

Substance Abuse: A Slow Poison

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ABSTRACT

Substance abuse which is popular with name of drug abuse is ongoing worldwide problem. Basically it's a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others. There is a high burden of health related issues in substance abusers which is further complicated by concomitant emotional/behavioral/personality issues, the often poor general health of the addict, inadequate nutrition and oral hygiene as well as by the pathological effects of the drugs on the various body parts of the person. Hence, there is a need for multidisciplinary teamwork in the care of substance dependent patient.

Keywords: Substance abuse, Poison, Drug addiction

INTRODUCTION

Substance abuse is a complex disease as many of the people are unable to understand why or how they become addicted to drugs. Addiction is characterized by seeking of drugs and their usage which becomes compulsive or difficult to control, despite of so many harmful consequences. It has been seen worldwide approximately 153 million people aged between 15 and 64 years are into substance usage with 99,000-253,000 people are dying [1,2]. Substance abuse which is popular with name of drug abuse; is a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others [3]. Though predominating reason behind this is not clear but few of the theories said that either a genetic disposition or a habit of addiction manifests itself as a chronic debilitating disease. It has become an immensely monstrous phenomenon in the past few decades which is affecting all the segments of society. Among various aspects social, cultural and financial are commonly associated with drug abuse [4,5]. The inquisitiveness to how it feels the introduction of nuclear family, the absence of love and care, waning of faith in religion, relationships and ethical values, etc.; are the common reasons towards substance usage. These drugs have variant health effects depending upon the type and duration of use along with the lifestyle of the users.

LITERATURE SEARCH

An extensive review of literature search was done (electronic and manual) which engaged most of the articles published in peer reviewed journals and other search engines like Google were also used for extracting relevant

information regarding substance usage. The review itself began with the search of relevant key words like substance usage, illicit drugs, alcohol, Marijuana, nicotine, cocaine smoking, etc., in various search engines including PubMed, MEDLINE, etc. Reports published only in English language were included in the review. The spot light of the present review would not only be on the substance usage but also on various risk factors that grow this habit among population, treatment modalities or barriers, etc. We have also tried to explain the various abused drugs along with their effects.

CAUSES AND RISK FACTORS OF SUBSTANCE ABUSE

Substance Abuse is characterized by a pattern of substance use leading to neglect of roles or commitments, physical hazards, legal issues or interpersonal problems [5,6]. People of any age, sex or economic status can become addicted to a drug. As many of the studies revealed the probable certain risk factors such as familial, social and individual risk factors which included various kind of maltreatment during

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childhood like child neglect or child abuse, less affectionate child-parent relationship, some sort of bullying, gang affiliation, peer pressure, bad company or depressive state of individual due to many professional or personal reasons, etc. Not only these even childhood Attention Deficit Hyperactivity Disorder (ADHD), ineffective parenting, lack of nurturing and parental attachment, antisocial personality disorders, anxiety issues, post-traumatic stress disorder, parental drug use or addiction These factor may further lead to abuse of substances such as cigarettes, alcohol and illegal drugs [7,8].

COMMONLY ABUSED DRUGS AND HEALTH COMPLICATIONS

Substance abuse in rural and urban areas is a major public health concern. There are many of the drugs which are available easily despite of so many strict law and regulations. Drug addiction, also called substance use disorder, is a disease that affects a person's brain and behavior and leads to an inability to control the use of a legal or illegal drug or medication. Substances such as alcohol, marijuana, club drugs, cocaine, nicotine, etc., also are considered drugs [2,5].

Marijuana

Marijuana popularly known as grass, pot, weed and herb is derived from plant *Cannabis sativa* which is the most commonly used illegal drug worldwide which constitute delta-9-tetrahydrocannabinol (THC) as an active ingredient and it is associated with intoxication. It can be used either as smoking or orally and person feels the pleasure, relaxation and impaired coordination and memory after its usage. Even the jeopardy for cocaine usage is 104 times higher if anyone has ever smoked marijuana at least once.

Cocaine

Cocaine names as crack, coke, snow, blow, rock is derivative of coca plant of South America which can be smoked, injected, snorted or swallowed. Pleasure, increased alertness along with paranoia, constriction of blood vessels leading to heart damage or stroke, irregular heartbeat, damage to kidney or lungs and ultimately death are probable long or short term effects which are associated with cocaine.

Heroin

Heroin which is known among every third person with the name of dope, smack and horse, is usually taken in the form of injection causes drowsiness, pleasure and slowed breathing. Even decreased breathing to the point of stopped breathing and death occurred due to excessive usage of heroin. Not only these effects, it also causes destruction of heart valves, tetanus and botulism and infections like HIV/AIDS or hepatitis as it is usually injected.

Anabolic steroids

Another popular drug which is frequently used by bodybuilders or athletes so as to boost the muscle mass or advance their performances. It includes testosterone a natural male hormone or other synthetic forms of testosterone which is associated with a number of mental-health effects, like dependence on the substance, mood problems and developing other kinds of drug abuse. Club drugs are those drugs which many of the young people are using during the club scene, pubs, dance or rave parties, etc., as they believe these drugs are harmless or even healthy. The following are the most popular club drugs: Ecstasy (also called MDMA, E, X, E pills, Adam, STP), GHB (also called Liquid XTC, G, blue nitro), Rohypnol (also called roofies, roche), PCP (also known as angel dust, hog, lovie, love boat), etc. They are having powerful anesthetic or stimulant effects which people used to maintain energy or alleviate the mood during night dance parties. But these drugs can cause high fever even if used once which can further lead to seizures, damage to brain, low blood pressure, dizziness, abdominal cramps, confusion and impaired memory [4,6-8].

SIGNS AND SYMPTOMS

Friends and family may be among the first to recognize the signs of substance abuse. Early recognition of these signs and symptoms may increase the chances for successful treatment or survival of the effected person. The range of disease related to drug abuse is unrestrained and often insidious. Health care providers must actively consider drug abuse when obtaining patient histories, performing physical examinations and considering differential diagnoses to identify drug users before severe complications occur [1,2,4]. The various signs and symptoms manifested due to substance abuse can be stated as physical and behavioral signs. Inability to sleep, awake at unusual times, unusual laziness; variation of appetite; cold, sweaty, shaking hands; eyes may be red, watery with pupils larger or smaller than usual; halitosis, slowed or staggering walk; poor physical harmonization; presence of needle marks on lower arm, leg or bottom of feet; feeling of nausea, vomiting or excessive sweating, indiscretion in heartbeat; runny nose; puffy face; deterioration of hygiene or physical health are common physical signs. Common behavioral signs include change in overall attitude/personality with no other specialized cause; drop in grades at school or performance at work; unceasing dishonesty; temper tantrums; intricacy in paying attention; absentmindedness; general lack of enthusiasm, energy, self-respect, "I don't care" attitude; loss of interest in family; giddiness; moodiness, irritability, or nervousness; secretive or suspicious behavior; change in personal grooming habits; friend circle and unexplained need for money [8,9]. Therefore preventive health care workers require the early recognition of those fellows who are at higher risk for drug-related complications.

TREATMENT

Majority of the people who are into substance use after the long term ill effects tried to go for cessation of these habits. But they do not succeed because of reduced decision-making ability due to underdeveloped state of the brain. Initially detoxification or detox phase has to be started which means inpatient hospital treatment. Even physical withdrawal of any drug is also helpful. It's been said through many of the studies that drug abuse reduces the brain development by altering function of brain which causes compulsive usage of drugs after withdrawal. Hence recovery phase is also important part of treatment plan as because of enduring cravings by the patients [9,10]. Behavioral counseling through psychologist, psychiatrist, counselor, etc., is also advantageous in order to cope up with drug cravings. Even drug testing should be done randomly so that further encouragement of that person can be done to avoid relapse cases. Now days various sort of distant counseling procedures has been started through online or hotlines which can become an invaluable resource for those persons who wants to initiate treatment and prevent relapse [10-13].

PREVENTION

The preeminent approach to prevent an addiction is not to take any sort of substance. Sometimes doctor prescribed the drug which has potential for addiction then follow the instructions properly with careful manner while using that drug. Researches revealed that there are higher chances of relapse once you get addicted to any drug. In order to prevent relapse always monitor cravings, avoid high-risk situations such as try to stay away from your previous old drug crowd. If then also person will restart using the drug again, immediately talk to consult psychologist or health professional or someone else who can help the right away [9-11].

BARRIERS/CHALLENGES

Many of health care personals face challenges or barriers while developing programs which can prevent and treat substance use disorders. Many of the studies shown that lack of interagency collaboration with poor funding and source of information, frail officialdom and the absence of situational need, pessimistic social support, fear regarding treatment and privacy. Concerns and time divergence and admission impenetrability are the few of the barriers which are faced by many of people during treatment or preventive measures [9,12-14].

CONCLUSION

Though strict protocols are being followed by many of the health professionals as well as patients during the treatment but still admission rates towards treatment are very poor. Many of the youth are losing their lives despite of availability of extensive evidence-based research approaches towards substance usage related disorders. Hence there is

need to recognize risk factors through family, school and community prevention programmes which are associated with substance usage.

REFERENCES

- Burke PJ, O'Sullivan J, Vaughan BL (2005) Adolescent substance use: Brief interventions by emergency care providers. *Pediatr Emerg Care* 21: 770-776.
- Chakravarthy B, Shah S, Lotfipour S (2013). Adolescent drug abuse - Awareness and prevention. *Indian J Med Res* 137: 1021-1023.
- Dube SR, Felitti VJ, Dong M, Chapman DP, Giles WH, et al. (2003) Childhood abuse, neglect and household dysfunction and the risk of illicit drug use: The adverse childhood experience study. *Pediatrics* 111: 564-572.
- (2011) InfoFacts: Understanding Drug Abuse and Addiction Understanding Drug Abuse and Addiction [Internet]. National Institute on Drug Abuse. Available at: <http://www.drugabuse.gov/publications/infofacts/understanding-drug-abuse-addiction>
- Cheng TC, Lo CC (2010) The roles of parenting and child welfare services in alcohol use by adolescents. *Children Youth Serv Rev* 32: 38-43.
- Welch-Brewer CL, Stoddard-Dare P, Mallett CA (2011) Race, substance abuse and mental health disorders as predictors of Juvenile court outcomes: Do they vary by gender? *Child Adolesc Soc Work J* 28: 229-241.
- Uhart M, Wand GS (2009) Stress, alcohol and drug interaction: An update of human research. *Addiction Biol* 14: 43-64.
- Clark HK, Ringwalt CL, Shamblen SR (2011) Predicting adolescent substance use: The effects of depressed mood and positive expectancies. *Addict Behav* 36: 488-493.
- Holfors D, Van Dorn RA (2002) Strengthening the role of two key institutions in the prevention of adolescent substance abuse. *J Adolesc Health* 30: 17-28.
- Bovin G, Griffin KW (2007) School based programmes to prevent alcohol, tobacco and other drug use. *Int Rev Psychiatry* 19: 607-615.
- Kleinman BP, Millery M, Scimeca M, Polissar NL (2002) Predicting long-term treatment utilization among addicts entering detoxification: The contribution of help-seeking models. *J Drug Issues* 32: 209-230.
- Rapp RC, Xu J, Carr AC, Lane T, Wang J, et al. (2006) Treatment barriers identified by substance abusers assessed at a centralized intake unit. *J Subst Abuse Treat* 30: 227-235.

13. Hall SM, Havassy BE, Wasserman DA (1990)
Commitment to abstinence and acute stress in relapse to alcohol, opiates and nicotine. *J Consult Clin Psychol* 58: 175-181.
14. Hser YI, Maglione M, Polinsky ML, Anglin D (1998)
Predicting drug treatment entry among treatment-seeking individuals. *J Subst Abuse Treat* 15: 213-220.