <b>WTW</b> – Welfare to Work   |
| <b>PACT</b> – Program of Assertive Community Treatment                                     |  |
| <b>PAIMI</b> – Protection and Advocacy for Individuals with<br>Mental Illnesses Act (U.S.) |  |
| <b>Part C</b> – Part C of the IDEA (federal funds for early<br>intervention services)      |  |
| <b>PCP</b> – Primary Care Pediatrician   |  |
| <b>PCPID</b> – President’s Committee for People with<br>Intellectual Disabilities          |  |
| <b>PDD</b> – Pervasive Developmental Disorder  |  |

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## 2003 SESSION

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## SENATE JOINT RESOLUTION NO. 358

*Directing the Virginia Commission on Youth, or its successor in interest, to make empirically based information concerning effective treatment modalities and practices for children available through the Internet. Report.*

Agreed to by the Senate, February 4, 2003

Agreed to by the House of Delegates, February 13, 2003

WHEREAS, upon the recommendations of the Virginia Commission on Youth's Study of Children and Youth with Serious Emotional Disturbances Requiring Out-of-Home Placement, House Joint Resolution No. 119 (2000), and the Committee Studying Treatment Options for Offenders with Mental Illness or Substance Abuse Disorders, Senate Joint Resolution No. 440 (2001), the Virginia Commission on Youth was directed to study treatment options for offenders with mental illness or substance abuse disorders, pursuant to Senate Joint Resolution No. 99 (2002); and

WHEREAS, Senate Joint Resolution No. 99 (2002) also directed the Virginia Commission on Youth to coordinate the collection and dissemination of empirically based information that identifies effective treatment modalities and practices for children, including juvenile offenders with mental health treatment needs, symptoms, and disorders; and

WHEREAS, to accomplish its work, the Commission appointed representatives to a special study committee, the SJR 99 Advisory Group, to study effective treatment modalities for children with mental disorders, and the Advisory Group met four times to receive public comment from consumers, family members, advocates, criminal justice professionals, treatment providers, academic faculty, and other experts; and

WHEREAS, in addition to the SJR 99 Advisory Group, the Commission convened a smaller clinical group, which met seven times to provide specialized expertise and guidance on the substantive aspects of the collection of evidence based treatment modalities for children and adolescents with mental health treatment needs; and

WHEREAS, the members of the SJR 99 Advisory Group and Clinical Group have acquired considerable expertise in the treatment needs of children with mental health disorders, and noted that nationally and in Virginia, increased attention has been given to children's mental health and the development of systems of care for children with serious emotional disorders; and

WHEREAS, family members, practitioners, and researchers have become increasingly aware that mental health services are an important and necessary support for young children and their families who experience mental, emotional, or behavioral challenges; and

WHEREAS, child and adolescent mental health has emerged as a distinct area for service delivery, drawing on the philosophies and practices that characterize other childhood fields, such as early intervention; and

WHEREAS, according to estimates by the Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services, each year more than 75,000 children experience the disabling symptoms of serious mental illness or emotional disturbance; and

WHEREAS, there has been a mounting interest in evaluating and developing empirically supported treatments for children in response to the noted prevalence of these problems with children; and

WHEREAS, the Commonwealth and its localities spend a substantial amount of money each year to provide mental health and substance abuse treatment services to children and adolescents, and the lack of information regarding the effectiveness of such services results in failed treatments and wasted resources; and

WHEREAS, over the past 30 years, there has been a movement calling for improvement in the "quality of evidence" in studies that claim to benefit children; and

WHEREAS, current emphasis on evidence-based practices for mental health treatments indicates that such practices promote effective use of resources, improve the clinician's knowledge, and allow for the identification of health care methods that have been evaluated for effectiveness; and

WHEREAS, increased awareness of mental health issues, the demand for the best medical treatment at affordable prices, and emphasis on evidence based practices are reasonable and justifiable consumer responses that may provide cost savings; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia Commission on Youth, or its successor in interest, be directed to make empirically based information concerning effective treatment modalities and practices for children available through the Internet. The Commission shall seek the assistance of the SJR 99 Advisory Group, the Secretary of Health and Human Resources, the Secretary of Public Safety, and the Secretary of Education in posting, maintaining, and biennially

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updating this information. Such information shall include effective, empirically based, treatment modalities and practices for children, including juvenile offenders with mental health treatment needs, symptoms, and disorders; and, be it

RESOLVED FURTHER, That agencies of the Secretariat of Health and Human Resources that deliver services to children, the Department of Education, and the Department of Juvenile Justice shall also post this information on their respective websites, provide for the dissemination of the information in as efficient and cost-effective manner as possible, and ensure access to the information by consumers, family members, advocates, mental health policy makers, and other interested persons.

The Virginia Commission on Youth, or its successor in interest, shall submit to the Division of Legislative Automated Systems an executive summary and report of its progress in meeting the directives of this resolution no later than the first day of the 2004 Regular Session of the General Assembly. The executive summary and report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

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## SENATE JOINT RESOLUTION NO. 99

*Directing the Virginia Commission on Youth, or its successor in interest, to coordinate the collection and dissemination of empirically-based information on treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders.*

Agreed to by the Senate, March 6, 2002

Agreed to by the House of Delegates, March 5, 2002

WHEREAS, each year the Commonwealth of Virginia and its localities, through the Comprehensive Services Act for At-Risk Youth and Families (CSA), spend millions of dollars to purchase services to address the emotional and behavioral problems of children and youth in Virginia; and

WHEREAS, there is no system in the Commonwealth to measure the quality or effectiveness of care received by these children and youth; and

WHEREAS, the Joint Legislative Audit and Review Commission, in its Review of the Comprehensive Services Act, Senate Document No. 26 (1998), reported that linking program and participant outcomes could provide "a meaningful tool to assess whether providers are producing the type of results required given the nature of the children they receive"; and

WHEREAS, with the exception of composite data that are reflected on the Office of Comprehensive Services' web site, which includes elements such as demographics, referral source, expenditures and number of children served through the Family Assessment and Planning Team (FAPT) process, data on individual children are not collected; and

WHEREAS, professionals and communities could benefit from information on treatment modalities and practices recognized as effective for the treatment of children with mental health treatment needs, symptoms and disorders; and

WHEREAS, to collect information on outcomes requires the development of an extensive and integrated information management system and longitudinal data collection, both of which require considerable resources; and

WHEREAS, the collection of empirically sound research on the treatment modalities and practices that have proven most effective for children and adolescents would serve as the initial step in evaluation efforts; and

WHEREAS, this research as collected could be used as a foundation for the future collection of client-specific information; and

WHEREAS, such information could be shared with entities involved in efforts to develop a policy and plan for children's improved access to mental health services, including the identification of effective models for replication; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia Commission on Youth, or its successor in interest, be directed to coordinate the collection and dissemination of empirically-based information on treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders.

An advisory committee comprised of state and local representatives from the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, Virginia Department of Social Services, Virginia Department of Medical Assistance Services, Virginia Department of Juvenile Justice, Virginia Department of Education, Virginia Department of Health, Virginia Office of Comprehensive Services, private providers and parent representatives shall assist and guide the effort of the entity directed to collect and disseminate the aforementioned information.

All agencies of the Commonwealth shall provide assistance to the entity directed to collect and disseminate such information, upon request.

The Virginia Commission on Youth, or its successor in interest, shall submit a copy of the information directed to be collected and disseminated concerning effective treatment modalities and practices for treating children, including juvenile offenders, with mental health treatment needs, symptoms, and disorders to the General Assembly through the Senate Committee on Education and Health, the Senate Committee on Rehabilitation and Social Services, the House Committee on Health, Welfare and Institutions, and to the Division of Legislative Services, no later than November 30, 2002.

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