



International Journal of Nursing and Medical Investigation

International Peer Reviewed Journal

Review article

The dual crisis: Substance abuse and adolescent a systematic review

Sanjay Sevak*, Maneesh Sharma,
Nursing Tutor, AIIMS Jodhpur, India

Abstract

The major problems associated with society's adults are related to unhealthy behaviors, which often begin during adolescence and represent major public health challenges. The substance abuse has a major impact on almost all parts of life including individuals, families, and communities, as its effects are cumulative, contributing to costly social, and mental health problems worldwide. In India, the last two decades have been a period of rapid increase in the percentage of substance abusers. Substance abuse prevalence is higher among adolescence and young adults. Adolescent life is becoming more and more stressful largely due to an ever-increasing debt, hardships and crisis that the adolescent face. Mostly widely use substance abuse includes tobacco, alcohol, cannabis and nicotine. Substance abuse is no more a personal problem; substance abuse destroys a person's life, families and communities. Now a day people abuse substance to overcome depression, anxiety, fear, low self-esteem, frustration or to attain of pleasure. Many have experimented various drugs or alcohol and problem started when this experimental use became abuse, the adverse consequence of substance abuse affects not only the individual user, but also the families and society. Hence, it is necessary to provide health promotion programs directed toward adolescents and their families. It will help to improve the knowledge among adolescents to comply with ill effects of substance abuse and to continue with healthy living. This review mainly focuses on the current status of substance abuse associated factors, which may help the adult generation to understand prevalence and allied serious problems and to improve the abuse rate.

Keywords: Substance abuse, Prevalence, Perception, Knowledge, Association, Adolescent

***Corresponding author: Mr. Sanjay Sevak,** Nursing Tutor, AIIMS Jodhpur, India. Email id: sanjayrajsevak@gmail.com

1. Introduction

The word 'adolescence' is derived from the Latin adolescere means "to grow up". Adolescence is therefore literally the period of development from childhood to young adulthood. In western society the term is now mainly used to describe the period from about 12 to about 18 or 19 years. [1]. The Adolescent or college students are the cream of young population. Some find the transition from a rural to an urban way of life upsetting and one feels anxious in their new surroundings. Adolescents are vulnerable for anxiety about examinations and dropping out of the course, unusual and unwanted behavior, financial difficulties, aggression, alcoholism, drug abuse, other substance abuse and suicide etc. [3] According to WHO approximately 20.6% of the total population of 846 millions in India consists of youth between 15-24 years

of age.[3] Adolescence is stage of exploration and is also a crucial phase of life. Substance abuse among adolescents is increasing like an epidemic. Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Psychoactive substance use can lead to dependence syndrome - a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.[4]

2. Prevalence of substance abuse: Updated view

Studies from different parts of the world have shown that prevalence of alcohol drinking and other substance

abuse adolescents are increased. WHO mental health survey was carried out in 2004-2008 in many countries such as, Middle East, Africa and China towards a global view of alcohol, tobacco, cannabis and cocaine use. The findings revealed that half of the people who had ever used alcohol began using at age of range between 14-21 years and tobacco 15-21 yrs, 16-22 years for cannabis and 19-22 years for cocaine. Smoking is responsible for nearly a half million deaths each year and Tobacco cause 59 million daily both these two were leading cause of global burden of disease.[5]. Also World Health Organization (WHO) predicts that by the year 2020, tobacco use will cause more than 10 million deaths per year. Each day in India, an estimated 5500 youth initiate tobacco use, contributing to predictions that by 2020, tobacco will account for 13% of all deaths in India. [6] According to Rao worldwide 3 million people die from smoking each year. One in every 10 sec which estimates suggests will rise to 10 millions by 2020.[7] A population-based cross-sectional study was conducted in West Bengal, India to find out the magnitude of licit and illicit substance use among students. The prevalence rates among rural and urban students were 6.14% and 0.6% for illicit drug use, 8.60% and 11.04% for tobacco, and 7.37% and 5.23% for alcohol consumption, respectively. Both licit and illicit substance use was associated more with male students.[8] The prevalence of smoking and tobacco chewing among adolescents using the interview method in Gujarat. The result reveal 33.12% of adolescents were addicted with one or other type of tobacco chewing, 32.26% adolescents were in the age group of 17-19 yrs. [9] A study conducted by Ishwar Modi and Shalini Modi (1986), revealed that highest use of drugs are among commerce students (31%), followed by arts and social sciences (27.2%), science (20.3%), medical (7.3%), engineering (6%) and law students (4.8%). On the other hand stress is more prevalent in the students of professional colleges.[10] Jyal, R., Bansal, R. (2006) conducted study about substance use in Dehradun District. The result revealed the substance use was significantly more among urban students as compared to rural students that are 37.9% and 24.4% respectively. [11] A Population based cross-sectional study on impact of family and peers on both initiation and continuation of substance use among adolescent students. The results of the study showed that prevalence of substance use was found to be higher among the urban students (15.1%) than their rural counterparts (10.7%). Relatives and friends were found to have a considerable influence not only on initiation but also important sources for money in substance abusece. [12]

3. Causes of Substance Abuse:

Substance abuse can be viewed as one facet of adolescent socialization. A number of factors influence substance abuse and alcoholism in the society; it is not possible to identify any single factor, since they act in combination, often one influencing the other. In a study by Hijam Dineshwar Singh and Mukta Sharma on the

extent, trends and patterns of drug use in India, the finding shows that majority of the drug users started using drugs due to curiosity and peer influence; the age of initiating the drug use by adolescents at age group of 15-19 years is 62%. The study concludes that adolescents in the colleges were abusing maximum with alcohol and cigarette, which are considered as gateway of substance abuse [13]. Family culture plays a very important role in drug abusing behavior of college boys and girls. Drug abuse is more prevalent in those college students whose parental supervision is permissive towards use of cigarettes or alcohol by their wards [14]. Reshmi Agarwal in her study finds that educational institutes with hostel attached to them produce more drug users than those without hostel. The above study clearly shows that those students without the supervision of the parents are having more chances of indulging in illicit substance use.[15]. This sums up that the causes of substance abuse are numerous and it is important to know the causes to find out a solution to it.

4. Substance abuse associated factors

There have been studies showing different factors associated with adolescents on substance abuse. A study on relation between stress and alcohol consumption conducted in adolescence. Sample of the study was children at high risk for alcoholism. The study results showed that 53% of the impact of trait family stressors on growth in drinking among adolescent.[16] A cross sectional study was conducted on association between adolescent drunkenness and parental divorce. The data was obtained from 3,694 elementary school students (mean age 14.3). The study results showed that parental divorce was found to have an effect on adolescent drunkenness in last 4 weeks. [17] A study on role of social networks and media respectively in predicting age of smoking initiation was conducted, The study results showed that there is significant correlates of age of smoking initiation, The age of smoking initiation was earlier among those adolescents who had a favorite tobacco advertisement.[18]. The substance abuse also associated with socioeconomic status and community. A study on regular use of alcohol tobacco in India and its association with socioeconomic status was conducted. The study results showed that respondents belonging to scheduled casts and tribes were more likely to report regular use of alcohol as well as smoking and chewing tobacco. People from rural areas had higher rates compared to urban area, as did those with no formal education. Individuals with income below the poverty line had higher relative's odds of use of chewing tobacco and alcohol compared to those above the poverty line. [19] A cross-sectional study was conducted at Dehradun to find out the association of socio-demographic factors with substance abuse among collegiate students, The result of the study showed that the prevalence was found to be higher in the students belonging to the middle slab of income group. Also fathers in professional jobs and non-vegetarian dietary habits, were also found to be

major risk factors for substance abuse behavior among students.[20] A four years longitudinal study on smoking increases the risk of panic and other anxiety disorders was conducted on adolescents and young adults. The study results showed panic attacks and panic disorders were strongly associated with occasional and regular smoking and nicotine dependence.[21] The longitudinal study was conducted on influence of representations of attachment, maternal adolescent relationship on adolescent substance abuse. The study results showed that higher levels of security in attachment styles had an indirect effect on changes in substance use. These findings highlight the roles of representations of attachment in the development of adolescent substance use.[22] A longitudinal study on parental substance use disorder and the risk of adolescent was conducted. Drug abuse data was obtained from three cohorts of adolescents and their families over a period of 7 years. The results indicate that parents psychoactive substance use disorder is positively associated with adolescence drug abuse. Affective disorders among parents are associated with a higher risk of alcohol, but not drug abuse.[23] A study on association between frequency substance use and quality of life among adolescents over a 12 month period .The study results showed that reduced frequency of use was associated with quality of life improvement, frequency of substance use predicted poor quality of life.[24]

5. Comprehension about the substance abuse

Sharma R. R.Ram Ray (2001) conducted a comparative descriptive research study on knowledge of psychoactive substance use disorders. The major findings of study revealed that female student had higher knowledge score than male students.($t = 2.27$)and middle class family income group students had higher knowledge. The following conclusions were drawn, students of lower age group, lower family income and with lower parenteral education need health education regarding psycho active substance used disorder. [25] A descriptive study was conducted to assess the knowledge related to substance abuse among adolescents in Bangalore. The findings of study revealed that, the mean knowledge score on substance abuse was found to be 41.28% for boys and 39.46% for girls. [26] In regarding developing negative attitude, it is also a sign of substance abuse and this was confirmed by a study conducted by Breslau et al (1993), the researchers in their study compared tobacco dependent and non-tobacco dependence adolescents and the result revealed that adolescent with tobacco dependence develop psychological vulnerability and negative attitude. [27] A study conducted to investigate the relationships between some academic related variables (interest in school, psychological resilience, and study habit) and attitudes toward substance abuse among adolescents. The result of the study revealed that interest in school, psychological resilience and study habits negatively correlated with adolescents' attitudes toward substance abuse. The academic related variables also jointly contributed 45% ($R\text{ Square}=0.445$) of the

variance being accounted for in attitudes to substance abuse and this was found to be statistically significant ($F(3,216)=57.63$, $p<.0005$).[28]

6. Substance abuse: The health hazards and its prevention

Substance abuse is associated with other problem. It provides the adolescent a maladaptive way to escape frustration, guilt and boredom. A Epidemiological survey was conducted in slum population in Chandigarh to estimate the pattern of alcohol and other substance dependence by using random sampling technique .The finding of the study revealed that majority of them (85%) reported having health related complications.[29] A study on adverse health effects of non-medical cannabis use was conducted. The study results showed that there is an association between cannabis use and adverse include a dependence syndrome, impaired respiratory function, cardiovascular disease and adverse effects of regular use on adolescent psychosocial development and mental health.[30] A study on inhalant use ,abuse and dependence among adolescent patients was conducted. The study results showed that adolescents with inhalant abuse or dependence were significantly more likely to meet lifetime criteria for abuse on alcohol, hallucinogens, nicotine, cocaine and amphetamines to have had major depression, attempted suicide.[31]

Bimal Krishna Bhowmic (2000), conducted a study on psychosocial problems of injecting drug users, the result of the study reveals that the psychosocial problem of the subjects are depression 80%, anxiety 60%, antisocial personality disorder 61.54%, adjustment disorder 43.75%, elated mood 23%; and hostility 30.77%. [32] The ill effects of substance abuse also include various infections like HIV and Hepatitis, in a survey conducted by Des Jarlais et al (1997), in New York city concludes that there is a high rate of HIV infection among the drug addicts in the city.[33] The above literature clearly reveals that adolescent's substance abuse is on the rise and it becomes a burning issue The only solution for treatment of alcohol and substance use is to create awareness among the addicts and the growing children about not only the health hazards such an addiction brings but also the psychological changes it brings to the addicts (Jayanti Kannan 2005)[34]. In a National institute on drug abuse collaborative cocaine treatment study conducted by Crits et al (1999) suggested that, in the treatment for cocaine dependence, the individual drug counseling with group drug counseling gives a better result compared to the psychotherapy.[35] The sooner adolescent seek help for substance abuse, the more chances they have of gaining control of their life. As nurses it is prime functions of nurse is to educate individuals, groups and communities about substance abuse, its adverse effects. Prevention and education are the important aspects of nursing care in any setting.

Conclusion

The above reviewed literature clearly reveals that substance abuse is on the rise and it becomes a major issue among adolescents. Substance abuse as a problem exclusively of the adolescents and also revealed that they have very less knowledge of the prevalence, causes and ill effects of the substance abuse. It is the duty of a nurse to create awareness among society regarding ill effects of substance abuse. It is a known fact that through media, newspaper, internet, pamphlets and booklets in the form of self-instructional module to educate the masses.

References

- Graham Philip, Turk Jeremy and Frank Verhalst. Child Psychiatry - A developmental approach. 3rd ed. New York: Oxford University Press. 1999. P267.
- Chandrashekar CR., et al., (1980), Mental morbidity among postgraduate and research students- an epidemiological study. Indian Journal of Psychiatry. 21:1: 89-93.
- WHO, Geneva. (1993), The health of the young people - a challenge and promise. www.who.co.in/world_health_statistics.
- www.who.int/topics/substance_abuse/en
- Degenhardt L, Chiu W.T, Sampson N, Kessler C.R. Toward a global view of alcohol, Tobacco, cannabis and cocaine use: findings from the W.H.O mental health survey. PLOS Med.2008;5(7):141
- Warren CW, Jones NR, Peruga A, Chauvin J, Baptiste J, Costa de Silva V, et al. Global youth tobacco surveillance, 2000-2007. MMWR Surveill Summ 2008; 57:1-28.
- Narayana Rao; Smoking is Injurious to Health Environment and People; 2008, Page -25
- Ranabir pal. Licit and Illicit Substance Use By Students In Eastern India. 2010.(1).76-81
- Makwana NR, Shah VR, Yadav S. A study on prevalence of smoking and tobacco chewing among adolescents in rural areas of Jamnagar district, Gujarat state. JMSR, 2007; 1 (1): 1-13.
- Ishwar Modi and Shalini Modi, Drugs addiction preventive, 1st edition, 1997, New Delhi, Rawat publication pp 30-42.
- Bansal, R Jyal R Kishore S. Substance use among enter college students in district Deharudeen. Indian Journal of community Medicine. 2006; (31) 252-253
- Dechenla.t. Sering. Impact of family and peer on initiation of substance abuse among Students. 2009.31(1)30-34
- Hijam Dineshwar & Mukta sharma, (1999-2000) "Rapid situation of drug use in Imphal", PP 5-8.
- Ram Ahuja, Social Problems in India, 2nd edition, 2003, New Delhi, Rawat publishing pp 138-153
- Reshmi Agarwal, Drug Abuse Socio-Psychological perspectives and intervention strategies, 1st edition (1995), Delhi, Shipra Publications, pp 389-404.
- King K.M. The influence of representations of attachment, maternal adolescent relationship quality Journal of child development 2009, 80(5):1448-1462.
- Tomcikova, "Parental divorce and adolescent drunkness". Journal of addiction research 2009, 15(4): 202-208.
- Unger J.B. Role of social networks and media respectively in predicting age of smoking indication" .journal of addict behavior, 1999, 24(3):371-381.
- Nefeld K .J., Regular use of alcohol and tobacco in India and its association with age gender and poverty" . Journal of drug alcohol dependent. 2003 7;77(3):283-291.
- Ruche juyal. Socio Demographic Characteristics of Substance Abusers among College Students. 2000(15). 12-17
- Isensee B. "Smoking increases the risk of panic and anxiety". Arch of general psychiatry 2003.;60(7):692-700.
- Branstetter.S., The Influence of Representations of Attachment, Maternal-Adolescent Relationship Quality, Journal of Child Developed, 2009, 1448-1462
- Hoffman JP, Parental substance use disorder and the risk of adolescence drug abuse". Journal of drug alcohol dependence, 2002; 1:66(3):255-264.
- Becker S. J "Association between frequency of substance use and quality of life among adolescents" Journal of drug education 2008 73 (4):150-152.
- Ram Ray Sharma (2001). Knowledge of psychoactive substance use disorder among college students. The nursing journal of India,2001, 42(2):P.29
- Nidagunadi S. Substance abuse: findings of a study conducted to assess the knowledge related to substance abuse among adolescent. Health Action; 2008.15-7.
- Breslau Naomi et al., Vulnerability to Psychopathology in Nicotine Dependent Smokers, An epidemiological study of young adults, American Journal of Psychiatry, 1993, Vol. 150, PP 941-946.
- Grace. A. Academic related variables and attitudes towards substance abuse among students. 2011.1(1)1925-27
- Chavan B S, Arun P, Bhargava R, Singh lip. Prevalence of alcohol and drug dependence in rural and slum population of Chandigarh. Indian J. psychiatry, 2007;49:44-8
- Hall W., "Adverse health effects of non medical cannabis use" Journal of drug education. 2002, 10 (2) .97-99.
- Patric D. Skoshik ., "Cannbis abuse hazards". American Journal of psychiatry .2006 Oct .163; 1798-1805.
- Bimal Krishna Bhowmic (2000), A Study of Psychosocial Problems of Injecting Drug Users In Manipur, Unpublished Thesis, Regional Institute of Medical Sciences Imphal.
- Jarlais DC et al, HIV incidence among injection Drug users in New York City, American Journal of Public Health Vol. 90, 2000, pp 352-359.
- Jayanti Kannan, physical Changes of Alcoholics Naturopathy, Vol.2, Issue No.162, 2005, pp 23-25.
- Crits Christoph P and Siqueland, Psychosocial treatments for cocaine dependence, archives of general Psychiatry Vol.56 1999; PP 493-502.