AMERICAN ACADEMY OF PEDIATRICS

Committee on Substance Abuse

Tobacco, Alcohol, and Other Drugs: The Role of the Pediatrician in Prevention and Management of Substance Abuse

ABSTRACT. During the past three decades, the responsibility of pediatricians to their patients and their patients' families regarding the prevention of substance abuse and the diagnosis and management of problems related to substance abuse has increased. The American Academy of Pediatrics (AAP) has highlighted the importance of such issues in a variety of ways, including its guidelines for preventive services. Nonetheless, many pediatricians remain reluctant to address this issue. The harmful consequences of tobacco, alcohol, and other drug use are a concern of medical professionals who care for infants, children, adolescents, and young adults. Thus, pediatricians should include discussion of substance abuse as a part of routine health care, starting with the prenatal visit and as a part of ongoing anticipatory guidance. Knowledge of the extent and nature of the consequences of tobacco, alcohol, and other drug use as well as the physical, psychological, and social consequences is important for pediatricians. Pediatricians should incorporate substance abuse prevention into daily practice, acquire the skills necessary to identify young people at risk for substance abuse, and provide or obtain assessment, intervention, and treatment as necessary.

PERVASIVENESS OF DRUG USE

The pattern of substance abuse among teenagers has undergone significant change during the past 30 years. Before the late 1960s, the abuse of alcohol and other psychoactive drugs including tobacco was predominantly by adults. Beginning in the late 1960s and early 1970s, substance abuse became widespread among adolescents and more recently among preadolescents. Alcohol and tobacco as well as opiates, cocaine, amphetamines, barbiturates, marijuana, hallucinogens, anabolic steroids, and prescription and nonprescription medications and inhalants (volatile substances) are used/abused by many teenagers and a growing number of pre-teens.[1] The use of even drugs like tobacco in this age group represents a significant health threat and is associated with an increased likelihood of future use of marijuana and other illegal drugs.[2]

Recent statistics show a steady increase from 1991 through 1996 in the use of drugs among students in 8th through 12th grade. Alcohol continues to be the most common substance of abuse used by young people. Nearly 80% of high school seniors report having used alcohol at some time in their lives. Binge drinking (consuming five or more drinks in a row, presumably to achieve intoxication) is alarmingly common with 16% of 8th graders, 25% of 10th graders, and 30% of seniors reporting having done so within the previous 2 weeks. Lifetime use of other drugs among high school seniors in 1996 was 45% for marijuana, 17% for inhalants, 7% for cocaine, 2% for heroin, and 15% for amphetamines. Even more alarming is the fact that marijuana use among 8th graders has increased 250% since 1991, from 10% to 25%.[1]

Significantly, daily use of tobacco and marijuana among young people in school is at an epidemic level. Among 8th graders, 1 in 10 smokes cigarettes and 1.5% use marijuana daily. One in 6 10th graders smokes, and 3.5% use marijuana daily. Among high school seniors, nearly 1 in 4 smokes daily and 5% admit to daily use of marijuana. The "Monitoring the Future" study that yields these data reports only those in school; tobacco, alcohol, and other drug use is greater among the population that does not attend school.[3,4] For example, it is estimated that 75% of 18-year-olds who are not in school use tobacco.[5] Rates of substance use also vary among ethnic groups and tend to be highest among whites, followed by Hispanics and then African-Americans.[6]

Possible factors implicated in the increase in usage include a decrease in perceived risk, fewer school-based substance abuse programs, pervasive messages in the electronic and print media as well as advertisements that glamorize tobacco and alcohol, and the somewhat lenient pattern of parenting in the 1990s.[1,7] The perception that the casual use of recreational drugs is not a significant concern is held by many adults as well, including a sizable number of pediatricians surveyed by the AAP in 1995. Although the prevalence of drug use may vary from community to community, there is general agreement that use of tobacco and alcohol at an early age is a predictive factor for use of other drugs, use of a greater variety of drugs, and use of more potent agents.[1] Furthermore, the onset of tobacco addiction occurs primarily among children. Most adults who smoke began to do so before the age of 19 years,[8] at an average age of 12½; most were regular smokers by the age of 14. Thus, it is critical for the pediatrician to be knowledgeable about smoking prevention and treatment measures.

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

MAXIMIZING THE PEDIATRIC EVALUATION

Appropriate interviewing techniques are critical in obtaining a comprehensive substance abuse history. Central to this is the issue of confidentiality, and the most useful information will be obtained in an atmosphere of mutual trust and comfort. Pre-teens as well as teenagers should be interviewed privately during each office visit with the reassurance of confidentiality and a discussion of its limits. Even an apparently straightforward complaint such as headache or sore throat may be associated with an underlying substance abuse problem. Open-ended questions are usually the most nonthreatening and a concerned, nonjudgmental style of interviewing may encourage the development of an honest doctor-patient relationship. It may be helpful to begin with questions about the patient's attitude toward use of tobacco, alcohol, and other drugs within his or her environment (home, school, and friends) rather than probing personal beliefs or habits. This questioning may lead logically to inquiry about the patient's experience with tobacco, alcohol, and other drugs. Many clinicians use structured interviews and questionnaires to determine a substance abuse history.[9–11]

Beliefs about substance use, ceremonies that include substance use, and patterns of use may vary among those of different ethnic backgrounds, cultures, and sexual orientation. Psychosocial stresses contributing to use may include pervasive messages given to some youth that they are inadequate because of their social or cultural group, a sense of being out of the mainstream, awareness of a lack of educational and employment opportunities, knowledge of widespread poverty and violence in one's community, and sociopolitical disenfranchisement.[12,13]

Inquiry into age-appropriate psychosocial history, such as family and peer relationships, academic progress, nonacademic activities, behavior, acceptance of authority, degree of self-esteem, and ongoing episodes of intrafamilial or extrafamilial child abuse may reveal risk factors for future or present substance abuse (Table).[14–17] These issues should be a part of every history when a patient aged 8 or older is seen for health care.

It is estimated that 1 in 5 children grows up in a home in which there is someone who abuses alcohol or other drugs.[18] Inquiry regarding the extent of tobacco, alcohol, or other drug use by peers and family should be a part of the routine history of every child who is seen in the pediatrician's office. This questioning should be followed by an age-appropriate discussion of the possible consequences of such use with the child and his or her parent or guardian. If this discussion reveals a family history of chemical dependency, the pediatrician should feel comfortable addressing the issue and be able to make appropriate referrals for care.

Inquiry regarding other risk behaviors is also important in dealing with the issue of substance abuse. Research suggests the clustering of behaviors such as early and promiscuous sexual activity,[13] membership in anti-social clubs and gangs, illegal use of firearms, use of drugs while riding in or driving a motor vehicle, and engaging in other illegal activities. Those who engage in one risk behavior are more likely to engage in others.[19,20]

TABLE. Factors Involved in Adolescent Tobacco, Alcohol, and Other Drug Use

Paternal or twin alcoholism
Parental alcohol, tobacco, or other drug use
Family history of alcoholism
Family history of antisocial behavior
Child abuse and neglect
Parents with poor parenting skills
Poor relationships with parents
Drug use by sibling
Drug use by best friend
Perceived peer drug use
Failure in school
Low interest in school and achievement
Rebelliousness and alienation
Low self-esteem
Early antisocial behavior
Psychopathology, particularly depression
Negative character traits (eg, frequent lying, lack of empathy toward others, favoring immediate over delayed gratification, need to seek sensation, insensitivity to punishment)
Previous dependence on alcohol or other drugs
Disorganization in the community
Delinquent behavior
Low religiosity
Early experimentation with tobacco and alcohol
Early sexual activity

Information should be obtained on the teenager's use of specific drugs, including tobacco and alcohol; the extent of such use; settings in which the use occurs; and the degree of social, educational, and vocational disruption attributable to the drug use. Teenagers may display varying degrees of honesty when discussing their use of tobacco, alcohol, and other drugs. Use may be exaggerated or minimized, and the pediatrician may need to rely on other contextual clues such as mood, dress, and physical and behavioral symptoms (such as criminal activity or problems at home or school) to fully assess usage patterns.

DRUG TESTING

Laboratory investigation (drug testing) may be used when it is necessary to determine the cause of dysfunctional behavior and other changes in mental status or suspicious physical findings. It is important to differentiate between "screening" and "testing" for drugs of abuse. "Screening" is a technique used to evaluate broad populations, such as screening all athletes trying out for a school team. "Testing," on the other hand, implies evaluation based on a clinical suspicion of use. Guidelines published by the American Academy of Pediatrics[21] as well as issues of consent and confidentiality[22] should be considered when deciding whether to use drug testing in the diagnosis and management of substance abuse. Upon obtaining urine for testing, it is critical that accidental and purposeful contamination, dilution, or substitution be avoided. Knowledge about the capability of the laboratory to identify specific substances and the accuracy and sensitivity of the pro-

cedures used is necessary when such testing is being ordered.[21]

Initially, a clinical history of substance abuse obviates the need for testing. In general, testing should be done only with the patient's consent. Exceptions include situations in which the patient's mental status or judgment is impaired, or when testing is a routine part of treatment and maintenance of abstinence.

ISSUES INVOLVING MANAGEMENT AND PREVENTION

The pre-teen or teenager who admits to repeated use of alcohol, tobacco, or other drugs requires careful evaluation to determine whether intervention and treatment are indicated. Any substance use by young pre-teens carries extraordinary risk because of the likelihood of progression to the use of additional and more dangerous substances and the impact of such use on physical, physiologic, neurologic, and emotional development.

Intervention is required for any patient in whom substance use is having an obvious effect upon academic, social, or vocational functioning. Use of substances in association with other risk behaviors also warrants immediate intervention.

Teenagers may be more able to accept the need for help if they are shown how their use has progressed from occasional in safe situations to more regular in more dangerous situations. Discussing reasons and motivations to quit using tobacco, alcohol, and other drugs may encourage the teenager to consider changing such behaviors and to recognize the importance of seeking treatment. Help may consist of counseling (family or individual), psychotherapy, inpatient or outpatient drug treatment, psychological evaluation and/or testing, psychiatric assessment, or drug detoxification. Environmental changes, such as living in a different community with a relative, may be integrated into any of these options. Pediatricians can be most helpful if they are familiar with the referral resources within their communities, including private and public facilities, those offering inpatient and outpatient treatment, and the capability to treat teenagers from diverse backgrounds. One large study of 1700 adolescent patients admitted for inpatient substance abuse treatment reported that only 4% of these patients were referred by physicians.[23]

A far more frequent scenario is the use of drugs—particularly alcohol and marijuana—as a recreational activity without significant disruption of behavior or performance. As many teenagers and families do not regard such use as a health issue, the pediatrician may need to offer counsel regarding the associated risks even though no such advice is solicited. At other times the pediatrician may be asked to help resolve a conflict between parent and child over the use of these drugs. Thus pediatricians need to be knowledgeable, objective, and able to give adolescents and their families accurate information on the health and safety hazards of using tobacco, alcohol, and other drugs.

Even infrequent recreational use poses a risk for serious problems including increased levels of abuse and intentional or unintentional injury. For example, use of alcohol and other drugs is a major cause of death and injury in adolescents and young adults. Unintentional injury, suicide, and homicide account for approximately 77% of the mortality in 15- to 24-year-olds,[24] and intoxication is a significant contributing factor in many of these deaths. Of 1023 consecutive admissions at one trauma unit (two thirds from automobile accidents) approximately half tested positive for alcohol, marijuana, or both. Positive tests for both were found in one third of those affected, while marijuana and alcohol alone each accounted for one third.[25] These data indicate that death and serious injury often result from risk-taking behavior while intoxicated.

Pediatricians hold valuable, respected positions with their patients, their patients' families, and within the community. Armed with the knowledge of normal adolescent development, the pediatrician has the unique ability to provide appropriate anticipatory guidance and counseling in substance abuse prevention and to place tobacco, alcohol, and other drug use in the context of risk behavior in general.[20] This may lead to the identification of other risk behaviors and provide the opportunity to intervene by encouraging protective behaviors.

RECOMMENDATIONS

The American Academy of Pediatrics recommends the following actions to promote the pediatrician's role in the prevention and management of tobacco, alcohol, and other drug abuse.

1. Pediatricians should:

- be knowledgeable about the extent and nature of tobacco, alcohol, and other drugs of abuse in their community as well as the health consequences of such use.
- include tobacco, alcohol, and other drug use in their anticipatory guidance discussions, beginning with the prenatal visit. Opportunities to discuss substance abuse may be identified at the time of routine health care as well as when patients are seen for treatment of injuries or episodic illness.[26]
- be alert for signs and symptoms suggestive of substance abuse and be able to identify those children and adolescents exhibiting behaviors that may place them at high risk for subsequent use of tobacco, alcohol, and other drugs (Table).
- be able to evaluate the nature and extent of tobacco, alcohol, and other drug use among their patients and among their patients' families to offer appropriate counseling about the risks of substance abuse and to make an assessment as to whether additional counseling and referral may be needed.
- interview the adolescent alone to obtain a meaningful history of drug use and/or associated problems and to assure confidentiality, except when a threat of harm to self or others exists or when reporting is required by law.
- have an awareness of community resources for

adolescents to accomplish appropriate referrals for evaluation and treatment of substance abuse.
- serve as a resource for smoking prevention and cessation and should be knowledgeable about cessation programs available in their communities.[27,28]
- be advocates for issues related to the prevention and treatment of substance abuse at the local, state, and national levels, especially relating to the advertising, sale, and promotion of alcohol. In addition, pediatricians need to be attentive to proposed changes in the legal status of marijuana.
- be available to professional organizations, schools, school-based health services, and community agencies as consultants to enhance programs designed to prevent substance abuse among children, adolescents and their families.

2. Children, adolescents, and their families should be informed that even recreational use of alcohol, tobacco, and other drugs by children and adolescents—regardless of amount or frequency—is illegal and has potential health consequences.
3. Patient consent should generally be obtained before testing for drugs of abuse, but may be waived when the patient's mental status or judgment is impaired.[21]

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Pediatrics 1998;101;125
DOI: 10.1542/peds.101.1.125

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