REPORT OF THE
VIRGINIA COMMISSION ON YOUTH

# COLLECTION OF EVIDENCE-BASED TREATMENT MODALITIES FOR CHILDREN AND ADOLESCENTS WITH MENTAL HEALTH TREATMENT NEEDS

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA


## HOUSE DOCUMENT NO. 9

COMMONWEALTH OF VIRGINIA
RICHMOND
2003

# *COMMONWEALTH of VIRGINIA*

*Commission on Youth*

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November 27, 2002

TO: The Honorable Mark R. Warner, Governor of Virginia

and

Members of the Virginia General Assembly

The 2002 General Assembly, through Senate Joint Resolution 99, requested that the Virginia Commission on Youth "...coordinate the collection and dissemination of empirically-based information on treatment modalities and practices recognized as effective for the treatment of children."

Enclosed for your review and consideration is the report which has been prepared in response to this request. The Commission received assistance from all affected agencies and gratefully acknowledges their input into this report.

Respectfully submitted,

Phillip A. Hamilton
Chairman

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## I. Authority for Study

Section 30-174 of the *Code of Virginia* establishes the Commission on Youth and directs it to "... study and provide recommendations addressing the needs of and services to the Commonwealth's youth and their families." This section also directs it 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 enacted Senate Joint Resolution 99 (SJR 99) directing the Commission to conduct a study of effective treatment modalities. In particular, the Commission was 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. In fulfilling its legislative mandate, the Commission undertook the study.

## II. Members

The Effective Treatment Modalities Study has been guided by a 17-member advisory group 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 Office of Comprehensive Services, private providers and parent representatives.

Members of the Commission on Youth are:

Del. Phillip A. Hamilton, Chair, Newport News
Del. Robert H. Brink, Arlington
Del. L. Karen Darner, Arlington
Sen. R. Edward Houck, Spotsylvania
Del. Robert F. McDonnell, Virginia Beach
Sen. Yvonne B. Miller, Norfolk
Del. John S. Reid, Chesterfield
Sen. D. Nick Rerras, Norfolk
Del. Robert Tata, Virginia Beach
Mr. Steve Cannizzarro, Norfolk
Mr. Gary Close, Vice Chair, Culpeper
Mr. Marvin H. Wagner, Alexandria

## III. Executive Summary

The 2002 General Assembly, through Senate Joint Resolution 99 (SJR 99) directed the Virginia Commission on Youth to coordinate the collection and dissemination of empirically-based information that would identify the treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with

mental health treatment needs, symptoms and disorders. This initiative originated from recommendations made to the 2002 General Assembly by the Virginia Commission on Youth as part of a two-year study of Children and Youth with Serious Emotional Disturbance Requiring Out-of-Home Placement and by the Joint Committee Studying Treatment Options for Offenders with Mental Illness or Substance Abuse Disorders *(House Document 23, Senate Document 25,* respectively).

Nationally and in Virginia, there has been an increase in attention to children's mental health and the development of systems of care for children with serious emotional disorders. Family members, practitioners, and researchers have become increasingly aware of the fact that mental health services are an important and necessary support for young children and their families who experience mental, emotional, or behavioral challenges.

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 adolescents in Virginia; however, there is no system in place to measure the quality or effectiveness of care received by these children and adolescents with serious emotional disorders.

This study provides a collection of empirically sound research on the treatment modalities and practices that have proven most effective for children and adolescents with mental health treatment needs, symptoms and disorders. Additionally, this study seeks to benefit professionals, communities, parents, and other entities or individuals working with children with mental health treatment needs, symptoms and disorders by providing them with a collection of research on evidence-based treatment modalities. The information contained herein is strictly for informational purposes only 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.

The following recommendations are offered to further the effort of encouraging the use of effective treatment modalities in serving children and youth in Virginia.

**OWNERSHIP AND UPKEEP**

**Recommendation 1**

Direct the Commission on Youth or its successor, with assistance from the SJR 99 Advisory Group, the Secretary of Health and Human Resources, the Secretary of Public Safety and the Secretary of Education, to maintain, update, and make available through web technologies 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 pursuant to SJR 99. This information shall be updated biennially.[1]

[1] Recommendation 1 will be introduced during the 2003 General Assembly as a Joint Study Resolution.

**DISSEMINATION**

**Recommendation 2**

That empirically-based information on effective treatment modalities for children with mental health treatment needs, including juvenile offenders, is made available through web technologies to consumers, family members, advocates, mental health professionals, treatment providers, state and local service providers, as well as state and local policy makers and other interested stakeholders. All agencies in the Secretariat of Health and Human Resources that deliver services to children, as well as the Department of Education and the Department of Juvenile Justice, shall post this collection of empirically-based information to their web sites. Dissemination methods should be as efficient and cost-effective as possible in order to facilitate access to this information.[2]

**ENCOURAGING USE OF EVIDENCE-BASED TREATMENTS**

**Recommendation 3**

Request that the Secretary of Health and Human Resources, as well as the Department of Juvenile Justice and the Department of Education, encourage the use of evidence-based treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders.[3]

## IV. Study Goals and Objectives

The study mandate establishing the goals of this study was set forth in SJR 99, which directed the Virginia Commission on Youth to coordinate the collection and dissemination of empirically-based information that would identify the treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders. In order to meet the study mandate, issues pertinent to the study were developed by staff and the SJR 99 Advisory and Clinical Groups and approved by the Commission on Youth.

A number of issues were identified as central to this study, including:

- Challenges of translating research gained from evidence-based interventions into practice, including dissemination of information, and realignment of resources to ensure optimal implementation;
- Collection of empirically sound research on most effective treatment modalities and practices to be used as foundation for future collection of client-specific information (utilization management and outcome evaluation);

[2] The Commission on Youth, pursuant to SJR 99, is charged with dissemination during the first year, 2003. Recommendation 2 will be introduced during the 2003 General Assembly Session through a Joint Study Resolution.

[3] The Commission on Youth will send letters to the affected agencies encouraging the use of evidence-based treatments.

- Information such as this would be beneficial to plan future services and resources for the Seriously Emotionally Disturbed (SED) population and at-risk SED populations;
- Frequency of co-occurrence of at least two different disorders in children;
- Acknowledgement that there have been no significant studies comparing outcomes in treatment between two different ethnicities or cultures;
- Increasing awareness of the need to consider the system within which the child functions (the family, the school, the neighborhood etc.);
- An increased tendency to offer treatment in the context of the entire family rather than focusing on the individual child; and
- The need to make families essential partners in the delivery of mental health services.

In response to the study mandate, the Commission undertook the following activities:

1. Convened an advisory group as specified in the study mandate to determine the scope of the collection of evidence-based treatment modalities for children and adolescents with mental health treatment needs;
2. Convened a clinical advisory group to provide guidance on the substantive aspects of the collection efforts;
3. Identified parameters and limits of study, including disorders/illnesses and treatments to be addressed;
4. Determined the intended audience;
5. Identified and examined sources of evidence-based research, including effective models for replication (national, state, and local models);
6. Consolidated and organized the information into a collection of empirically sound research;
7. Prepared the information for presentation to the State Executive Council for dissemination to professionals and communities across the Commonwealth; and
8. Developed recommendations.

## V. Methodology

The staff of the Commission on Youth developed a study workplan and, following its approval by the Commission, organized an advisory and clinical group to examine the issues and provide relevant expertise in mental health disorders and treatments.

In developing the *Collection of Evidence-based Treatment Modalities for Children and Adolescents with Mental Health Treatment Needs*, the Commission employed several distinct research and analysis activities.

### A. ADVISORY GROUPS

The Commission convened an advisory group to determine the scope of the collection efforts and to guide the development of the collection and planning for the dissemination of the empirically-based information on treatment modalities. In

accordance with the study resolution, the SJR 99 Advisory Group included state and local representatives from the Departments of Mental Health, Mental Retardation and Substance Abuse Services, Social Services, Medical Assistance Services, Juvenile Justice, Education, Health, the Office of Comprehensive Services, private providers, parents and consumers. The SJR 99 Advisory Group membership list is found in the Appendix.

In addition to the SJR 99 Advisory Group, the Commission convened a smaller clinical group 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. Those persons involved in direct service or in the decision making process for the placement of children in a particular service were selected for participation in the clinical workgroup. In addition, the SJR 99 Clinical Advisory Group reviewed each chapter of the collection of treatments prepared by staff.

The Clinical Advisory Group was asked to assume the following responsibilities:

- Determine mental health disorders and other issues to be discussed;
- Identify and examine sources of evidence-based research;
- Evaluate treatments to determine whether they can be replicated; and
- Collect and organize the information into written format.

Members of this eight-member body are shown in the Appendix.

The full SJR 99 Advisory Group met four times during the course of the study. The SJR 99 Clinical Advisory Group members met six times as a separate entity.

## B. RESEARCH AND LITERATURE REVIEW

In seeking to collect empirically-based information on effective treatment modalities and practices that have proven most effective for children and adolescents, Commission on Youth staff, assisted by the SJR 99 Advisory Group, approached the wealth of current materials available. As discussed more comprehensively in the *Collection of Evidence-Based Treatment Modalities for Children and Adolescents with Mental Health Treatment Needs* as part of this report, the study sought to accomplish the first step in the actual utilization of these practices by compiling credible research of evidence-based treatments for children and adolescents with mental health treatment needs, symptoms and disorders and by making such information available to professionals, communities, parents, and other entities or individuals.

The SJR 99 Advisory Group asserted that the scope of this study be limited to only evidence-based treatments and/or promising treatments if evidence-based treatments were not available for a particular disorder. Studies and literature containing peer reviewed information were utilized as resources for this study, as suggested by the Advisory Group. Given the breadth of the disorders addressed in the Collection and the emerging data updating the field of study, Commission staff relied on Internet and library sources. The search strategy consisted of a combination of computer-based and library searches. In the computer search, various search terms were employed referring to different aspects of child and adolescent mental health. Additionally, articles were reviewed in a comprehensive analysis of studies conducted of child treatments

and the bibliographies of reviews and studies were also examined. The computer search identified countless articles which were reviewed for pertinence. A library search of mental health journals yielded further studies. Much research was discarded when it did not meet the criteria of containing peer-reviewed research or did not meet the standard for evidence-based treatments.

In the course of the study, Commission staff reviewed hundreds of source documents. These are documented for reader reference as sources following the discussion of each of the 22 disorders and corresponding treatment modalities.

Research also was conducted on other states and their service delivery mechanisms for providing mental health services to children. Service delivery models for the states of Arizona and New York were reviewed. Service delivery mechanisms for the countries of New Zealand, Canada, the United Kingdom and Australia were also examined since these countries employ evidence-based treatments for children with mental health treatment needs.

## C. DATA ANALYSIS

The SJR 99 Advisory Group maintained that the use of meta-analyses of peer-reviewed studies would be the preferred method for locating the sources of information. While there is a growing research base in this field, research in the area of children's mental health is still relatively new. Similarly, there are a limited number of studies that have been put through a rigorous peer-review. These factors posed both challenges and opportunities for staff's research of evidence-based treatment modalities for children and adolescents with mental health treatment needs.

# VI. Background

## A. HISTORY OF RESOLUTION

Senate Joint Resolution 99 was a recommendation of a two-year study of the Virginia Commission on Youth[4] and by the Joint Committee Studying Treatment Options for Offenders with Mental Illness or Substance Abuse Disorders. Specifically, the Virginia Commission on Youth adopted the following recommendation published in *House Document 23*:

> Direct the Virginia Commission on Youth to coordinate the collection and dissemination of empirically-based information that would identify the 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,

[4] The 2000 General Assembly conveyed House Joint Resolution 119 to the Commission by way of letter from the Speaker of the House of Delegates. The resolution directed the Commission to study children and youth with serious emotional disturbance requiring out-of-home placement. The Commission on Youth published two reports on this subject during a two-year study period: *House Document 49* in 2001 and *House Document 23* in 2002.

Virginia Office of Comprehensive Services, private providers and parent representatives should assist in and guide this effort.

Upon completion, client specific information on the types of services utilized for certain conditions and behaviors in Virginia should be collected. This information should be shared with entities involved in efforts to develop a policy and plan for children's improved access to mental health services as required under current biennium language (Item 323 K).

The results of the study shall be used to plan future services and resources within the Commonwealth for children with serious emotional disturbance or at risk of serious emotional disturbance; to identify effective models that could be replicated; and to identify effective means to transfer technology regarding effective programs, such as education, training and program development to public and private providers.

This recommendation was introduced as Senate Joint Resolution 99 and was adopted by the 2002 General Assembly Session. The Commission on Youth designed this study to be assisted by an advisory group, as required by the resolution, and also formed a clinical workgroup for technical support. The SJR 99 Advisory Group provided overall guidance, including direction and philosophy for the collection of evidence-based treatment modalities for children and adolescents with mental health treatment needs.

The clinical group provided support on the substantive aspects of the collection of evidence-based treatment modalities for children and adolescents with mental health treatment needs. Those persons involved in direct service or in the decision making process for the placement of children in a particular service were selected for participation in the clinical workgroup.

## B. 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 plague most adults.[5] It is now well-recognized that these disorders are not just a stage of childhood or adolescence, but a result of genetic, developmental and physiologic factors.

Research conducted in the 1960's revealed that children suffer from mental disorders.[6] It was not until the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) of the American Psychiatric Association was published in 1980 that child and adolescent mental disorders were assigned a separate and distinct section within the classification system.[7] The development of treatments, services, and methods for preventing mental disorders in children and adolescents has also gradually evolved over the past several decades.

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[5] American Psychiatric Association. (2002). *Childhood Disorders*. [Online]. Available: www.psych.org/public_info/childr~1.cfm. [June 2002].

[6] Id.

[7] National Institute of Mental Health. (2001). *Blueprint for Change: Research on Child and Adolescent Mental Health.* Report of the National Advisory Mental Health Council's Workgroup on Child and Adolescent Mental Health Intervention.

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.[8] Mental disorders and mental health problems appear in families of varying social classes and backgrounds. However, there are children who are at greatest risk due to other factors. These include: physical problems; intellectual disabilities (retardation); low birth weight; family history of mental and addictive disorders; multigenerational poverty; and caregiver separation or abuse and neglect.[9]

Woodruff et. al (1999) have indicated that, to date, child and adolescent mental health has emerged as a distinct arena for service delivery, drawing on the philosophies and practices that characterized other childhood fields, such as early intervention. With the increase in 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.[10] Family members, practitioners, and researchers are becoming 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.

## C. PREVALENCE OF MENTAL DISORDERS AMONG CHILDREN AND ADOLESCENTS

Clearly, the widespread prevalence of mental illness in children and youth has been established. According to estimates compiled by the Center for Mental Health Services, 11 percent of children in the United States have at least one significant mental illness that is accompanied by impairment in home, school or peer contexts.[11]

Although there has been an ever-increasing awareness of children's mental health issues, knowledge about treating disorders is still emerging. According to the American Psychiatric Association (APA), 12 million American children suffer from mental illness; however, only one in five receives treatment.[12]

In 1999, as reported by Jenson, the Office of the Surgeon General indicated that only 30 percent of all children with a mental or emotional disorder were receiving treatment.[13] Only one in three to five children receive any specialty mental health services. Finally, for children meeting the criteria for serious emotional disturbance, school systems are the only provider of services for 50 percent.

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[8] National Alliance for the Mentally Ill. Virginia (2002). General Information. [Online]. Available: http://www.namivirginia.org/toppage1.htm. [June 2002].

[9] U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General.* Rockville, MD.

[10] Woodruff, D.W., Osher, D., Hoffman, C.C., Gruner, A., King, M.A., Snow, S.T., and McIntire, J.C. (1999). The role of education in a system of care: Effectively serving children with emotional or behavioral disorders. *Systems of Care: Promising Practices in Children's Mental Health, 1998 Series, Volume III.* Washington, D.C.: Center for Effective Collaboration and Practice, American Institutes for Research.

[11] U.S. Department of Health and Human Services. (2001). Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. 2000. Washington, D.C.

[12] American Psychiatric Association. (2002). *Childhood Disorders.* [Online]. Available: www.psych.org/public_info/childr~1.cfm. [June 2002].

[13] Jensen, P.S. (2002). Closing the Evidence-Based Treatment Gap for Children's Mental Health Services: What We Know vs. What We Do? *Emotional and Behavioral Disorders in Youth.*

In Virginia, according to estimates by the state's Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS), each year more than 75,000 children experience the disabling symptoms of serious mental illness or emotional disturbance.[14] These prevalence rates were applied, using 2000 Census data, to Virginia's population data to extrapolate the estimated prevalence of children suffering from serious emotional disturbance. According to the census, Virginia's child and adolescent population aged 9-17 is 885,411. The prevalence with serious emotional disturbance among children and adolescents is estimated to be between 79,687 and 97,395.[15] And at least one half million Virginians have relatives with a serious mental illness.[16]

## D. 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 directly attributed to the 1999 Surgeon General's report *Mental Health: A Report of the Surgeon General.* This report includes a chapter on children and adolescents and is the first such report to reference mental health. A follow-up effort was released one year later, entitled *A Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda.* This publication set the tone for policy and research for children's mental health. Another recent federal initiative that is closely aligned to the philosophy and findings set forth in the Surgeon General's report is the 2001 NIMH *Blueprint for Change: Research on Child and Adolescent Mental Health.*

The Surgeon General's 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 the National Action Agenda, 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.[17]

The Surgeon General's Report also specifies 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,

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[14] National Alliance for the Mentally Ill. Virginia (2002). General Information. [Online]. Available: http://www.namivirginia.org/toppage1.htm. [June 2002].

[15] Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services. (2001). *Comprehensive State Plan: 2002-2008.*

[16] National Alliance for the Mentally Ill. Virginia (2002). General Information. [Online]. Available: http://www.namivirginia.org/toppage1.htm. [June 2000].

[17] U.S. Department of Health and Human Services. (2001). *Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. 2000.* Washington, D.C.

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.

Without appropriate treatment, these childhood mental disorders can lead to more serious mental disorders. Untreated childhood disorders can also be predictors of other future difficulties, such as increased potential for involvement in the juvenile justice system, the loss of custody and even placement outside of the home. Other outcomes include destructive, ambiguous or dangerous behaviors and mounting parental frustration.

The Surgeon General's efforts 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 this report's *Collection of Evidence-Based Treatment Modalities for Children and Adolescents with Mental Health Treatment Needs* section.

## VII. Findings and Recommendations

### Ownership and Upkeep

*Findings*

*The acknowledgment that children and adolescents suffer from mental illness is a relatively recent occurrence. It is now well-recognized that these disorders are not just a stage of childhood or adolescence, but a result of genetic, developmental and physiologic factors. 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. In addition, the prevalence with serious emotional disturbance among children and adolescents is estimated to be between 79,687 and 97,395.*

*Despite the prevalence of these problems with children, it is noted that there has been a shortage of studies on interventions with children in the field of children's mental health. However, in response to this limitation, there has also been a mounting interest in evaluating and developing empirically supported treatments for children. Over the past 30 years, there has been a movement calling for an improvement in the "quality of evidence" in studies that claim to benefit children.*[18] *This movement will continue with the increasing importance attributed to empirically supported treatments for children. Additional treatment interventions will be studied in various treatment settings and a more diverse population will participate in these studies, allowing for expanded knowledge in the field of children's mental health.*

[18] Christophersen, E.R., and Mortweet, S.L. (2001). Treatments That Work With Children: Empirically Supported Strategies for Managing Childhood Problems: Washington, D.C.: American Psychological Association.

Recommendation 1

**Direct that the Commission on Youth or its successor, with assistance from the SJR 99 Advisory Group, the Secretary of Health and Human Resources, the Secretary of Public Safety and the Secretary of Education, maintain, update, and make available through web technologies 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 pursuant to SJR 99. This information shall be updated biennially.**[19]

## Dissemination

*Findings*

*The field of 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. 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 that are publicly accountable.*

Recommendation 2

**That empirically-based information on effective treatment modalities for children with mental health treatment needs, including juvenile offenders, is made available through web technologies to consumers, family members, advocates, mental health professionals, treatment providers, state and local service providers as well as state and local policy makers and other interested stakeholders. All agencies in the Secretariat of Health and Human Resources that deliver services to children, as well as the Department of Education and the Department of Juvenile Justice, shall post this collection of empirically-based information to their web site. Dissemination methods should be as efficient and cost-effective as possible in order to facilitate access to this information.**[20]

## Encouraging Use of Evidence-Based Treatments

*Findings*

*One of the major goals outlined in the Surgeon General's National Action Agenda, 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 include increasing the research on proven treatments, practices, and services developed in the laboratory to assess their effectiveness in real-world settings. The evaluation of model programs that 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*

[19] Recommendation 1 will be introduced during the 2003 General Assembly as a Joint Study Resolution.

[20] The Commission on Youth, pursuant to SJR 99, is charged with dissemination during the first year. Recommendation 2 will be introduced during the 2003 General Assembly Session through a Joint Study Resolution.

*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.*

Recommendation 3

**Request that the Secretary of Health and Human Resources, as well as the Department of Juvenile Justice and the Department of Education, encourage the use of evidence-based treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders.**[21]

## VIII. Acknowledgments

In addition to the individuals who served on the SJR 99 Advisory Group and Clinical Advisory Group, the Virginia Commission on Youth extends its appreciation to the following agencies and individuals for their assistance and cooperation on this study:

*Student Intern*
Jacquelyn A. Brown

*Joint Commission on Health Care*
April R. Kees, Senior Health Policy Analyst

*Virginia Association of Health Plans*
Joy M. Bechtold, Director of Policy

*Virginia Department of Health*
James B. Vetter, Suicide and Youth Violence Prevention Consultant
Center for Injury and Violence Prevention

[21] The Commission on Youth will send letters to the affected agencies encouraging the use of evidence-based treatments.

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

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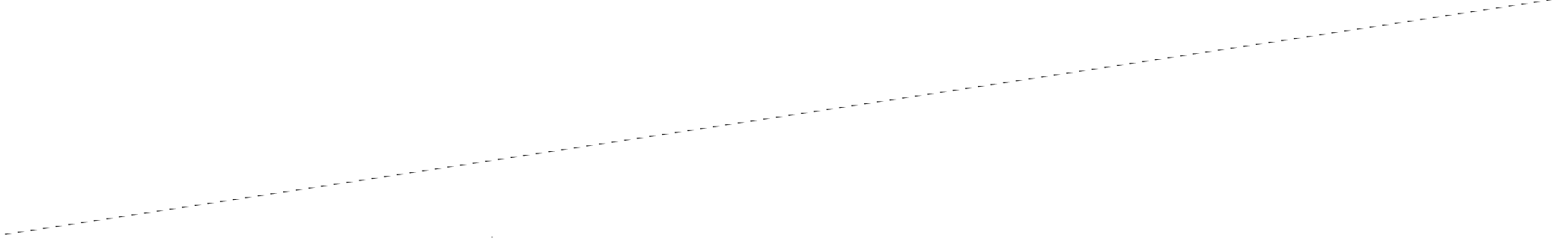
2002



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# INTRODUCTION

The 2002 General Assembly, through Senate Joint Resolution 99, directed the Virginia Commission on Youth to coordinate the collection and dissemination of empirically-based information that would identify the treatment modalities and practices recognized as effective for the treatment of children[1], including juvenile offenders, with mental health treatment needs, symptoms and disorders. This initiative originated from recommendations made to the 2002 General Assembly by the Virginia Commission on Youth as part of a two-year study of Children and Youth with Serious Emotional Disturbance Requiring Out-of-Home Placement and by the Committee Studying Treatment Options for Offenders with Mental Illness or Substance Abuse Disorders (House Document 23, Senate Document 25, respectively).

## 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 plague most adults (American Psychiatric Association, 2002). It is now well-recognized that these disorders are not just a stage of childhood or adolescence, but a result of genetic, developmental and physiologic factors.

Research conducted in the 1960's revealed that children suffer from mental disorders (American Psychiatric Association, 2002). It was not until the third edition of the DSM (the Diagnostic and Statistical Manual of Mental Disorders) 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, 2002). Mental disorders and mental health problems appear in families of varying social classes and backgrounds. However, there are children who are at greatest risk due to other factors. These include: physical problems; intellectual disabilities (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).

[1] *Child* and *children* are used throughout this document to connote *children and adolescents.*

Woodruff et. al (1999) have indicated that, to date, child and adolescent mental health has emerged as a distinct arena for service delivery, drawing on the philosophies and practices that characterized other childhood fields, such as early intervention. With the increase in 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, 1999). 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 and their families.

*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 – Prescription for Wellness, National Institute of Mental Health, 2000.

## Prevalence of Mental Disorders among Children and Adolescents

Clearly, the widespread prevalence of mental illness in children and youth has been established. According to estimates compiled by the Center for Mental Health Services, 11 percent of children in the United States have at least one significant mental illness that is accompanied by impairment in home, school or peer contexts (U. S. Department of Health and Human Services, 2001).

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

In 1999, as reported by Jenson (2002), the Office of the Surgeon General indicated that only 30 percent of all children with a mental or emotional disorder were receiving treatment. Only one in three to five children receive any specialty mental health services. Finally, for children meeting the criteria for serious emotional disturbance, school systems are the only provider of services for 50 percent.

In Virginia, according to estimates by the state's Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS), each year more than 75,000 children experience the disabling symptoms of serious mental illness or emotional disturbance (NAMI, 2001). These prevalence rates were applied, using 2000 Census data, to Virginia's population data to extrapolate the estimated prevalence of children suffering from serious emotional disturbance. According to the census, Virginia's child and adolescent population aged 9-17 is 885,411. The prevalence with serious emotional disturbance among children and adolescents is estimated to be between 79,687 and 97,395 (DMHMRSAS, 2001). And at least one half million Virginians have relatives with a serious mental illness (NAMI, 2001).

## 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 directly attributed to the 1999 Surgeon General's Report *Mental Health: A Report of the Surgeon General.* This report includes a chapter on children and adolescents and is the first such report to reference mental health. A follow-up effort was released one year later, entitled *A Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda.* This publication set the tone for policy and research for children's mental health. Another recent federal initiative that is closely aligned to the philosophy and findings set forth in the Surgeon General's Report is the 2001 NIMH *Blueprint for Change: Research on Child and Adolescent Mental Health.*

The Surgeon General's 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 the National Action Agenda, 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 Report also specifies 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.

Without appropriate treatment, these childhood mental disorders can lead to more serious mental disorders. Untreated childhood disorders can also be predictors of other future difficulties, such as increased potential for involvement in the juvenile justice system, the loss of custody and even placement outside of the home. Less serious outcomes include other destructive, ambiguous or dangerous behaviors and mounting parental frustration.

The Surgeon General's efforts 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 this report.

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**Resources**

Mental Health: A Report of the Surgeon General
www.surgeongeneral.gov/library/mentalhealth/chapter3/sec6.html

National Institute for Mental Health (NIMH)
www.nimh.nih.gov/publicat/violence.cfm

National Alliance for the Mentally Ill (NAMI)
www.nami.org/helpline/ocd.htm

American Academy of Child and Adolescent Psychiatry
www.aacap.org/clinical/Anxtysum.htm
www.aacap.org/clinical/Ptsdsum.htm
www.aacap.org/clinical/Ocdsum.htm

**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.

# Role of the Family in Treatment Programs

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 process of delivering services and 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. As a result, they often are not incorporated to the extent that would be most beneficial to the child. 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.

Freisen & 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.

It is crucial that families remain actively involved in all aspects of their child's mental health treatment. Without family involvement, it will be 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.

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

It's 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, treatment option, or are confused about specific recommendations, they should consider a second opinion.

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, 2000.

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# EVIDENCE-BASED TREATMENTS

## Overview

The field of 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). These interventions which have strong empirical support are referred to as "evidence-based" treatments.

Empirical or evidence-based treatments are interventions for which there is consistent scientific evidence showing that they improve client outcomes [National Association of State Mental Health Program Directors (NASMHPD) Research Institute, Inc. (NRI) 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 about 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 of etiology, distribution, or risk for disorders or on 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 that 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 National Institute of Mental Health, highlighted in the Surgeon General's Report on Mental Health (1999) and outlined by Burns (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). To answer questions of evidence, suggested approaches have been implemented in order to demonstrate what interventions work for particular disorders. Table 1 shows the two classifications of research studies on treatments.

*Table 1*

**Efficacy vs. Effectiveness**

| |
|---|
| **Effective** (or well-established) treatments are those that 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 condition (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. Also, 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.

One of the major goals outlined in the Surgeon General's *National Action Agenda,* 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 include increasing the research on proven treatments, practices, and services developed in the laboratory to assess their effectiveness in real-world settings. The evaluation of model programs that 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" (Corrigan, 2001). Evidence-based treatments allow patients, clinicians and families to see the difference between alternative treatment decisions and to ascertain what is the best treatment approach for a successful outcome (Donald, 2002). Treatments that are evidence-based and research driven can compliment 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 that 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 establishing treatment guidelines and practices. Professional accountability and technical complexity are two current issues 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, while 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 bring all players in the medical industry together and significantly aid in the decision making process about treatments and benefits. This can be done with a reduction in litigation and conflict due to varying interests.

The current emphasis in evidence-based medicine for mental health treatments is on promoting effective use of resources and simultaneously allowing for improvements in 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 on mental health issues and the 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 visit libraries 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 also 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. "Few people have time to visit libraries and no one has time to read, let alone prioritize and store, the thousands - even millions - of articles and books on healthcare that might one day be useful to them. Journals containing useful information are too numerous for most decision-makers to subscribe to, and may be written using too much medical jargon for many people to follow easily" (Burns et al.).

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. Also, 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 retrained, first in using the science-based treatments and secondly in making them more usable for other practitioners (Burns et al., 1999). The authors indicate that "the progression from effective treatments to their implementation and dissemination into real world practice settings is through largely uncharted scientific territory." 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). Also, 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's 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).

## 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 are discussed below:

- *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.

Source: National Institute of Mental Health, 2002.

## 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 frequently 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). The dissemination of 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, the general public will not benefit from 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 treatment into practice settings.

Several factors have been identified to account for this inconsistency. First, the training that mental health professionals receive does not require that they receive 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).

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 treatments 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 appropriate 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.

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# KEY COMPONENTS OF SUCCESSFUL TREATMENTS

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 that ensures that a child can transition with ease among the different services. The efficiency of these transitions is enhanced through the creation of effective individualized service plans. These plans are targeted to the child's specific needs and 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 in 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).

## 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."

## Culturally Competent Service Delivery

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

Culture has been found to impact 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 impact diagnosis, treatment, and service delivery decisions (U.S. Department of Health and Human Services, 2001).

These 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 in order to effectively meet 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).

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 due to the difficulties of stigma, 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 hinder 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[2]

| **Disorders/Behavior** | **Support for Treatment** | **Positive Effects -- Consistent Evidence** | **Inconsistent Evidence – Unproven** | **Comments** |
|---|---|---|---|---|
| ADHD | Evidence-based treatments | *Psychosocial*<br>Parent Management Clinical behavior therapy<br>*Pharmacological Treatments*<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 Disorders | Promising treatments | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Stress Management<br>Family Therapy<br>Group Therapy | | Medication is seldom used as a singular treatment for adjustment disorders due to the fact that child requires assistance in coping with the stressor that is causing the maladaptive behavior. |
| Anorexia Nervosa | Evidence-based treatments | *Psychosocial*<br>Nutritional rehabilitation – Considerable evidence suggests that nutritional monitoring is effective in<br>Family psychotherapy<br>Inpatient behavioral programs<br>*Pharmacological Treatments*<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. |

[2] The information contained in herein is strictly for informational purposes and is not intended to replace the advice and counsel of a medical professional.

| **Disorders/Behavior** | **Support for Treatment** | **Positive Effects – Consistent Evidence** | **Inconsistent Evidence – Unproven** | **Comments** |
|---|---|---|---|---|
| Anxiety Disorders | Evidence-based treatments | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Modeling<br>CBT and Family Component<br>CBT and Group Component<br>Systemic Desensitization<br>*Pharmacological Treatments*<br>SSRIs | Herbal Supplements which may impede diagnosis | Phobias may be treated through systematic desensitization. Parenting strategies and behavior management strategies are also effective. Medication should not be utilized as the sole intervention. |
| Binge Eating Disorder | None Available | | | The treatment goals and strategies for binge eating disorder are similar to those for bulimia nervosa except patients with binge eating disorder present difficulties associated with being overweight rather than being malnourished. |
| Bipolar Disorders | Evidence-based treatments | *Psychosocial*<br>No consistent studies on psychosocial treatments with children<br>*Pharmacological Treatments*<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. |
| Bulimia Nervosa | Evidence-based treatments | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Combined Treatments<br>Group Therapy<br>*Pharmacological Treatments*<br>SSRIs | Bupropion<br>Monoamine oxidase inhibitors (MAOIs) | Treatment includes treatment of co-occurring disorders the establishment of regular, non-binge meals and improvement of attitudes related to the disorder. |
| Fire Setting | Promising treatments | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Fire Safety Education | | Leaving the child untreated is not beneficial as children usually do not outgrow this behavior. |

| **Disorders/Behavior** | **Support for Treatment** | **Positive Effects – Consistent Evidence** | **Inconsistent Evidence – Unproven** | **Comments** |
|---|---|---|---|---|
| Major Depressive Disorder and Dysthymia | Evidence-based treatments | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Family Systemic Therapy<br>Interpersonal therapy<br>Combined Treatments<br>Group Therapy<br>*Pharmacological Treatments*<br>SSRIs | Dietary supplements such as Omega-3, St. John's Wort, SAM-e which may have harmful side effects | Most studies fail to accommodate developmental differences in children, lack of culturally sensitive perspective, little attention paid to cultural relevance of materials used. |
| Mental Retardation | Evidence-based treatments | *Psychosocial*<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. |
| Oppositional Defiant & Conduct Disorder | Evidence-based Treatments | *Psychosocial*<br>Parent Training Based on Living w/Children<br>Videotape Modeling Parent Training<br>Multisystemic Therapy<br>Anger Coping Therapy<br>Assertiveness Training<br>Delinquency Prevention Program Rational Emotive Therapy<br>*Pharmacological Treatments*<br>Stimulants<br>Mood Stabilizers | Boot camps, psychiatric hospitalization, medication trials, brief courses of cognitive-behavioral therapy | Interventions usually performed in school or home Various treatment modalities are utilized for treating these disorders as well as the comorbid disorders which accompany ODD and CD Medications must only be prescribed in conjunction with psychological interventions such as parent training. |

| Disorders/Behavior | Support for Treatment | Positive Effects – Consistent Evidence | Inconsistent Evidence – Unproven | Comments |
|---|---|---|---|---|
| Pervasive Developmental Disorders (Autism & Asperger's disorders) | Promising treatments | *Behavior Interventions*<br>Educational and Communication Focused Interventions<br>Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) approach<br>Natural Language Methods<br>Picture Exchange Communication System<br>Behavior Intervention<br>*Pharmacological Treatments*<br>Antipsychotics<br>Psychostimulants | | (TEACCH)<br>Treatment and Education of Autistic and Related Communication Handicapped Children<br>Home Based Behavior Therapy a good option<br>Low Prevalence of autism, approaches to treatment are 2 types:<br>1. Focus on specific symptoms or learning needs,<br>2. Focus on reversing the level of impairment<br>Home based behavior. |
| Schizophrenia | Evidence-based treatments | *Psychosocial*<br>Psychoeducational Therapy for the child and for the family<br>Family Intervention Programs<br>*Pharmacological Treatments*<br>Antipyschotics | | Few well conducted trials in Psychopharmacology and children the superiority of atypical over neuroleptic medication. Concerns with side effects. Best Practice guidelines based on extrapolation from adult studies or consensus of child clinicians. |
| Self Injury | Promising Treatments | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Behavior Modification<br>Addictions Model<br>*Pharmacological Treatments*<br>SSRIs | | Research continuing on psychosocial interventions and medications.<br>Hospitalization used as last resort. |

| Disorders/Behavior | Support for Treatment | Positive Effects – Consistent Evidence | Inconsistent Evidence – Unproven | Comments |
|---|---|---|---|---|
| Sex Offending | Promising Treatments | 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 | *Psychosocial*<br>Cognitive Behavioral Therapy<br>Group Therapy<br>Behavioral Therapies<br>Skills Development<br>Family Therapy<br>Multisystemic Therapy<br>Individual Psychotherapy<br>Medical detoxification | | The use of medication should only be pursued as a last resort in the dually-diagnosed population, as there is potential for misuse and overdose. |

| **Disorders/Behavior** | **Support for Treatment** | **Positive Effects – Consistent Evidence** | **Inconsistent Evidence – Unproven** | **Comments** |
|---|---|---|---|---|
| Suicide Prevention | Evidence-based Treatments | *Psychosocial*<br>Training of Emergency Room professionals for follow up and treatment<br>*Pharmacological Treatments*<br>Lithium<br>Clozapine<br>SSRIs (comorbid disorders) | Tricyclic antidepressants<br>Closely monitor medications that may increase disinhibition or impulsivity | All medications prescribed to the suicidal child or must be carefully monitored by a third party and any change of behavior or side-effects immediately reported. Education regarding benefits of follow-up treatment to reduce the reoccurrence of attempted suicide should be emphasized. |
| Tourette's Disorder | Evidence-based treatments | *Psychosocial*<br>Habit Covariance<br>Habit Reversal<br>*Pharmacological Treatments*<br>Neuroleptics | Plasma exchange or intravenous immunoglobulin (IVIG | When tics interfere with functioning and/or there are other disorders also present, medication may be helpful. |

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

| Disorders | Support for Treatment | Positive Effects – Consistent Evidence | Inconsistent Evidence – Unproven | Comments |
|---|---|---|---|---|
| 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 | | Multisystemic therapy is the most effective treatment for delinquent adolescents and MST shares strengths with other systemic family approaches. |
| School Setting Interventions | Promising Approaches | Integration of Mental Health Professionals into the School Environment<br>Creation of a "System of Care" Within the School Environment<br>Engagement of Families in Educational Planning and Services<br>Consistent Program Implementation<br>Other Environmental and Community Factors | | Classroom contingency management methods are effective in controlling the behavior of children with conduct problems, parent administered reinforcements enhance classroom contingency management. |

# MENTAL RETARDATION



## 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 approximately one percent (Developmental Disabilities Act, 1994). In Fiscal Year 1999-2000, there were 15,947 children in Virginia ages 3 to 22 in special education who had received a mental retardation diagnosis (Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services, 2001).

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). 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 - 4th 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 (APA, 1994).

The first required element of the diagnosis—intellectual impairment—is typically measured by cognitive testing instruments. Normal 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 intelligence quotient (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 71-75 are only consistent with mental retardation 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 (*DSM-IV*). 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).

The *DSM-IV* also requires that the onset of symptoms occur prior to the age of 18. It is important to note, however, that experts warn that children under the age of 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 Downs 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). "Mental retardation" should not be used interchangeably with the term "developmental disability." A developmental disability is not a medical term, but is instead a legislative concept referring to a broad spectrum of disorders, including mental retardation, epilepsy, and autism.

A diagnosis of mental retardation has been further classified based on the child's level of impairment. The four categories adopted by the *DSM-IV* are: mild (IQ between 50/55 and 70), moderate (IQ between 35 and 50), severe (IQ between 20 and 35), and profound (IQ below 20). Studies have found that 80 to 85 percent of those with the diagnosis fall within the mild mental retardation range, while less than six percent are diagnosed with severe or profound mental retardation (Szymanski & King, 1999).

## Etiology

There are numerous causes for mental retardation. Those most frequently cited include external factors such as infections, trauma, toxins, premature births and delivery problems. Genetic disorders have also been cited as a frequent cause of mental retardation, accounting for approximately one third of cases (Szymanski & King, 1999). 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). 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 percent of the cases of mild retardation and in 23 to 43 percent of severe cases, no official cause has been determined (Szymanski & King).

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 as well (Masi, 1998). Clinicians and researchers have explained this high prevalence of comorbidity 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 comorbidity of mental illnesses has been found to range from 27 to 71 percent in children with mental retardation (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. The most common comorbid conditions are described in more detail below:

- *General Medical Conditions* – Seizure disorders are present in 15 to 30 percent of individuals with severe or greater mental retardation, and motor handicaps (20 to 30 percent) and sensory impairments (10 to 20 percent) are also frequently reported (Szymanski & King, 1999).
- *Pervasive Developmental Disorders* – Mental retardation is extremely common in children with pervasive developmental disorders. Approximately 75 percent 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 percent) than in the general population (9 percent) (*DSM-IV*). Attention Deficit Hyperactivity Disorder (ADHD) is also particularly frequent, with a range of 4 to 11 percent 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 Disorder* – 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 percent 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 under-diagnosed in this population (Szymanski & King, 1999). Mentally retarded children 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 the caregivers familiar with the child and 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., in press). 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 (Sturmey, 1995).

The strength and accuracy of a diagnosis is 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., in press). These differences can lead to under-diagnosis; therefore evaluators must be comprehensive in their approach and think outside the usual formulas when diagnosing mentally retarded children (Sturmey, 1995).

## Treatment

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. The concept of community-based care flows directly from this principle, calling for the treatment and integration of mentally retarded children within the community to the maximum extent possible. No more than 10 percent 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. Those children with mental retardation who are admitted to an institutional setting typically display symptoms of severe mental disorder or intensive or massive medical needs in conjunction with mental retardation.

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 need for behaviors such as 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 Encyclopedia of Childhood and Adolescence*, 1998). All states are required by law to offer early intervention programs for mentally retarded children 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 of 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 impact the choice of treatment method 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 mentally retarded children 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., in press).

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. They 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 Plan (IEP) is developed through team evaluation and parent 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., in press).

## 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 with regards to communication skills.

There are two elements that have a significant impact on 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 mentally retarded children 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, 1985). This intervention provides a consistent and structured framework for teaching appropriate behavioral patterns, as well as adaptive life skills. It should be generalized and consistent in all settings, such as home and school, and should focus on teaching appropriate skills and behaviors to replace maladaptive behaviors, rather than merely suppressing them (Szymanski & King, 1999).
- *Social skills training* – Social skills training has also been found to improve the integration of mentally retarded children 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 mentally retarded children, and therefore research regarding its effectiveness is limited (Benson, 1992).

## Pharmacological Treatment

The effects of medication are not generally different in mentally retarded children than in 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 mentally retarded children for symptom suppression without being integrated into the overall treatment plan (Szymanski & King, 1999). 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 mentally retarded children, they are most often prescribed in patients who exhibit disruptive behavior, including self-injury, stereo-typed behaviors (such as hand or finger twisting, or complex whole body movements), and aggression (Szymanski & King, 1999).

## Unproven Treatments

The effectiveness of diet restrictions in mentally retarded patients generally is not supported by research (Szymanski & King, 1999). These types of treatments include 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 in 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.

### *Availability of Community Services and Supports*

The Arc, a non-profit organization that supports the mentally retarded, 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's Department of Mental Health, Mental Retardation, and Substance Abuse Services (DMHMRSAS) shows that service availability for mentally retarded children is also a serious concern in Virginia. In its Comprehensive State Plan, the DMHMRSAS reported that 1,858 children and adolescents were on the waiting list for mental retardation services (DMHMRSAS, 2001).

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, the 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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**Additional Resources/Organizations**

American Association on Mental Retardation
4444 North Capitol Street, NW. Suite 846, Washington, DC 2001-1512
Website: http://aamr.org.
Also, *Mental retardation: Definition, classification, and systems of supports* (1992)

National Information Center for Children and Youth with Disabilities (NICHCY)
P.O. Box 1492, Washington, D.C. 20013
1-800-695-0285 (Voice/TTY)
Email: NICHCY@aed.org; website: http://www.nichcy.org

The Arc (formerly Association for Retarded Citizens), website: http://www.thearc.org.

IDEA 1997 Statute on Implementing Regulations: contact the United States Department of Education at (202) 205-5465 or (202) 205-5507, or website: http//www.ed.gov/offices/OSERS/IDEA.

# PERVASIVE DEVELOPMENTAL DISORDERS



## 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 Information Center for Children and Youth 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 and typically onset is prior to three years of age (National Institute of Neurological Disorders and Stroke). PDDs vary from the majority of recognized mental disorders which generally appear in late adolescence or early adulthood (Volkmar, 1999).

Symptoms of PDD 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 (National Institute of Neurological Disorders and Stroke, 2001). Table 1 presents the most common characteristics of PDDs.

*Table 1*

**Characteristics of Pervasive Development Disorders**

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

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

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

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). Table 2 identifies all of the umbrella PDD categories, according to the *Diagnostic and Statistical Manual of Mental Disorders - 4th 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**

- **AUTISTIC DISORDER**
- **ASPERGER'S DISORDER**
- **RETT'S DISORDER**
- **CHILDHOOD DISINTEGRATIVE DISORDER**
- **PERVASIVE DEVELOPMENTAL DISORDER NOT OTHERWISE SPECIFIED**

Source: The National Institute of Neurological Disorders and Stroke, 2001.

## Etiology

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 currently understood that these disorders are not caused by any psychological factors (National Information Center for Children and Youth with Disabilities, 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 7-48 per 10,000 for individuals diagnosed with PDD (Stanford University School of Medicine). There also appears to be a gender difference in autism with 4 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**

- 1 in 1,000 individuals diagnosed the "classic" autism;
- 1 in 500 individuals within the autism spectrum, including PDDs; and
- 1 in 200 individuals within the autism spectrum, including PDD and Asperger's.

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 a pervasive, disorder characterized by deficits in social and cognitive functioning. However, there is a need for a classification title for this group due to the fact that most children have some form of this disorder, rather than specifically being diagnosed with autism or Asperger's Disorder (Rimland).

The intent behind the *DSM-IV* is that the diagnostic criteria not be used as a checklist, but rather as guidelines 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 citied in the National Information Center for Children and Youth with Disabilities (NICHCY), 2001]. Accordingly, a child may be diagnosed by one practitioner as having autistic disorder and by another practitioner as having PDDNOS.

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

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

*Table 4*

**Distinguishing Characteristics of Pervasive Development Disorders**

- AUTISTIC DISORDER— Impairments 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. 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.

# 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).

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).

### *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, 2001).

Since the characteristics of the disorder vary so much, ideally a child should 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).

Table 5 outlines the diagnostic criteria for autistic disorder.

### *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, 2001). Epilepsy occurs in up to 30 percent of those with autism and can amplify their symptoms. Research has been conducted which suggests that epilepsy might cause or mimic autism (CIPLA).

*Table 5*

**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.

### *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 to acquire language and the ability to learn. 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).

### *Treatments 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 treatment information discussed in the following paragraphs has been compiled and analyzed by the Autism Society of America.

> 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. that show promising results in the treatment of autistic disorder in children.

#### Educational and Communication Focused Interventions

The Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) 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 can be accommodated to fit individual needs.

#### Natural Language Methods

Significant gains for teaching language, including speech intelligibility, have occurred in the past few 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 which helps children with autism acquire functional communication skills. Children using PECS are taught to give a picture of a desired item to a communicative 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 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 for many years (Lovaas, as cited by the Autism Society of America, 2002). This best describes the basic idea of intensive behavior intervention. The goal is to teach 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).

**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).

**Pharmacological Treatments**

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. However, 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 percent of the psychopharmacological interventions used to treat children have unfortunately not been empirically tested on children (Riddle, Kastelic, & Frosch, as cited by Elder). It is not surprising that there are questions about the use of these pharmacologic interventions.

### *Unproven Treatments*

The following are treatments where there is conflicting data regarding effectiveness.

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

Source: Kallen, R. J., M.D. , 2000.

The understanding of autism has grown tremendously since it was first discovered. 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.

## ASPERGER'S DISORDER

Asperger's Disorder is a type of PDD which is characterized by problems in development of social skills and behavior (American Academy of Child & Adolescent Psychiatry, 1999). Asperger's is commonly recognized after the age of three (National Institute of Neurological Disorders and Stroke, 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 also several important differences (American Academy of Child & Adolescent Psychiatry).

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 1991, as cited in Bloch-Rosen). 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 1991, 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, and a preference for soft clothing, 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 (Journal of the American Academy of Child & Adolescent Psychiatry, 1999). Today, children who are 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 (Journal of the American Academy of Child and Adolescent Psychiatry).

### *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. One reason is 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 comorbid 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). Other disorders which may co-occur with Asperger's Disorder include obsessive-compulsive disorder, depression and ADHD (Bloch-Rosen). Comorbidity of certain conditions may vary according to the child's developmental level. For example, 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 (Journal of the American Academy of Child & Adolescent Psychiatry, 1999). Mental retardation is not usually observed in children diagnosed with Asperger's Disorder (Journal of the American Academy of Child and Adolescent Psychiatry).

### *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 with all PDDs, should be focused and individualized in order to appropriately relate to the full range of impairments (Journal of the American Academy of Child and Adolescent Psychiatry, 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 (Journal of the American Academy of Child and Adolescent Psychiatry).

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).

### *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, it is important for the parents and clinician to 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 (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 behaviors 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 alternatives or the actions of their choices (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 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 are used to treat comorbid 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 syndrome and related conditions (Brasic).

## Conclusion

Early intervention and treatment is the single most important effort 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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**Additional Resources/Organizations**

National Information Center for Children and Youth with Disabilities
P.O. Box 1492, Washington, DC 20013-1492
nichcy@aed.org - www.nichcy.org
Tel: 202-884-8200 or 800-695-0285 - Fax: 202-884-8441

National Institute of Mental Health (NIMH)
6001 Executive Blvd., Rm. 8184, MSC 9663, Bethesda, MD 20892-9663
nimhinfo@nih.gov - www.nimh.nih.gov
Tel: 301-443-4513 TTY: 301-443-8431 Depression Info: 800-421-4211;
Anxiety Info: 88-88-ANXIETY (269-4389); Panic Info: 888-64-PANIC (64-72642)
Fax: 301-443-4279

National Institute on Deafness and Other Communication Disorders Information Clearinghouse
Communication Avenue, Bethesda, MD 20892-3456
nidcdinfo@nidcd.nih.gov - www.nidcd.nih.gov
Tel: 800-241-1044 TTD/TTY: 241-1055

National Institute of Child Health and Human Development Clearinghouse
PO Box 3006, Rockville, MD 20847
NICHDClearinghouse@mail.nih.gov
www.nichd.nih.gov - Tel: 800-370-2943

MAAP Services (For Autism, Asperger's Syndrome, and PDD)
P.O. Box 524, Crown Point, IN 46308
chart@netnitco.net; www.maapservices.org/index.html
Tel: 219-662-1311, Fax: 219-662-0638

Autism Research Institute (ARI)
4182 Adams Avenue, San Diego, CA 92116
www.Autismresearchinstitute.com
Tel: 619-281-7165, Fax: 619-563-6840

Virginia Resource Page
PADDA (People with Attention and Developmental Disabilities Association)
Contact: Mr. Mark Jacob - Executive Director
11048 Warwick Boulevard, Newport News, Virginia 23601
1-888-33PADDA or (757) 591-9119
Fax 757/591-8990, Website: www.padda.org

PEATC (Parent Educational Advocacy Training Center )
6320 Augusta Drive, Suite 1200, Springfield, Virginia 22150
Phone: (703) 923-0010 or in VA only 1-800-869-6782; Fax: (703) 923-0030;
Latino Outreach: (703) 569-6200
Email: partners@peatc.org; Website: www.peatc.org

Assessment Clinic for Children with Developmental Disorders
VCU/MCV Department of Psychiatry
Virginia Treatment Center for Children
515 N. 10th Street, Richmond, Virginia 23219
Phone (804) 828-4725

Autism Society of America
7910 Woodmont Avenue, Suite 650, Bethesda, Maryland 20814-3015
Phone: (301) 657-0881 or 1-800-3-AUTISM; Fax: (301) 657-0869
Web site: http://www.Autism-society.org
Asperger Syndrome and High Functioning Autism Parents Support Group, Fairfax, Virginia
Contact: Barry Loss: 703-866-2121; bloss@erols.com

# ADJUSTMENT DISORDERS



## 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 (The Medical Center Online, 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 which 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 (The Medical Center Online, 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).

In 1997, the U.S. Department of Health and Human Services, the Substance Abuse and Mental Health Service Administration 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 percent of these children who were admitted had an adjustment disorder (Institute for Health, Health Care Policy and Aging Research, 2002).

## Classifications

The following six types of adjustment disorders are listed in the *Diagnostic and Statistic Manual, IV 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.

# Etiology

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 (The Medical Center Online, 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 their support system may influence their reaction to a stressor (The Medical Center Online). There is no evidence to indicate that biological factors influence the cause of adjustment disorders. The common thread in the cause of 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.

# Diagnosis

Children with adjustment disorder may have a wide variety of symptoms. Symptoms normally include several of the symptoms shown in Table 1.

*Table 1*

**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 very 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 (The Medical Center Online, 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 diagnosis the adjustment disorder (The Medical Center Online).

*Table 2*

**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: The Medical Center Online, 2002.

# 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.

# Promising Treatments

There have been no significant studies conducted to assess the effectiveness of treatment for adjustment disorders. However, research has been conducted regarding the age of the child and its impact upon treatment results. Andreasen and Hoenk, as cited by Benton and Lynch (2002), reported that, in children and adolescents, more serious mental illnesses were present at five years following treatment for adjustment disorders.

However, 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 (The Medical Center Online, 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.

Brief treatment using cognitive-behavioral strategies is the preferred practice (United Behavioral Health, 2002). Cognitive-behavioral approaches are used to improve age-appropriate problem solving skills, communication skills, impulse control, anger management skills, and stress management skills (The Medical Center Online, 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), suggest 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 (The Medical Center Online, 2002).

### *Pharmacological Treatment*

Medication is seldom used as a singular treatment for adjustment disorders due to the fact that 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, the researchers (Ansari & Matar) found that disappointment in relationships was the primary stressor causing the disorder. Accordingly, such issues must be addressed through psychotherapy, rather than pharmacology, to address the symptoms of the disorder.

If a clinician determines that pharmacotherapy is necessary, short-term use of anxiolytics and hypnotics may be beneficial.

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**Additional Resources/Organizations**

Horowitz, Mardi Jon Stress Response Syndromes: PTSD, Grief, and Adjustment Disorders (Hardcover - August 1997).

Noshpitz, Joseph D., Coddington, R. Dean (Editor). Stressors and the Adjustment Disorders (Wiley Series in General and Clinical Psychiatry) Paperback. 1990.

# BEHAVIOR DISORDERS

# ATTENTION DEFICIT HYPERACTIVITY DISORDER



## 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. Children with ADHD experience an inability to sit still and pay attention in class. ADHD is also characterized by multiple symptoms of persistent and dysfunctional patterns of overactivity, impulsiveness, inattention, and distractibility (Murphy, Cowan & Sederer, 2001).

*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 that 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, 2000.

Children with ADHD experience harmful consequences as a result 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 (CHADD, 2001). According to the organization Children and Adults with Attention Deficit Disorders (CHADD), with the *Diagnostic and Statistical Manual, 4th 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).

## Etiology

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 percent, 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).

Although a diagnostic test for ADHD is not available, (CHADD, 2001) there is insurmountable evidence supporting the validity of the disorder.

## Comorbidity

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

## Treatment

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 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. Studies also reveal the superiority of stimulants compared to psychosocial treatments (NIMH, 2000).

A Consensus Statement published by the National Institute of Mental Health (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.

Studies did reveal that the combination of medication and behavioral treatments usually were not much more effective then just medication alone. However, combined treatment did result in more improved social skills and accordingly, parents and teachers judged this treatment more favorably. Both medications and combined treatment was superior to routine community care, which often involved the use of stimulants.

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.

### *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.

Short-term trials of stimulants have supported the effectiveness of methylphenidate dextroamphetamine (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.

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 in children be clear as to what the treatment targets are for a particular medication so that it can be maintained if it is successful and stopped if it is not effective.

## Unproven Treatments

There is a long history of a number of other interventions for ADHD. These include: dietary replacement, exclusion, or supplementation; various vitamin, mineral, or herbal regimens; biofeedback; perceptual stimulation; and a host of others. Some of the dietary elimination strategies showed intriguing results, suggesting the need for future research. 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, ranging from no data to well-controlled trials.

## 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 the accurate information from the inaccurate. Relatives, teachers and caretakers need to understand that ADHD is neurobiological and 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 are now 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). Maximizing positive outcomes under these laws is possible with caregiver involvement.

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

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**Additional Resources/Organizations**

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Children and Adults with Attention Deficit Disorders (CHADD)
8181 Professional Place, Suite 201, Landover, MD 20785
CHADD National Call Center (800) 233•4050; Business (301) 306•7070 FAX (301) 306•7090
*http://www.chadd.org*

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University of Virginia Health Sciences Center
*http://www.med.virginia.edu/medicine/clinical/pediatrics/devbeh/adhdlin/home.html.*

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# OPPOSITIONAL DEFIANT & CONDUCT DISORDERS



## Introduction

Although it is normal for both children and adolescents to exhibit some type of oppositional behavior as they mature, some children and adolescents may 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 that are diagnosed with attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), and conduct disorder (CD).

Typically, children who suffer from these mental health disorders display behavior that is disturbing, potentially dangerous as well as disruptive (Boesky, 2002). However, this section will specifically address ODD and CD since these two disorder 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, 4th Edition, (DSM-IV),* as cited by Loeber (2002), the essential features of ODD are recurrent pattern 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, 2002).

There has been much debate on the degree that ODD and CD relate to 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**

**Behavior disorders as a category are, by far, the most common reason for referrals to mental health services for children and adolescents.**

**Oppositional Defiant Disorder (ODD)**

- ODD is reported to affect between 2 and 16 percent of children (Medical Center Online, 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 percent 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: The Mental Health Online, 2002.

# Oppositional Defiant Disorder (ODD)

ODD is 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 toward 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 that does not involve major antisocial violations (Christophersen & Mortweet, 2002).

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, 2001). ODD is not diagnosed if conduct disorder is present (SAMHSA, 1998). The diagnostic criteria for ODD are listed in Table 2.

*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, 2002.

# 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).

According to research compiled by Christophersen & Mortweet (2002), 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 subtypying may result in CD being over inclusive and also associated with other mental disorders.

Children diagnosed with CD have more difficulty in areas of academic achievement, interpersonal relationships and drugs and alcohol use (Boesky, 2002). They also are 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 percent of children with three or more CD symptoms at age 15 were self-reported frequent offenders a year later, compared with 17 percent of children with no CD symptoms. Also, according to Murphy (2001), 25 to 40 percent 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*.

*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 to 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 years.

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, 2002.

## 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, 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.

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 versus two separate mental health disorders. Most children with CD begin with ODD-like behaviors (Kazdin, as cited in Boesky). 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.

## Etiology

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 the 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. However, there is no one attributable 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, other times, coexisting conditions have been found to exacerbate behavioral problems.

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

## 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, 2002). Children who develop CD often show signs of these disorders at an earlier age.

There is evidence of developmental ties between ODD and ADHD (Lavigne, 2001). Also, the onset of CD is occurs earlier in boys diagnosed with ADHD (Loeber, 2000). Studies have determined that, in 92 percent 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).

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

Loeber (2000) conducted a literature review of the comorbidity of CD and found that comorbid conditions in girls with CD are relatively predictable. He asserted that in general, adolescent girls, compared with boys, 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.

## Diagnosis

The accurate diagnosis of disruptive disorders requires a multimethod assessment involving the consideration of conclusions reached by two different assessment methods (Christophersen & Mortweet, 2001). Also, 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.

# 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 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 is certain forms of group therapy that uses behavioral therapy techniques.

Murphy (2001) states 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. Also necessary to consider are the other comorbid disorders that accompany CD that also 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 conduct disorder are taught limit setting, consistency and other behavioral techniques. Medication is only used to treat comorbid ADHD or moods disorder but not for 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 conduct disorder 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 which 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 are also proven effective and 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 have been proven successful in reducing problem behaviors and are particularly effective with children diagnosed with ODD. 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). The following is a description of these two techniques:

> *Living With Children* – 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 as 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 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 Hengyeler; 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.

**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 and antidepressants may also be prescribed to youth experience feeling of depression or 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.

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

As stated by Christophersen & Mortweet (2002), 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 with comorbid disorders. Medications must only be prescribed 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 in order 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).

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Riley, D.A. *The Defiant Child: A Parent's Guide to ODD.* Taylor Pub: 1997.

Samenow, S.E. *Before It's Too Late.* Times Books: 1999.

**Additional Resources:**

Child, Adolescent and Family Branch Center for Mental Health Services
5600 Fishers Lane, Room 18-49, Bethesda, Md. 20857
Phone: (301) 443-1333 or (800) 789-2647.

# MALADAPTIVE BEHAVIORS

# SEXUAL OFFENDING



## Introduction

Sex 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). Sexual offending is not a disorder per se, but is rather a behavioral problem that can have some disorders linked to it.

Juveniles who perpetrate sex 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 sex 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). Juvenile sexual offending is not more prevalent in any one race or culture.

## Characteristics of Juvenile Sexual Offending

Sexual and physical abuse, child neglect, and exposure to family/domestic violence are associated with juvenile sex offending (Center for Sex Offender Management, 1999). Exposure to pornography has also been cited, but studies examining whether pornography exposure leads to juvenile sex

offending have been inconclusive (OJJDP, 2001). Likewise, the association between substance abuse and juvenile sex offending has not been fully established (Center for Sex Offender Management).

*Table 1*

**Characteristics of Sexually Abusive Juveniles**

| |
|---|
| Typically adolescents, age 13 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. |
| 20-50% have histories of physical abuse. |
| 40-80% have histories of sexual abuse. |

Source: Center for Sex Offender Management, December 1999.

# 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 disorders; and
- difficulties with impulse control and judgment.

# Treatment

Funding problems and ethical issues have made it difficult to conduct controlled outcome studies on the treatment of juvenile sex offenders. However, a number of encouraging clinical reports have been published. While these studies are not definitive, they support the belief that the majority of sexually abusive juveniles are open to, and can benefit from, treatment (Center for Sex Offender Management, 1999).

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

### *Multisystemic Therapy*

Multisystemic therapy (MST) is an intensive family and community-based treatment that addresses the multiple factors of serious antisocial behavior in juvenile abusers. Treatment can involve any combination of the individual, family, and extra familial (e.g., peer, school, or neighborhood) factors. 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).

In perhaps the best controlled study to date, MST was compared to individual therapy in the outpatient treatment of 16 adolescent sex 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

(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 percent for sexual offenses and 25 percent for non-sexual offenses, while those juveniles receiving individual therapy had recidivism rates of 75 percent for sexual offenses and 50 percent for non-sexual offenses (Hunter, 2000).

### *Residential Sex 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 sex offender treatment. Residential treatment 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 808 juveniles participating in residential sex offender programs within Virginia's juvenile correctional centers, the recidivism rate based on re-arrests for sexual offenses was 4 percent (with an average time post-release of 4½ years). The projected recidivism rate for sexual offenses was 7.7 percent, when based on all juveniles reaching the 10-year post-release mark (Waite et al., 2002). 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 which are based on their compliance with parole rules and application of material they learned in treatment.

### *Controversial Treatments*

Some areas of practice are considered ethically and legally controversial and may create special problems for juvenile sex 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.

## Promising Approaches to Intervention

The following is a review of issues essential to the development of successful community-based and residential treatment programming for sexually abusive juvenile.

### *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. Research on adult sex offender supervision utilizes these management strategies: intensive supervision and sex 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 yet known 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 more 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 review, 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 and 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.

Providers have established the following as essential components of the treatment process for juveniles who commit sex 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 sex education to give an understanding of healthy sexual behavior and to correct distorted or erroneous beliefs about sexual behavior.

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# EATING DISORDERS



## Introduction

Eating disorders are a significant problem among adolescents in the United States. Currently, more than 5 million Americans are diagnosed with some form of eating disorder and, of that number, more than 85 percent had the onset of symptoms during adolescence [American Dietetic Association (ADA), 2001].

The prevalence of eating disorders has grown at an alarming rate during the last three decades, particularly among adolescent females (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. Their study indicates that these disorders are far less likely to occur in males — estimates of the male-female prevalence ratio range from 1:6 to 1:10. However, males represent 19 percent to 30 percent of the younger patient populations with anorexia nervosa, suggesting that young men are becoming increasingly vulnerable to these disorders.

Studies have also noted high prevalence rates of eating disorders among groups such as athletes, models, dancers, and performers, as well as young people who must limit food consumption due to the existence of diseases such as diabetes mellitus (ADA, 2001). 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.

## Precipitating Factors

It is often difficult to isolate the causal factors that precipitate development of eating disorders. In many cases, the symptoms are brought on by a combination of psychological, physical, emotional and cultural pressures (ADA, 2001). Psychological factors related to the disorder include low self-esteem,

feelings of helplessness, and intense dissatisfaction with appearance[American Psychological Association (APA) HelpCenter, 1998]. Furthermore, the presence of perfectionistic or impulsive traits and rigid cognitive styles have been more frequently observed in these populations (APA, 2000). In addition, factors such as dysfunctional families and relationships have been highly correlated to eating disorders (APA HelpCenter).

The American Psychiatric Association has indicated that genetics may play a role in the development of maladaptive eating behaviors. 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, 2000). Other 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 & Cowan, 2001).

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 percent of patients with anorexia and bulimia nervosa. In addition, women 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).

*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 HelpCenter (2001) and Murphy & Cowan, 2001.

# 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 weight preoccupation 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).

The onset of most eating disorders typically occurs during adolescence or early adulthood (APA, 2000). However, symptoms have been observed in patients as young as seven years of age. These

young patients frequently display obsessional behaviors and depression and are far more frequently diagnosed with anorexia than bulimia.

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 percent 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).

Clinicians should recognize, however, 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 percent per year, which is about 12 times higher than the annual death rate for all causes of death among females ages 15-24 in the general population. 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 comorbid problems 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 (APA HelpCenter, 1998).

*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: APA HelpCenter, 1998.

## General Treatment Principles

Individuals with eating disorders are among the least likely to seek treatment (APA HelpCenter, 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 (APA HelpCenter). 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 (National Institute of Mental Health, 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 percent 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.

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, 2001). 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.

The following present current research for each of the three eating disorders: anorexia nervosa; bulimia nervosa; and binge eating.

### Anorexia Nervosa

Approximately 0.5 to 3.7 percent of females suffer from anorexia nervosa in their lifetime (NIMH, 2001).

*Table 3*

**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
- Infrequent or absent menstrual periods in females who have reached puberty

Source: NIMH, 2001.

### *Treatment Methods for Anorexia Nervosa*

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 following treatment methods 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.

## 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 percent of females have bulimia nervosa in their lifetime (NIMH, 2001). There are two subtypes of bulimia: purging and non-purging (exercise and restrictive food intake). Table 4 lists the symptoms of the disorder.

### Treatment Methods for Bulimia Nervosa

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 4*

**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: NIMH, 2001.

### *Evidence-based Treatments*

The following treatments are most commonly utilized in bulimic patients:

- *Cognitive behavioral psychotherapy* – This form of individual 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* – 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 percent. Most clinicians recommend continuing antidepressant therapy for a minimum of 6 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* – Patients generally respond better to cognitive behavioral therapy than pharmacotherapy; however, the combination of these two methods has been found to be superior to either alone (APA).
- *Group psychotherapy* – Research indicates that this form of therapy has been found to have moderate efficacy. Many clinicians favor use of this in conjunction with individual psychotherapy (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 binging 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 5*

**Symptoms of Binge Eating Disorder**

| |
|---|
| • Recurrent episodes of binge eating, characterized by consuming excessive amounts of food within discrete periods of time and a sense of lack of control. |
| • Marked distress about the binge-eating behavior. |
| • The binge eating occurs, on average, at least two days a week for six months. |
| • The binge-eating is not associated with regular use of inappropriate compensatory behaviors, such as purging, fasting, or excessive exercise. |

Source: NIMH, 2001.

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

### Treatment Methods for Binge Eating Disorder

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 different medical ailments that are frequently 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.

Because binge eating disorder has only recently been recognized, little research exists on effective treatment strategies (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 will allow them to receive more accessible and appropriate treatment (Brewerton, 1997). NIMH reports that studies are currently evaluating the effectiveness of various interventions. Their research has shown that treatments which 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, the two factors that increase the likelihood of bingeing—hunger and negative feelings—are reduced, decreasing the frequency of binges.

### 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 percent), 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 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 black women 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 different 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).

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**Additional Resources/Organizations**

Harvard Eating Disorders Center - http://www.hedc.org.

National Association of Anorexia Nervosa and Associated Disorders - http://www.anad.org.

National Eating Disorders Association - http://www.nationaleatingdisorders.org.

National Institute of Mental Health (NIMH) - http://www.nimh.nih.gov.

# JUVENILE FIRESETTING



## 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 annually and thousands of needless injuries and deaths.

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" (USFA/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/FEMA).

Federal Bureau of Investigation statistics for 1995 show that juveniles accounted for 52 percent 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*

**Facts on Juvenile Firesetting**

- Juveniles account for half of all people arrested for arson.
- In 1997, juvenile firesetting accounted for more than 280 deaths and 2,400 injuries annually
- The annual property loss, as well as the cost of providing protection from these fires easily reached more than $250 million.

Source: National Association of State Fire Marshals, 2001

## Etiology

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 examples 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).

Researchers are attempting to gather data about the children and their families that are firesetters, the 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 in order to both understand this behavior and in order to design effective interventions for this behavior.

According to the United States Fire Administration, 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 percent of all children have engaged in fire play. These children 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/FEMA, 1997).

### *Profile of a Firesetter*

According to Slavkin, while only 10 percent 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. Firesetters also engage in property destruction and crimes of physical aggression, such as forcible rape (11 percent), nonviolent sexual offenses (18 percent), vandalism (19 percent), and arson (35 percent) (Williams, as cited in Slavkin, 2000). 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 tends to escalate with age, with the "bigger the child, the bigger the fire" (Little, 1998). The average age of the firesetter is 11 (Little, 1998). The majority (80 percent) 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/FEMA, 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 feature many juvenile firesetters exhibit is that of poor school work performance. Depending upon the age group, they may also have a history of truancy, disruptive behavior or hyperactivity (Little, 1998). Poor relationships with peers and the inability to form close friendships is another common feature among juvenile firesetters. They tend to be social misfits. They lack assertiveness and can be easily manipulated and vulnerable to others. Some statistics show sexual abuse in both males and females is another 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 and cues with fire, 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. 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 (USFA/FEMA, 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 compared to hospitalized children with no history of firesetting (USFA/FEMA). Moreover, these children were less socially skilled, more aggressive, and presented with learning disabilities (USFA/FEMA).

## Elements of Effective Treatments

Seven components common to effective juvenile firesetter programs have been identified and are described below (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.

## Promising Treatment Approaches

There is no single identified treatment that is effective for treating this behavior. However, many treatments utilized 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 great effect in the long-term than a brief visit from 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/FEMA, 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/FEMA).

## 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/FEMA, 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/FEMA). 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/FEMA). In addition, consideration should be given to ensure that the juvenile does not pose a risk to others and the public safety is protected.

### *Treatment in a Residential Facility*

Many programs will not admit a juvenile with a history of firesetting for fear that the child will burn the facility (USFA/FEMA, 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/FEMA, 1997). Certain foster homes can be classified as "intensive" foster homes to allow for these difficult types of placements (USFA/FEMA). 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/FEMA). 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/FEMA).

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/FEMA, 1997).

### *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/FEMA, 1997).

Dr. David Kolko at the University of Pittsburgh Medical Center has successfully treated firesetters in an inpatient treatment setting (USFA/FEMA, 1997). Intensive individual, group, and family counseling with a cognitive treatment approach is utilized. This treatment approach challenges the child's rationalizations behind the firesetting behavior. A skills based approach is employed with particular emphasis placed on providing interpersonal and problem solving skills (USFA/FEMA).

## Ineffective Treatments

It is important to acknowledge that while simple curiosity of fire is normal, firesetting is not and that 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, Juvenile Fire Setting, 2002). Accordingly, the problems must be dealt with to prevent the fires from increasing in number and intensity. Also, past notions of burning the child to make them cease the undesired behavior is unfounded and shown to have no benefit (Waupaca Area Fire District, Juvenile Fire Setting).

## 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 requires 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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**For further information, see the following sources:**
International Association of Arson Investigators. http://www.fire-investigators.orginterFIRE VR www.interfire.com.

National Juvenile Firesetter/Arson Control and Prevention Program publications, contact OJJDP's Juvenile Justice Clearinghouse at 800–638–8736.

FEMA's Fax-On-Demand at 202–646–FEMA; or consult the U.S. Fire Administration's home page on the World Wide Web at http://www.usfa.fema.gov/.
Office of Juvenile Justice and Delinquency Prevention U.S. Department of Justice Juvenile Justice Clearinghouse 800-638-8736

U.S. Fire Administration Federal Emergency Management Agency http://www.usfa.fema.gov.

USFA/FEMA RESOURCE LIST
Primary Prevention School Curriculum and Programs

*CTW'S Fire Safety Project*
*Sesame Street Fire Safety Resource Book*
Contact: Children's Television Workshop
1 Lincoln Plaza
New York, NY 10023
(212) 595-3456

*Learn Not to Burn*
Contact: National Fire Protection Assn.
1 Batterymarch Park, P.O. Box 9101
Quincy, MA 02269
(617) 770-3000

*Knowing About Fire*
Contact: Paul Schwartzman
National Fire Service Support Systems
20 North Main Street
Pittsford, NY 14534
(716) 264-0840

*The Juvenile Crime Prevention Curriculum*
Contact: Public Relations Department
The St. Paul Companies
385 Washington Street
St. Paul, MN 55102

*Follow the Footsteps to Fire Safety*
Contact: City of St, Paul
Department of Fire and Safety Services
Fire Prevention Division
100 East Eleventh Street
St. Paul, MN 55101
(612) 228-6203

*Project Open House*
Contact: Richard A. Marinucci
Farmington Hills Fire Department
28711 Drake Road
Farmington Hills, MI 48331-2525
(313) 553-0740

*Fire Safety Skills Curriculum*
Contact: Judy Okulitch
Program Manager
Office of the State Fire Marshal
3000 Market Street, NE, #534
Salem, OR 97310
(503) 378-3475

*Kid 's Safe Program*
Contact: Fire Safety Education Curriculum for Preschool Children
Oklahoma City Fire Department Public Education
820 N.W. 5th
Oklahoma City, OK 73106
(405) 297-3314

# SELF INJURY



## Introduction

Self injury (SI), also called self mutilation or cutting, is a highly stigmatized emotional disorder. According to Focus Adolescent Services (FAS) (2001), approximately one percent of Americans suffer from SI. While SI can occur in people regardless of age, gender, ethnicity, or socioeconomic status (FAS), much of the discourse is centered on adolescents, as this behavior tends to begin during adolescence (Boesky, 2002). However, 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, as quoted in Martinson).

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). 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, Boesky). For some, the production of pain is a component of the tension relief, while for others the blood-letting is what becomes necessary to gain a sense of relief.

*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 quoted in Martinson.

Research has shown that SI is seldom an attempt at suicide. While some believe it 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." 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 (FAS). There are, however, clusters of peer group acceptance of this behavior.

# Etiology

Studies have shown that physical or sexual abuse and trauma are commonly associated with SI. A 1991 study found that exposure to sexual or physical abuse, emotional or physical neglect, and chaotic family conditions during childhood, latency, and adolescence strongly predicts 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. A 1994 study by Zweig-Frank et al. found no association among abuse, dissociation, and SI among patients diagnosed with borderline personality disorder (Martinson, 1998).

### *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 (1993, as cited by Martinson) defines an invalidating environment as one in which the communication of private feelings is met by erratic, inappropriate, or extreme responses. That is, expressing 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 and self-distrust and feelings of "I never mattered."

### *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. (1987), Birmaher et al. (1990) 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 include Borderline Personality Disorder, Mood Disorders, Eating Disorders, Obsessive-Compulsive Disorder, Post-Traumatic Stress Disorder, Dissociative Disorders, Anxiety and/or Panic 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).

# 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, 1997 as cited in Martinson). Current approaches to the successful treatment of SI relies heavily on teaching children and adolescents new ways of coping with stressors so that underlying painful feelings can be dealt with (Martinson). Also, it is helpful for the mental health provider to assess whether there are any comorbid disorders and ascertain any implications this 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, 2002). There is a need for further study in order to ascertain evidence-based treatments that have proven effectiveness. Efficacy of treatment interventions for SI 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).

### *Promising Treatment Approaches*

Treatment for SI may depend on the combination of dangerous behaviors which the child displays. Treatments shown to have promising results include the following:

*Cognitive Behavioral Therapy* - 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, 1995, as cited in Jones, 2001).

*Behavior Modification* - Behavior modification may be used to eliminate some behaviors while establishing others (Jones). Psychodynamic therapy may be used to identify the lack of attachment (Hughes, 1998, as cited in Jones).

*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, 1997, as cited in Jones).

### *Therapy Principles*

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, 1995, as cited by the Suicide Information & Education Centre, 2001).

### *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 so far 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.

***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, 1999, as cited in SIEC). 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).

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# TOURETTE'S DISORDER



## 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.). The diagnosis of Tourette's disorder is generally made before the child's 18th birthday. However, the symptoms of Tourette's disorder generally appear between 5 and 10 years of age, and usually begin with mild, simple tics involving the face, head, or arms (The Medical Center Online, 2002). 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 (The Medical Center Online).

In all patients diagnosed with Tourette's disorder, sudden, explosive outbursts of behavior are reported in approximately 25 percent of patients, but with such outbursts occurring more frequently in children than 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*

**Facts about Tourette's Disorder**

- Tourette's disorder is a tic disorder.
- It is rare and more commonly found in males by a ratio of 3:1.
- When diagnosing Tourette's disorder, Wilson's and Huntington's diseases must be ruled out.
- It is treated with patient/family support and maybe high-potency neuroleptics.

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 (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 type of activity is called coprolalia (Murphy et al., 2001). However, only 15 percent of all patients diagnosed with Tourette's disorder manifest this symptom (Tourette Syndrome Association, 2002). The natural course of Tourette's disorder varies and although Tourette's disorder

symptoms can be very mild or quite severe, the majority of cases fall in the mild category (The National Institute of Neurological Disorders and Stroke, 1999).

## 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 phonic tics must have been present for at least one year (The National Institute of Neurological Disorders and Stroke of the National Institutes of Health, 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 (The National Institute of Neurological Disorders and Stroke).

## Etiology

Tourette's disorder is highly hereditary, with evidence supportive of genetic transmission (Murphy et al., 2001). However, no clinical studies have been performed to link the gene.

Further 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 (The Medical Center Online, 2002). A parent has a 50 percent chance of passing the gene to a child (NAMI, 2002). However, 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 (The Medical Center Online).

*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.

## Comorbidity

According to the National Alliance for the Mentally Ill (NAMI) 40 percent of children and adolescents who have Tourette's disorder also have attention problems. Thirty percent have academic difficulties. In fact, it is thought that approximately 50 percent of children with Tourette's disorder meet criteria for attention deficit hyperactivity disorder (ADHD). However, most have a normal intelligence and do not usually have primary learning disabilities. Some—25 to 30 percent—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.

## 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 specifically target treatment interventions.

The development of a child diagnosed with Tourette's disorder may proceed normally and there may be no need for treatment (The Medical Center Online, 2002). However, if tics interfere with functioning or school performance or other disorders also 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 (The Medical Center Online).

When symptoms interfere with functioning, medication can effectively improve attention span, decrease impulsivity, hyperactivity, tics, and obsessive-compulsive symptom. However, behavioral interventions may also be useful for tics and symptoms associated with any co-occurring disorders (NAMI, 2002).

### *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 syndrome symptoms have an exacerbation of symptoms (Bagheri).

> *Habit covariance* - refers to behaviors which, 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. Treating habit disorders must be implemented by a service provider with adequate training in order to be effective.
>
> *Habit reversal* – may be effective in treating symptoms associated with Tourette's disorder. Habit reversal focuses on awareness, motivation, correction and prevention. Treating habit disorders must be implemented by a service provider with adequate training in order to be effective.
>
> Source: Christophersen & Mortweet, 2001.

### *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 percent 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).

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, according to Bagheri, the use of several drugs or medicines together in the treatment of Tourette's disorder should be minimized, especially in children (Bagheri). Table 3 shows different pharmacotherapy used with symptoms associated with Tourette's disorder.

*Table 3*

**Pharmacotherapy of Tourette's Disorder**

| | |
|---|---|
| **Tics** | |
| Neuroleptics | Clonidine |
| Haloperidol | Other Drugs |
| Pimozide | Botulinum Toxin* |
| Fluphenazine | |
| Others | |
| **Obsessive Compulsive Disorder** | |
| Clomipramine | Sertraline |
| Fluoxetine | |
| **Attention Deficit Hyperactivity Disorder** | |
| 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.

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) has 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).

## Other Important Treatment Elements

It is important to realize that simple inattention or hyperactivity by itself is not sufficient for diagnosis.

## Cultural Considerations

In other countries, the prevalence of Tourette's disorder is similar to that seen elsewhere. However, the understanding of the disorder varies significantly in that tic symptoms are not considered to be a problem and are not usually mentioned to physicians (Mathews, 2001). Families consider the tics to be bad habits, and health care professionals, when consulted, often feel likewise. In Latin America countries such as Costa Rica, tics and obsessive symptoms presented by children with Tourette's disorder may be considered to be 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 from 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, DSM-IV and similar diagnostic criteria are not always adequate for purposes of identifying Tourette's disorder as a true mental health disorder. Such views certainly impact diagnosis and treatment.

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www.aafp.org/afp/990415ap/990415f.html.

Children and Adults with Attention Deficit/Hyperactivity Disorders (CHADD):
8181 Professional Place, Suite 201, Landover, MD 20785
CHADD National Call Center (800) 233- 4050 - Business (301) 306-7070
FAX (301) 306-7090
www.chadd.org

Information about obsessive-compulsive disorder is available from the Obsessive-Compulsive Foundation, Inc. (OCF)
90 Depot St., P.O. Box 70 - Milford, CT 06460-0070 - telephone: 203-878-5669

Modifications for Students with Tourette Syndrome, Attention-Deficit Disorder and Obsessive-Compulsive Disorder
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Tourette Syndrome Association, Inc.
42-40 Bell Blvd., Bayside, NY 11361 - Telephone: 718-224-2999.
www.tsa-usa.org

Tourette Syndrome Net
www.tourettesyndrome.net

Tourette's Syndrome Association Greater Washington DC Chapter (Silver Spring, MD)
Serving Maryland, Virginia, West Virginia, and Washington DC
Toll Free: 877-295-2148 or: 301-681-4133 - e-mail TSAGW@aol.com

# ANXIETY DISORDERS



## Introduction

Anxiety disorders are those disorders that cause children to feel frightened, distressed and uneasy for no apparent reason. Although most children have fears and worries through their childhood 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 present, an anxiety disorder may be present.

Anxiety disorders are one of the most common mental health problems that children encounter. The combined prevalence of anxiety disorders is higher than almost all other mental disorders of childhood and adolescence (Costello, as cited by the U.S. Department of Health and Human Services, 1999). Comprehensive reviews of epidemiological studies reveal that in children between the ages of 6 and 17 years old, anxiety disorders occur in as many as six to eight percent of the population (Christophersen & Mortweet, 2001). Other estimates state that five to 20 percent of children will be diagnosed with some type of anxiety disorder (The Medical Center Online, 2002). Children with anxiety disorders have a strong risk factor for anxiety disorders in adulthood (Christophersen & Mortweet). Also, many adults report that their problems with anxiety stemmed from childhood and adolescence (Ollendick & King, 1998). Table 1 describes characteristics of anxiety disorders.

## Etiology

There is little information available regarding the causes of anxiety disorders. Much attention has been on the risk factors for developing an anxiety disorder in childhood (Christophersen & Mortweet, 2001). Although studies have indicated that children are more likely to develop an anxiety disorder if their caregivers have anxiety disorders, 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]. High levels of anxiety or excessive shyness in children aged six to eight may be indicators of a developing anxiety disorder (NAMI).

*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.

There are several biological factors which are thought to cause or contribute to the development of anxiety disorders. In 2002, researchers at the National Institute of Mental Health (NIMH) noted that the development of some cases of obsessive-compulsive disorder occur following infection or exposure to streptococcus bacteria. As with many mental disorders, there has been a genetic predisposition shown in the development of these disorders (Center for the Advancement of Children's Mental Health, 2000).

*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

Because children display and react to symptoms of anxiety differently, diagnosis can be difficult. It is imperative to ascertain whether the behavior exhibited by the child is an anxiety disorder or is simply the method the child has chosen to respond to the stressor. Any attempt to define anxiety disorders in children must be considered along with what constitutes normal anxiety. The first clearly recognizable stage of anxiety usually occurs when babies are about seven to nine months of age when the child is able to begin to distinguish individuals (Huberty, 2002). Such anxiety behavior is normal and age appropriate. The presence of an anxiety disorder may be detected when children experience confusion and distortions of perception which are not related to the child's age and development. Service providers must take care in distinguishing anxiety and how it reflects the child's cognitive development.

King and MacFarlane, as cited in Winder et al. (2002) cite studies which revealed that both the number and the intensity of fears experienced by children decline with age. Also, certain fears appear

to be more common at particular ages. Furthermore, they point to a preponderance of evidence suggesting that girls exhibit a greater number of fears than boys. The intensity and number of fears, however, may vary within different age groups.

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 (2000), the service provider, in diagnosing anxiety disorders in children, should also ensure that the child meets the appropriate *DSM-IV* diagnostic criteria (*Diagnostic and Statistical Manual of Mental Disorders-4th Edition*) and identify those which may be particularly pertinent to children and adolescents. Furthermore, the service provider must be familiar with normal developmental patterns associated with anxiety in order to determine if the child's behavior can be attributed to an anxiety disorder or whether the behavior can be explained by the child's developmental stage. Assessing anxiety is rather complicated, so assessment may require a multi-method, multi-setting, and multi-trait approach. There are many methods of assessment and not all may be needed or easy to utilize in particular situations, so approaches should emphasize objective measurement techniques.

## Categories

There are several anxiety disorders defined in the *DSM-IV*, which characterizes the symptoms that children experience with an anxiety disorder. 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 (SAD)* — 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).
- *Obsessive-compulsive Disorder (OCD)* — OCD is characterized by 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 of this disorder occur after experiencing a trauma such as abuse, natural disasters, or extreme violence. Symptoms include nightmares, flashbacks, the numbing of emotions, depression, being easily startled and feeling angry, irritable, and distracted (NAMI).
- *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. Common symptoms for children and adolescents with social phobia are sensitivity to criticism, trouble being assertive and low self-esteem (NAMI).
- *Generalized Anxiety Disorder*—Chronic, exaggerated worry about 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

Because anxiety does not always follow a normal developmental pattern, it can be particularly difficult to classify and diagnose as a mental disorder. Furthermore, it is also very likely to be comorbid with many other disorders. As noted by Huberty (2002), when more than one diagnosis was given for mental health disorders in children, anxiety disorders were identified in 50 to 75 percent of the cases. Studies have revealed anxiety disorders to be comorbid with attention deficit disorder, conduct disorder, depression, and dysthymia. Moreover, it has been found that anxiety appears to precede depression and conduct disorders preceded depressive disorders.

Additional findings by Huberty (2002) relate to the relationship of anxiety to depression. Children who are given either diagnosis are likely to show symptoms of the other disorder. Thus, singular diagnoses of anxiety or depression are difficult to obtain. Accordingly, some differences have been found between these disorders and may prove helpful in understanding the comorbidity between these disorders. Findings include that depressed children demonstrate a more negative attitude and a greater inclination for anger and impulsivity. Moreover, depressed children were more difficult to manage than children having anxiety disorders.

*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, 1997.

## 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 which are in the best interests of the child (Huberty, 2002).

Most of the treatments discussed are considered to be 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 to be effective in a practice setting.

### *Behavioral Interventions*

#### Cognitive Behavioral Therapy

According to Christophersen and Mortweet (2002), probably one of the most well-established treatments for treating children with an anxiety disorder is cognitive-behavioral therapy (CBT). CBT involves teaching children to deal with their fears by modifying the way they think and behave by

practicing new behaviors. The use of CBT has been shown to be effective in addressing anxiety in children and focuses on how children learn to be anxious and the contingencies in their environment. Like behavioral therapy, cognitive-behavioral therapy teaches children to react differently to the situations that trigger anxiety symptoms. This form of treatment differs from the behavioral therapies, in that greater focus is placed on showing children how to control thoughts that are linked with anxiety (Center for Advancement of Children's Mental Health at Columbia University, 2000).

**Behavioral Therapy**

Another promising treatment for childhood anxiety disorders, as noted by the Center for Advancement of Children's Mental Health at Columbia University (2000) is behavioral therapy. Behavioral therapy focuses on changing specific actions and uses several techniques to decrease or stop unwanted behavior. One technique discussed trains children to perform a special breathing exercise, diaphragmatic breathing, to reduce anxiety. This has been shown to help children who hyperventilate. Another form of behavioral therapy—exposure therapy—gradually exposes the child to what frightens them and seeks to assist the youngster cope with his or her fears.

**CBT and Family Intervention**

A more recent study added a parent component to CBT, which significantly enhanced reduction in post-treatment anxiety disorder compared with CBT alone (Barrett et al., as cited by the U.S. Department of Health and Human Services, 1999). According to Christophersen and Mortweet (2002), a more structured parent training component was added to treat children with anxiety disorder, generalized anxiety disorder and social phobia. The content of this treatment focuses on behavior management strategies such as ignoring anxious behavior, parental awareness of responses and training in problem-solving skills. Treatments were effective in reducing anxiety symptoms of children. Older children did not demonstrate a huge difference in improvement with this addition to CBT but the family component enhanced the effectiveness of the CBT based on the parental ranking of symptoms and especially for younger children.

**CBT and Group Interventions**

According to Christophersen and Mortweet (2002), another promising variation of CBT is CBT combined with group treatment. This intervention is described to contain contingency management and self control strategies. Studies on this intervention have shown that participating children demonstrate significant improvements during the study period. Preliminary evidence of group CBT for preventing anxiety disorders has also been reported. This treatment approach, as discussed by Christophersen and Mortweet, has been employed with positive findings and programs utilizing the *Group Coping Koala Workbook* developed by Barrett, have been found to be particularly effective.

**Systematic Desensitization**

As researched by Ollendick and King (1998), systematic desensitization has gained support as being effective for treating fears and fearful behaviors. The premise of systematic desensitization is that fears and phobia are conditioned responses that can be unlearned through specific counter-conditioning procedures. Systematic desensitization consists of three components (Ollendick and King):

- Induction of an incompatible response (relaxation);
- Development of a fear-producing hierarchy: and
- The systematic graduated pairing of items in the tier with the incompatible response.

The basic assumption of this technique is that a fear response can be inhibited by substituting an activity which is antagonistic to the feared response. This is achieved by exposing children, in small

graduated steps, to the feared situation while they are performing a relaxing act. Studies have shown systematic desensitization to have some promising results in overcoming phobias.

**Modeling**

As noted by Ollendick and King (1998), modeling involves learning through the observation of others. It entails demonstrating nonfearful behavior in the anxiety-provoking situation and showing the child a more adaptive response. Modeling, which can be filmed or performed in a live "face to face" scenario, is useful in assisting children in learning how to approach the feared object or situation (Ollendick and King). Results have been shown to be efficacious, especially for participant modeling, which involves allowing the child physical contact with the models and the object causing the fear. Modeling is especially beneficial in allowing the child to adapt their behavior. Studies have shown participant modeling to have greater efficacy than systemic desensitization and filmed/live modeling.

### *Pharmacological Treatment*

Pharmacotherapy can be effective in treating anxiety disorders in children but should not be used as the sole intervention, but in conjunction with behavioral or psychotherapeutic treatments (American Academy of Child & Adolescent Psychiatry (AACAP, 1997). The practice guidelines offered by the American Academy of Child & Adolescent Psychiatry acknowledge the limits in the state of pharmacological treatments of anxiety for children and suggest that they be utilized in combination with other treatment modalities (Christophersen & Mortweet, 2002).

Research conducted to date has indicated that selective serotonin reuptake inhibitors (SSRIs) may provide effective treatment of separation anxiety disorder and other anxiety disorders of childhood and adolescence (U.S. Department of Health and Human Services, 1999). Advantages of SSRIs include the low side effects profile and relative safety in overdose, although passing anxiety and agitation may occur when commencing or increasing the dosage of SSRIs (AACAP, 1997).

Tricyclic Antidepressants (TCAs) are also thought to show promising results in treating children with anxiety disorders but studies assessing TCA have had conflicting results (AACAP, 1997). There are case reports of children and adolescents with panic disorder receiving benefit from TCAs.

The practice guidelines offered by the American Academy of Child & Adolescent Psychiatry (1997) also cite several studies indicating that benzodiazepines may be useful in treating anxiety disorders, especially for anxiety associated with medical procedures in children. Clinical trials indicate that benzodiazepines are tolerated by children with minimum adverse effects. Sedation, drowsiness, and decreased mental acuteness are the most common side effects. Due to the potential for tolerance and dependence in children, it is recommended that benzodiazepines be used for only short-term treatment.

## Unproven Treatments

Some treatments are either thought to be unproven in treating anxiety disorders or there is no research supporting the effectiveness of treatment. For example, there are virtually 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, 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). Furthermore, the benefits of herbal and over-the-counter substances are considered to be unproven; use could actually impede the diagnosis of anxiety disorders because many of these substances may contain ingredients that cause symptoms of anxiety (Chen et al., 2002).

## Cultural Considerations

In some cultures, the understanding of anxiety disorder varies significantly. Many cultures do not use the word anxiety. For example, according to research conducted by Chen et al., (2002), the Asian culture does not use anxiety to describe the symptoms accompanying the disorder and Asian patients utilize terminology such as "being nervous" or "being tense." In many cultures, including the Asian culture, representing oneself as being anxious is viewed as a sign of weakness. Therefore, the Asians culture may describe symptoms of anxiety with physical complaints since physical problems are seen as more legitimate. Furthermore, the authors purport, cultures may understand their symptoms as a defined illness that is known only to the specific native culture. This can make diagnosis complex. Also, there are Chinese pharmaceuticals which may cause or worsen anxiety because they may cause increased heart rate, blood pressure and sweating. Proper evaluation is necessary to ensure that anxiety symptoms are not side affects caused by these types of pharmaceuticals. Moreover, because anxiety disorders and the symptoms that accompanying the disorders are shaped by culture beliefs, it may take a thorough assessment to identify anxiety disorders in children.

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**Additional Resources/Organizations**

Anxiety Disorders Association of America
8730 Georgia Avenue, Suite 600 - Silver Spring, MD 20910, USA
Main (240) 485-1001 - Fax (240) 485-1035
http://www.adaa.org/

Obsessive-Compulsive Foundation, Inc. (OCF)
90 Depot St., P.O. Box 70 - Milford, CT 06460-0070
Telephone: 203-878-5669

Anxiety & Depression Resource Organization - www.freedomfromfear.com

Anxiety-Panic.com- www.anxiety-panic.com

Anxiety-Panic-Stress - www.anxiety-panic-stress.com

National Anxiety Foundation - lexington-on-line.com/nafdefault.html

Obsessive-Compulsive Foundation -www.ocfoundation.org/indright.htm

PTSD Support Services - www.ptsdsupport.net/

National Center for PTSD - www.ncptsd.org/

Social Phobia/Social Anxiety Association - www.socialphobia.org/

# MOOD DISORDERS



## Introduction

Children, like adults, experience depression and accompanying feelings of frustration, disappointment or sadness. According to a 1992 report from the American Psychiatric Association (APA), studies of children aged six to twelve reveal that one in ten may suffer from depression. 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.

*Table 1*

**Prevalence of Mood Disorders in Children**

- 7-14% of children will experience an episode of major depression before the age of 15.
- 20-30% 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, 8-100 will commit suicide.

Source: Brown, 1996.

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).

According to Brown (1996), the following behaviors may be associated with mood disorders in children:

In 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.

In 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.

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 (2002) 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 also 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 a less severe type of depression but still involves long-term, chronic symptoms that are not disabling, but keeps a child from functioning well or from 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 4 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 of touch with reality. Moreover, hallucinations or delusions may accompany mania.

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.

## Etiology

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 percent 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, 2000). However, research did not shed light on whether the ties between family history and childhood onset of depression stems 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).

According to Murphy et al. (2001), neurotransmitter evidence points to "abnormalities amine neurotransmitters as medicators 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.

## Risk Factors

According to research compiled by the National Institute of Mental Health (NIMH) (2000), boys and girls during childhood 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 National Institute of Mental Health include:

- Stress
- Cigarette smoking
- A 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
- 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, or 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.

The general population diagnosed with bipolar disorder has an alcoholism rate and a drug-abuse rate that is triple the remainder of the population (Kluger & Song, 2002). Accordingly, this must be considered in the evaluation of children for bipolar disorder.

*Table 2*

**Comorbidity and Mood Disorders**

- 40 to 70 percent of depressed children and adolescents have comorbid psychiatric disorders.
- 30 to 80 percent have comorbid anxiety disorders.
- 10 to 80 percent have disruptive disorders (ADHD, oppositional defiant disorder).
- 20 to 40 percent involve substance abuse.

Source: Yaylayan, 2002.

# Diagnosis

Proper assessment of mood disorders in children is essential in early intervention and treatment. According to the American Association of Child and Adolescent Psychiatry (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 psychiatric assessment of depressed children is difficult and 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.

# 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 percent 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 suicide section of this report.

### *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 percent of depressed children relapse within two years, and 70 percent 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, 1999). 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.

***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 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 by the Surgeon General (1999) reveals that 20 to 40 percent 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 American Academy of Child and Clinical Psychiatry (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 is 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 American Academy of Child and Clinical Psychiatry recommends children continue therapy for at least six to twelve months to help achieve remission and also to prevent recurrence.

## Evidence-based Treatments

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 service providers 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).

## Treatment of Major Depression

The National Institute of Mental Health (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 Interventions***

In an analysis of research of major depressive disorder and children, Burns et al. (1999) found that cognitive behavior therapy was efficacious in rendering positive treatment results. Further findings revealed that interpersonal therapy and systemic family therapy showed promise in the treatment of children with major depressive disorder.

The following treatments for major depressive disorder are outlined in the American Academy of Child & Adolescent Psychiatry (1998) in their Clinical Practice Parameter for Depressive Disorders. This research indicated that a combination of cognitive-behavioral therapy, interpersonal therapy, psychodynamic psychotherapy, and other psychotherapies be utilized together to effectively treat the child.

Psychodynamic psychotherapy can assist the child in understanding themselves, altering maladaptive patterns of behavior, and interacting more effectively with others. Cognitive behavioral therapy (CBT) is based on the premise that depressed patients have cognitive distortions in how they view themselves, the world, and the future, and that these cognitive distortions contribute to their depression. However, clinical studies found a high rate of relapse, suggesting the need for continuation of treatment. Interpersonal therapy centers on problem areas of grief, as well as personal roles, disputes, role transitions, and personal difficulties. It has been shown to be useful in the acute treatment of adolescents. Cognitive behavioral therapy, interpersonal supportive therapy and systemic family therapy can be effectively provided in both an outpatient or inpatient setting (Burns et al., 1999).

Among the numerous studies reviewed in the Surgeon General's Report (1999), one form of CBT—coping skills—was judged probably efficacious. However, it was not classified as "well-established" because it was not studied by another source outside team of investigators. 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.

***Pharmacological Treatment***

According to the U.S. Department of Health and Human Services (1999), formerly the medications selected for treating major depression in children were the tricyclic antidepressants. However trials in children did not indicate that tricyclic antidepressants were efficacious, unlike trials performed on adults. 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. Recent research indicates that young people with depressive disorders may respond more favorably to SSRIs than to tricyclic antidepressants. There is great promise with several types of cognitive-behavioral therapies for children along with efficacy being established that supports the utilization of SSRIs.

## Treatment of Bipolar Disorder

***Psychosocial Treatments***

According to analyses conducted by Columbia University (2001), there are no consistent positive trials of psychosocial treatments for children diagnosed with bipolar disorders. 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 then the manic episodes and also more difficult to treat (Kutcher).

***Pharmacological Treatments***

According to 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 that 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. 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 American Academy of Child & Adolescent Psychiatry (1998), research supports the use of psychotherapies of varying degrees including psychoanalysis, psychodynamic psychotherapy, and cognitive behavioral therapy. 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

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 are not always safe and may also 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 that were middle-class and Caucasian. Moreover, little attention was paid to the relevance of the materials and interventions employed in treatment as well as the education of the clinician regarding cultural differences.

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**Additional Resources/Organizations**

American Foundation for Suicide Prevention - www.afsp.org
(888) 333-2377

Child & Adolescent Bipolar Foundation
1187 Wilmette Ave., P.M.B. #331 - Wilmette, IL 60091
Fax (847) 920-9498 - 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
Telephone: 312-642-0049; 1-800-826-3632
FAX: 312-642-7243 – http://www.ndmda.org

National Institute of Mental Health
Information Resources and Inquiries Branch
6001 Executive Boulevard, Room 8184, MSC 9663 - Bethesda, MD 20892-9663
Telephone: 301-443-4513; FAX: 301-443-4279
TTY: 301-443-8431; FAX: 301-443-5158
Website: www.nimh.nih.gov - E-mail: nimhinfo@nih.gov

Pediatric Mood Disorders Clinic
Virginia Treatment Center for Children
515 North 10th Street, P.O. Box 980489 - Richmond, Virginia 23298-0489
Phone: 804.828.3137; Fax: 804.828.9493

Additional Resources Online

National Alliance for the Mentally Ill - http://www.nami.org/helpline/depression-child.html

National Institute for Mental Health
http://www.nimh.nih.gov/depression
http://www.nimh.nih.gov/publicat/depchildmenu.cfm
http://www.nimh.nih.gov/publicat/depchildresfact.cfm

American Academy of Child & Adolescent Psychiatry
http://www.aacap.org

Vitacost Holdings, Inc. - http://www.drkoop.com/wellness/mental_health/depression

# SCHIZOPHRENIA



## Introduction

Schizophrenia is a neurodevelopmental disorder associated with deficits in cognition, affect, and social functioning (American Academy of Child & Adolescent Psychiatry, 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.). The difference in psychosis disorders from other mental disorders is 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]. The psychotic symptoms of schizophrenia— hallucinations and delusions—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 emotions, 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 (NIMH, 2001). 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).
- 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.J.L. and Lopez, A.D., 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, 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, 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, 2002).

The *Diagnostic and Statistical* Manual of Mental Disorders - *4th edition (DSM-IV)* recognizes five subtypes of schizophrenia. These are outlined in Table 2.

*Table 2*

## Subtypes of Schizophrenia

***Paranoid Type***—Paranoid delusions, frequent auditory hallucinations, affect not flat

***Catatonic Type***—Motoric immobility and excessive purposeless motor activity, maintenance of a rigid echolalia

***Disorganized Type***—Disorganized speech, disorganized behavior, flat or inappropriate affect; not catatonic

***Undifferentiated Type*** (probably most common) —Delusion, hallucinations, disorganized speech, catatonic behavior, negative symptoms but the criteria are not met for the Paranoid, Disorganized, or Catatonic Type

***Residual Type***—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

Source: Murphy et al., 2001.

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, 1999).

The diagnosis of schizophrenia, according to *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). These symptoms are described in Table 3. Children, like adults, may exhibit both the positive and negative symptoms simultaneously (Murphy et al., 2001).

*Table 3*

**Positive and Negative Symptoms of Schizophrenia**

| |
|---|
| **Positive symptoms** |
| Delusions – Often described by content |
| Hallucinations – Auditory, visual, tactile and olfactory hallucinations; voices that are commenting |
| Bizarre behavior – Aggressive/agitated, strange appearance, odd clothing and social behavior, repetitive-stereotyped behavior |
| |
| **Negative symptoms** |
| Affective flattening – Decreased expression of emotion |
| Algoia – Lack of words, including poverty of speech |
| Asociality – Few friends, activities, interests, impaired intimacy |

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 percent 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.

# Etiology

The etiology for schizophrenia is unknown, although 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 also 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., 1998 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).

The National Institute of Mental Health (2001) has studied the early onset of schizophrenia in children to obtain a better understanding of the cause of schizophrenia. The initial findings showed that children who had psychotic episodes before puberty demonstrated evidence of progressively abnormal brain development. 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 68 percent of children and adolescents with schizophrenia have some other diagnosis. 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 and/or Oppositional Defiant Disorder are the next most likely comorbid diagnoses.

Comorbid substance abuse disorder may be present in 30 to 50 percent of all children, with commonly used substances being marijuana (15 to 25 percent) and cocaine (5 to 10 percent) (Continuing Medical Education Online Monograph, 1999). 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, 1999). 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).

## 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:

- **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 dsyphoria.
- **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: American Academy of Child & Adolescent Psychiatry, 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 (American Academy of Child & Adolescent Psychiatry, 2001). Treatment recommendations are based on findings with adults because there is a lack of treatment research for 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).

## Evidence-based Treatments

The Agency for Healthcare Research and Quality (AHRQ) and the National Institute of Mental Health (NIMH) 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 (ACT) (National Alliance for the Mentally Ill, 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., 1998 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.). 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.

### *Pharmacological Treatment*

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 the possibility to live a 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 (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 (American Academy of Child & Adolescent Psychiatry, 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 (American Academy of Child & Adolescent Psychiatry).

Clozapine is one of these 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 (American Academy of Child & Adolescent Psychiatry, 2001). Such side effects include excess weight gain (NIMH, 2001) and seizures (American Academy of Child & Adolescent Psychiatry).

*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., 1998a, 1998b, as cited and edited by the U.S. Department of Health and Human Services.

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, 1999).

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.

***Using Antipsychotics in Children***

Parameters set forth by the American Academy of Child & Adolescent Psychiatry (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.
- 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.

***Other Pharmacological Agents***

The American Academy of Child & Adolescent Psychiatry (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, 1998, 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 American Academy of Child & Adolescent Psychiatry (2001):

1. **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.

2. **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., 1987; Cazzullo et al., 1989; Mari & Streiner, 1994; McFarlane, 1997, 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).

***Other Treatments***

Specialized educational programs and/or vocational training programs may be indicated for some children to address the cognitive and functional deficits associated with the illness (American Academy of Child & Adolescent Psychiatry, 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 (American Academy of Child & Adolescent Psychiatry, 2001). 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 (American Academy for Child and Adolescent Psychiatry, 2001).

## 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 are 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 by 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 provide 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 American Academy for Child and Adolescent Psychiatry (2001) reports electroconvulsive therapy being used for children with treatment 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). For certain 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, 1999).

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 white 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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**Additional Resources/Organizations**

E-Mental-Health.com - www.emental-health.com/Schizophrenia.asp

Open the Doors - http://www.OpentheDoors.com

National Alliance for Research on Schizophrenia and Depression (NARSAD)
http://www.mhsource.com/narsad/

Schizophrenia Society of Canada - http://www.schizophrenia.ca/english.html

The Schizophrenia Home Page – http://www.schizophrenia.com

Understanding Schizophrenia: A Guide for People with Schizophrenia and Their Families
http://www.mhsource.com/narsad/schiz.html

National Alliance for Research on Schizophrenia and Depression (NARSAD)
60 Cutter Mill Road, Suite 404, Great Neck, NY 11021
Phone: 1-800-829-8289 and (516) 829-0091; Fax: (515) 487-6930
Web Address: http://www. Mhsource.com/narsad.html

National Institute of Mental Health
Information Resources and Inquiries Branch
6001 Executive Boulevard, Room 8184, MSC 9663 - Bethesda, MD 20892-9663
Telephone: 301-443-4513; FAX: 301-443-4279
TTY: 301-443-8431; FAX: 301-443-5158
Website: www.nimh.nih.gov - E-mail: nimhinfo@nih.gov

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# Co-occurrence of Substance Abuse and Mental Illness



## 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, 2002). 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. Children and adolescents who become chronic users often develop psychological or social problems, and studies of males entering the juvenile justice system confirm the link between substance use and crime (Gehshan, 2001).

## Co-occurrence of Substance Abuse and Mental Illness

According to epidemiologic data, nine percent of adolescent females and 20 percent 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 percent 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 percent (Kessler et al., 1996).

While the co-occurrence of substance abuse and mental health disorders often exacerbates personal difficulties, research indicates that individuals with a dual diagnosis are less likely to seek treatment. Findings from the Epidemiological Catchment Area (ECA) study found that only 37.4 percent of the individuals identified with co-occurring substance abuse and mental health disorders in Virginia sought treatment in inpatient or ambulatory service sectors during a one-year period (Bourdon et al., 1994).

This comorbidity and lack of adequate treatment has significant clinical implications. First of all, these children and adolescents are particularly vulnerable to relapses and rehospitalizations (Mueser et al., 1997). Studies have found that the most common cause of psychiatric relapse today is the use of alcohol, marijuana, and cocaine, and the most common cause of relapse to substance use is an untreated psychiatric disorder (SAMHSA, 1997). In addition, individuals with co-occuring 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.

## Etiology

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 percent 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 falling 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 insure that a child will abuse alcohol or other drugs. However, the high statistical coincidence occurring in these two conditions is very 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 ADHD and learning disorders in combination with depression and anxiety disorders carry a high risk of having a co-occurring substance use disorder. 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 among children and adolescents diagnosed with substance abuse disorders.

Research has not conclusively established 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 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). Thus, addiction must be viewed as a multifaceted disease.

*Table 1*

**Psychiatric Disorders Commonly Found Among Children and Adolescents Diagnosed with Substance Use Disorders**

**Behavior Disorders**
- Conduct Disorder
- Oppositional Defiant Disorder
- Attention Deficit/Hyperactivity Disorder

**Mood Disorders**
- Major Depressive Episodes
- Dysthymic Disorder
- Bipolar Disorder

**Anxiety Disorders**
- Generalized Anxiety Disorder
- Social Phobia
- Posttraumatic Stress Disorder

**Eating Disorders (Bulimia Nervosa)**

Source: Bukstein, 1998.

There is also data that supports the idea that some persons who abuse alcohol especially have different brain chemistries that predisposes them to drinking (Personal Communication with Dr. Anita Everett, Inspector General for the Commonwealth of Virginia, July 2002).

According to Leshner, 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 the treatment approaches are 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). Parent 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).

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 also 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).

*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 (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.

## 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 conducting an assessment of children and adolescents suspected of co-occurring disorders, the primary goal is to determine whether the use of substances exists and whether it fits the diagnostic criteria within the *DSM-IV* 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 the clinician has 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. That is: 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 use of alcohol or other drugs

despite symptoms of tolerance and withdrawal or attempts to control the use, substance dependence is generally diagnosed. 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-occuring 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 different issues when conducting an evaluation. First of all, youths often display denial, distortion, and minimization when discussing substance use, and 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 that are specifically designed to treat co-occuring disorders, and those that do exist are relatively new. Consequently, most methods have not been objectively evaluated with children and adolescents for effectiveness (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
- The 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
- Involvement in self-help groups such as Alcoholics Anonymous and Narcotics Anonymous

The Best Prevention and Treatment Practices expert panel to the Substance Abuse and Mental Health Services Administration 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.).

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. Table 3 describes the most typical treatment settings.

*Table 3*

**Most Typical Treatment Settings For Children and Adolescents**

- ***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 prosocial 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.

*Table 4*

**Factors Influencing Choice of Treatment Setting For Children and Adolescents**

- **Motivation and willingness of adolescent and family to cooperate with treatment**
  However, treatment 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 (NIDA, 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 *percent* of facilities with a mental health focus provided dual diagnosis programs, and nearly half of substance abuse treatment facilities provided these programs (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

There are numerous methods that 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 therapy 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 (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. While this method of treatment has yet to be systematically studied in adolescents with substance use disorders, cognitive approaches show positive effects with adolescents treated for mental health disorders such as depression (Bukstein, 1998).

### *Group Therapy*

This form of therapy provides friendship, socialization, and support to youths who are recovering from co-occurring disorders. The discussion is intended to remind adolescents of negative consequences of substance use and the benefits of abstinence, and to provide advice and encouragement regarding treatment and recovery from mental disorders. Group therapies frequently take the form of self-help groups, such as the Twelve Step program, Alcoholics Anonymous, and Narcotics Anonymous. Although group therapy is a common ingredient in many integrated programs,

no consensus exists as to the optimal format, content, or goals of these groups (Mueser et al., 1997). Research is needed to evaluate the benefits of different approaches and to explore whether certain clients are likely to gain more from a particular format.

### *Behavioral Therapy*

The underlying goal of behavioral therapy is for the youth and the treatment providers to mutually identify specific problems and areas of deficit and to work to improve 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).

After 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-occuring disorders often disrupt normal skill development, treatment and rehabilitation often include assistance in developing needed skills and functions which 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).

### *Multisystemic Therapy (MST)*

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 amount of juvenile incarcerations and out-of-home placements (NIDA). However, this form of therapy has not been tested specifically in dually-diagnosed populations.

### *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 to 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. They stipulate, 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 only be prescribed to those children and adolescents who displayed psychiatric symptoms prior to the substance use, or 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 of time, typically several weeks. To date, little research has been done regarding the effectiveness of medications in adolescents with co-occuring substance use and psychiatric disorders.

### *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 of 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 of 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-occuring 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 rehospitalizations (SAMHSA, 1997).

## Contraindicated Treatments

Benzodiazepines, typically prescribed for anxiety, are almost always contraindicated in the presence of a substance abuse disorder due to their addictive properties (SAMHSA, 1997).

## 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 African-Americans are at a higher risk of relapse because they 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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# YOUTH SUICIDE



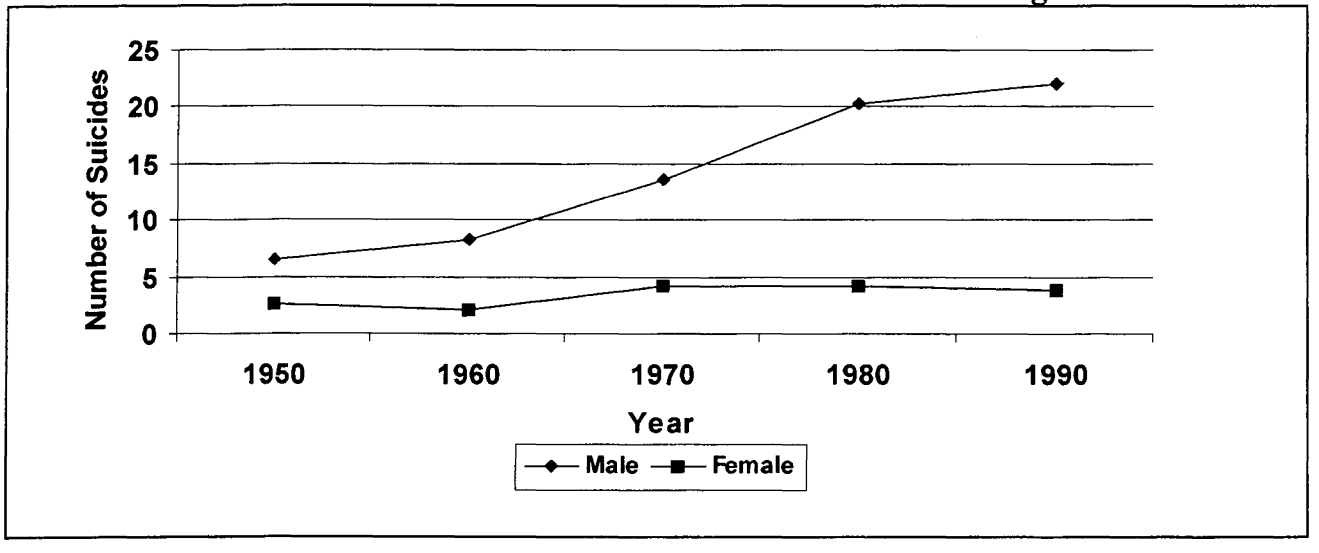
## Introduction

Suicide and suicide attempts by children and adolescents constitute a major public health problem in the United States. Suicide is the third leading cause of death, behind accidents and homicide, among adolescents (Fritz, 2001). Moreover, the middle teenage years are the period in the life cycle where the incidence of suicide attempts is the greatest (Fritz).

Over the last thirty years, there has been a sharp proliferation at the national level in the rates for both completed suicide and suicide attempts among adolescents and young adults. According to Garland and Zigler and cited by the Virginia Commission on Youth (2001), the adolescent suicide rate increased 200 percent, compared with a 17 percent increase in the general population over the last three decades. According to the National Center for Health Statistics (Virginia Commission on Youth), an average of one young person every two hours took his or her own life. Furthermore, the actual number of deaths caused by suicide is likely to be higher due to the fact that some of the deaths may have been classified as accidental. Chart 1 shows the suicide rates for persons in the U.S. ages 15 to 24.

*Chart 1*

**U.S. Suicide Rates* for Persons 15-24 Years of Age**




* Per 100,000 persons.

Source: American Association of Suicidology, 2000, as cited by the Virginia Commission on Youth, 2001.

There has been increasing attention paid to the issue of suicide and suicide prevention and, in 1999, the U.S. Surgeon General issued a "Call to Action" emphasizing the need for greater awareness on this national problem (Vetter, 2002). 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). 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.

The Virginia Department of Health conducted a study on Suicide in the Commonwealth of Virginia and the findings are discussed in the following paragraphs. The study revealed that the suicide rate for young Virginians, aged 10 to 19, had increased an alarming 32 percent since 1975. In 1998, seven Virginia children, aged 5-14, were reported to have died from suicide. Another 50 children, aged 15-19 ended their lives. Furthermore, approximately one Virginia teenager every week takes his or her own life. Chart 2 shows Virginia deaths for children and adolescents from 1950 to 1998.

## Contributing Factors in the Rise of Youth Suicide

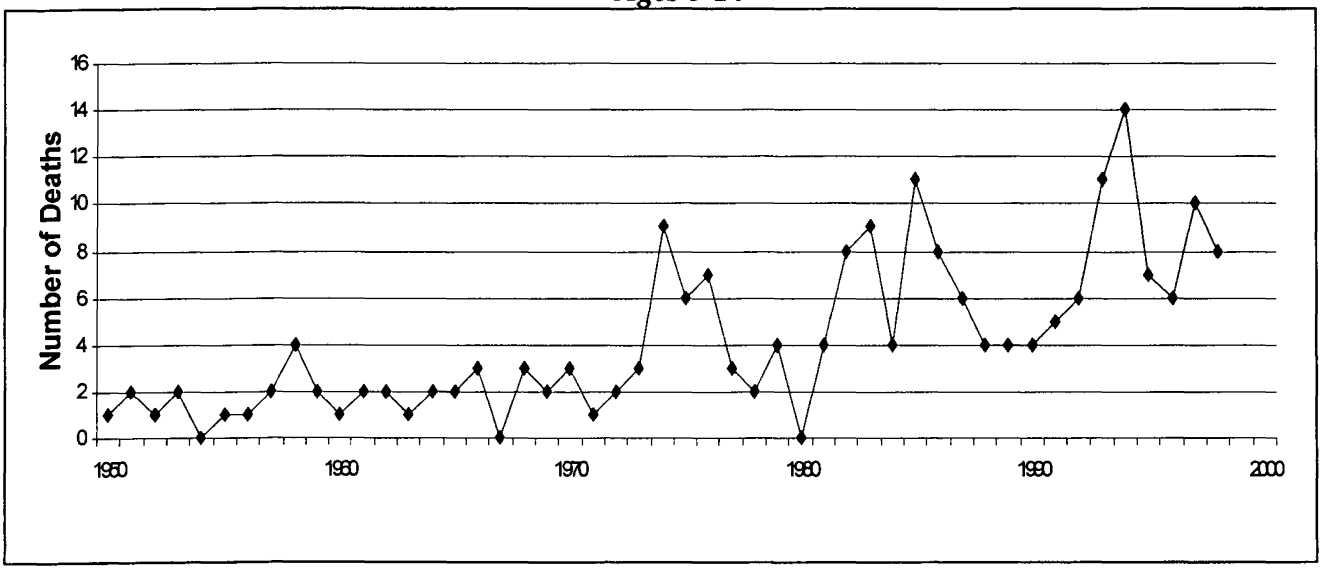
Several different factors contribute to a child or adolescent attempting or completing suicide. The American Academy of Pediatrics, as cited by the Virginia Commission on Youth (2001), identifies a number of factors which may explain the dramatic increase in youth suicide in recent years:

- It's easier to get the tools for suicide. (Boys often use firearms to kill themselves; girls usually use pills.)
- The pressures of modern life are greater.
- Competition for good grades and college admission is stiff.
- More violence is seen in the media.
- Parents may be less involved in their children's lives.

*Chart 2*

**Virginia Deaths from Suicides 1950-1998**

***Ages 5-14***




Source: Virginia Center for Health Statistics, 2000, as cited by the Virginia Commission on Youth, 2001.

Table 2 presents statistics addressing risk factors for youth suicide, as reported by the American Academy of Pediatrics, as cited by the Virginia Commission on Youth (2001).

*Table 2*

**Risk Factors for Youth Suicide**

- Suicide is much more common in adolescent and young adult males than females.
- 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.
- Mood disorders, poor parent communication, and a previous suicide attempt are risk factors for suicide in both boys and girls.
- Previous suicide attempts are more predictive in male.
- Substance and/or alcohol abuse significantly increases the risk of suicide in teenagers aged 16 and older.
- Family pathology and a history of family suicidal behavior may also increase risk and should be investigated.

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 (2001) discussed in its summary of findings that—in order to address youth suicide and the problem—one must also be made aware of the dynamics surrounding this issue. In its report, *Suicide Fatalities among Children and Adolescents in Virginia from 1994-95*, the Virginia State Child Fatality Review Team found that more than 40 percent of the children who took their lives had told someone about their intent to die (Virginia Commission on Youth). Unfortunately, for various reasons, the opportunity to intercede was lost. Other and potentially more important implications discussed in this report were that the warning signs for youth suicide were not recognized. Other factors are that the

extent of the problem was not understood, the means for conducting the act were not removed, or the family thought they could handle the problems themselves. Other contributing factors were that families may not have known where or how to get help, or that help was not available.

## Mental Health Disorders and Youth Suicide

The factors that predispose children and adolescents to complete suicide are numerous.

The Academy of Child & Adolescent Psychiatry's *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 this practice parameter:

> Awareness and acknowledgment of the various risk factors that can trigger both suicide and suicide attempts are crucial in assessing and potentially preventing suicide. Such factors include preexisting psychiatric disorders, which are considered to be both biological and social-psychological facilitating factors. More than 90 percent 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.
>
> 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 stated in a Joint Statement by the American Academy of Child & Adolescent Psychiatry & American Psychiatric Association (2001), some of the psychiatric illnesses in adolescents which include suicidal thoughts or behaviors include depression, ADHD, and bipolar disorder. 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. Also, studies conducted disclose that teenagers with bipolar disorder may have an ongoing combination of moods which may make the child at risk.

Stress events often precede adolescents' suicides; however, it is difficult to discern whether the stress is a result of the mental disorder or of events with which the child or adolescent having a mental disorder may not be able to cope (American Academy of Child & Adolescent Psychiatry, 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 (American Academy of Child & Adolescent Psychiatry).

Even the most capably trained clinician can find it difficult to differentiate between those youth who have thoughts of engaging in suicide and those youth 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 (Academy of Child and Clinical Psychiatry, 2001). However, research has provided some broad indicators about risk factors and means for assessing the risk.

## Virginia's Suicide Prevention Plan

SJR 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 Virginia 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 Centers for Disease Control and Prevention (1992):

- 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. This three-tier approach targeted prevention at varying degrees and to different audiences.

Universal prevention is the provision of needed interventions to keep communities healthy. These programs provide general awareness information and education. 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. Finally, 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.

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 Heath 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.

## 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 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 and Adolescent Psychologists (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 only occur once 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 appropriately meet the needs of the youth and to effectively treat any diagnosed mental disorders.

### *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 that have been associated with reduced suicide—lithium and clozapine (Baldessarini et al., as cited by the U.S. Department of Health and Human Services). Research into lithium, which is shown to have a significant impact on the reduction in the suicide rate, is extensive.

According to the American Academy of Child & Adolescent Psychiatry (2001), selective serotonin reuptake inhibitors (SSRIs) may be successful in reducing suicidal ideation and suicide attempts in non-depressed adults certain personality disorders. Research has shown them to be safe in children and adolescents due to their low lethality and effectiveness in treating depression in non-suicidal children and adolescents. However, it is necessary to closely monitor children and adolescents on SSRIs to insure that no new suicidal ideations are noted.

## Contraindicated Treatments

As noted by the American Academy of Child & Adolescent Psychiatry (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.

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**Additional Resources/Organizations**

Virginia Department of Health Center for Injury and Violence Prevention
James B. Vetter, Ed.M., Suicide and Youth Violence Prevention Consultant
P.O. Box 2448, 1500 E. Main St, Room 105 - Richmond, VA 23218-2448
(804) 786-2611 - fax: (804) 786-0917
http://www.preventsuicideva.org.

National Hopeline Network - 1-800-SUICIDE 784-2433 (Prevent Suicide Virginia)

American Association for Suicidology, Washington, D.C. - http://www.suicidology.org

American Foundation for Suicide Prevention, New York, New York - http://www.afsp.org

Jason Foundation - http://www.jasonfoundation.com

Kristin Brooks Hope Center and the National Hopeline Network - 1-800- SUICIDE
http://www.hopeline.com or http://www.livewithdepression.org

The Link's National Resource Center for Suicide Prevention - Atlanta, Georgia http://www.thelink.org

Organization of Attempters and Survivors of Suicide in Interfaith Service (OASSIS), Washington, DC - http://www.oassis.org

The Samaritans, Albany, New York Suicide Awareness\Voices of Education, Minneapolis, Minnesota - http://www.save.org

Suicide Prevention Advocacy Network, Marietta, Georgia - http://www.spanusa.org

Suicide Awareness Voices of Education - http://www.save.org/symptoms.html

National Strategy for Suicide Prevention - http://www.mentalhealth.org/suicideprevention/strategy.asp

American Foundation for Suicide Prevention - http://www.afsp.org

American Association of Suicidology - http://www.suicidology.org

National Alliance for the Mentally Ill - http://www.nami.org

National Depressive and Manic-Depressive Association -- http://www.ndmda.org

Suicide Awareness\Voices of Education -- http://www.save.org

Suicide Prevention Advocacy Network USA, Inc. -- http://www.spanusa.org

# Crisis Centers in Virginia Localities

***Provided by the Virginia Department of Health***
***Suicide and Youth Violence Prevention Program***

13 Virginia agencies listed by the National Hopeline Network as offering telephone crisis hotline services. These agencies and additional information can be found at http://www.preventsuicideva.org.

**CrisisLink**
Administrative Office
Arlington, VA 22207-1619
t)(703)516-6771, f)(703)516-6767
http://www.crisislink.org

**Trust: Crisis Hotline & Shelter**
404 Elm Ave.
Roanoke, VA 24016
t)540.344.4691, f)540.344.4695
Teen line: 540.982.8336

**Crisis Center**
P.O. Box 642
Bristol, VA 24203
t)540.466.2218, f)540.466.5481
540.628.7731 Washington Co.

**Contact Martinsville-Henry Co.**
P.O. Box 1287
Martinsville, VA 24114-1287
t)540.638.8980, f)540.632.6133
Teen line: 540.634.5005
540.694.2962 Patrick Co.
540.489.5490 Franklin Co.

**Concern Hotline, Inc.**
P.O. Box 2032
Winchester, VA 22601
t)540.667.8208, f)540.667.8239
540.459.4742 Shenandoah Co.
540.635.4357 Warren Co.
540.743.3733 Page Co.

**New River Valley Community Services-ACCESS Services**
700 University City Blvd.
Blacksburg, VA 24060
t)540.961.8400, f)540.961.8469
888.717.3333 toll free

**Richmond Behavioral Health Authority**
107 S. 5th St., Richmond, VA 23219-3825
t)(804)819-4140, f)(804)819-4263

**Madison House**
170 Rugby Rd., Charlottesville, VA 22903
t)804.977.7051, f)804.977.7339

**ACTS Helpline**
P.O. Box 74, Dumfries, VA 22026
t)703.368.4141, f)703.368.6544
Hours: 703.368.6544 Spanish M-F 6p-10p
Teen line: 703.368.8069

**Contact Peninsula**
P.O. Box 1006, Newport News, VA 23601
t)757.244.0594, f)757.245.4707

**The Crisis Line of the Planning Counsel**
P.O. Box 3278, Norfolk, VA 23514-3278
t)757.622.1309, f)757.622.7259

**Henrico Mental Health**
10299 Woodman Rd., Glen Allen, VA 23060
t)804.261.8500, f)804.261.8480
804.748.6356 Chesterfield Co.
804.556.3716 Goochland Co.
804.752.4200 Hanover Co.
804.598.2697 Powhatan Co.

**Contact Crisis Line Danville/Pittsylvania Cty**
P.O. Box 41, Danville, VA 24543-0041
t)804.793.4940, f)804.792.4359

**The Crisis Line of Central VA**
P.O. Box 3074, Lynchburg, VA 24503
t)804.947.5921, f)804.947.5501
888.947.9747 toll free
888.947.7277 teen talk 888.299.7277 teen talk

# SCHOOL-BASED MENTAL HEALTH SERVICES



## 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 percent of all children receive mental health services, 70 to 80 percent of this number receives that care in the school setting (The 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 and 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 adequately meet the educational needs of children with disabilities. While a discussion of the requirements of the Act 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 benefit from school and must be adequately accommodated in the school setting in order to receive the benefits of educational services.

In addition to providing the accommodations required under IDEA, schools have also 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 and Hoagwood, 2000).

However, while a broad range of school-based programs are 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 drop-out 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.

In response to these gaps in research, analysts have made greater efforts to document the components of successful school-based programs (e.g., 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, 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.

Other delivery approaches include expanding the current role of the school counselor or school psychologist to provide mental health services in school. *Table 1* shows a listing of various national delivery models.

*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 integrate 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.

# 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).

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 is 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 greater detail in the National Overview 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 and 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 and 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 disorder 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 and 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 through the use of 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 and 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.

### *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 program, Medicaid, the Comprehensive Services Act, and other local, state and federal resources. It is extremely important that the funding issues are addressed during the planning phases of program development, as underfunded, poorly-implemented programming will do little to assist these children and adolescents.

*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 and Hoagwood).
- 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 and Hoagwood).
- The most effective programs target specific behaviors and skills, e.g. depression, conduct problems, drug use (Rones and 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 and 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 and 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 and 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 and Hoagwood).

Source: Commission on Youth Graphic of Citations as Noted, 2002.

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 (SJR 99 Advisory Group Meeting, August 14, 2002).

## 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 impact the accessibility and utilization of services, and could result in substantial growth in the number of positive child outcomes.

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Woodruff, D.W., Osher, D., Hoffman, C.C., Gruner, A., King, M.A., Snow, S.T., and McIntire, J.C. (1999). The role of education in a system of care: Effectively serving children with emotional or behavioral disorders. *Systems of Care: Promising Practices in Children's Mental Health, 1998 Series, Volume III.* Washington, D.C.: Center for Effective Collaboration and Practice, American Institutes for Research.


**Additional Resources/Organizations**

Center for School Mental Health Assistance: http://csmha.umaryland.edu.


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# JUVENILE OFFENDERS



## Introduction

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).

There is a high prevalence of mental health needs among juvenile offenders. Unfortunately, an increasing number of youth with mental health disorders continue to enter and remain involved in the juvenile justice system.

## Background

It is estimated that 50 to 75 percent of incarcerated young offenders nationwide have a diagnosable mental health disorder. Moreover, while there are highly successful treatment methods which can rebuild families and provide intensive mental health services to young offenders with mental health problems, their availability is rare (Coalition for Juvenile Justice, 2000).

Estimates provided by both state and local juvenile justice facilities suggest that juvenile offenders have significant mental health treatment needs. A study by the Virginia Department of Juvenile Justice (DJJ) showed that more than 40 percent of males and almost 60 percent of females in detention homes were in need of mental health services; more than seven percent of males and more than 15 percent 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 that the rate of particular mental health disorders is, on average, higher among youth in the juvenile justice population than in the general population, as illustrated in Table 1. The descriptions of the most common psychiatric disorders seen among juvenile offenders are listed in Table 2.

Juveniles are commonly sent to juvenile justice with complex mental health and behavioral health needs. According to a national report released by the National Alliance for the Mentally Ill (NAMI), 36 percent of respondents to a nationwide survey of families who have 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: APA, 2000, as cited by Boesky, L. M., 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, L. M. (2002).

## 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 that were both involved in the system but not confined; youth incarcerated for their crimes as well as youth adjudicated to residential treatment. It appears from the study results that children at an increased risk for institutional placement will be placed roughly according to the type of primary dysfunction they evidence, with behaviorally disordered children becoming incarcerated and emotionally disordered children being placed into the state mental health system. Other factors relating to later institutional placement included chronic school truancy, prior outpatient substance abuse or mental health treatment and prior use or 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 may interfere with rehabilitation (Columbia University, 2002). The findings also indicate 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). Additional studies have shown that juvenile courts have 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).

**Promising 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 percent lower than those in untreated, control groups. Highly successful programs reduce rates of reoffense by as much as 80 percent (Coalition for Juvenile Justice, 2000).

The National Center for Mental Health and Juvenile Justice (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 focus is on treating children with serious emotional problems including the development of individualized, child-centered, family-focused, community-based, and culturally competent services (National Center for Mental Health and Juvenile Justice, 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 National Center for Mental Health and Juvenile Justice). 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).

***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, building upon youth and family strengths. Wraparound is such a system of care (NMHA, as cited by the National Center for Mental Health and Juvenile Justice, 2002).

***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 National Center for Mental Health and Juvenile Justice, 2002).

The underlying premise of MST is that the behavioral problems of children and adolescents are maintained through problematic interactions within or between one or more of these systems.

***Functional Family Therapy***

Functional Family Therapy 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 National Center for Mental Health and Juvenile Justice, 2002).

flexibly structured, culturally sensitive and accountable to families (Sexton and Alexander, as cited by the National Center for Mental Health and Juvenile Justice, 2002).

***Cognitive Behavioral Therapy***

Cognitive Behavioral Therapy 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 National Center for Mental Health and Juvenile Justice, 2002).

***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 (National Center for Mental Health and Juvenile Justice, 2002). It can be an alternative to corrections and places juvenile offenders who require residential treatment with foster families who are carefully trained to provide supervision, limits consequences and a supportive relationship. It promotes both rehabilitation and public safety (Chamberlain, 1998).

## 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 streets; and
- Strong Aftercare Treatment.

## Incarcerated Juveniles

The juvenile justice system has long been used as a security setting for juveniles with a variety of mental health issues and disorders. Youth with severe emotional problems often continue to get in trouble and end up being incarcerated for their own or society's protection. According to Dennis Waite, Ph.D., Director of Psychological Services, Virginia Department of Juvenile Justice (Personal Communication, October 29, 2002), these juveniles quite often must receive treatment in an institutional setting when their treatment needs were not addressed earlier Approximately, three to four percent of all juveniles that come before the court for criminal behavior will be incarcerated due to the seriousness of their crime or the chronic nature of their behavior (Personal Communication, Dennis Waite, Ph.D.).

The juvenile justice system is the "last stop" for juveniles with mental health disorder, especially when they are seen as untreatable or if 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).

## Conclusion

It is important to note that the juvenile justice system can neither select its service population nor refuse to accept a child based on his mental health diagnosis (Boesky, 2002). Accordingly, the juvenile justice system has become the "unofficial placement" for children with mental health disorders who are unable to access appropriate psychological and psychiatric treatment in the community (Boesky). 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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# IMPLICATIONS FOR POLICY MAKERS



## Empirically Supported Treatments for Children

Over the past three decades, there has been a clear appeal for improvements in the quality of evidence in studies for treatments that claim to benefit children (Christophersen & Mortweet, 2002). Evidence-based practices have emerged to address the rising desire for increased scrutiny and improved methods for analyzing and applying the clinical research that has been conducted and withstood rigorous scientific investigations. Rising interest in the study and utilization of evidence-based practices has spurred the evaluation of treatments that work in the field of children's mental health.

The guidelines that comprise empirical support are relatively new. Furthermore, studies are emerging that will be evaluated to determine whether particular modalities can be deemed effective and/or efficacious based on the criteria set forth by the American Psychological Association Task Force on Empirically Supported Treatments (Christophersen & Mortweet, 2002). To date, new studies have actually supplemented the current research base and emerging findings have not yet contradicted results previously published (Christophersen & Mortweet). Such information is most beneficial to clinicians responsible for treating children and especially since in the past, information about what is effective in treatment has not always been available or accessible.

In addition to the increased importance attributed to evidence-based treatments in the field of children's mental health, several issues have emerged. These include: replication of evidence-based treatments; implementation of evidence-based treatments; lack of research in cultural competency in treatment; and the shortage of mental health providers and its impact upon the field of children's mental health.

## Factors Influencing Replication

Although evidence-based treatment practices are becoming more available in the mental health field because of increasing awareness of these advancements; translating these practices and utilizing them in clinical settings continues to pose a challenge. According to the National Institute for Mental Health (NIMH) (2000), tight budgets make adoption of best practices difficult. Their implementation may require a restructuring of existing services. Furthermore, once a best practice is implemented, fidelity is the most critical element to its success. However, methods of instilling fidelity in practice settings are unproven. Evidence-based treatments usually lack their own evidence-base when it comes to effective implementation (NIMH).

Ensuring fidelity in treatment requires that components of the treatment are precisely employed. Such issues as appropriate staffing, patient ratios and a blend of suitable clinicians are crucial to ensuring successful replication of treatments (NIMH, 2000). According to Mullen (2002), fidelity of

implementation requires that the specific evidence-based practice be provided as it was tested. Too frequently, serious distortions occur during implementation because this does not occur.

## Adequate Resources

Another consideration in the implementation of evidence-based practices is adequacy of resources. Delivery settings may have concerns about their ability to incorporate evidence-based interventions into their local practice (NIMH, 2000). However, resources for the implementation and dissemination of evidence-based practices must be devoted toward the purpose. Resources for the development, training, and interpretation of clinical data must also be allotted and earmarked before such utilization can actually commence (Hayes, 2001). Additionally, measures must be employed for utilization of assessments and treatment planning as well as means to measure outcomes (Hayes). Resources and supports may need to be made available to government and private sources to support a large-scale investment in the utilization of evidence-based treatments (Mullen, 2002). However, the offset of utilizing treatments that work in children's mental health cannot be minimized.

## Training Needs

There is a definite need for clinicians to be trained in evidence-based treatments. The effective implementation of evidence-based practices in children's mental health is related not only to the willingness of the field to provide the treatments but also on appropriate training (Mullen, 2002). Training is critical since evidence-based practices are a relatively recent development. Most clinicians have only been recently exposed to the research delineating the criteria as well as the specific modalities that are classified as being empirical or evidence-based. Accordingly, most clinicians are not prepared to provide these types of treatments (Mullen). Attempts to implement a treatment without these resources may impair the treatment's proven outcomes.

Mullen (2002) asserts that a major obstacle to utilizing evidenced-based treatments is the absence of training programs for mental health service providers. Clinicians trained many years ago are unlikely to be aware of the newer, evidence-based practices. Continuing education programs may be able to fulfill the need for training (Weissman & Sanderson, as cited by Mullen). Technical assistance for clinicians as well as practice guidelines, manuals, toolkits and other forms currently used to translate evidence into practice are effective mechanisms for continuing education approaches. Furthermore, it is necessary to present the information in a concise and understandable fashion to trainers so that training curricula can be developed and amended to reflect the shift towards evidence-based treatments (Burns, et al., 1999).

## Cultural Considerations

Christophersen & Mortweet (2002) assert that, although much has been published discussing the importance of culture regarding mental health treatment, there are virtually no studies addressing specific treatment outcomes and their impact upon various cultures. Patients from different countries may be treated with identical modalities, but results have not been examined in order to understand the impact of diversity and treatment. This lack of data makes it impractical to estimate when cultural issues might impact diagnosis and treatment. However, as cited by Christophersen & Mortweet, the rapidly changing demographics in the United States make cultural competence a pertinent issue in treatment. Education revisions for mental health providers are needed so that they can order to appropriately address and serve a growingly diverse population. By the year 2050, approximately one half of the United States' population will be people of color (Hall, as cited by Christophersen & Mortweet).

Past research has not adequately considered the rising culturally diverse population. A practical awareness of cultural norms is needed in order to effectively render treatment. Research by Christophersen & Mortweet (2002) indicates that practical norms may be challenged by the varying behaviors exhibited by different cultures. Sleeping patterns, mood levels and hyperactivity are just a few of the elements that may be shaped or defined by cultural expectations. Future research must address cultural considerations in order to address the representativeness and; ultimately, improve the outcomes for the child population to be served.

## Shortage of Mental Health Professionals

The provision of evidence-based services, especially for those services that include community-based components as well as family support services, is directly dependant upon the availability of mental health professional (Moore, 2000). The continuity of providers has a significant impact on the availability of effective evidence-based services.

Mental health clinicians are needed but especially those specialists with expertise with the specific treatment modalities research has shown to be effective. Such a provider base is essential in the planning and implementation of evidence-based practices.

The following information has been taken from the Virginia Commission on Youth's Study on Emotional Disturbance Requiring Out-of-home Treatment (*House Document 23*, 2002) relating to the shortage of mental health professionals in Virginia.

The shortage of qualified mental health professionals has been identified in communities nationwide. In Virginia, fifty localities have been designated Mental Health Professional Shortage Areas (MHPSAs). This designation distinguishes those regions that are significantly underserved, based on a ratio of qualified mental health service providers to the total population of the community. Such a shortage of qualified professionals creates significant barriers to the service availability for children. Availability of a broader range of health professionals is a factor not only in access to care but also in access to evidence-based treatments.

## Recommendations from SJR 99

In conducting SJR 99, Commission staff reviewed numerous national and state research reviews and publications, convened four meetings of its 17-member advisory group and convened six meetings of its 9-member clinical group. Additionally, staff requested that subject matter experts in the Commonwealth review the collection of evidence-based treatments.

Based upon the analysis of the data collected, reviews of related reports and publications and the input and expertise of the advisory and clinical groups, the following recommendations were adopted by the Virginia Commission on Youth to be proposed during the 2003 General Assembly Session:

# EFFECTIVE TREATMENT MODALITIES FOR CHILDREN WITH MENTAL HEALTH TREATMENT NEEDS

## RECOMMENDATIONS FROM SJR 99 TO THE 2003 GENERAL ASSEMBLY

### OWNERSHIP AND UPKEEP

I. Direct that the Commission on Youth or its successor, with assistance from the SJR 99 Advisory Group, the Secretary of Health and Human Resources, the Secretary of Public Safety and the Secretary of Education, maintain, update, and make available through web technologies 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 pursuant to SJR 99. This information shall be updated biennially.[3]

### DISSEMINATION

II. That empirically-based information on effective treatment modalities for children with mental health treatment needs, including juvenile offenders, is made available through web technologies to consumers, family members, advocates, mental health professionals, treatment providers, state and local service providers as well as state and local policy makers and other interested stakeholders. All agencies in the Secretariat of Health and Human Resources that deliver services to children, as well as the Department of Education and the Department of Juvenile Justice, shall post this collection of empirically-based information to their web site. Dissemination methods should be as efficient and cost-effective as possible in order to facilitate access to this information.[4]

### ENCOURAGING THE USE OF EVIDENCE-BASED TREATMENTS

III. Request that the Secretary of Health and Human Resources, as well as the Department of Juvenile Justice and the Department of Education, encourage the use of evidence-based treatment modalities and practices recognized as effective for the treatment of children, including juvenile offenders, with mental health treatment needs, symptoms and disorders.[5]

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[3] Recommendation I will be introduced during the 2003 General Assembly as a Joint Study Resolution.

[4] The Commission on Youth, pursuant to SJR 99, is charged with dissemination during the first year after completion of the study.

[5] The Commission on Youth will send letters to the affected agencies encouraging the use of evidence-based treatments.

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# General Description of Providers

| | |
|---|---|
| **Psychiatrist** | A physician who has attended medical school and completed a 4 year residency training program in psychiatry, and is licensed by a state medical board. A psychiatrist is able to prescribe medications and specializes in mental health treatment. |
| **Child Psychiatrist** | A psychiatrist that is specially trained and qualified to treat infants, children, adolescents, and adults as individuals, couples, families, and groups. They practice in a variety of settings, including independently in offices, on the staffs of hospitals, clinics, HMO's, etc. |
| **Psychologist** | A mental health professional with an advanced degree in psychology. A psychologist offers mental health assessment and therapy but is unable to prescribe medications. In Virginia, only psychologists with a doctorate (Ph.D. or Psy.D.) are eligible for licensure. |
| **Child Psychologist** | A licensed psychologist that specializes in providing psychological services to infants, toddlers, children, and adolescents. They are 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 attended medical school, is licensed by a medical board, and is able to prescribe medications. Although they are trained to spot mental health problems and often prescribe medications, they do 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. They specialize in preventive health maintenance for healthy children and medical care for those who are seriously or chronically ill. They 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 Masters 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. They may perform physical examinations, diagnose illnesses, and in most states write prescriptions. The education program is shorter in duration than medical school. |
| **Nurse Practitioner** | A nurse who has completed advanced training and may perform physical examinations, take medical histories, and prescribe certain medications. |

## GENERAL DESCRIPTION OF PROVIDERS *(cont.)*

| | |
|---|---|
| **Clinical Nurse Specialist** | A nurse who has had formal clinical preparation resulting in a master's degree. They manage, support, and coordinate 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 for entering the workforce. |
| **Licensed Clinical Social Worker (LCSW)** | A professional who has earned a degree in social work, has been licensed to provide counseling/therapy to individuals with emotional, psychological, and/or behavioral needs, and meets state requirements. Professional social workers practice in many settings including family service agencies, community mental health centers, hospitals, and public and private agencies. Professional social workers are the nation's largest group of mental health service providers. |
| **Licensed Professional Counselor (LPC)** | A professional with a master's degree (M.A. or M.S.) or doctorate who has been licensed to provide counseling to individuals with psychological, emotional, and behavioral needs. They can be found in private practice, counseling centers, group practices, family service centers, health maintenance organizations (HMOs), hospitals, and government agencies. |

Source: National Mental Health Consumers' Self-Help Clearinghouse, Technical Assistance Guide Systems Advocacy, at http://pie.org/PieDb/00981.htm, last visited May 13, 2002.

# PROVIDERS LICENSED IN VIRGINIA

**Professionals regulated by the Board of Counseling**
**Professionals regulated by the Board of Psychology**
**Professionals regulated Board of Medicine**
**Professionals regulated Board of Social Work**
**Professionals regulated 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 licensed substance abuse treatment practitioner. CSACs 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 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, private outpatient mental health and substance abuse clinics.

*Licensed Professional Counselors (LPC)* – This is a specific legal license that a psychotherapist, usually at the masters 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.

**Providers Licensed in Virginia** *(cont.)*

*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* -- A 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.

**Professionals regulated by the Board of Psychology:**

*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:**

*Psychiatrist* – 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.

**Providers Licensed in Virginia** *(cont.)*

**Professionals regulated by the Board of Social Work:**

*Licensed Clinical Social Worker (LCSW)* – 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 Worker* – 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 masters 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.

*Type of degree held*: R.N. and Masters 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.

**Adjustment Disorder** – This disorder 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.

**Age Appropriate** - At the right level for the chronological (actual) age of the child.

**Anxiety Disorders** – A disorder when worries or fears 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.

**Anorexia Nervosa** - an eating disorder characterized by low body weight (less than 85 percent of normal weight for height and age), a distorted body image, and an intense fear of gaining weight.

**Anti-depressants** - Medications that are used in the treatment of depression, as well as other psychiatric disorders.

**Antipsychotics** – Medications used commonly in medical and psychiatric practices. They are generally effective in treating 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 Disorder** - According to the DSM-IV, Asperger's Disorder is a type of pervasive developmental disorder similar to Autism that typically manifests in childhood. It is characterized by social impairments (which may include poor body language and eye contact skills, failure to develop peer relationships, lack of spontaneous sharing of experience, lack of reciprocity) and the presence of repetitive behavior and interest patterns.

**Assessment** – A professional review of a child's and family's needs that is done 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** - Assistive technology means any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.

**Attention Deficit Hyperactivity Disorder (ADHD)** - a behavior disorder, usually first diagnosed in childhood that is characterized by inattention, impulsivity, and, in some cases hyperactivity.

**At Risk of Serious Emotional Disturbance** - Children aged birth through seven are considered at risk of developing serious emotional disturbances if they meet at least one of the following criteria:

a. 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

b. 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, etc.); or

c. 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, etc.).

**Autism** – This disorder is a severely incapacitating 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.

**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 then 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 Behavior Therapy, 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 from a functional behavioral assessment. Usually appended to a student's individualized educational plan, a public school district 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 what environmental or proactive changes the staff will make to decrease the likelihood of the undesirable behavior or symptom.

**Behavioral Health Authorities (BHAs)** – These agencies function in the same capacity and operate under the same requirements as community services boards.

**Binge Eating Disorder** - a disorder that resembles bulimia nervosa and is characterized by episodes of uncontrolled eating (or bingeing). It differs from bulimia, however, because its sufferers do not purge their bodies of the excess food, via vomiting, laxative abuse, or diuretic abuse.

**Bipolar Disorder** – This mood disorder causes a child swings between states of depression (low mood and energy) and mania (heightened, elevated, ecstatic mood and energy).

**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.

**Case Management** – A 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** -- The 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** – 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.

**Certified Substance Abuse Counseling Assistant** – 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 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, private outpatient mental health and substance abuse clinics.

**Certified Substance Abuse Counselor (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 licensed substance abuse treatment practitioner. CSACs 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.

**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** – 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.

**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 provider where the child lives, works and plays. It may be a school, work site, 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.

**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)** – A Virginia law that created 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).

**Continuum of Care** - A 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.

**Counseling** - A service that incorporates care consultation, evaluation, and outpatient treatment to those experiencing mental health concerns.

**Court Service Units (CSUs)** – These are local agencies operated by the Department of Juvenile Justice that 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** – These are 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 more serious problems 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*

**Depression** - a depressive disorder characterized by extreme feelings of sadness, lack of self-worth, and dejection.

**Developmental Disorders** - One category of mental health problems. The category 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.

**Diagnostic and Statistical Manual of Mental Disorders Revised (DSM-IV)** – The official manual listing psychiatric and psychological disorders, published by the American Psychiatric Association in 1994. It is 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)** – This revision of the fourth edition of the manual published by the American Psychiatric Association in 2000, replacing the DSM–IV.

**Discharge Plan** – A 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.

**Dual Diagnosis** – A condition where a person has 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 also 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.

**Dysthymia** – This disorder is classified as a 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.

**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.

**Eating Disorders** - The term eating disorders refers to a variety of disorders. The common feature of all the eating disorders is abnormal eating behaviors. Eating disorders are serious mental health problems and can be life threatening.

**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.*

**Etiology** – This is 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?"

**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 Assessment and Planning Teams (FAPTs)** – These are local teams that 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*

**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.

**Generalized Anxiety Disorder (GAD)** - a 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.

**Group Homes** – *See Therapeutic Group Homes*

**Halfway Houses** - See *Therapeutic Group Homes*

**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).

**Home-Based Services (Family Preservation Services)** – Services that are 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.

**Independent Living Services** – These are 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)** – This is a 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.

**Inpatient Hospitalization** – Services that are provided on a 24 hour basis in a hospital setting. This is the most restrictive placement that a child can receive, and it tends to be reserved for children with difficult and ongoing problems. These hospitals use a variety of interventions, including individual, group, and family therapy, medication management, and behavior modification.

**Intensive Outpatient Therapy (IOP)** – This is 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 Facilities for Persons with Mental Retardation (ICF/MR)** – These facilities provide a community based residential setting for individuals with mental retardation that 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)** – These are secure residential facilities operated by the 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** - the deliberate destruction of property by juveniles through fire, which sometimes results in casualties.

**Juvenile Sex Offender** - juveniles who perpetrate sex offenses by committing any sexual act against the victims' will, without consent, or in an aggressive, exploitive, or threatening manner.

**Licensed Clinical Social Worker (LCSW)** – 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 Professional Counselor (LPC)** – This is a specific legal license that a psychotherapist, usually at the masters 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.

**Licensed Social Worker** – 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.

**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.

**Major Depression** (also known as clinical depression or unipolar depression.) - classified as a 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.

**"Mandated"** – This is a designation that is provided to children receiving funding under the Comprehensive Services Act. The state and local governments are required by law to appropriate sufficient funds for services for these youth. The 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** - A 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.

**Mental Retardation** - Mental retardation is 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.

**Mentorship Services** – These are 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** – This is a category of mental health problems that include all types of depression and bipolar disorder.

**"Non-mandated"** – This is the 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. The children and adolescents that 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)** - an 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.

**Oppositional Defiant Disorder (ODD)** – ODD is an enduring pattern of uncooperative, defiant and hostile behavior to authority figures that does not involve major antisocial violations

**Outpatient Psychiatric Services** – Services that are 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.

**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.*

**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 the following:

- autism (autistic disorder)
- Asperger's disorder
- Rett's disorder
- childhood disintegrative disorder (also called disintegrative psychosis)

**Pharmacology** – Pharmacology is 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's 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.

**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. The 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. These types of services are most often provided by social service agencies, community services boards, pediatricians and nurses in health clinics, and schools.

**Private Inpatient Units** – These are privately-owned hospitals that 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** – These are 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** – These are 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.

**Psychiatrist** – 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.

**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** – This is 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** – The 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. 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** – These are 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.*

**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.

**Residential Services** – Services that 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)** – These are 24-hour facilities that provide 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 child care either by 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 there has either 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.

**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.

**School-based Services** – These are best described as any program, intervention, or strategy applied in a school setting that was specifically designed to influence students' emotional, behavioral, or social functioning.

**Schizophrenia** – This disorder is a severe, chronic, and disabling disturbance of the brain that causes distorted thinking, strange feelings, and unusual behavior and use of language and words.

**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** – These are 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.

**Separation Anxiety Disorder (SAD)** – This is defined as 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** – 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:

a. Problems in personality development and social functioning that have been exhibited over at least one year's time;
b. Problems that are significantly disabling based upon the social functioning of most children that age;
c. Problems that have become more disabling over time; and
d. 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** - A 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 court service unit personnel. 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.

**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.

**State Mental Health Facilities** – These facilities provide a range of psychiatric, psychological, rehabilitative, nursing, support, and other necessary services for children and adolescents with significant and acute psychiatric concerns. There are two in the Commonwealth that are designated for children and adolescents: the Southwestern Virginia Mental Health Institute and the Commonwealth Center for the Treatment of Children and Adolescents.

**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.

**Suicidal Ideation** - thoughts of suicide or wanting to take one's life.

**Suicide** - the intentional taking of one's own life.

**Suicide Attempt** - an act focused on taking one's life that is unsuccessful in causing death

**Supportive Therapy** - Psychotherapy that focuses 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.

**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.

**Therapeutic Camp Services** – These are 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** – This service is 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. Only one child is placed in the home at a time, 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** – These are facilities that 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. Each home serves 5 to 10 youth, providing an array of services 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.

**Tourette's Disorder** – This disorder is 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 doesn't serve any purpose.

**Transitional Services** - Services that 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.

**Tricyclic anti-depressants** - Drugs used in the treatment of clinical depression. Tricyclic refers to the presence of three rings in the chemical structure of these drugs.

**Wraparound Services** – These are child and family driven services and supports that 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

**CHIP** - The State Children's Health Insurance Program, Title XXI of the Social Security Act, created by the Balanced Budget Act of 1997. (See FAMIS)

**COBRA - Consolidated Omnibus Budget Reconciliation Act** 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.

**CPS** - Child Protective Services

**DCSE** - Division of Child Support Enforcement

**DHP** - Department of Health Professions

**DMAS** – Department of Medical Assistance Services

**DMHMRSAS** – Department of Mental Health, Mental Retardation and Substance Abuse Services

**DSS** - Department of Social Services

**ESPDT** - 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.

**FAMIS (Family Access and Medical Insurance Security Plan)** – Virginia's Title XXI Plan.

**FAPTs (Family Assessment and Planning Teams)** – These are local teams that 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.

**FC**- Foster Care

**FPL** - Federal poverty level.

**HCBS** - Home and Community Based Services

**HMO** - Health Maintenance Organization 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.

**IEP (Individualized Educational Plan)** – This is a 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.

**ICF (Intermediate Care Facility)** - 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.

**IMD** - Institute for Mental Disease, which is a residential facility with more than 16 beds that specializes in psychiatric care.

**JCC - Juvenile Correctional Centers** – These are secure residential facilities operated by the 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.

**TANF** - Temporary Assistance for Needy Families - TANF recipients are usually eligible for full Medicaid benefits and include children younger that 18 (or expected to graduate from high school by age 19). One of the child's parents must be dead, absent, disabled or unemployed.

**Title IV-E** - Title of the Federal Social Security Act which authorizes 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** - Title 19 is Medicaid. State governments must provide Federal law that mandates that Medicaid.

**Title XXI** – Title 21 is 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. Funds are available October 1, 1997 FAMIS is Virginia's SCHIP program.

**TMA** - Transactional Medical Assistance. This provides short-term Medicaid coverage for people who lose assistance when they secure a job that does not provide health benefits.

**VDH** – Virginia Department of Health

Sources: Virginia Department of Medical Assistance Services and Virginia Office of Comprehensive Services, 2002.

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