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Article 100

Trends in Nontraditional Substance Use: Implications for Counseling Practice

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Introduction

In recent years, teenagers have expressed an interest in and have increased their use of mood altering substances that have euphoric effects or a "high." Within the wide variety of addictive nontraditional substances, Salva Divinorum, "Spice" or "K2," and Nutmeg are identified as the substances most frequently used by teens. It is therefore imperative for counselors to be cognizant of the changes in substance usage, their effects on teens and refer for specialized treatment. In this article, the writer offer counselors some insights on how to effectively address this growing problem among adolescents.

Nontraditional Substance Use

While alcohol is still the number one drug of choice for today's youth, recently there has been an increase in the use of nontraditional substances by teens. Nontraditional substances include legal household materials like hair spray, canned/compressed air, bath salts, and spices. Teens who experiment with these substances describe their intense but short-lasting effects to other teens, often over the Internet via Web sites like YouTube.com. As these tales and rumors spread about these new drugs, more youngsters seek them out hoping to experience the reported effects (Diconsglio, 2011). This increase in usage is disturbing. During the past few years of conducting chemical dependency evaluations among teens and during group therapy, most of the teens I work with report the use of one or more of the substances described in this paper. States that have banned the use of spice are Washington, Oregon and Idaho. States that have banned both spice and bath salts are Kansas, Oklahoma, Iowa, Missouri, Arkansas, Mississippi, Louisiana, Illinois, Tennessee, Kentucky, Georgia and Alabama (NCSL, 2011).

Drug enforcement agencies have placed these drugs under Schedule I drug classification, which means the drugs have no medical use and are likely to be highly addictive. These substances produce mood altering effects similar to marijuana; sometimes the effects can be intense, heightened, and life threatening. There is a growing

recognition of negative consequences associated with these nontraditional substances that is causing apprehension among health care professionals and law enforcement authorities. The Drug Enforcement Administration has listed the substances as drugs or chemicals of concern. Within the category of addictive nontraditional substances, three major substances are described below.

Salvia Divinorum is a hallucinogen absorbed by the respiratory tract when chewed or smoked.

Origin. Southern Mexico, Central and South America. Salvia is sold on the Internet or in "head shops" packed and labelled under different names as disguise.

Functions. The herb is used in the mentioned cultures for rituals and medicinal purposes for the cure of headaches, rheumatism, and constipation.

Mode of usage. It is used by chewing its fresh leaves or extracted juice and also used recreationally by smoking its dried leaves as joints, smoked in pipes or inhaled through a vaporizer.

Purpose. Hallucinogen.

Mechanism of action. Salvia activates kappa opioid receptors in the brain; kappa Opioid is a protein in the human brain with effects on pain relief, consciousness, motor control, and mood.

The recreational use of salvia has found its way into the mainstream; the DEA declared that the drug has no known medical benefits and it is against the law to own it. Although the legal status of the substance varies in all states, it has been categorized as a Schedule I drug. More specific information on this substance is available state by state on local law enforcement Web sites. A National Institute on Drug Abuse survey done in 2009 of 8th, 10th and 12th grade students showed an increase in the use of salvia as was also evidenced in media reporting. The flood of its use was also linked to Youtube.com as those who use it often videotaped themselves and post them on the web (National Institute on Drug Abuse [NIDA], 2009). These teens are open and willing to share Youtube web addresses so that others can see them promoting the use of salvia.

Spice is a man-made herbal mixture of tattered plant materials and psychoactive chemicals; it is about 500 to 700 times stronger than THC, the active ingredient in marijuana. Spice tends to excite anandamide receptors, the same receptors aroused by cannabis use, resulting in euphoria or a "high." The substance is also distributed by various brand and slang names. The merchandise is advertised as a natural or herbal substance.

Spice is said to have a higher potency than natural cannabis with signs of addiction associated with its consumption. Lawmakers and research communities are on alert to identify and evaluate the detrimental effects of this substance and to inform the public accordingly (Vardakou, Pistos, & Spiliopoulou, 2010).

Spice is sold on the Internet, and in other public places such as gas stations to people of all ages. Spice costs between \$25.00-\$40.00 for a three gram bag (Vardakou et al., 2010). It is considered to be the new designer drug that seems to be gaining popularity among adolescents who are willing to try it. They feel they can experiment with it without fear of legal implications; it is able to produce the desired effects and may not be detected during average urinalysis for those who require routine or random drug

testing. The writer has learned from colleagues in the partial hospitalization program how some teens present for programming with odd behaviors, even though their urine testing comes up negative. Later on as these teens make progress in their treatment accruing sobriety and mental stability, several of them have confessed that their odd behaviors were related to the use of spice or other drugs.

Case reports showed spice users may feel extreme tranquility with minimum elation and may have high tolerance over time. Withdrawal symptoms include uneasiness, sweating, shakes, inability to sleep, vomiting, trembling, headache, diarrhea, and depression with a desperate need to use the drug. When the continued use of spice is used to tame withdrawal symptoms; this is a criteria for dependence potential (Vardakou, et al., 2010).

Origin. China, Japan, Korea, and Europe.

Function. Herbal mixture to alleviate ailment as identified in the above cultures.

Mode of usage. It is used by smoking and also in combination with other substances.

Purpose. Hallucinogen.

Mechanism of action. Binds to cannabinoid compounds in the brain. It produces erratic effects in the user such as visual and auditory hallucinations.

Lastly, **Nutmeg** is a dried seed of the aromatic evergreen tree *Myristica fragrans*.

Origin. Indonesia

Function. It is used for several reasons depending on culture (e.g., spiritual rituals, inducing abortion, or culinary uses).

Mode of Usage. It is used by smoking the powder rolled up in tin foil.

Purpose. Hallucinogenic and euphoric properties.

Mechanism of action. Excites the central nervous system, cardiovascular system, and gastrointestinal system.

Specific clinical presentation of nutmeg intoxication include nausea, hallucinations, abdominal pain, vomiting, dizziness, drowsiness, headache, anxiety, fear, psychotic episodes, hostile behavior, hypotension, flushing, and arrhythmias (Forrester, 2005). Nutmeg is sold in regular grocery stores.

Effects of Nontraditional Substances

In the writer's experience, teens gave the following reasons for the use of nontraditional substances: the inability to detect these substances in urinalysis either by parents or legal authorities, and a desire to seek excitement and adventure. Any of these substances mentioned above are very dangerous; they may cause violent behaviors, hallucinations, paranoia, anxiety, seizure disorder, suicidal ideation, combative behaviors, and death. Emergency room personnel and law enforcement officers have sounded the alarm to the public through the media hoping to enable the public to be aware of clues of nontraditional substance use. In this writer's experience, teens have reported that different substances manifest themselves in identical ways for example, marijuana, spice and bath salts emote the same behaviors. The substances also affect individuals in a variety of ways depending on body composition, amount used, and potency of the substances.

Table 1 lists the common effects of nontraditional substances as identified by Capasso et al. (2005) and Singh (2007).

Table 1
Effects of nontraditional drug abuse

Physical effects	Emotional effects	Mental effects
Weight loss/gain	Mood liability	Forgetfulness
Lethargy	Depression	Disorientation
Feelings of sickness	Mood swings	Paranoia and Psychosis
Blood shot eyes	Psychological dependence	Brain damage
Agitation/irritability/family conflict	Agitation	Poor judgment
Seizure	Suicidal ideation	Impulsivity
	Increased heart rate	Loss of inhibition

Recognizing Signs of Substance Abuse

When attempting to recognize signs of substance abuse, parents, guardians, caregivers, and counselors must pay special attention to teenagers, as some behavioral patterns seen in teens are normative for the adolescent stage of development. However, sudden changes should alert the adults present in the teen's life because these changes may indicate use of mood altering substances. The following is not an exhaustive list, but examples of sudden changes that may indicate use of nontraditional substances:

- Physical Well-being: personal hygiene, unusual smell on breath or body odor, unusual smell on clothing, dramatic weight gain or loss, injuries.
- Education: lateness, truancy, decreased motivation, unexplained drop in grades, and school dropout.
- Social: changes in peer network or prosocial activities
- Behavioral: Defiance, hostility, use of vulgar language, disrespect for authorities and elders, stealing, selling drugs, pawning own or others items, secrecy, running away from home, promiscuity, vandalism, fighting, loud etc.
- Cognitive: confusion, forgetfulness, slow reaction time.
- Emotional: disruption in family dynamics, anger, aggression, mood swings (Weinberg, 2001).

In this writer's experience, parents have lamented on how a well groomed youngster's appearance has changed. Examples of the changes are dying of hair, wearing clothing with writing or pictures that glorify drug use, and changing friends. One parent recounted the youngster's statement, "I hang out with deviants, stoners, or druggies."

Implications for Counseling Practice

Current research shows that teens are experimenting with illegal drugs or find alternative ways by using nontraditional substances to get desired effects. Specific factors either push teens to use drugs or protect them from substance use. Counselors working with young people need to consider key areas of establishing strong working relationships with teens. By doing so, they can better identify normative and non-normative patterns, correctly evaluate the severity of a substance use problem, refer for appropriate expert assessment, and acknowledge that multiple attempts may be needed to resolve the problem. Teens who become substance abusers may need to have multiple stints at treatment to end the habit of addiction. It is vital that counselors only work within their scope of practice when it comes to substance abuse issues and refer to addiction specialists as needed (Burrow-Sanchez, 2006).

Adolescent stages of development, with their unique challenges, often see teens testing boundaries or trying new things, whether risky or not; drug experimentation is often one such test or taboo to break. Since the prefrontal cortex of the brain is not fully developed at this stage, drug use may interrupt brain function and hinder activities such as constructive decision-making, planning, learning, and motivation (NIDA, 2007).

The function of the prefrontal cortex is to allow individuals to think, evaluate, and make complex judgments; it provides impulse control, so that one does not merely respond to negative emotions such as anger. In teenagers, the prefrontal cortex is still in the process of maturation so risky or impulsive behaviors are common with this age group. Those working with teenagers need to put this into consideration as teenagers assess risk differently than adults (Feldman, 2003).

It is also crucial to have programs in place in school to support teens so that those factors that push them into drug seeking behaviors are minimized. Demographic information or health screenings and parent teacher conferences during the school year may reveal various risky behaviors that will inform the counselor of at risk teens. This enables counselors to take appropriate steps to prevent the issues from getting worse. Understanding the background information of each student, getting to know the teens, and knowing their family information may also be helpful in assessing risk and protective factors. These protective and risk factors are found in the individual, family, peer, school, and community; some of the shielding factors identified are self-control, parental supervision, academic proficiency, anti-drug policies, and identification with one's vicinity, while the risk factors include early violent demeanor, limited parental supervision, access to substances in the home, and poverty (NIDA, 2007). It is necessary for teachers, parents, and other concerned adults to look for physical signs of proper hygiene and appropriate clothing in order to note deviation from normal. Watching for types of social interaction, activities adolescents are involved with or associations they keep, signs of mood changes, and legal involvement may point out clues indicating drug use.

As suggested by Sanders (2002), basic counseling skills need to be employed when working with teens with substance abuse disorder. These include:

- Building relationships with teens to develop trust; this makes it easier to explore solutions and grounds for change. Relationship building entails empathy, active listening, non-judgment, genuineness, and warmth.

- Respectful communication that is inviting for teens to feel safe; answer specific questions, share and explore treatment options.
- Engage teens with activities to assist them with working through the grief of losing their drug of choice, rituals, routines, and affiliates.
- Understand the adolescent stages of development, show teens alternate perspectives, gently challenge their view on substance use, share relevant experiences and information.
- Offer education in a non-threatening or authoritative way, reward good behaviors and refrain from punitive actions, help them set short-term and long-term goals, and identify their interests to make transition toward greater and better things.
- Assist the adolescents to develop and use relapse prevention strategies, utilize support networks, practice alternative living away from previous drug use routine, monitor and reward progress, encourage them to share their stories to reinforce growth and build self-confidence.
- Allow the adolescents to make their own realization to stimulate self-growth and healing while assisting them and offering suggestions in the process.
- Collaborate with parents, case managers, probation officers, mentors, and other adults, as needed, to address issues in a collective manner; provide education for parents for better insight and future management of drug related issues.
- School counselors should particularly pay attention to use of slang and random suspicious actions by teens, including gestures, grooming issues, truancy, tardiness, sleeping in classrooms, ongoing trips to the bathroom alone or with peers.
- Incorporate drug prevention programs and other series into the school curriculum to include those that build teens' self esteem, and provide information about the effects of substances on the brain and body.
- Provide alternatives to drug use, teach refusal skills, and reframe peer pressure as peer acceptance to resist illicit drug use.
- Educate and raise awareness of parents and community members on the use of these emerging substances and provide them with street names so that they are caught up with current drug terminologies. This can be done by inviting guest presenters such as addiction counselors or drug counselors to parent teacher association meetings, running advertisements on local televisions, or radio announcements or billboards (Agnew, Holtz & Twombly, 2011).

Mental health counselors may need to ask specific questions on the use of nontraditional substance use when clients present with mental health and chemical dependency conditions such as depression, anxiety, insomnia, relationship problems, and alcoholism. Mental health conditions and substance abuse may occur at the same time, one may precede the other, or both may occur simultaneously. Research showed that six out of ten persons with addiction disorder may have an additional kind of mental health condition (NIDA, 2011). In this regards, special attention has to be made when completing evaluations to gather accurate and relevant information for diagnosis.

Summary

The use of nontraditional substances is increasing among young people today. Counselors need to be informed and be vigilant about the kinds of substances and dangers associated with these substances. Counselors play an important role in assessing at risk teens, identifying the problem, and combating this type of issue. Counselors are in an excellent position to offer immediate help; support teens; collaborate with families, social workers, and probation officers; and refer for ongoing service as needed to promote individual, family, community and societal wellness.

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