

ADOLESCENCE EXPLORED: MENTAL HEALTH AND SUBSTANCE ABUSE IN AN
UNDERSERVED POPULATION

by

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The Surgeon General's Conference on Children's Mental Health held in 2000 brought attention to the fact that children and adolescents with mental health and substance abuse problems are an underserved population. Rates of psychiatric disorders are high among this population, yet very few adolescents who need help actually receive it. A comprehensive literature review was undertaken to examine various aspects of adolescent health, including rates of mental health and substance abuse as well as treatment and mental health service utilization among this population. Barriers to care are discussed, with emphasis on gender, ethnicity, psychiatric diagnosis, treatment setting, and parental influences. In the past, the specialty mental health care sector has been relied on to provide treatment for adolescents. This thesis examines school-based mental health services, and Student Assistance Programs in particular, as alternatives to treatment for the adolescent population. School-based clinics have the potential to reduce some barriers to care, hence increasing rates of care for adolescents with mental health and substance abuse problems. Other recommendations to reduce barriers to care and increase rates of treatment are presented.

Mental health and substance abuse have a significant impact on the health of the nation. These disorders cause or exacerbate numerous health problems, including cancer and heart disease. In 1996, mental health problems cost the United States \$150 billion in direct and indirect costs (USDHHS, 2000). The relevance of public health in this thesis is exemplified by

the potential of public health to decrease the health consequences associated with these disorders by working to increase rates of treatment.

TABLE OF CONTENTS

PREFACE.....	ix
1. Introduction.....	1
2. Implications for Public Health.....	4
3. Adolescent Psychiatric Diagnosis.....	8
3.1. Adolescent Mental Health.....	8
3.2. Adolescent Substance Use.....	12
4. Adolescent Mental Health Service Utilization & Barriers to Care.....	17
4.1. Overview.....	17
4.2. Gender.....	19
4.3. Ethnicity.....	20
4.4. Psychiatric Diagnosis.....	22
4.5. Treatment Setting.....	23
4.6. Parental Influences.....	24
4.7. Other Potential Factors.....	25
4.8. Attitudes & Beliefs as Barriers to Care.....	25
4.9. Multifactoral Models.....	28
5. School Based Mental Health Services.....	32
6. Student Assistance Programs.....	36
6.1. Introduction.....	36

6.2.	History.....	37
6.3.	Evaluating the Effectiveness of Student Assistance Programs.....	40
6.4.	Student Assistance Program Conclusion	42
7.	Recommendations & Conclusion	43
	BIBLIOGRAPHY.....	51

LIST OF TABLES

Table 1: Model of Health Service Use.....	29
Table 2: Model for Health Service Use	30
Table 3: Key components of effective school-based interventions	35

LIST OF FIGURES

Figure 1: Healthy People 2010 Goals for Substance Use (USDHHS, 2000)	7
Figure 2: Lifetime Illicit Drug Use (%)	14
Figure 3: Lifetime Illicit Drug Use (excludes marijuana) (%)	14

PREFACE

The terminology used in this thesis must be explained for the sake of clarity and understanding. Throughout the thesis, the terms “mental health” and “substance abuse” are frequently used. However, these two terms imply two different things. “Abuse” signals that a problem is present, while “health” does not connote a negative or positive association. Nevertheless, in this thesis, “mental health” is the term used to signify mental health problems. The terminology used in this thesis mirrors what is found in the associated literature. Hence, it is not the author’s place to change such terminology. In the future, however, health professionals must work to address and clarify this issue of contradictory terminology.

1. Introduction

In the year 2000, the United States Surgeon General convened a conference to examine the state of child and adolescent mental health in the nation. The conference aimed to finally bring attention to a problem that has in the past largely been ignored. The Surgeon General represented the low rates of adolescent mental health treatment as a health crisis:

The burden of suffering experienced by children with mental health needs and their families has created a health crisis in this country. Growing numbers of children are suffering needlessly because their emotional, behavioral, and developmental needs are not being met (United States Public Health Service, 2000, p.3).

A more powerful statement about the bleak nature of adolescent mental health can not be made. In a society that focuses on physical well-being and defines health as a lack of illness, the challenge of defining and examining adolescent mental health is daunting (USPHS, 2000). However, since the Surgeon General's Report, a significant amount of research has begun to focus on addressing this issue (Chow, Jaffee, & Snowden, 2003; Nastasi, Moore, & Varjas, 2004; Owens et al., 2002; Yeh et al., 2002).

Public health can work to provide disease surveillance, health promotion and prevention, and evaluation of and access to mental health services (Nastasi et al., 2004). Mental health and substance abuse have a significant impact on the health of the nation. Numerous health problems such as cancer, heart disease, and cirrhosis of the liver can be caused or exacerbated by these disorders. Moreover, these health consequences place a considerable financial toll on the nation. From a public health perspective, the effective identification, referral and treatment of adolescents who suffer from psychiatric diagnoses will help to alleviate the health and monetary burdens are associated with such problems.

A comprehensive literature review was undertaken to examine various aspects of adolescent health. Rates of mental health and substance abuse in this population are documented. The bulk of this paper, however, focuses not on describing adolescent mental health and substance abuse, but rather on examining treatment utilization within this population. This thesis is broken down into numerous sections. Public health implications and incentives for working with this population open the thesis. Next, rates of adolescent mental health problems and substance abuse are explored, followed by a discussion of treatment utilization and barriers to care. School-based mental health services are presented as a potential resource for treating the adolescent population. An example of a school-based service, Student Assistance Programs, is described. Finally, the thesis concludes with recommendations to reduce the problem of undertreatment of adolescents with mental health needs.

Approximately one in five adolescents suffers from some diagnosable mental health disorder (Achenbach & Howell, 1993; Nastasi et al., 2004; McGee, Feehan, Williams, Partridge, Silva, & Kelly, 1990; Saunders, Resnick, Hoberman, & Blum, 1994; United States Department of Health and Human Services, 1999; USPHS, 2000). Moreover, one in four adolescents can be considered to clinically abuse at least one substance, and one in five is clinically dependent on at least one substance (Young, Corley, Stallings, Rhee, Crowley, & Hewitt, 2002). Without effective treatment, these problems can develop into chronic life conditions that have the potential to seriously affect a person's health and quality of life (USPHS, 2000).

Despite high rates of these disorders, very few adolescents receive treatment for their respective health problem (Cuffe et al., 2001; McGee et al., 1990; Nastasi et al., 2004; Saunders et al., 1994; USPHS, 2000). Some research estimates that up to 80% of adolescents who need help do not actually receive specialty mental health care (Burns et al., 1995). Reasons for

undertreatment of adolescents are varied and not completely understood, but factors such as socioeconomic status, psychiatric diagnosis and stigma play important roles in deciding which adolescents receive treatment (Alegria et al., 2002; Cuffe et al., 2001). These factors will be reviewed and discussed.

Recent trends in mental health treatment have pointed to school-based clinics as important tools in helping to increase rates of service (Baruch, 2001; Borenstein, Harveilchuck, Rosenthal, & Santelli, 1996; Slade, 2002; Weist, Myers, Hastings, Ghuman, & Han, 1999). School-based clinics provide an ideal setting for accessing and treating adolescents in a natural environment, and help to eliminate some of the barriers to treatment (Wagner, Tubman, & Gil, 2004). To succeed, interagency and inter-profession cooperation are needed. One sector of service cannot be expected to bear the brunt of this burden. The example of Student Assistance Programs is described to demonstrate one school-based strategy that incorporates inter-agency collaboration.

Adolescent mental health has not received adequate attention, both from a research and a practical perspective (USPHS, 2000). The Surgeon General's Report on Children's Mental Health has illustrated the importance of finally acknowledging the health needs of this underserved population. In the past four years since the report, the topic has started to receive significant amounts of attention. Indeed, many of the research articles presented in this thesis began with a statement of how the report acted as an impetus for researchers and practitioners to explore this area of mental health and treatment. In the future, if the health needs of adolescents are to be met, this trend must continue on. Failure to do so will ignore the short term and long term health of the population (USPHS, 2000).

2. Implications for Public Health

Public health approaches to substance abuse and mental health differ from the traditional medical model of diagnosis and treatment. The United States Department of Health and Human Services (USDHHS) advocates that the public health model should focus on surveillance of the respective problems within the population, the promotion of health education and illness prevention, and access to and evaluation of available services (Nastasi et al., 2004; USDHHS, 1999). The focus is transferred from the individual to the population in general. In the context of adolescent health and school-based health clinics, this change of focus is important. We cannot only examine all the individual adolescents identified as needing treatment, but instead must observe the entire underserved adolescent population in general. In doing so, the widespread nature of the problem is brought to light. We are able to see the significant number of adolescent who fall behind, mentally and physically, because they are not able to receive the needed treatment. This broad perspective cannot be over-emphasized, as the public health approach has potential to do much in eliminating this problem.

Nastasi et al. (2004) argue that the USDHHS's stance on mental health thus implies five necessities that are required to encompass a public health perspective and approach. These are:

1. Comprehensive service provision, characterized by a continuum of services (from prevention to treatment)
2. An ecological model that takes into account social, cultural, and physical environmental factors
3. Provision of services that are easily accessed by the general population, for example, through public facilities such as schools
4. A science-based approach to practice that includes ongoing evaluation
5. Methods for surveillance of mental health needs (Nastasi et al., 2004).

This thesis works to address the issue of mental health from a public health perspective. Each of the above necessities are represented in some form. Epidemiological data is presented, and the importance of surveillance surveys are emphasized. Perhaps most importantly, in the conclusion and recommendation section, I argue that school based clinics, representative of an ecological model, are essential in eliminating barriers to care.

A public health approach can help to eradicate some of the treatment problems, including both prevention of and intervention with associated mental health problems and substance abuse. However, just as many schools ask the question, “Is mental health our problem to deal with?”, many people in public health might ask, “Are we the right discipline to manage such problems?” Usually, mental health and substance abuse problems are viewed as social or behavioral disorders, things best left to professions such as psychology, psychiatry, and social work. Some critics argue that public health is best suited for medical problems such as heart disease, diabetes, or infectious diseases.

This paper argues that public health can and should play a significant role in the prevention of and intervention with mental health issues and substance use disorders among adolescents, for a variety of reasons. Most importantly, mental health problems (including suicide) are second only to all cardiovascular conditions in the burden of disease in countries with developed economies. Alcohol use is fifth, and drug use is seventh (USDHHS, 1999). In 1996, mental health problems cost the United States approximately \$150 billion in indirect and direct costs (Healthy People 2010, 2004). These numbers do not begin to take into consideration other factors, such as quality of life. Depression increases the risk of suicide, and depressed people are more likely to use health services than health people, resulting in increased costs of

care. Alcohol and drug use can lead to chronic conditions such as cirrhosis of the liver, and also increase the risk of infectious diseases such as Hepatitis C and HIV (Healthy People 2010, 2004). In adolescents, one of the largest health risks of substance use is driving while under the influence of alcohol and/or drugs (Nastasi, 2004). The list of health complications that are caused by mental health or substance abuse problems is extensive, and the above risks represent merely a fraction of the negative health problems that result from such problems.

Clearly, mental health and substance abuse problems dramatically affect the health of the general population. As no longitudinal studies have examined how treatment in adolescence affects adult mental health status, we can only hypothesize that effective prevention and treatment of such disorders can significantly decrease the cost burdens associated with mental health and substance use. With this in mind, adolescence presents a unique opportunity to treat individuals before their conditions develop into chronic diseases that can affect the entire lifespan. The Surgeon General's Report on Children's Mental Health estimates that almost 75% of people who present with psychiatric symptoms in adulthood had symptoms that were present in childhood and adolescence, symptoms that were either never treated or treated ineffectively (USPHS, 2000). If even a small portion of adolescents who suffer from mental health and substance abuse problems are identified and referred to appropriate treatment, the long-term health consequences of these problems for those who are afflicted can be reduced.

Healthy People 2010 is a government initiative that has targeted specific diseases and behaviors that influence the health of the nation. The initiative is aimed at health promotion and prevention, and has identified key public health priorities in objectives. The main goals are to increase the quality and years of healthy life as well as to eliminate health disparities. Healthy

People 2010 uses both mental health and substance abuse as leading health indicators. Healthy People 2010 explains that,

Leading Health Indicators reflect the major public health concerns in the United States and were chosen based on their ability to motivate action, the availability of data to measure their progress, and their relevance as broad public health issues (USDHHS, 2000).

The inclusion of these topics into Healthy People 2010 demonstrates the vast impact that the respective disorders have on large amounts of the population, and how health in general is greatly impacted by both problems. For the objectives in reducing mental health and substance abuse problems, Healthy People 2010 lists the following goals; for mental health, the goal is increase the proportion of adults who receive treatment. For substance abuse (Figure 1) the goals are (a) to increase the proportion of adolescents who have not used substances within the past 30 days, (b) reduce the proportion of adults who have used substances in the past 30 days, and (c) reduce the proportion of adults engaging in binge drinking in the past month (USDHHS, 2000).

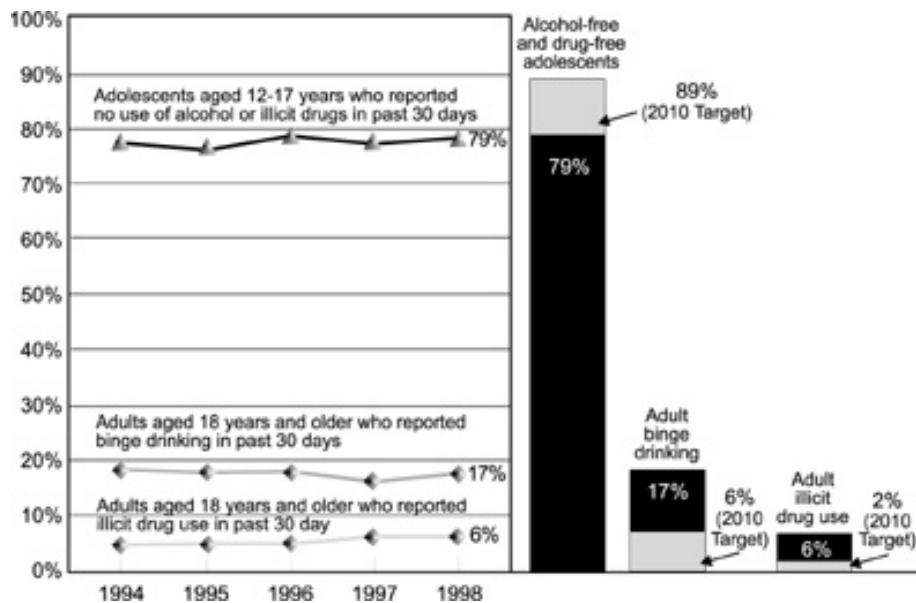


Figure 1: Healthy People 2010 Goals for Substance Use (USDHHS, 2000)

3. Adolescent Psychiatric Diagnosis

Within this thesis, two different forms of psychiatric diagnoses are presented. Adolescent mental health is first discussed. Mental health can be seen to encompass those disorders present on Axis II within the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR). These diagnoses include disorders such as depression, anxiety, and schizophrenia. Although substance use disorders are Axis II disorders, they are presented separately here to highlight the significant impact they have on adolescents. For a further review of these psychiatric diagnoses, refer to the DSM-IV-TR (APA, 2000).

3.1. Adolescent Mental Health

A unique time period in lifespan development, adolescence represents a transition from childhood to adulthood that brings with it many biological, social, and psychological changes (Gumbiner, 2003). In research, adolescence is often defined as the time frame from thirteen to eighteen years. However, from a developmental psychology perspective, such a discrete time period might not be applicable. Some youths might biologically and psychologically begin to develop before or continue to develop after these ages (Butcher, Mineka, & Hooley, 2004).

Adolescence is often a time when mental illnesses first emerge, making this time period important for identifying and intervening on such diseases. While disorders such as Oppositional Defiant Disorder, Conduct Disorder, and Attention-Deficit Hyperactivity Disorder, are usually diagnosed early in childhood and continue into adolescence, disorders such as depression, anxiety, and schizophrenia are often diagnosed first in adolescence (Butcher et al., 2004). Disorders that often begin in adolescence may progress and worsen into adulthood, resulting in numerous health risks (USPHS, 2000). For instance, presence of depression is associated with heart disease, cancer, and diabetes (USDHHS, 2000). Having a mental health disorder also

increases a person's risk of developing a comorbid substance use disorder. Moreover, all mental disorders significantly affect a person's quality of life, and many people who suffer from mental health problems are unable to simply live a full and productive existence (USDHHS, 2000). Hence, early identification and treatment are essential in helping to prevent further exacerbation of negative outcomes (Atkinson & Hornby, 2002).

While the numbers vary widely based on study design, there is general consensus among researchers and practitioners that mental health problems among adolescents are widespread and affect a significant proportion of the population. Research shows approximately one in five adolescents are afflicted with some form of diagnosable mental disorder (Achenbach & Howell, 1993; Nastasi et al., 2004; McGee, Feehan, Williams, Partridge, Silva, & Kelly, 1990; Saunders, Resnick, Hoberman, & Blum, 1994; USSDHHS, 1999; USPHS, 2000). Moreover, approximately 5% to 10% of the adolescent population suffer significant impairment due to their mental disorder (USDHHS, 1999; Achenbach & Howell, 1993; McGee et al., 1990).

It is important to distinguish between actual mental disorders or illnesses and mental health problems or distress. The American Psychiatric Association defines mental disorder as “a clinically significant behavior or psychological syndrome or pattern that occurs in an individual and that is associated with persistent distress or disability or with significantly increased risk of suffering death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event.” (APA, 2000, p. xxxi). On the other hand, “mental health problems” can be a general term for symptoms of mental distress that fail to meet the specific criteria for a diagnosable mental disorder, possibly due to insufficient duration or intensity (USDHHS, 1999). Gumbiner (2003) notes that for many adolescents, the problems they experience are rarely diagnosable

disorders. Due to the nature of adolescence, problems such as peer acceptance and determining one's identity can cause significant amounts of mental distress.

When factoring in social morbidities such as suicide, violence, and sexual activity, accurate statistics that truly capture how many adolescents are at risk for mental health problems are difficult to find. Suicide is perhaps the most significant health risk that is associated with mental health problems, as it is the third leading cause of death among adolescents and young adults ages 15 to 24 years (Nastasi et al., 2004). Suicide is significantly associated with depression in children and adolescents, especially in males when depression and substance use occur together. The National Youth Risk Behavior Survey found that, during a twelve month time span, 19 percent of adolescents polled had seriously thought about attempting suicide, while almost 9 percent had actually attempted (Centers for Disease Control, 2003). Additionally, in the same time-span, almost 30 percent of students had felt so sad or depressed every day for two weeks that they changed their behavior in some way to accommodate their sadness.

Gender might have a significant impact on adolescent mental health, and a considerable body of psychological literature focuses on gender differences in rates of psychiatric disorders. Adolescent girls have rates of depression approximately twice as high as their male counterparts (Nolen-Hoeksema, 1990; Cohen et al, 1993; Peterson et al., 1997). On the other hand, male adolescents are much more likely to be diagnosed with behavioral disorders such as Conduct Disorder or its predecessor, Oppositional Defiant Disorder (Gumbiner, 2003). Some researchers have theorized that females are much more likely to be afflicted with an "internalizing disorder", or one where emotions are directed inwards, while males are much more likely to be afflicted with an "externalizing disorder", where emotions are directed outwards (Nolen-Hoeksema & Girgus, 1994; Wu et al., 1999). Gender differences in adolescent mental health rates can be

important for researchers and practitioners who are developing prevention or treatment programs.

In childhood, males are slightly more likely to be diagnosed with a mental disorder, usually behavioral in nature (Compas et al., 1997; Nolen-Hoeksema, 1994). When adolescence approaches, however, rates of female depression jump ahead, prompting one to question why this occurs and the implications for treating and educating this population. Nolen-Hoeksema and Girgus (1994) have postulated that females have more risk factors for depression than males, but these risk factors don't emerge until adolescence, when psychosocial challenges begin to increase in prevalence. Such risk factors include females' tendency to be more ruminative than males, to turn to self-coping in periods of sadness, to focus on cooperation within groups, and to be less aggressive. In adolescence, these risk factors can lead to females developing depression at higher rates than males. For example,

Girls who enter early adolescence with a more passive, ruminative style of coping, and who are confronted with abuse or harassment or with new restriction on their choices and devaluation because of their gender, may be the ones who experience substantial increases in rates of depression (Nolen-Hoeksema & Girgus, 1994, p.434).

This understanding has helped practitioners to recognize that prevention, identification, and treatment programs must be geared towards both internalizing disorders and externalizing disorders (Nolen-Hoeksema & Girgus, 1994). This is not to say that females do not exhibit externalizing behavior or that males will not be diagnosed with depression. These two disorders are present among both sexes (Cuffe et al., 2001). However, treatment efforts targeting all disorders works to ensure that all adolescents who need help receive treatment.

3.2. Adolescent Substance Use

Substance abuse and dependence are considered to be developmental disorders that often begin in adolescence and may progress from experimental use to frequent use and then to levels of psychopathology (Young et al., 2002). Because they are developmental disorders, the prevalence of use and abuse can increase throughout the stages of adolescence. Hence, higher rates of use/abuse are expected from a cohort of 17 and 18 years olds in comparison to a cohort that is comprised of 12 year olds (Bauman & Phongsavan, 1999; Johnston, O'Malley, & Bachman, 2004; Young et al., 2002).

As described above, adolescence is a period of transition, where change occurs in the cognitive, biological, physiological and psychological atmospheres. It is a time of turbulence, when adolescents strive for independence and autonomy from their parents. Many times, adolescents develop risk-taking behaviors as a means of accomplishing this independence, of which substance use can be the most physically and psychologically damaging behavior (Bauman & Phongsavan, 1999).

If substance use develops from experimental use to abuse and dependence, the short and long term health consequences of such behavior are significant. Heavy emphasis is placed on the long term consequences of substance use, as these are the best documented. Chronic alcohol use alone is associated with heart disease, impaired liver functioning, and cancer (USDHHS, 2000). When seen in the context of adolescence, however, the short term effects of substance use are significant as well. Substance use is associated with injury, violence and suicide, pregnancy and sexually transmitted diseases (Nastasi et al., 2004). Moreover, an earlier onset of use has been shown to be a risk factor for developing clinical substance use disorders and psychopathology (Bauman & Phongsavan, 1999; Young et al., 2002).

Despite numerous targeted prevention programs to decrease substance use that were prevalent in the 1980s, adolescent substance use has nevertheless increased in the 1990s, with marked increases in illicit substances such as heroin and ecstasy (Johnston et al., 2004). Rates of use have stabilized over the last several years, but use is still remarkably high, prompting many researchers to question the assertion that we are “winning the war” against substance use (Bauman & Phongsavan, 1999). In fact, epidemiological studies such as Monitoring the Future (MTF) and the Youth Risk Behavior Surveillance (YRBS) point in the opposite direction (CDC, 2004; Johnston et al., 2004). Numerous prevention and intervention programs have been developed and implemented throughout not only the United States, but other developed countries as well. The majority of these programs have failed to show positive long term results (Bauman & Phongsavan, 1999). Clearly, substance use is still a problem that significantly affects the adolescent population.

For the past 25 years, annual data on the prevalence of substance use among 12th graders have been collected by the Monitoring the Future Research Study (Johnston et al., 2004). Additionally, ten years ago, the study started collecting annual data on 8th and 10th graders. This source of data has provided consistent statistics pertaining to substance use among adolescents. The most recent data available comes from 2003. The Youth Risk Behavior Survey also collects nation data addressing not only substance use among adolescents, but various other health risks as well, such as diet, exercise, and mental health (CDC, 2004). Both of these surveys, epidemiological in design, are important to health professionals who are working to alleviate adolescent mental health problems. The studies provide important surveillance data, enabling researchers to track general trends and understand the problems of this population.

According to Monitoring the Future data, 77% of students have at least tried alcohol before they graduated, and 51% of teens tried one or more illicit substances before they finished high school, down slightly from 55% in 2001 (Figure 2). (Johnston et al., 2004). The substances being used are not just alcohol and marijuana; 29% of teens have tried something other than marijuana before graduation (Figure 3). Other studies have shown similar results (Young et al, 2002; Chen et al., 2004).

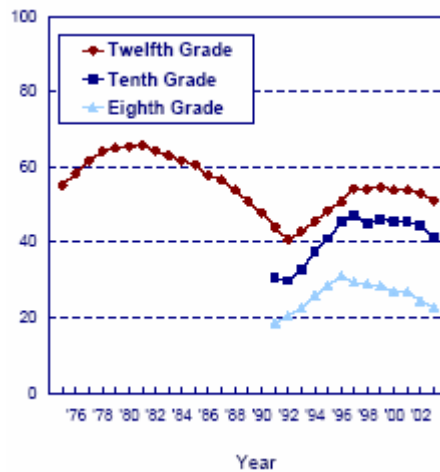


Figure 2: Lifetime Illicit Drug Use (%)
 Source: Johnston et al., 2004, p.9

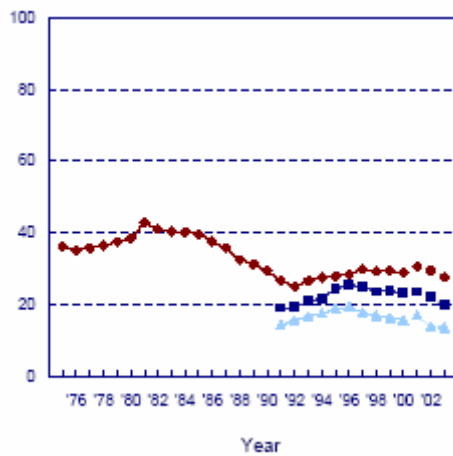


Figure 3: Lifetime Illicit Drug Use (excludes marijuana) (%)
 Source: Johnston et al., 2004, p.9

Monitoring the Future has helped researchers to track overall rates in substance use, as well as specific rates for individual drugs. As depicted in the general trends, substance use tapered off in the 1980s and reached a low in 1992 (Johnston, 2004). Use since then however has dramatically increased. Trends of use for specific substances show that often times there are a “drugs de-jour”, or substances that suddenly become popular and for which rates of use rapidly escalate. An example of this was the boom in Ecstasy and heroin use in the 1990’s. Individual trends in substance use display how prevention and intervention attempts must seek to target specific substances, and not substances in general (Johnston et al., 2004).

Other studies besides Monitoring the Future have shown important trends in substance use as well. Using DSM-IV criteria, Young et al. (2002) found that one out of every four adolescents met criteria for some form of substance abuse, while one out of every five adolescents met the criteria for substance dependence. Alcohol was the most commonly abused substance, with ten percent of the population meeting criteria for this disorder, while almost five percent of the population was considered clinically dependent on cannabis. The authors also found that the most commonly endorsed clinical symptoms for alcohol and marijuana use were ‘physically hazardous use’, often in the form of driving while intoxicated (Young et al., 2002). Driving while under the influence of substances is one of the most significant health risks for adolescent substance use (Nastasi et al., 2004). Data from the Youth Risk Behavior Study have shown that almost one third of high school students have reported riding in the car with someone who is under the influence of alcohol, while 13 percent have reported they have driven after alcohol consumption (CDC, 2004). The Youth Risk Behavior study has also found that five percent of the adolescent population has used alcohol on school grounds; this percentage is the same for marijuana use as well. A further finding from this study is that, among sexually active

adolescents, a third had used alcohol or drugs during their last time of intercourse (CDC, 2004). Combined, these findings illustrate some of the health risks adolescents incur with substance abuse.

4. Adolescent Mental Health Service Utilization & Barriers to Care

4.1. Overview

As illustrated above, adolescence is a time period during which developmental problems begin to emerge. Mental health and substance abuse rates dramatically increase during this time, and have the potential to develop into chronic conditions that can significantly affect a person's quality of life (USDHHS, 1999; USPHS, 2000). Hence, mental health and substance abuse interventions that are readily accessible to adolescents are essential to curtail further exacerbation of problems. Treatment of problems while they are still emerging can help to stop such problems before they develop into chronic conditions (USPHS, 2000). Despite this, few adolescents who help actually receive the treatment. While statistics vary, research estimates that between 30 and 80 percent of adolescents who need help do not receive help (Burns et al., 1995; McGee et al., 1990; Nastasi et al., 2004; Saunders et al., 1994; USPHS, 2000). In general, however, most research points to less than one of every two children with psychiatric disorders receiving some sort of mental health treatment (Cuffe et al., 2001).

Reasons for undertreatment of this population are complex and not well understood, despite significant amounts of research that have focused on this area. Possible predictors of differential treatment include demographic factors, economic factors, family and environmental factors, and psychiatric diagnosis (Cuffe, Waller, Cuccaro, Pumariega, & Garrison, 1995; Cuffe et al., 2001; Farmer, Stangl, Burns, Costello, & Angold, 1999; Flisher et al., 1997; Weist et al., 1999; Wu et al., 1999). Gender and race are factors that that have been the focus of research, but results are still inconclusive (Cuffe et al., 2001). Many of the research findings are contradictory in manner, with one study pointing in a certain direction and another study pointing in the opposite.

A possible explanation for the plethora of conflicting results is different study designs in the research field. For example, some studies utilize race as a possible influencing factor, while other studies examine socioeconomic status. Some studies differentiate between mental health treatment in general and mental health treatment in specific sectors of the community such as specialty mental health treatment, school based health clinic treatment, and public or private forms of treatment. Thus, conflicting terminology and study variables cause generalization across different studies to be problematic.

Another possible reason for contradictory results is that many studies look at variables individually. For example, ethnicity and treatment setting are often studied as potential influences in treatment utilization, but rarely do studies attempt to put these two findings together to determine whether factors might interact with each other. In part, recent research has started to address this issue, and treatment utilization is not seen as merely influenced by one single factor. Individual factors that possibly influence treatment rates are first reviewed, and then followed by two multifactoral models that have the potential to further clarify this issue.

Despite large portions of conflicting data and results, some general trends in treatment have been identified:

1. Minority status is associated with decreased rates of specialty mental health services
2. Externalizing disorders are linked to increased rates of mental health treatment
3. The burden of care placed on the family predicts increased rates of general treatment (Alegria et al., 2002; Farmer et al., 1999; McKay et al, 2001; Slade, 1999; Wu et al., 1999).

4.2. Gender

Gender has received a significant amount of attention as a factor that might influence adolescent service utilization. If we look at rates of mental health, males are found to have more diagnoses in childhood, and females are found to have higher rates of diagnoses in adolescence (Gumbiner, 2003; Nolen-Hoeksema & Girgus, 1994). Hence, one would expect that higher rates of female mental health problems would result in higher rates of female treatment. Yet studies present inconsistent research findings. For instance some studies have found that females are treated at higher rates than males (Pumariega, Glover, Holzer, & Nguyen, 1998), others have found that females are treated at equal rates as males (Cuffe et al., 2001; McKay et al., 2001), and still others report that females are treated at lower rates than males (Farmer et al., 1999).

So what causes inconclusive results and possible differential rates of treatment? Possible explanations for inconclusive findings might lie with two other variables: in what sector or treatment setting adolescent receive help and the diagnosis they are receiving help for. As already noted, females are more likely to be diagnosed with affective problems, while males usually exhibit more behavioral problems (Nolen-Hoeksema, 1994). Some research has found that males are treated slightly more often or in disproportionate rates because males externalize their behavior more so than females (Cornelius, Pringle, Jernigan, Kirisci, & Clark, 2001; McKay et al., 2001; Wu et al., 1999). Male patterns of acting out are seen as more problematic and disruptive than the internalizing behavior of females, resulting in higher referral rates. This line of thought would explain some of the findings that indicate males are treated more often than females.

In support of the finding that females are treated at higher rates than males, some studies have shown that females utilize school-based health and mental health clinics more often than males (Weist et al., 1999; Borenstein et al., 1996). Reasons for this, however, are not known.

Seeking help at school-based clinics is often completely voluntary, and males might not utilize health services unless recommended or forced to.

As demonstrated here, gender is related to treatment patterns among adolescents and must be approached from a comprehensive perspective. It is important to explore how multiple factors can interact to produce results that are additive in nature.

4.3. Ethnicity

Next to gender, ethnicity has probably received the most attention with respect to the way that ethnicity and race affect treatment utilization. As with gender, research is inconclusive in determining the specific effects of ethnicity. Most studies focus on the African American population, although some research exists that details rates of treatment within the Hispanic population as well. For information on rates of service utilization among Hispanics, refer to; Alegria et al., 2002; Chow et al., 2003; and Yeh et al., 2002. A large numbers of the findings indicate that minority status is associated with unmet treatment need (Alegria et al., 2002; Cuffe et al., 1995; Pumariega et al., 1998; Slade, 1999). However, some studies suggest the opposite, with African Americans in particular being overrepresented in the treatment population (Yeh et al., 2002).

As with gender, a possible explanation for these contradictory findings can be found when ethnicity and treatment setting are examined together. Studies that show African Americans as an under-treated population have been conducted in specialty mental health care settings (Alegria et al., 2002; Pumariega et al., 1998; Slade, 1999). Many of these same authors suggest that African Americans are overrepresented in the juvenile justice system.

Being underrepresented in one sector and overrepresented in another may come from two sources. The first is that African Americans are referred to certain treatment sectors because their mental health needs are specific to that area. However, diagnostic rates of mental health problems are relatively equal across ethnicity, implying that equal rates of Caucasian and African Americans should be found in each sector (Burns et al., 1995). The second possibility is that a referral bias for African Americans exists, implying that African Americans are shifted towards the juvenile justice system while Caucasians are referred more to the specialty mental health sector (Cuffe et al., 1995). Although concrete data that supports this possibility is lacking, some authors have suggested referral bias as a valid reason for undertreatment of African Americans (Cuffe et al., 1995; Wu et al; 1999).

In addition to referral bias, cultural factors must also be considered when attempting to explain different rates of treatment based on ethnicity. Yeh et al. (2002) suggest that African Americans may not voluntarily seek mental health treatment due to the belief that treatment will be ineffective. Pumariega et al. (1998) also suggest that the lack of cultural competence in mental health services serves as a deterrent to treatment for African Americans. In large part, mental health care providers are white, and their services are directed towards people of the dominant culture. African Americans often seek mental health treatment from nonprofessional sources, such as family, community, or religious figures, as an alternative to turning to a sector with predominately white providers (USDHHS, 1999).

Mistrust of the mental health system and its providers also play a strong role in African American's reluctance to seek treatment. Almost 50 percent of African Americans report being afraid of mental health treatment, in comparison to 20 percent of Caucasians (USDHHS, 1999).

The reasoning behind this finding is relatively straightforward; racism, discrimination, and mistreatment within the health care system are prevalent throughout African American history.

4.4. Psychiatric Diagnosis

The primary focus of the research debate pertaining to diagnosis focuses on whether adolescents with externalizing disorders receive higher rates of treatment in comparison to adolescents with internalizing disorders. As discussed above, diagnosis is often associated with gender, mainly because externalizing behaviors are associated with being male and internalizing disorders are associated with being female (Wu et al., 1999). With the exception of two studies by the same group of authors (Cuffe et al., 1995; Cuffe et al., 2001), research points to higher rates of mental health treatment for those with externalizing disorder (Cornelius et al., 2001; Hacker & Drainon, 2001; McKay et al., 2001; Weist et al., 1999; Wu et al., 1999). However, one study that examined school-based mental health services found equal rates of treatment for both types of disorders (Wu et al., 1999).

Findings such as these reinforce the theory that children must “act out” to receive attention (Weist et al., 1999). Social disruptiveness associated with these disorders is unfortunately what draws parents’ and teachers’ attention and results in their being labeled as problematic behaviors that need treatment (Cornelius et al., 2001). For example, an adolescent with conduct problems is much more likely to impact other people than an adolescent with a depressive disorder. Naturally it makes sense to treat children who have a larger impact on their surrounding environment. Obviously though, the problem with this trend is that a significant portion of the population needing help goes unrecognized.

4.5. Treatment Setting

The relationship of treatment setting has been described above with gender, ethnicity, and psychiatric diagnosis, reflecting possible interaction among all four of these factors. Perhaps the most convincing finding that supports the interaction between factors is that Caucasian males are more likely to receive specialty mental health treatment than any other adolescent subpopulation. In studies that break treatment sources down into categories (instead of the general variable of “mental health treatment”), this finding is consistent, possibly suggesting another area of referral bias (Angold et al., 2002; Cuffe et al., 1995; Weist et al., 1999; Wu, Hoven, & Fuller, 2003). People who refer adolescents to treatment might have the tendency to steer white males into specialty mental health treatment, while other subpopulations are directed towards alternative forms of treatment.

In contrast to the specialty mental health sector, school-based mental/health clinics are less likely to be influenced by demographics. Females and African Americans are more likely to be treated at school-based clinics than in the specialty mental health sector (Slade, 1999; Weist et al., 1999). Moreover, adolescents with internalizing disorders are equally likely to be treated at school-based clinics as adolescents with externalizing disorders (Wu et al., 1999). These findings emphasize the importance of school-based mental/health clinics. Such programs are able to identify and treat underserved portions of the population, adolescents who for whatever reason are unable to or simply do not seek specialty mental health treatment. This topic will be further discussed in the recommendations section.

4.6. Parental Influences

Parental influences are important when adolescent treatment is considered, mainly because adolescents depend on their parents to help them seek treatment and then correspondingly provide support throughout treatment. Very rarely do adolescents decide to seek treatment and then proceed. Usually youths who need help are identified by a parent, teacher, or some other authority figure (Wu et al., 1999). The responsibility of finding appropriate treatment, enrolling the youth, and enabling the adolescent to stay in treatment (i.e. – providing transportation to treatment, making sure the adolescent attends scheduled appointments, providing funding for the treatment, etc.) is usually placed on the parent (Wagner et al., 2004). Hence, parental characteristics have considerable potential to influence whether or not their child receives mental health treatment.

Many authors have found that perceived parental or familial burden is significantly associated with increased rates of treatment (Angold et al., 2002; Farmer et al., 1999; Owens et al., 2002). That is, if a parent feels that their children's mental illness has a substantial impact on the rest of the family, as well as family life, parents are more likely to take steps to eliminate or at least deal with the problem. Parents are simply acting to preserve the family. Angold et al. (2002) found this to be especially true when the family income is threatened by a child's behavioral problems.

In contrast to this positive treatment association, negative attitudes pertaining to accessibility of services and to the burden of care placed on the family are associated with decreased service utilization (Flisher et al., 1997). So, if parent are overwhelmed by their own problems and believe that they do not have the time or resources to address their children's problems, they are unlikely to provide support for the child to seek treatment. In support of this

finding, Cornelius et al. (2001) and Flisher et al. (1997) found that the presence of parental psychopathology is negatively associated with treatment.

4.7. Other Potential Factors

Other potential factors that can influence service utilization are age, severity of psychiatric symptoms, poverty, and insurance status. These are factors that have been investigated, but not to the degree as those listed above. In general, increased age is associated with decreased service use, while increased symptoms or severity of mental illness is associated with increased service use (Cohen & Hesselbart, 1993; Cuffe et al., 2001; Farmer et al., 1999). As adolescents age, they are more likely to spend less time with their parents and hence not be under their parents' control. A parent might not be aware that a mental health problem exists, or the adolescent might be more resistant to parental interventions and recommendations. Also, as adolescents age, they are more likely to drop out of school, hence prohibiting service in the education sector (Cuffe et al., 2001). Moreover, severe mental health symptoms will likely cause an impact on individuals as well as families, hence prompting the individual or the family to seek treatment. Poverty and the use of public insurance are also associated with increased rates of treatment utilization, although not necessarily within the specialty mental health sector (Burns et al., 1995; Farmer et al., 1999). The presence of public insurance allows the adolescent to receive the needed treatment without placing a financial burden on the family.

4.8. Attitudes & Beliefs as Barriers to Care

Most of the factors discussed above are structural in nature. In other words, the majority of people do not or cannot change their gender or ethnicity during their lifespan. Additionally,

people cannot simply decide to change their psychiatric diagnosis at will, nor can they decide to be born into certain family situations. These are immutable characteristics.

However, other barriers to care exist, that are not as permanent in nature, and can be described as perceptual and attitudinal in nature. Owens et al. (2002) distinguish between these two categories of characteristics, terming the first set as factors that are associated with mental health service utilization and the second set as actual barriers to care:

While service utilization is closely related to barriers of care, there is a subtle, but important difference between the two measures. The latter focuses on the perceptions about the factors that have prevented access or created difficulties in accessing mental health. Service utilization, on the other hand, focuses on the actual receipt of services, regardless of whether barriers existed (Owens et al., 2002, p.731).

To explain with greater clarity, minority status possibly affects the receipt of services, whether or not the afflicted person (or the parent) actually believes that other difficulties in receiving care exist. Owens et al. (2002) argue that these attitudinal barriers relate to beliefs and perceptions that adolescents and their parents have pertaining to mental health status and treatment.

Perhaps one of the most significant attitudinal barriers to treatment is the pervasive stigma attached to people with mental illness, despite recent attention that has shown the widespread nature of the problem. According to the Surgeon General's Report on Mental Health (1999), stigma is the "most formidable obstacle to future progress in the arena of mental health and illness. It refers to a cluster of negative attitudes and beliefs that motivate the general public to fear, reject, avoid, and discriminate against people with mental illness." (USDHHS, 1999, p.56). Stigma causes people to delay seeking help for fear of how they will be treated and labeled by other people. Instead, they internalize public opinions, and either deny the existence

of such problems or attempt to deal with them on their own. In a national survey meant to poll attitudes toward mental health, respondents viewed people with mental illness as inherently dangerous and less able to handle their own affairs (USDHHS, 1999). A similar poll administered in the UK also found harsh public opinions of people with mental illness. For example, 70 percent of those polled rated alcoholics as dangerous to others, and 80 percent described them as unpredictable. In general, people with mental illness were described as “hard to talk to” and “different than everyone else” (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000). In both of these polls, alcoholism and schizophrenia elicited the most negative responses.

Many adolescents, as well as their parents, worry about how their peers will react to them if treatment is sought. Adolescence is already complicated, as youths attempt to develop their own identity while at the same time find acceptance among their peers (Gumbiner, 2003). Having a mental illness significantly adds to normal development issues, and admitting the presence of a mental illness to peers acts only to complicate the situation even more. Sometimes, adolescents might feel that it is best to simply ignore the problem, rather than risk embarrassment.

In addition to acting as a barrier to care, stigma also affects the amount of attention that mental health issues receive. For example, it was not until four years ago that the Surgeon General published a report that specifically addressed adolescent mental health and low levels of treatment in adolescents, despite the fact these are significant problems that have been studied in the past (USDHHS, 1999). This ignorance is perhaps influenced by the stigma that is placed on mental illness. Other diseases, such as coronary heart disease and cancer, are well researched and discussed in contemporary culture. But mental illness is not. The subject is taboo in American culture, which acts to delay potential progress made in this area.

Another perceptual barrier to care may be that many adolescents and their parents are unaware that mental health problems are actual clinical conditions that can be alleviated through treatment (Baruch, 2001). As noted, adolescence is a time of change, and many people, including parents and teachers, often assume that adolescent problems are nothing more than “growing pains” that will diminish in time. Odd behaviors and moods are taken as a sign that a youth is simply developing in the normal and healthy manner (Powers, Hauser, & Kilner, 1989). This thinking is in part fueled by the general population’s ignorance of mental health issues. Thinking that an adolescent’s behavior is what to be expected ignores the fact that an adolescent might indeed be suffering from a mental illness.

Secondly, many people are unaware of where to turn for help. Finding appropriate and effective treatment can be a daunting task for someone who is not familiar with the mental health system, a system that is by no means easy to navigate. This is especially true for some families who do not have the resources, either in the form of time or money, to identify treatment sites (Wagner et al., 2004). Moreover, in some economically challenged areas, treatment centers might not exist, forcing people to have to search and travel beyond their familiar community.

4.9. Multifactorial Models

When examining possible reasons for low rates of service utilization among adolescents, emphasis must be placed on how a variety of factors, and not just one characteristic in particular can lead to the under-treatment of this population. Clearly, many factors influence whether an adolescent receives needed mental health treatment. To say that one single factor predicts treatment utilization oversimplifies the issue. For example, contending that gender alone decides treatment rates ignores various other possible influences. Perhaps research has thus far yielded

inconclusive results in part because the complex nature of treatment utilization is hard to define and measure. A broad perspective is necessary, although difficult to factor into research design. For the sake of understanding how numerous factors can influence treatment utilization, two models are presented, both of which are multifactorial in design.

The first model is the Behavioral Model for Health Services designed by Anderson (1995), and hypothesizes that use of health services is a function of three factors; predisposing characteristics, enabling or impeding resources, and level of a person’s need (Figure 4). While this model was designed many years ago, the basic components relate to barriers to care described above. Predisposing factors include demographics, social structure, and health beliefs, while enabling or impeding factors include personal and family characteristics as well as community traits. Need is defined as the severity of one’s problems, and the corresponding perceived and actual need for help. Hence, the use of health services is determined not by one factor, but the interaction between many factors (Anderson, 1995). The model includes barriers discussed above such as gender, attitudes towards health services, ethnicity, and family characteristics.

Table 1: Model of Health Service Use

PREDISPOSING CHARACTERISTICS	ENABLING RESOURCES	NEED	USE OF HEALTH SERVICES
Demographic	Personal/Family	Perceived	
Social Structure	Community	Evaluated	
Health Beliefs			

Source: (Anderson, 1995)

The second model was developed by McKinlay and Marceau (1999) and adapted by Alegria et al. (2002), and posits that treatment is influenced at four levels: social position, environmental factors, lifestyle factors, and physiological factors (Figure 5). Social position includes such characteristics as race, gender, and SES, while environmental factors include the neighborhood a person lives in. Lifestyle factors include psychosocial factors and social support, while physiological factors are the symptoms and impairment caused by the disorder (Alegria et al., 2002). Like Anderson’s model, this design depicts different characteristics influencing service utilization. While Anderson’s model displays a linear progression between the factors, this model simply implies that each level can affect another.

Table 2: Model for Health Service Use

Level 1: Social Position (Ethnicity, Income, Education, Gender)
Level 2: Environmental Factors (Geographic Location, Neighborhood Environment)
Level 3: Lifestyle Factors (Life Stressors, Psychosocial Factors, Social Support)
Level 4: Physiological Factors (Symptoms, Impairment, Disability)

Source: (Alegria et al., 2002)

Both of these models display the interconnectedness and complexity of the factors which can enable or impede mental health treatment utilization. Demographic factors are considered in both of the models, as well as family and environmental characteristics. Anderson’s model is perhaps more relevant here because it depicts how predisposing factors might influence one’s enabling or impeding resources. For example, the predisposing characteristic of ethnicity might affect the treatment resources available in the person’s community.

A main research finding that illustrates this interconnection was mentioned above; Caucasian males are more likely to receive specialty mental health service than any other

subpopulation. Here, gender, ethnicity, and treatment setting all interact together to enable one segment of the adolescent population to receive higher rates of mental health treatment. These models are further appropriate because they combine structural as well as perceptual or attitudinal barriers. Structural and perceptual barriers can act together to create barriers unique to a certain population. An example of this is how African Americans are more likely to mistrust the mental health system than Caucasians (USDHHS, 1999).

These models, however, are lacking a crucial element when seen in the context of adolescence, as they only pertain to why a person seeks or receives treatment. However, as noted before, adolescents and children rarely decide to seek treatment themselves. Parents are essential in recognizing and identifying adolescent mental health problems (Wu et al., 1999). When these models are examined, and all other factors are considered, the parent-child relationship must be understood, as both parties bring different enabling and impeding factors to the adolescent receiving care.

These models can partially explain why minorities have low rates of service utilization (Alegria et al., 2002). Barriers to care that are associated with ethnicity, such as geographic location, poverty level, and family cohesion, can lead to lower rates of treatment. Ethnicity is not one barrier within itself, but rather a composite of barriers, making treatment access nearly impossible for minority adolescents. Some of these barriers are reinforced by the dominant society, and can be seen in a referral bias for minorities. Other barriers are attitudes that are dominant within the minority culture, such as the mistrust of the system.

5. School Based Mental Health Services

As illustrated, many barriers exist that stop adolescents from receiving the help that they need, and while no simple solution exists, current research has shown the potential of school-based mental health clinics to help address this need (Baruch, 2001; Borenstein et al., 1996; Slade, 2002; Weist et al., 1999). The burden of treating adolescent mental health and substance abuse problems has traditionally fallen on the mental health organization and provider sector (USPHS, 2000). Individual therapists as well as community agencies are expected to be the primary resources for adolescent health problems. However, reliance on these providers has in part led to the problem of undertreatment in adolescence (Wager et al., 2004). Community outreach efforts are difficult, and identifying adolescents who need help is a challenge that most mental health clinics are not capable of overcoming. Usually, the only adolescents that receive services from these types of treatment centers are the ones who actually present to them, a process that entails parents recognizing the need for treatment, identifying the appropriate type of treatment, scheduling appointments, and making sure their children actually attend the scheduled appointment. This multi-step process is often too complex for parents to handle on their own. As mentioned above, many parents are unaware of resources that exist within the community, and many simply do not have the time and knowledge to navigate their way through the specialty mental health system (Wager et al., 2004).

School-based mental health programs are diverse in nature, and can not be easily described. To give a standardized definition would only limit understanding such programs. Practical issues such as funding, staff involvement, parental involvement, leadership, clinic locations, and coordination within the school system are unique to each program. For further discussion on school-based clinics, refer to; Adelman & Taylor, 1993; Atkinson & Hornby, 2002; Baruch, 2001; and Nastasi et al., 2004.

In general, programs can be broken down into three levels based on the intended population; preventative programs, targeted programs for functional adolescents, and programs for adolescents with multiple mental health problems (Taras et al., 2004). Obviously, prevention programs are geared to those students who have not developed mental health problems. Programs such as these seek to build a supportive environment where students are able to talk to teachers and school staff about any problems they may be experiencing. Early recognition of problems is also an important component of these programs.

Targeted programs are geared towards providing support and mental health treatment for students who have already developed mental health problems. For those students whose academic and social behavior is not significantly affected by their mental health illness, schools can provide counseling or possibly special education. Conversely, for students with severe impairment from a mental health illness, schools can provide intensive support for the child, including contact with a multidisciplinary team of mental health professionals and community resources (Taras et al., 2004).

Additionally, the delivery model of school-based mental health services can be broken down into three tiers. Schools can provide their own mental health treatment through a school-based system, can link students to community resources, or can employ a comprehensive model that uses both school and community resources (Taras et al., 2004). While each of these models has potential to help provide treatment to adolescents in need, only the comprehensive model employs interagency or inter-sector cooperation.

The CDC note that the responsibility of addressing adolescent health and social problems should not fall solely on the school system. Instead, community agencies, families, and other service sectors must be involved as well (CDC, 2000). Children are affected not just by their

family and their schools, but also by their community in general. Assigning the task of treatment to one sector of the community, be it the mental health or education sector, ignores the collective environment that constitutes any person's world (Wagner et al., 2004). Moreover, when all parts of the community are involved in working with adolescents and their health problems, interagency and inter-sector cooperation is initiated. Interagency communication can help to provide extensive care to adolescents, as the school setting is not ideal for all adolescent health problems. Individuals who are identified at school can be referred to an appropriate treatment agency, a process that is currently employed by Student Assistance Programs, described in the next section. Linkages and communications among all sectors are vital to adequately meet the health needs of adolescents (USPHS, 2000).

Unfortunately, very few comprehensive data on the extent and status of school-based mental health programs exist. Some authors have suggested that school-based mental health clinics are diverse in nature, fragmented within school communities, lacking rigorous standards, and are rarely evaluated (Adelman & Taylor, 1993; Wagner et al., 2004). Hence, comprehensive data and descriptive information are difficult to procure. Adelman & Taylor (1993) portray school-based clinics to be nationally uncoordinated and sometimes not well conceived. However, since the early 1990s, there has been a push to implement comprehensive or expanded mental health systems within the school setting. These programs are multifaceted, and provide prevention, identification, and treatment services. Moreover, the programs are coordinated across the school system so that all adolescents are targeted, and linkage to the community is provided (Adelman & Taylor, 1993). There has also been call for standardization and evaluation of school-based programs to prove their effectiveness empirically and to facilitate program

replication. Wagner et al. (2003) have identified key components of effective programs, which can be seen in below (Figure 6).

Table 3: Key components of effective school-based interventions

<ul style="list-style-type: none">• Have a strong theoretical foundation and a clear conceptual basis for describing, predicting, and interpreting normative and non-normative patterns of development• Conduct rigorous conceptually and empirically guided evaluation on an ongoing basis• Combine psychoeducational and skills building components• Pay careful attention to the optimal timing, duration, frequency, and intensity of exposure to intervention• Maintain the fidelity of the implementation of core program components through manualization and ongoing monitoring• Provide adequate training opportunities for teachers and professional staff, as well as opportunities for participation in all phases of program development including its design, delivery, and evaluation• Design program materials to engage the key consumers of the intervention – children and adolescents• Maximize “buy-in” from stakeholders by creating system-wide recognition of the impact of the problem behavior and the potential benefits of the intervention program• Facilitate the development and utilization of clearly articulated and consistently enforced school-wide policies concerning the management of the target behavior• Develop and maintain linkages with complimentary intervention programs across a range of implementation settings

Source: (Wagner et al., 2004)

6. Student Assistance Programs

6.1. Introduction

The Student Assistance Program (SAP) has been found to be the most widely implemented form of school-based mental health service intervention, especially when drug and alcohol interventions are examined. However, no one definition can adequately describe what a SAP is, mainly because SAPs take different forms. While there is not one single standardized model, common components and elements are present in most SAPs. In the most basic form, SAPs are programs that are comprised of school and community representatives who work to identify troubled students, refer them to appropriate treatment, and provide follow-up support (Moore & Foster, 1993; Palmer & Paisley, 1991; Anderson, 1993; Fertman et al., 2001). Although SAPs were originally targeted towards the substance abusing adolescent, the focus of many modern SAPs has expanded to include other adolescent issues such as mental health.

Anderson attempts to describe the complex nature of SAPs by offering different definitions:

1) A student assistance program consists of a team of staff who draft policy language, design procedures, train others, and promote program awareness in order to identify, assess, refer, and support students with alcohol and other drug related problems in proportion to their numbers (Anderson, 1988, p.10).

2) A student assistance program is the system of all of the things it is necessary to know, think, and do in order to help students deal with all of the ways in which they are affected by their own use of mood-altering chemicals or someone else's (Anderson, 1988, p.8).

3) A student assistance program is a comprehensive and integrated, joint school-community program for providing to all students (Kindergarten through grade 12) prevention,

intervention, support, and instructional services for the amelioration of alcohol and other drug-related problems (Anderson, 1988, p.11).

He argues that each definition illuminates a different perspective that can be taken when approaching SAPs. It should be noted that although his definitions are primarily directed towards substance use, they can also be broadened to include other areas of adolescent health. Equally important to note is that although these programs are geared towards the recovery or optimal health of students, it is truly the entire community that benefits from active participation in such programs. Anderson emphasizes the responsibility of a community by arguing,

On the one hand, we have an investment in becoming more effective at minimizing the alcohol and drug-related problems of the kids we care about; on the other, we have an investment in becoming healthier individuals in healthier environments (Anderson, 1988, p.8).

6.2. History

Student Assistance Programs (SAP) first appeared in schools in the early 1970s. Since this time, SAPs have come into widespread in both public and private schools throughout the United States. In the short time since their initiation, SAPs have evolved rapidly to adequately address the needs of troubled adolescents.

SAPs were modeled after EAPs, programs that were primarily directed towards the alcoholic or substance abusing employee (Moore & Forster, 1993). The Johnson Institute Alcoholism Intervention Model detailed a five step procedure that linked the troubled employee with community and workplace resources: (a) documentation of impairment, (b) initial worker confidentiality, (c) objective confrontation about the impairment, (d) referral for community healthcare, and (e) ongoing support systems at the workplace (Moore & Forster, 1993). The similarities between these two types of programs are numerous: identification, referral, and follow-up processes are at the core of both SAPs and EAPs.

While most of the early SAPs focused on adolescents who abuse substances, current programs have broadened their horizons to target other problem areas with adolescents. While substance abuse is no doubt an issue that many adolescents face, it is by no means the only problems that can result in impaired academic learning and functioning. For example, the Pennsylvania SAP has four different referral categories; Mental Health, Substance Use, Violence/Trauma, and Grief.

Moore and Forster (1993) divide the development of SAPs into two main time periods; the formative years of program innovation lasting from 1978-1987 and the resulting movement to professionalism lasting from 1998-1991. The formative years of program innovation saw SAPs move from being nothing more than replicates of EAPs to becoming their own unique program directly targeting adolescents in the school system. Early programs placed outside specialists within the school building who worked with students voluntarily participating in the program (i.e., there was not a referral process). During this early time period, parental involvement was minimal, resulting in many students having difficulty accessing outside resources. However, during the mid-1980s, SAPs increasingly started to involve parents and receive their input about treatment and community resources, which allowed SAPs to further expand their treatment options (Moore & Forster, 1993).

As SAPs became more established, the programs and their advocates began the movement to professionalism. Moore and Foster (1993) argue that this movement was marked by an increase in program evaluation, improved training of personnel, and more funding to support SAPs. Frameworks for SAPs were also developed and standardized, so that while there is not one accepted and utilized SAP model, common components were identified as necessary.

Moreover, professional organizations and journals were developed to further the goals of and research pertaining to SAPs.

At their core, SAPs are designed to help both school personnel and students. They educate school personnel to understand and identify adolescent health issues that impede a student's health, learning, and academic well-being, and then refer them to treatment (Meister, 2000). The program is not intended to be treatment oriented. Rather, the focus is on identifying students and consequently referring them to appropriate treatment. Educating school personnel indirectly works to help students receive the help they might need.

Community resources are vital. School systems themselves do not have the resources or the capabilities to treat students who have significant mental health or substance abuse problems (McGovern & DuPont, 1991). But within the community, there are various resources such as substance abuse treatment centers and mental health therapists that are more than able to meet the needs of the troubled student. Hence, "most SAPs are partnerships including schools with people outside the schools, such as those involved with chemical dependence and mental health in treatment, business and law enforcement." (McGovern and DuPont, 1991, p. 262). Fertman et al. (2001) note that 22 percent of the SAPs surveyed in Pennsylvania included a school-based probation officer who is active on the SAP team. Probation officers are primarily associated with law enforcement, but can also act as resources from the community. These officers can be a positive asset to the SAP team, as they often have "specialized knowledge of a discrete student population." (Fertman et al., 2001, p.365).

For SAPs to be effective in helping students and also to make it possible for students to feel comfortable participating in such a program, confidentiality and parental involvement are two key issues that must be organizationally addressed (McGovern & DuPont, 1991; Fertman et

al., 1999). The ultimate goal of SAPs is to help adolescents overcome specific problems and hence become better students. If students feel that their personal information is not being treated in a confidential manner, they are less likely to actively participate in and benefit from the SAP process. Parental involvement can be seen in a similar manner. If parents do not feel that they are involved in the SAP process, or feel that the school is acting in an inappropriate manner, they are less likely to allow their children to participate in such a program. Accordingly, if parents choose for their child not to participate in such a program, their wishes must be honored. The CDC emphasizes that parents must be involved in the scholastic well-being of their children, and stresses the importance of bringing parents into the SAP process (CDC, 2000).

6.3. Evaluating the Effectiveness of Student Assistance Programs

A considerable amount of time has elapsed since the period of professionalism of SAPs described by Moore and Forster (1993), prompting one to question what has happened in the years since their article has been published. A review of the literature shows that the past ten years have predominately focused on the continued evaluation of SAPs. Moore and Forster note that evaluation was a large part of SAPs move to professionalism, and it appears that this is the primary focus of most of the current research pertaining to SAPs.

In 1994, Carlson, Hughes, LaChapelle, Holayter and Deeback found that research has largely focused on whether the SAPs are implemented as planned, rather than on their effectiveness in helping students. In their statewide evaluation of Pennsylvania SAPs, Fertman et al. (1999) found that programs are being implemented and practiced as they are designed to be. This evaluation found that most Pennsylvania SAPs have a well-defined referral process, involve parents and respect their opinions, make extensive recommendations for student

treatment services, and have established linkages to community agencies. However, the study called for the development of benchmarks and indicators so as to further improve SAPs and their services to students (Fertman et al., 1999).

In addition to understanding whether or not SAPs are implemented as planned, program evaluations have also helped to pinpoint components that can possibly work to make a program more effective. Herberg, Hughes and Bond (1990) identified five organizational factors that facilitate a successful program. These factors are:

1. A formal student identification process
2. Staff training in identification
3. Staff involvement in identification
4. Referral training for the student assistance team
5. Formal assessment and referrals for identified students.

In order for students to be referred, school staff must receive training in how to identify students who are having some sort of health problem (Herberg, Hughes, & Bond, 1990). While teacher identification of students who need help might seem like something that is inherent knowledge, it is important to remember that many teachers lack mental health and substance abuse training, and hence might not be aware of some of the less obvious signs of failing health (Meister, 2000). For students who are referred to a SAP, a designated team evaluates the student's respective problems and then develops a specialized treatment plan. Finally, SAP team staff must be aware of the numerous community resources available for the student, and work to collaborate with these agencies (Herberg, Hughes, & Bond, 1990; Moore & Forster, 1993).

6.4. Student Assistance Program Conclusion

Student Assistance Programs are presented here as one model of a school-based mental health service. By no means is this the only school based program that is available, nor is it the “best”. However, SAPs are effective for a number of reasons. The program aids in the effective identification of students who are experiencing some sort of mental health problem. Teachers and school administrators are trained to recognize and identify students who need help. Currently, many teachers are unaware of some of the signs and symptoms of mental illness, and part of the SAP philosophy aims to educate school employees about this topic. The more readily that students are identified, the quicker they can be connected with appropriate treatment.

In addition, the program incorporates the theory of interagency cooperation. This trend cannot be overemphasized. One sector of the human service community cannot bear the entire burden of caring for this population. Only if sectors work together will the problem be effectively addressed. Moreover, this model might be particularly appropriate for school systems that are unable to develop their own mental health clinic due to funding concerns. The presence of one SAP coordinator is undoubtedly less expensive than an entire clinic. While the student might not be treated within the school system, the coordinator can at least work to refer the student to the necessary treatment resource.

7. Recommendations & Conclusion

Mental health and substance abuse are significant problems that greatly affect the adolescent population. Research has consistently shown that at least one out of every five adolescents experiences some form of mental illness. Rates for substance abuse are similarly high. The long term health risks and economic costs that are associated with such diseases are considerable. Despite this, rates of treatment among adolescents are low. Obviously, something is not working correctly, be it in the identification, referral, or treatment process.

Recent attention, in part brought about by the Surgeon General's Report on Adolescent Mental Health (2000), has brought this issue to the foreground of adolescent research. School-based programs, with Student Assistance Programs in particular, have been described as a strategy for treating adolescents. For progress to be made in this area, intensive efforts from all human service sectors are needed. The problem has no simple answer, nor is it likely to go away. Here are recommendations on how to adequately address this problem. These recommendations are in large part centered on an understanding of the literature, and also based on the author's past experiences working with adolescents, both in juvenile detention centers and on research studies looking at adolescent mental health and substance use.

Early intervention programs should be targeted towards all adolescents who need help. Programs must be developed and implemented that focus on internalizing as well as externalizing disorders, females as well as males, and minorities as well as Caucasians. Early intervention programs are critical for identifying adolescents whose problems are only beginning to develop. This gives professionals a head start in attempting to treat the illness before it develops into a chronic condition. Too often, children and adolescents with problems are ignored or pushed aside. Consequently, these children do not receive treatment and often go on

to develop chronic conditions that are difficult to treat. In many circumstances, males with externalizing behaviors are referred to the juvenile justice system instead of the mental health sector. This is a reactive system, not a proactive one, where adolescents are punished for something over which they have very little control. To stop mental health problems from developing into chronic conditions, they must be identified immediately. Early identification is practiced for many diseases such as heart disease and cancer. Why not practice such procedures for mental health problems and substance abuse as well?

This is not to imply that early interventions should only be practiced for adolescents. Mental health problems are present in childhood as well. Current research has shown that more school-based health clinics, and Student Assistance Programs in particular, are being implemented within elementary and middle schools. This thesis focuses on the adolescent time period, but many of the same problems and recommendations can similarly be applied to childhood.

What better place to implement this procedure than the school? The educational sector is an ideal location for the identification, treatment, and referral of adolescents who are experiencing health problems. Placing mental health clinics within the school system can treat all adolescents who need help, provide easier access to care, provide a familiar environment for treatment and follow-up, and possibly act to reduce stigma. The school system has often been the primary location for drug and substance prevention programs, but has until recently rarely been utilized as an actual intervention site (Wagner et al., 2004).

In the barriers to care section above, differences in treatment rates between the specialty mental health care sector and the educational sector were highlighted. Most importantly, the educational sector was found to treat adolescents who might not receive specialty mental health

care, namely females and minorities. Hence, school-based mental health services have the potential to reach these underserved populations.

School-based services reach not only two underserved subpopulations - females and minorities - but also the entire adolescent population in general. Results from the Great Smokey Mountains Study (GSMS) show that between 70 and 80 percent of the population that receives help does so within the educational sector (Farmer et al., 2003). Moreover, 60 percent of these youths first entered into the mental health system through the educational sector. In comparison, 27 percent of adolescents entered through the specialty mental health sector (Burns et al., 1995). Clearly, school-based mental health programs significantly help to identify, refer, and treat adolescents who need help.

School-based programs eliminate the barriers faced by parents and adolescents in finding a treatment center (Wagner et al., 2004). Instead of having to search for treatment in the community, programs exist within the school itself. Moreover, students and their parents do not have to worry about transportation issues or traveling to different treatment center. The school system is usually centralized within a community, and easily accessible to both students and parents.

Furthermore, the school setting provides an environment in which the child's behavior can be viewed and monitored in a natural setting. Apart from parents, teachers spend the most time with adolescents and have a unique opportunity to recognize behaviors that others might not see. This can help in the identification of students who need help, and can also be used as a means of follow-up once a student has reentered the academic community from outside treatment (Wagner et al., 2004).

Wagner, Swenson and Henggeler (2000), citing work done in the 1970s by Cowen and Bronfenbrenner, argue that community based interventions have the potential to be the most effective interventions for adolescents. Coming from an ecological perspective, treating youth in mental health clinics is challenging because it occurs in a setting that is unfamiliar. The authors note, “By treating the pathology of the child outside the boundaries of the community, and with little regard for the ecological systems that influence and are influenced by such behavior, the ultimate effectiveness of traditional intervention practices may be limited.” (Wagner et al., 2000, p.213).

Besides being with their parents, children and adolescents spend a large portion of their day with teachers. This allows teachers to develop relationships with their students, and to recognize when children deviate from typical mood and behavior. Additionally, teacher view interaction with peers, and in a completely different setting than the home environment. Consequently, teachers are in a unique spot to recognize when problems are beginning to develop. If a school-based mental health program exists within the school, teachers have a resource that allows them to refer the adolescent to appropriate treatment.

Moreover, the availability of mental health services in the school might help to lessen the stigma of mental health treatment by normalizing it into the school context (Baruch, 2001). Students and families are no longer forced to seek treatment from unfamiliar mental health centers. By providing help within the school system, parents and adolescents are able to feel that treatment is part of a normal academic schedule.

Placing mental health services is an area that is fraught with controversy. Many people will argue that school is not the place for these issues to be addressed. But I argue that the school is the ideal location for this challenge to be addressed. Teachers are not just educators.

They are mentors and leaders, people who work with students on a daily basis for the best of the individual. The school is not just an educational setting; it is a developmental center for children and adolescents. In childhood, teachers work to help the child develop relationships and proper interaction with their peers, while in adolescence, teachers work to help the youth develop their own identity. Ignoring the mental health problems of students completely disregards an inherent aspect of adolescent development.

Addressing the mental health needs of adolescents within the school system benefits the school system and the adolescent. Students' academic development is significantly impacted by their mental health status. Students with mental health problems have lower grades and higher rates of absenteeism, problems that can only be lessened if the underlying mental health problem is also addressed. A healthy student functions better academically, and a healthy student body allows the school system to operate at its highest potential. Lower rates of mental illness imply lower rates of student disruption as well as less teacher frustration.

Although school-based clinics have the potential to address the problem of undertreatment of the adolescent population, certain issues must also be addressed if this sector is to be used as an alternative to the specialty mental health care sector. As detailed above, school-based services have been fragmented and not well coordinated in the past. If school-based clinics are to be successful and prevalent throughout the United States, issues of coordination, standardization, and evaluation cannot be ignored. Evidence-based practice is essential in developing and implementing school-based clinics. Recent research and practice has focused on these issues, and this trend must continue in the future.

Another important issue to consider is funding. Many schools are unable to employ enough teachers, let alone an entire mental health treatment team. School-based clinics must

explore alternative forms of funding. Services might be covered by medicaid, or a student's insurance, if present.

For a policy perspective, however, more funding will need to be allocated to programs and research studies that are directed towards treating mental health issues in schools and connecting treatment with the community. More importantly, funds need to be funneled into actually working with adolescents instead of studying them. This is not to say that we should stop funding research that looks at adolescent mental health. To say so would ignore the vast amount of knowledge that has been gained through research.

In addition, funds need to be directed towards mental health practice with the school system. Many schools and community centers have significant funding problems. For example, a substantial grant will be awarded to a school for the purpose of developing a mental health treatment clinic OR to a researcher studying the genetic links of depression. Which prospect would have the potential to directly affect the lives of more adolescents? The answer should be relatively obvious.

It is also clear that increased levels of interagency cooperation are critical for addressing these issues. Although the school system might be an ideal location to target youth with mental health problems, the burden of care cannot fall on the educational sector alone. In the past, the specialty mental health sector has provided care, and this has led to the current predicament of undertreatment of adolescents. A single sector cannot adequately address the multiple needs of this population. The problem is too broad and diverse. In part, programs such as SAPs can help the school to bridge the gaps with community agencies. Schools and communities in general must make a commitment to work with each other. Despite research from the GSMS that point to significant numbers of adolescents being treated within the educational sector, the study has

also shown that many of these adolescents are not linked to other treatment sources within the community (Farmer et al., 2003). Health service professionals must work with people from different fields; whether it be a psychiatrist consulting with a social worker or a public health professional helping a school counselor to evaluate a program. Health professionals must all work together to meet the needs of the adolescent population.

Health education programs should be focused on many issues. These programs should educate the public about mental illness, what it is and what it is not. A person who is ignorant of mental illness is unable to recognize the problem, address the issue, and make steps to change the situation. Second, health education programs should be geared towards eliminating the stigma that is associated with mental illness. Normalizing mental illness at an individual and collective level will help people understand how mental health problems can affect a person and in turn how people in the community are affected by mental illness. Through this process, the stigma of such a disease should be lessened.

Denial is closely related to stigma and plays a significant role in barring treatment to adolescents. For adolescents with psychiatric diagnoses, two forms of denial that are relevant to their receiving treatment. Firstly, adolescents themselves might deny suffering from mental illness. This might be the case for those youths with substance abuse problems, as denial is often associated with substance dependence. Secondly, parents might deny that their children are suffering from a mental illness. Again, this is often the case for parents whose children abuse substances. Having worked with adolescents diagnosed with substance dependence, the author would argue that parental and school-based denial is a significant barrier to care for some youths. Many parents and school authorities refuse to admit that adolescents are using substances, and consequently, adolescents do not receive appropriate treatment. Many schools take the stance of

“drugs aren’t in *our* school district” or “only *bad* schools have drug problems”. This philosophy does nothing more than allow the problem to flourish. Only by tackling the problem head-on can the problem be adequately addressed. The fact that drugs are in *every* school must be stressed to parents, school administrators, and politicians.

What better place to start health education programs than in schools themselves? To a small degree, health education campaigns are already present within the school system. One example would be D.A.R.E., or Drug Abuse Resistance Education. This program is present in many public schools throughout the United States.

Just as treating adolescents within the school system can help to erase the stigma of mental illness, educating adolescents at the school level can also help to normalize mental illness. These programs should be geared towards both students and adults. Students and parents can be taught to understand signs and symptoms of mental illness and what steps to take if they feel they need help.

These recommendations are steps that could be taken to reduce the problem of the undertreatment of the adolescent population. Many more can be made, and arguments recommendations here exist. Nevertheless, these recommendations have the potential to significantly help the adolescent population.

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