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PartySmart Report 2004–1

Drug Use Among Youth: The Prevalence, Health Problems And Possible Solutions

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The United States is a drug-using society. We look towards drugs to solve our problems. Headache? Take aspirin. Muscle ache? Take ibuprofen. Pain? Take a pain reliever. No energy? Drink coffee or the latest trend, Red Bull. Think you're fat? Take diet pills. Runny nose? Take an antihistamine. Child with a runny nose? Take antihistamines for children. These are some of the drugs that are available over-the-counter (OTC) for anyone, of any age, to buy. Other drugs are available with a prescription. Shy? Take medication for social anxiety disorder. Sad? Take anti-depressants. Not sexually aroused? Take sexual dysfunction medication. Runny nose? Take allergy medication. At the same time, we tell our youth that they should never use drugs, primarily referring to illegal drugs. In reality, there can be problems associated with all drugs, whether they are legal, illegal, prescribed or OTC. Prescription drugs, OTC products, alcohol and tobacco are advertised and their use is widely accepted in society, although there is some stigma associated with the use of tobacco and some prescription drugs. Television commercials show alcohol as a cure for shyness and boredom while improving physical appearance and sex appeal. Although these commercials are supposed to be geared at adults of legal drinking age, they make an impact on young people as well as children. When asked to choose their favorite television commercial in a spring 2002 study, more teens named commercials for Budweiser than for any other brand, including Pepsi, Nike and Levi's. (CAMY, 2003) Problems associated with the use, misuse and abuse of OTC products such as caffeine, pain relievers, cough suppressants, diet pills, motion sickness medication and mouthwash is not well researched and documented. These products, as well as other OTC products, are easily accessible and have the potential for misuse and abuse by youth. In the United States, use of these products and others is normative, an acceptable solution to a problem. There are risks involved with all drug use, with some drugs being riskier than others, some more stigmatized while others are established, commonplace and accepted. This social stigma is not always related to the level of possible health risks associated with the drug.

Prevalence of Drug Use

Drug use has remained common among high school students throughout history. In the United States, the perceived availability of illegal drugs has remained consistently high, since this data began to be collected. In light of a consistent prevalence of illegal drugs, alcohol and tobacco, as well as prescription and

OTC products; abstinence for all is unrealistic. According to the 2002 National Council on Patient Information and Education (NCL, 2002) national survey, 59% of the Americans surveyed reported taking at least one OTC product in the past six months. (NCL, 2004) In 2002, the Journal of the American Medical Association published the Sloane Survey which found that nearly 80 percent of American adults reported taking an OTC pain reliever at least once a week. (NCL, 2004) Although most of the limited research on abuse and misuse of OTC products are studies on adults, these products are easily accessible and have the potential for misuse and abuse by youth. The number of American youth who are using prescription drugs for a psychiatric disorder has more than doubled between 1987 and 1996 now nearing the levels found in adults. (Warner, 2003) Prescription drugs are not always used as prescribed, by the person they are prescribed to. Misuse and abuse has become more prevalent; the most commonly misused are opiates, CNS depressants and stimulants. In 1999, an estimated 4 million people, about 2 percent of the population age 12 and older used prescription drugs non-medically in the past month. Of these, 2.6 million misused pain relievers, 1.3 million misused sedatives and tranquilizers, and 0.9 million misused stimulants. (USDHHS, 2001) Young people are particularly affected by this, as indicated by The National Household Survey on Drug Abuse, the sharpest increases in new users of prescription drugs for non-medical purposes occur in 12 to 17 and 18 to 25 year-olds. (Johnston, 2004) Alcohol and tobacco are the most common drugs used by adults and young people in the United States. The most commonly abused drug, and the one that the largest number of people are addicted to, is alcohol. In 2003, approximately 55% of U.S adults reported drinking at least one drink in the past month. (SAMHSA, 2004) Among 12 to 17 year olds, 42.9% have used alcohol in their lifetime, 17.7% in the past month. (SAMHSA, 2003) Among 12th graders, 77% have consumed alcohol, 48% in the past month. (Johnston, 2004) Among 12th graders, 94.2% say alcohol is fairly/very easy to get. (Johnston, 2004) The 2001 SAMHSA survey on drug use reports that in New Mexico, among 12 to 17 year olds, 19.82% have used tobacco in the past month. The 2001 New Mexico Youth Risk and Resiliency Survey reported that among the New Mexico high school students sampled, 75% have had a drink of alcohol in their lifetimes and 50% in the past month. (Palm, 2001) Tobacco use is also very prevalent; approximately 22.5 percent of adults were current smokers in 2002. (CDC, 2002) Among 12 to 17 year olds, 34.5% have used tobacco in their lifetime, 14.4% in the past month. (SAMHSA, 2003) Among 12th graders, 54% have tried cigarettes in their lifetime, 24% current smokers. (Johnston, 2004) The 2001 SAMHSA survey on drug use reports that in New Mexico, among 12 to 17 year olds, 19.82% have used tobacco in the past month. The 2001 New Mexico Youth Risk and Resiliency Survey reported that among the New Mexico high school students sampled, 64% have smoked in their lifetimes and 29% in the past month. (Palm, 2001) Illegal drugs are surprisingly prevalent among youth, with 51% of 12th graders having tried an illicit drug in their lifetime. (Johnston, 2004) Among 12 to 17 year olds, 30.5% have used an illicit drug in their lifetime, 11.2% in the past month. (SAMHSA, 2003) Although rates of illegal drug use change by year, one thing that has stayed consistently high since the data has been collected is the perceived availability of illegal drugs. 87.1% of 12th graders that marijuana is fairly/very easy to get and 43.4% say cocaine is fairly/very easy to get. (Johnston, 2004) In New Mexico, the rates are higher than the national average, with the SAMHSA national survey reporting that 13.53% of 12 to 17 year olds

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having used illicit drugs in the past month. A local survey of New Mexico High School Students had even higher results. The 2001 New Mexico Youth Risk and Resiliency Survey reported that 52% of high school students sampled have used marijuana in their lifetimes and 30% in the past month. New Mexico has the unfortunate position of being one of only four states in the US with the highest rates of alcohol dependence/abuse as well as the highest rates of illicit drug dependence/abuse among persons aged 12 and older.

Problems Associated with Drug Use

Drug use, misuse and abuse have been known to be problematic in the United States. Some problems are caused by the drug effects and mode of administration such as personal injury, infectious disease, hospitalizations, overdose and other health problems, including death. Other problems are associated with the use, misuse and abuse: motor vehicle accidents, decreases in productivity, increases in relationship problems, violence and abuse, sexually transmitted infections, suicide, incarceration, homelessness, loss of federal benefits, child neglect and more. Health problems can be both directly caused by and associated with drug use. As stated previously, there are health risks involved with all drug use, whether illegal, or legal. Over The Counter products are perceived as the safest of all drugs. The American Academy of Family Physicians reported in 2002 that there is a public perception that OTC products are not “real” medicine. People who take OTC products have a limited understanding about OTC ingredients, and a belief that “more is better” when treating headaches and pain with OTC products. (NCL, 2004) With some OTC products, using more than indicated (or using the products for extended periods of time) can cause serious health problems, including damage to internal organs, overdose and death. Even caffeine, a chemical found in chocolate, tea, coffee and chocolate milk, can cause insomnia, vomiting, hypoglycemia, tremors, blurred vision and death. The herbal supplement, Ephedra was used by many people to aid in weight loss and to enhance performance until April 2004, when it was banned due to adverse health effects including heart attack and stroke. The 2002 DASIS Report on people admitted for drug abuse treatment, reported that OTC admissions peak at age 16. (SAMHSA, 2002) According to the 2002 National Council on Patient Information and Education (NCPIE, 2002) national survey, 79% of the medical professionals surveyed said they were somewhat or very concerned about the inappropriate use of OTC medicines. (NCL, 2004) Most prescription drugs have the potential for very serious adverse effects, even death. The CDC website has the following quote on the vaccine side effects page: “Like any drug, vaccines are capable of causing serious problems, even death.” (CDC, 2004) Prescription drugs are increasingly involved in emergency room visits. Mentions of hydrocodone as a cause for visiting an emergency room increased 37 percent from 1997 to 1999, mentions of clonazepam increased 102 percent from 1992 to 1999. (SAMHSA, 2004) The most commonly abused drug, and the one that the largest number of people are addicted to, is alcohol. In 2000, alcohol consumption directly and indirectly caused 85,000 deaths (3.5% of all deaths), in the United States. (Mokdad, 2004) It also contributes to death among youth, with alcohol use being a leading risk factor in the three leading causes of death among youth: unintentional injuries, suicides and homicides. In any one year nearly 4.5% of people in the US, could be given a diagnosis of alcoholism, com-

pared to 1.8% for other drug dependence. Binge drinking is associated with a number of adverse health effects, including unintentional injuries (e.g., motor vehicle accidents, falls, burns, drowning, and hypothermia); violence (homicide, suicide, child abuse, domestic violence); sudden infant death syndrome; alcohol poisoning; hypertension; myocardial infarction; gastritis; pancreatitis; sexually transmitted diseases; meningitis; and poor control of diabetes. (CDC, 2004) Alcohol consumption has been the leading cause of premature death in New Mexico. This was due to cirrhosis of the liver as well as alcohol-involved motor vehicle accidents, suicide and homicide. The New Mexico rate of alcohol-involved motor vehicle accident deaths was more than twice the national rate. Cigarette smoking is the most preventable cause of disease and death in the United States. Every year, more than 400,000 die from cigarette smoking, 20% of deaths in the US are related to smoking. Of these, 50,000 died from second-hand smoke. Tobacco kills more Americans than AIDS, illegal drugs, homicides, fires and auto accidents combined. Smoking causes respiratory and cardiovascular diseases, as well as cancer of the mouth, throat, larynx, lung, esophagus, pancreas, kidney, bladder, stomach, cervix, and the blood. Smoking harms reproduction and causes diseases in the infant such as SIDS. Smoking harms the immune system, and increases the risk of fractures, dental disease, sexual problems, eye diseases and peptic ulcers. (USDHHS, 2004) Smoking materials (i.e., cigarettes, cigars, pipes, etc.) are the leading cause of fire deaths in the United States. (Hall, 2004) Use of illegal drugs can cause many health problems. Some of these health problems are related to the method of use: smoking can cause respiratory problems; snorting can damage nasal membranes and is associated with transmission of hepatitis; injecting is associated with transmission of hepatitis and HIV as well as damaged veins and infections. Other health problems are caused by the drug effects and/or conditions of use: overdose, hypothermia, cardiovascular problems and more. In 2000, illicit drug use directly and indirectly caused 17,000 deaths (0.71% of all deaths). (Mokdad, 2004) From 1990 to 1997, New Mexico had the highest death rate from drugs in the nation, twice as high as the national rate. New Mexico also had the highest rate of deaths from heroin overdose. These deaths frequently involve combinations of heroin with other drugs and/or alcohol.

Interventions

There have been many attempted solutions to the problem of drug use, misuse and abuse, including incarceration and other criminal justice interventions, treatment, prevention education and reduction/elimination of supply. Many of the educational efforts have been implemented in schools, targeting youth who have not initiated alcohol, tobacco and illegal drug use. As noted earlier, most school-aged youth have initiated alcohol, tobacco and/or illegal drug use. Therefore, education programs should be geared at helping youth who have not initiated use as well as those who have; otherwise, up to 42% of youth will not be targeted. Most drug education programs focus on very select drugs, while ignoring that fact that myriad drugs surround us all. Drug education programs should prepare our youth for living in a world full of drugs. School-based drug education programs should educate youth on making informed decisions before using any drugs (including alcohol, tobacco, OTC products, prescription and illegal drugs). This will help to keep people safe whether using the drugs correctly,

people to make their own decisions about drugs, especially encouraging informed decision making. Although extensive research has been done on illegal drug use, more research needs to be done on drug education as it relates to legal drug use. There is reliable data on the effects of legal drugs, and they almost always include warning labels, but few studies exist on the effectiveness of warning labels as an educational tool. Legal drugs are associated with many health problems, but it is rare for the general public to perceive them as such. Legal drugs, other than tobacco and alcohol, are rarely included in surveys of drug use, so reliable prevalence data on use, misuse and abuse is extremely limited. Finally, further research needs to be done on drug education that prepares people to make informed decisions about all drugs. This research should focus on youth, but should continue from primary through secondary school. Most importantly, findings from this research should be implemented. There is a wealth of information on effective drug education programs, but it is rarely applied in the school setting. Many of the programs that are implemented in schools are not effective, not based on research or science, and most do not have realistic objectives. Conducting and applying more research on drug use, misuse and abuse will help to reduce the extent of ongoing health problems related to drugs in the United States.

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sion after peer-counseled HIV education, than adult health care providers. Peer-led groups produced greater attitude changes in teens' perception of risk than adult-led groups. (Mason, 2003) Peer leaders offer several benefits including cost savings, ability to model appropriate behaviors outside of the classroom and greater social credibility among students. (Black, 2004) National Peer Helping Association promotes, provides standards and code of ethics for peer education programs. (Black, 2004) Advocates for Youth promote peer programs as the most effective way for youth to learn about sexual health. (Mason, 2003) Peer interactions facilitate learning by allowing students to learn from each other. (Van Ments, 1990) Peer interactions have been shown to facilitate critical thinking, impulse control, communication skills, empathy, sharing, helping and comforting. All of these skills and qualities can be related to drug use, misuse and abuse. (Black, 2004)

Conclusions

The best solution for these problems is to prevent drug use, misuse and abuse, but, as the statistics indicate, the use is so widespread that alternative solutions should also be utilized. Rodney Skager, an expert in the field of drug research has noted that drug use has remained common among high school students. He recommends, therefore, that abstinence for all is unrealistic and that safety information should be provided for all. When drug use is opened up to include over the counter and prescription drugs, abstinence for all becomes an unreasonable and absurd goal. Research has proven that drug education should be implemented and evaluated based on educational standards. This information can be used to create drug education programs that are more effective and more realistic. One such application of this research is a program called School & Community Drug Talks. These are discussions on drug use, facilitated by a student or member of an existing group to talk about living in a world full of drugs. It is not a stand-alone program as it should be used to supplement existing drug education. All drugs (any drug that can alter perception) should be included. The topics discussed would include: getting information on drugs, weighing the information and using the information to help self and others. The purpose is to discuss drug use with peers in a safe environment and ultimately to empower youth to make their own decisions about drug use. This program is guided by the research stated above, which demonstrates that people will use drugs (including over the counter, prescription, alcohol, tobacco, caffeine, illegal drugs, etc.), that young people have information and skills to make informed decisions about drugs and that informed decision making can reduce potential risks associated with drugs. This is a direct application of research which demonstrates that drug education should utilize what is already known in the field of education and should include all drugs that alter perception and cause health problems. It is facilitated by a peer, which has been shown through research to be more effective, a cost savings and more likely to result in interactive learning with appropriately trained peers. The primary means of education is through discussion, which has been an established method of effective education for many years. Discussion is proven to be more effective than lectures especially for decision making and problem solving. It has been shown to develop skills which are related to drug use decision making such as communication, critical thinking, social skills and self esteem. It also empowers young

or misusing the drugs. In deciding whether or not to use a drug people should weigh the benefits, side effects, possible consequences, possible interactions with other drugs, alternatives, etc. This is a lot of work and most people do not do it. Instead, many trust that all legal drugs are safe and that all illegal drugs are not safe. In doing this, they allow the political and legal systems to problem solve for them. Problem solving skills have been utilized to prevent violence, accidents, behavioral problems, suicide and many other health problems. Unfortunately, problem solving is rarely encouraged for thoroughly evaluating drugs. Most drug education that does incorporate problem solving focuses on how to say no, or how to deal with peer pressure. Adults and youth who use illegal drugs often do so because of perceived benefits of drug use, but these same benefits are rarely addressed as a component of drug education. Drug education tells youth what to think about drugs, it does not teach them how to think it through themselves. This leads back to the assumption that legal drugs are safe and illegal drugs are not safe. If we do not teach young people to problem solve, they may not feel the need to read a warning label on a bottle of OTC cough medicine. They may assume that taking cough medicine to treat a cough is safe, not realizing that it impairs judgment and reaction time in the same way that alcohol and marijuana can. Adults and youth ultimately have a choice in whether or not to use drugs (legal and illegal) at any given time, place or circumstances. The best education seeks to empower people to make informed decisions, without attempting to make the decisions for them. This empowerment is especially important for youth who often do not share the same rights and decision-making power that adults do. Young people do have power and authority to make decisions that affect their lives. Teaching young people to think through their own problems without telling them what to think, gives them the power to change their lives and the accountability that goes along with that. Many drug education programs have failed to meet their goals, this may be due to the drug education itself, but more likely it is due to the goal. Most programs attempt to eliminate drug use among young people, but by the 12th grade most young people have consumed alcohol, cigarettes or illegal drugs. Munro (1997) has recommended that drug education be informed by and evaluated on educational criteria of knowledge, understanding and analysis. These more realistic goals will make drug education more effective, as well as more accessible to schools.

Discussion

Discussion has been an approved and recommended classroom technique for many years. According to the National Education Association (NEA), many national education studies have recommended that students be more active in the learning process, instead of passive recipients of knowledge. The NEA recommends that education be interactive which sharpens thinking skills by practice of independent thinking, critical thinking and creative thinking. Discussion has also been shown to develop language-processing skills. It has also been shown to enhance social skills and self esteem by making the students responsible for the knowledge. (Stove, 1993) The NEA promotes the "Can We Talk" program, which incorporates violence, sexuality and drug education. The program promotes discussion as the primary method of prevention. (Becher, 2003) Rodney Skager, an expert in research of drug education programs, has recommended interactive teaching and learning strategies conducted in an environ-

ment that encourages questions and sharing of personal experience for more effective drug education. (Skager, 2004) Studies have shown that interactive drug education is more effective than lectures. Research on effective school-based drug education in Australia found that teaching should be interactive with a focus on community values, social context of use and the nature of drug harm. (Midford, 2002) Interactive peer-led programs were found to be significantly more effective than non-interactive, teacher-led programs in preventing drug use. (Black, 1998) Many national education studies have recommended that students be more active in the learning process, instead of passive recipients of knowledge. Interactive learning sharpens thinking skills by practice of independent thinking, critical thinking and creative thinking; develops language processing skills; and enhances social skills and self esteem by making the students responsible for the knowledge. (Stove, 1993) The Upfront Program in Oakland, CA was labeled “an exemplary program” by the California Department of Education. It utilizes group discussion, and makes the classroom a safe space to explore issues surrounding drug use. A Meta-Analysis of California School-Based Risk Reduction Programs found that alternative interventions (independent thinking, coping, social skills, etc.) have less impact on knowledge but more impact on attitudes and behavior. (Bruvold, 1990) Discussion has been found to be an effective way to change attitudes. It encourages students to discover their own strengths and weaknesses, teaches students to think for themselves and allows students to learn from each other. After an interactive discussion students become more committed to the actions discussed. (Van Ments, 1990) Interactive education has been utilized and promoted for health education by reputable sources. Centers for Disease Control (CDC) includes popular education in their “Guidelines for STD Prevention Community and Individual Behavior Change Interventions,” which define popular education as a social action that promotes participation of people and communities in gaining control over their lives, empowering people to act with others to bring about change. The discussion should consist of listening, participatory dialogue followed by action, envisioning positive change during the dialogue. The facilitator should describe what the participants see and feel, define the problem as a group, share similar personal experiences, question why the problem exists and develop action plans. (CDC, 2004) The CDC and Academy for Educational Development list HIV prevention interventions that are science-based and proven effective. One such intervention is the Mpowerment Project in which the major educational element is a peer-led discussion group. (AED, 2003) The “I Can Problem Solve” program, a SAMHSA (Drug Abuse and Mental Health Services Administration) model program, a Promising Program of the Department of Education and Center for Substance Abuse Prevention among others, teaches children “how to think, not what to think”. It encourages teachers and parents to engage in an interactive problem solving style of communication in which children are asked questions to define the problem, guide consequential thinking, and guide thought about the child’s own and others’ feelings. (Shure, 2000) Paulo Freire, a philosopher and major contributor to the field of education, went so far as to describe the traditional lecturing role of teacher as further oppression of the student. He promotes education that is dialogue-driven based on the student’s reflections on their own reality, utilizing critical thinking to empower students to create their own solutions based on these reflections. (Freire, 1993) Research has provided some specific recommendations for conducting effective interactive learning. Adolescents have been found to be more likely to engage in inter-

active discussion after peer-counseled HIV education, than adult health care providers. (Mason, 2003) Discussion should allow for informal language, which along with little time for caution leads to more openness. (Van Ments, 1990) The NEA’s “Can We Talk” program describes a natural approach to communication for all people young and old. It includes learning (getting information), reflecting (processing, filtering and evaluating information) followed by communicating (sharing practical information). (Becher, 2003)

Peer

Peers are very important in the lives of young people. High school students spend twice as much time with peers as they spend with adults, including their parents. Adolescence is a time when youth are establishing their independence from their parents, while at the same time developing their own identity. During this adjustment period, peer influence has been found to be the strongest. Both positive and negative peer influence among youth is well documented. Peer interactions have been shown to facilitate critical thinking, impulse control, communication skills, empathy, sharing, helping and comforting. All of these skills and qualities can be related to drug use, misuse and abuse. Among drug education, peer programs were found to be more effective and peer-led programs correlated with more knowledge, less alcohol and marijuana use, and lower rates of smoking. There have been contradictory reports as well, citing peer-led programs that had no effect or a negative effect. A strong correlation has been found between effective peer-led programs and well-defined peer-leader training. Effective peer leader training is, therefore, vital to peer education programs. Finally, the peer leaders are the ones who experience the strongest program impact, in teaching and helping others the lessons become internalized. Young people are part of a unique subculture with common norms, language, experience and needs and therefore, peers have a more important role in their lives. High school students spend twice as much time with peers as they spend with adults, including their parents. (Brown, 1990) One stage of psychosocial development for adolescence is establishing autonomy. Autonomous teens have gained the ability to make and follow through with their own decisions, live by their own set of principles of right and wrong, and have become less emotionally dependent on parents. (Huebner, 2000) Numerous studies have shown that their peers influence youth’s health behaviors. (Mason, 2003) Studies have proven the benefits of peer health education. Evaluation of a Peer-Led Drug Abuse Risk Reduction Project for Runaway and Homeless Youth found that peer-led groups were more effective than adult-led and nonintervention groups. (Fors, 1995) A study of Australian school-based drug education found many common principles of effective school-based drug education, one of which was the use of peer leaders. (Midford, 2002) Interactive peer-led programs are significantly more effective than non-interactive, teacher-led programs in preventing drug use. (Black, 1998) Among drug education, peer programs were found to be more effective and peer-led programs correlated with more knowledge, less alcohol and marijuana use, and lower rates of smoking. There have been contradictory reports as well, citing that peer led programs had no effect, or a negative effect. (Black, 2004) A strong correlation has been found between effective peer-led programs and well-defined peer-leader training. (Black, 2004) Adolescents have been found to be more likely to engage in interactive discus-