Each generation of adolescents is exposed to a wider array of stressors and environmental deficits. Use, abuse, and dependence on alcohol and other drugs greatly impairs youths' ability to develop fully, and exacerbates and compounds other biopsychosocial problems. Physiologically, the onset of secondary sex characteristics, the growth spurt, final development of the central nervous system, as well as hormonal, neurotransmitter, and biochemical changes occur during adolescence. Mood altering chemicals alter human physiology including neurotransmitters. Young people who use chemicals also have a more difficult time with psychological tasks, such as individuation, emancipation, and separation. Their relationships with families tend to be marked by conflict and polarized feelings. Adolescence is also a period of development of a gender role identity or integrating sexual impulses into self concept. Young people who use chemicals are more likely to have difficulty controlling impulses and have high rates of promiscuity and prostitution. Another developmental area common to adolescence is the development of a moral code. Young people who use chemicals tend to become involved in behaviors viewed as anti-social, including theft, selling chemicals, and sexual misadventure. Career choice is another developmental area of concern. Because prospects for well paying jobs are limited as compared to the past, some young people take a fatalistic approach toward their education. The progression of chemical use, risk factors, and an overview of evaluation and intervention techniques and strategies are presented. (LLL)
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TEEN DRUG USE: IMPACTS AND OUTCOMES

ABSTRACT

Each generation of teens is exposed to a wider array of stressors and environmental deficits. Use, abuse, and dependence on alcohol and other drugs greatly impairs our youths' ability to develop fully, and exacerbates and compounds other biopsychosocial problems. Recent research continues to indicate what has been believed empirically: Adolescent chemical use may be a direct causal factor of other adolescent difficulties, including pregnancy, delinquency, and others. This paper provides an overview of adolescent developmental tasks as impacted by alcohol and other drug use. In addition, the progression of chemical use in adolescents, risk factors for adolescent chemical use, and an overview of the evaluation and intervention techniques and strategies will be discussed.
Adolescence is the time period between ages eleven and twenty-four where a child develops into adulthood. This period of transition is growing longer with each generation as psychological development is completed later. In addition, adolescence a period of greater stress with each passing generation with an increased number of blended families, and for many a bleaker outlook than in the past: This is the first generation in the history of the United States which will not out-do the previous generation in socio-economic status including earning power, education, and social status. The use of alcohol and drugs amongst adolescents has always been a concern. However as the field of adolescent chemical dependency matures, other mental health and community support professionals begin to view problematic nature of adolescent chemical use as well.

Adolescence is the period of greatest physiological development than any other time except when a person is between the ages of birth and one year old. It is during adolescence that we see the onset of secondary sex characteristics, the growth spurt, final development of the central nervous system, as well as hormonal, neurotransmitter, and biochemical changes. It is a well documented fact that all mood altering chemicals alter human physiology including neurotransmitters. This creates great potential for "soft" but never-the-less serious impact of physiological development in addition to a more striking physiological consequences of adolescent chemical use: Unintentional injuries (led by motor vehicle accidents in which alcohol and drugs are a factor) is the leading cause of death amongst young people. It must be remembered that mood altering chemicals not only change mood but change cognition and behavior, the three of which are inextricably linked. This factor often increases the already problematic normal adolescent feeling of invincibility.

Another important set of adolescent developmental tasks are the psychological tasks. These include individuation, emancipation, and separation. Young people must develop their identity separate from their parents, develop the capacity to function independently, and psychologically and physically separate from their nuclear family in an appropriate fashion. Young people who use chemicals have a more difficult time with this as their relationships with families tend to be marked by conflict and polarized feelings. The extent to which an adolescent traverses psychological development successfully is the extent to which one will have a relatively well adjusted adult. If one's first experience with the death of a loved one (perhaps a grandmother) is during a period of heavy chemical use, one loses the opportunity to "practice" this problem and its resolution in a clear minded fashion in a relatively supported environment. Later, when the
loved one passing away is a parent, one has lost a successful experience to draw upon. Adolescence is also marked by the development of abstract thinking. In early adolescence the central nervous system is not yet completely sufficient to allow for the frequent practice of abstract thinking, including choice making and planning. During middle and even late adolescence while the physiological mechanisms are present, abstract thinking is a skill for practice. Young people who are using chemicals are less likely to make wise decisions, control impulses, or solve problems readily. In addition, young people who use chemicals tend to have a high level of self doubt and feelings of instability about career and ability to succeed into adulthood. Abstract thinking of course helps young people to avoid problematic behaviors in addition to chemical use. A truism however is that skipping school and shop lifting do not necessarily impair abstract thinking. Chemical use necessarily impacts abstract thinking and increases the likelihood of skipping school and shop lifting.

Adolescence is also a period of development of a gender role identity or integrating sexual impulses into self concept. This has great implications both for current relationships as well as relationships in the future. It also has impact on sexual behavior. Young people who use chemicals are more likely to have difficulty controlling impulses and have high rates of promiscuity and prostitution. In addition, there is a higher incidence of rape among chemical using adolescents, and a higher incidence of sexual abuse histories as their being more likely to perpetrate sexual abuse. These behaviors lead them into a higher likelihood of early unwanted pregnancy, sexually transmitted diseases, and AIDS.

Another developmental area common to adolescence is the development of a moral code, integrating parental, community, and spiritual beliefs into personal integrity. Young people who use chemicals tend to become involved in behaviors viewed as antisocial including theft, selling chemicals, and sexual misadventure. This frequently leads to severe family conflict and often spiritual conflict. Many young people who later discontinue their use of chemicals still have a difficult time facing some of the behaviors their chemical use led them into.

A final and critical developmental task of adolescence is career choice. This of course begins as early as pre-school and elementary where young people are showing a propensity for the arts or sciences. This path continues through education, the first job shoveling snow, the first fast food job, and beyond. Young people are painfully aware that prospects for well paying jobs in manufacturing and production are limited as compared to the past. Many can not afford higher education. This encourages some young people to take a fatalist approach towards their education and behavior in general believing little they will do will have positive impact anyway, or the "fiddle while Rome burns" syndrome.
Many researchers have pointed out the relationships and interrelationships between adolescent alcohol and drug use and other biopsychosocial problems. One researcher (Dryfoos, 1990) points out that substance abuse is related to every major adolescent difficulty including delinquency, tobacco use, early sexual activity, lower grades, dropping-out, early child bearing, and school failure. No one would suggest that adolescents who don't use alcohol and drugs don't experience these difficulties. This writer, however, advocates the view that if adolescent alcohol and drug use continues to decline we will see a concurrent decline in these other problem areas as they relate to chemical use.

This leaves an important question: What children are at greatest risk for alcohol and drug abuse? Dr. David Hawkins, Director of the Center for Social Welfare for Research at the University of Washington, recently developed eleven risk factors for substance abuse. They include: family history of alcoholism, family management problems (poorly defined rules, little monitoring, inconsistent or excessively severe discipline), early anti-social behavior combined with hyperactivity, parental drug use and positive attitudes towards drugs, academic failure, little commitment to school, alienation/rebelliousness and lack of social bonding to society, anti-social behavior in early adolescence, friends who use drugs, favorable attitudes towards drug use, early first use of drugs (use of alcohol or drugs before age fifteen).

Not all young people of course use mood altering chemicals. There is a group of young people, approximately twenty percent (20%) who for any given extended period of time do not use alcohol or drugs. It is also suggested that approximately ten (10) out of one hundred (10%) of America's high school, Senior age teens are truly chemically dependent. Chemical dependency is a medical diagnosis of a primary, progressive, chronic, and fatal disease. It is usually suggested that an adult alcoholic may drink for fifteen years before becoming symptomatic. Young people can, and may become chemically dependent in five to fifteen months due to their great physiological and psychological vulnerability as well as the intensity of their use. Young people use less frequently than adults but use much more on each given occasion. This leaves approximately seventy percent (70%) of our youth somewhere in the progression of chemical use between "periodic and experimental" use to serious substance abuse. It is this writer's position that any use of mood altering chemicals by young people must be considered "abuse". Because of the great risk of physiological negative outcomes (for example: drunk driving accidents) and the serious likelihood of psychological permanent yet not readily seen damage, young peoples' use is troublesome. This does not mean that one
overreacts to a single instance of adolescent experimentation. However, if parents, community, and health care practitioners view any use as problematic fewer young people will find themselves after three years of many saying "kids will be kids", fewer young people will find themselves in a treatment center. Unfortunately, chemical dependency has been both over-diagnosed and under-diagnosed among the adolescent population. Many studies suggest that a large percentage of adolescents in psychiatric facilities being treated for conduct disorder and depression are truly chemically dependent and are in need of chemical dependency focused care. Similarly, some agencies have overused the chemical dependency diagnosis amongst teenagers who while they were abusing chemicals, were either asymptomatic or pre-symptomatic for chemical dependency. The greatest need for parents and concerned community members is a solid evaluation.

Once a thorough chemical dependency evaluation has been completed, several outcomes are likely. If the client shows no signs or symptoms of chemical dependency and limited evidence of any chemical use, continued monitoring by parents and the school may be sufficient. This does not indicate, however, a "clean bill of health". Young people require continued observation throughout their developmental years, as chemical use may begin and increase quite rapidly. At the other extreme, a chemical dependency evaluation may confirm active chemical dependency. In these instances a range of treatment options are available. These include outpatient therapy which normally consists of peer groups, didactics, and family work. A more structured intervention may be necessary including intensive outpatient of three to five times weekly or perhaps day treatment up to six hours per day for four to six days weekly. Many young people may require a residential stay of four to six weeks to start them and their parents with the necessary behavioral changes to support continued abstinence and recovery. Some young people, particularly those with histories of severely dysfunctional families may require long-term treatment of up to six to nine months with a focus on chemical dependency and an increase in their independent living capacity. All chemical dependency treatment work with young people must include the 12-step programs of Alcoholics Anonymous and Narcotics Anonymous, structured family dynamic therapy, and educational component. The likelihood of a young person without a high school diploma or G.E.D. continuing abstinence and recovery is close to zero.

Some young people who are chemically dependent may require a brief stabilizing stay at a psychiatric facility prior to chemical dependency treatment. This is particularly true in cases where young people are actively suicidal or homicidal. This also may be true in the case of hallucinogen-induced psychosis. Some young people may need a course of physiological withdrawal with the assistance of chemotherapy, but this is fairly rare amongst the adolescent population. Most adolescent withdrawal symptomatology
is psychological in nature and "soft" in terms of physiological changes.

Some young people may require a "Dual Diagnosis" program. This is true for young people who are chemically dependent in addition to having severe psychiatric difficulties including bipolar disorder, extreme attention deficit with hyperactivity disorder, thought disorder, or serious affective disorder including major depression. Some treatment regions are more likely to have the range of treatment services than others, necessitating some families to travel great distances geographically to obtain the services their young person requires.

When any adolescent presents for health care (mental health, physical health, or even through the criminal justice system) one must immediately ask the question: Is this young person chemically dependent? If the answer is "yes", a straightforward chemical dependency course of treatment including 12-step programs, family work and abstinence oriented to therapy, will go a long way towards improving general behavior patterns. In other instances it may be relatively easy to rule out chemical dependency. Once this is ruled out then the decision about cause and effect of behavior becomes somewhat easier to evaluate.
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