A Descriptive Study to Assess the Knowledge Related to Substance Abuse among Adolescents in Desh Bhagat University Mandi Gobindgarh (Punjab)

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Abstract: **Aim:** A descriptive study to assess the knowledge related to substance abuse among adolescents in Desh Bhagat University Mandi Gobindgarh (Punjab). **Method:** A descriptive research design was adopted for this study. The study sampling technique used was stratified Random sampling technique. Data was collected from 100 adolescents (50 Boys and 50 Girls). After a thorough review of literature related to topic the tool was developed. Reliability of the tool was done by answering the questionnaire. **Result:** The present study has revealed the overall mean knowledge score in areas of substance abuse was 40.32%. The findings revealed majority of the students (98.33%) had inadequate knowledge the findings of the present study has revealed the mean knowledge score of boys are 41.28, while girls had a mean knowledge score of 39.46%. From these findings it is evident that boys possess more knowledge than girls. This is in consistent with Susanne Mathew (2004) whose study revealed males had more mean knowledge score (7.67) than females (6.86).

Keywords: Knowledge, Substance abuse, Adolescents

1. Introduction

"An ounce of prevention is worth a pound of cure" - Nancy M Valentine

The word 'adolescence' is derived from the Latin adolescence (to grow up). Adolescence is therefore literally the period of growing up and becoming an adult. In western society the term is now mainly used to describe the period from about 12 to about 18 or 19 years, or the period of development from childhood to young adulthood. (Graham Philip, Turk Jeremy and Frank Verhalst)

**Health action** opined that Adolescents are the citizens of tomorrow on whom the future of the nation stands. It is a challenge to meet their health needs. 18-20% of Indian population constitutes the age group of between 10-20 years.

Adolescence may be defined as a critical period of human development manifested at the biological, psychological and social level of integration, of variable onset and duration, but marking the end of childhood and setting the foundation for maturity.

Adolescence is marked by physical and social changes. Between 12 and 18 years marked bodily changes occur, and in all societies, the life that young people lead in this phase is eventful and changes considerably.

Biologically its onset is signaled by the acceleration of physiological growth and the beginning of secondary sexual development; its termination by fusion of epiphyses of the bone and the completion of sexual maturation. Biological maturation provides increasing muscular strength and dexterity, which permit adolescent to participate successfully in the activities of their social group, thus acquiring a psychological sense of adequacy. At the same time, positive psychological motivation is a prerequisite for task perseverance and the search for a variety of experiences, which provide the conditions necessary for full muscular development through exercise.

Psychologically it is marked by the acceleration of cognitive growth and personality formation. The striking attainment during adolescence is the ability to conceptualize at an abstract level. This is provided by formal schooling and informal social experience.

A second and related psychological theme of adolescence is the search for a sense of identity. No longer a child not yet an adult, the adolescent is busy engaged in determining who he/she is and what he/she is to become. In this effort he/she examines his/her parents from a more critical perspective and leans more towards the peer groups for his/her sense of belonging. A third key developmental task consists of the further evolution of sexual identity and gender appropriate behavior, which are decided by the societal culture.

Dari V Raj, 2017 - Socially, adolescence is a period of intensified preparation for the assumption of an adult role and is associated with cultural norms. In many cultures the onset of adolescence is clearly signalled by puberty rites, usually in the form of tests of strength and courage, the completion of which entitles the individual to be recognized as a young adult.

Sabiha Jamal stated that Man's eternal thirst for new and more enriching experiences has driven him beyond the routine and mundane pleasures of everyday life to the search for, and reliance on, substances that even momentarily afford him relief from monotony and uniqueness of...
perception. These experiences are satiating not only in themselves, but also because, for that point in time, they make the individual stand apart from his fellow beings. Innumerable researchers have been conducted, and a great deal more has been written about drugs/substances, and yet, they remain an enigma. They have been hailed as of enormous social, medical and religious value-and also as the most destructive, pathogenic and misleading discovery of all times.

The development of interest in this area over the past fifty to sixty years however does not make substance-taking behavior a new phenomenon. These mind-changing substances have already accompanied mankind through his social evolution for many millenniums and will, no doubt, continue to be in many more to come- whatever be our views, decisions or sanctions regarding them.

One of the earliest references to substance that had a potential for abuse was the opiates, mentioned in Sumerian writings around 6000 B.C. Mention of marijuana was made in China around 2737 B.C. during the reign of Emperor ShenNung. Homer in the 9th century B.C. described the use of "mood-changing drugs." The use of hemp has been described by Herodotus among Scythians in the 4th century B.C. The Coca leaf was used during the times of the In-civilization in South America to give a feeling of exhilaration and vigor to the user. The plant "Echinocactus Williamsii" from which peyote was obtained was used by the Indian tribes of Mexico for producing euphoricectasy.

In India, the narcotic and euphoric properties of the cannabis plant were known to the Aryans. The 'Somaras' or the 'nector of the Gods' mentioned in the ancient Sanskrit texts were probably fermented liquor. Spellman (1967) states that 'bhang' appears in the Aryan Vedas in the sense of cannabis about 1300 B.C. During the Moghul period and later, opium and cannabis were used habitually on a very large scale. Besides these, the use of cocaine had been common for the last seventy to seventy five years as noted by Chopra and Chopra in 1965. Little attention was however paid to the effect of drugs on habitual users until the end of the 19th century when the Government of India appointed two commissions in 1893 and 1895 to study the situation. A second inquiry was conducted after independence in 1954-55 when the Government appointed a prohibition inquiry committee. Between the two inquiries, considerable changes had occurred in the drug habits, the mode of administration and the type of addicts.

In the United States, writers like Bayard Taylor and Fitzugh Ludlow began to propagate accounts of their own ecstatic states and psychedelic experiences due to cannabis use in the early 1900's. But by far, the most significant contribution to popular knowledge of the non-opiate psychoactive drugs came in 1954 with the publication of Aldous Huxley's book "The Doors of Perception" - an account of the way in which mescaline had thrilled and enhanced the authors perceptions of the world, as well as illuminating his earlier religious and philosophical beliefs. "The Doors of Perception" turned out to be what is arguably the most important single event in the unfolding of the psychedelic movement and must rank with the earlier, though somewhat obscure chemical advances that had been made by Hofmann and Stall in the synthesis of Lysergic Acid Diethylamide.

Anand S. reported that in India, the last two decades have been a period of rapid increase in the percentage of drug and alcohol abusers. Alcohol is getting a social sensation over a wider stratum of society. There has been a marked increase in the use of heroin (popularly known as smack and brown sugar) in our country in the last few years. The affected groups have also changed. Earlier it was usually seen among the elite's, the upper middle class and the students' community. But today the class, age, and education are seen to be no bar to drug and alcohol abuse. New risk groups has emerged, which includes youth both educated and illiterate, employed and unemployed, rural and urban industrial workers, labors class, and people on tour.

World Health Organization in its technical report describes a 'Dependence-producing drug' as a drug having the capacity to interact with a living organism to produce a state of psychic or physical dependence or both. Such drugs may be used medically or non-medically without necessarily producing such a state. The characteristics of a state of drug dependence, once developed, will range with the type of drug involved.

The existence of such a state is not necessarily harmful in itself. There are however several types of substance that, because they can produce substantial central nervous system stimulations or depression, or disturbances in perception, mood, thinking, behavior or motor functions, are generally recognized as having the capacity, under circumstances of use, to produce individual and public health and social problems.

The use of substance never remains an isolated phenomenon and inevitably involves profiting from their sale and ultimately the development of a black market, with a rise in crime caused by those addicted, attempting to obtain adequate funds to maintain their habits. At the same time it leads to the debilitation and non-productivity of a large segment of society, to the extent that, the future efficiency of a nation's population depends to a large extent on the caliber of its present student population: Studies of substance abuse in India and abroad have tended to utilize the student community as the target population for their studies on Substance abuse.

2. Review of Literature

A literature review is an evaluative report of information found in the literature related to selected area of study. The review describes, summarizes, evaluates and clarifies this literature. It gives a theoretical base for the research and helps to determine the nature of research.

(Queensland university, 1999)

The past three decades have witnessed rapidly developing trend among psychologists, sociologists, psychiatrists and
educators to engage in systematically organized investigators of adolescent development and their substance abuse. Many studies that have been completed or in progress, represent short-time attempts to define our understanding and are limited ones, other investigations are comprehensive and include many phases of adolescent development and substance abuse.

As a result of an apparent increase among adolescent delinquent behavior and mental and emotional disturbances considerable attention is being given to the study of substance abuse among adolescence, the possible causes of these problems and ways in which preventive measures can be carried-out.

Relevant literature related to substance abuse among adolescence has been reviewed and is compiled under the following headings.

1) Literature related to knowledge and attitude regarding substance abuse.
2) Literature related to causes of substance abuse.
3) Literature related to incidence and prevalence of substance abuse.
4) Literature related to adverse effects of substance abuse.

1) Literature related to knowledge and attitude regarding substance abuse

Deepit Pagare et al. (2017) in their study on Risk factors of substance use among street children from New Delhi has revealed children (11 to 16 years) had more knowledge than younger children (P>0.05). Children revealed that this knowledge was based on their own experiences and the information provided by their parents, by peer group and during health education classes organized by some voluntary organizations. A sizable proportion (over 50%) of children coming to observation homes were found to indulge in substance use. The fact that children had access to a large variety of intoxicating substances, reflected in effective implementation of the existing legislation's, namely the Narcotics and Psychotropic Substances Act, 1985 and the Delhi Anti Smoking and Non-Smoking Health Protection Act, 1996. A study on street children in Bombay, Calcutta, Delhi and Hyderabad also revealed high rates of substance use among runaway boys. Running away exposes children to stressful life on streets, which accompanied by lack of parental care and supervision and easy access to intoxicating substances, creates an atmosphere conducive for indulging in substance use. The knowledge of harmful effects did not deter children from indulging in substance use.

Jeremy Aldworth et al. (2017) conducted a National survey on American Attitudes on Substance abuse, stated that there was a sharp increase in teens from 2002-2003 who smoked (14%), drank and got drunk (4%) and who used marijuana (6%). One of the most alarming findings from the above survey was the way with which teens obtained marijuana. Twenty percent could buy marijuana in an hour or less. Almost 40% (about 10 million teens) could buy marijuana within a day.

Syed Masud Ahmed et al. (2017) conducted a study on knowledge, attitude and perception of school going Bangladeshi adolescents on substance/drug abuse. A self-administered. Questionnaire was used to collect information from 4035 students of class X aged 15-16 years. The findings revealed a fair level of knowledge on different aspects of substance abuse among study participants of both sexes. Seventy (70%) percentage of them knew the addictive properties of tobacco, alcohol and drugs commonly available, 40% had the knowledge about the harmful effect of addictive substances on the body and society. The study participants were quite knowledgeable about the sources of acquiring the prevalent knowledge on addictive substances while the importance of text books (67%) and peer network (40%) could not be ignored.

Castrucci B C et al. (2017) conducted a study regarding the association of adolescents tobacco use their beliefs and attitudes and friends and parent’s opinions of smoking. The study concluded preventing the initiation and continuation of smoking among adolescents will require interventions that address individual attitudes with respect to tobacco and will also need to present a clear picture of adolescent smoking, in addition, prevention and intervention messages should emphasize the importance of parental opinions on youth tobacco use regardless of parent’s tobacco use behavior.

Ram Ray Sharma (2017) conducted a comparative descriptive research study on 50 male and 50 female college students on knowledge of psychoactive substance use disorders. The major findings of the study revealed that female students 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 father’s education need health education regarding Psycho active substance use disorder.

Angur Dhitai (2014) conducted a study to determine the knowledge and attitude of school going adolescents regarding reproductive health, sexual behavior, AIDS, STD and drug abuse before and after structured teaching programme in selected schools of Nepal. The sample size was 200 selected schools going adolescent.

Barking SL et al (2014) conducted a study to examine how adolescent attitudes and social skills affect current substance use and intentions to use substances in the future. An anonymous questionnaire was administered to 2646 seventh graders in their classrooms. Data were analyzed with spearman’s analysis of variance, and multiple linear regressions. 41% of students were minority, 50.6% female, over 90% were either 12 or 13 years old and 69.9% lived in two parent families.

Teichman M. Kefir E (2014) the effects of perceived parental behaviors, attitudes, and substance use on adolescent attitudes toward and intent to use psychoactive substances was studied. Perceived parental rejection, acceptance, and attitudes significantly differentiated between adolescents who reported favorable attitudes toward and high intent to
use substance and those who expressed less favorable attitudes. On most parameters, the father’s influence was significant whereas the effect of the mother did not reach significance. Positive and significant relationships were also found between perceived parental rejection, acceptance and attitudes and adolescent attitudes and intent to use psychoactive substances.

Wright J.D. and Pearl L. (2013) conducted a study among pupils aged between 14 and 15 using a questionnaire to monitor young people’s experience and knowledge of illicit drugs between 1969 and 1999 at intervals of 5 years and they found over 30 years the proportion of pupils who knew someone taking drugs more than quadrupled from 15% in 1969 to 65% in 1994 and decreased to 58% in 1999. The proportion mentioning “ecstasy”, LSD and amphetamines increased while amyl nitrate decreased significantly. ”To feel big, grown up” was the main perceived reason for taking drugs. “To escape problems” increased significantly in 1999. Television remained the main source of information closely followed by friends in school. The knowledge of the name of the drugs has steadily increased; knowledge of the effects has remained limited. Social and group pressures remained the main perceived reason for taking drugs and many saw drugs as a way of coping with stress.

Bajwa RJK, Pillai V, Mattoo SK (2012) conducted a study on college student’s attitude to drug abuse. The study focused on the development of a scale to assess attitude towards drug dependence and its application in 200 college students. The attitude was comparable across the two genders among the youngster students. As the age increased, the attitude becomes progressively more unfavorable among the boys, and progressively less unfavorable among the girls. Higher parental education and mothers occupational as housewife was associated with relatively more unfavorable attitudes among the boys. The attitude was not influence by other variable like family income locality and hostel/home residence.

Low WY, Zulkifli SN, Yusof K et al. (2012) a survey was carried out to gather information on knowledge, attitudes and perception of parents and their children in relation to drug abuse matters. Significantly more teenagers knew more of the cause of drug addition, as well as place for treatment and rehabilitation. Teenagers were significantly more aware of effects of negative parental attitudes contributing to drug abuse, apart from school factors. Personal experiences before abusing drugs such as knowledge of pleasurable effects of drugs and where to obtain them has also a role to play I leading to drug abuse.

Sharma PV et al. (2011) an exploratory study was conducted among 200 apparently healthy current smokers aged 15-45 years to determine their attitudes and behavior regarding tobacco smoking by using a preceded questionnaire specifically designed for the purpose. Females constitutes 10% of the study group and the 73 participants who smoked cigarettes exclusively were from urban backgrounds and were noted to initial the smoke more frequently than beedi or gutka smokers. Parental and peer group influence, as well as curiosity in late teenage were the major reasons for starting smoking which was however continued mainly to obtain the stimulatory and relaxing effects of nicotine.

Francis L (2011) performed a study regarding religiosity and attitudes towards drug use among 13-15 years old in England. A sample of 5753 13-15 year olds attending the third and further year classes of 29 secondary schools completed a questionnaire concerned with attitudes towards the use of alcohol, together with indices of religious off libation, belief and practice. The data demonstrated that young adolescent’s attitudes towards drug use varies considerably from one substance to another and that religiosity is a significant predictor of attitudes towards the use of each of the substance included in the survey.

Jose (2010) assessed the knowledge and attitude of 180 undergraduate students of Kerala a drug dependence using a structured questionnaire. They found that the majority of the students (98.33%) had inadequate knowledge. The study revealed maximum knowledge was in the area of ‘prevention’ and the minimum knowledge was in the area of ‘withdrawal effects’. The result also showed the presence of significant positive relationship between knowledge and year of study, family income and drug abuse. A significant relationship also was observed between student’s family income and attitude and mother’s education and mother’s education and attitude. Fifty percent of students showed unfavorable attitude and 50% showed favorable attitude towards drug dependence.

Dass (2009) conducted a study to assess the awareness among college students and to determine the relationship of knowledge and selected variables in 100 first year Pre-Degree students from 3 colleges in Kolkata using a structured questionnaire. The results revealed that college student’s knowledge of drug abuse was inadequate, but it was maximum in the area of prevention and minimum in the area of the effects of drug abuse. No significant relationship was found between knowledge and sex, mass media exposure. But there was significant relationship between knowledge and parental education.

Towber man DB, MC Donald RM (2009) performed a study regarding attitudes toward drug and alcohol use and adolescent rates of substance use. The purpose of the study was to examine the underlying dimensions of drug use attitudes that relate to substance use by alcohol scents. Six attitudes were identified through factor analysis, and are perceived peer attitude, alcohol avoidant attitude, drug-avoidant attitude, performance attitude, image enhancement attitude, and perceived parental attitude. All six factors were found to correlate significantly with both drug experimentation and frequency of drug use. New York State office of Alcoholism and substance Abuse services examined the perceived change in parental and peer attitudes towards underage drinking associated with the raising of the legal drinking age and its effect on youthful alcohol use and drinking driving. Findings indicate that the effect of perceived parental attitudes is specific to underage alcohol use, but the effect of perceived parental attitudes is specific to underage alcohol use, but the effect of perceived peer attitudes is general to both underage and legal drinkers.
Results from this study suggest that parental supervision is a key factor in enforcing the drinking age law and reducing youthful alcohol use. Parent’s participation should be included in all enforcement and prevention efforts.

2) Literature related to causes and factors influencing substance abuse

Delucia, C Belz A. et al (2017) showed that the family environment and paternal alcoholism play a major role in adolescent symptomatology, even if their parent is a recovered alcoholic, it puts the children at a higher risk of developing symptomatology.

Maulik, Pal, Tripathi, Pandey (2016) conducted a study to find the reason for relapse in opioid Dependent subjects. The findings revealed, 81.3% of the subjects were in withdrawal, 8% were unable to control urges, and 6.6% continued with opioid due to boredom and frustration. One inquiry, the main reasons cited were feeling tense, ill, pain or wanting a hit by 75%, sleep disturbance by 34.7% and escaping from works by 17.9%. The most frequent reasons were related to withdrawal, associated symptoms like anxiety, or sleeping problem etc. These intra person factors accounted for the main reason. Other important reasons were negative emotional states like anger, frustration, boredom etc. giving into temptations and interpersonal factors like family tension were also important.

Pushpa Bhagwanji Patil (2015) conducted a study of the drug addicts with reference to social, psychological and economical problems. The result revealed among 160 drug addicts majorities were in the age group of 20-30 years, unemployed, lower income group, and belong to joint family.

Rajalaxmi Naidu (2014) performed a study on the causes and effects of alcoholism amongst outstation 500 youths studying in private engineering colleges in Nagpur. The major findings of the study revealed 68% after joining and 32% before joining were taking alcohol 66% due to curiosity, 16% due to peer group pressure 18% to get rid from worries.

Middleton CT. (2013) conducted a National survey on Drugs and Alcohol revealed that some major factors that influence a child's decision to begin drinking are: the number of peers within their immediate environment who have started to drink, the number of adults they have regular contact with who have an alcohol problem, and the amount of the time the child is alone in the home (limited supervision). Exposure to alcohol advertising also influences children by creating a positive attitude toward alcohol use. Children who start drinking at a young age are more likely to experiment later with illegal drugs. Yet, many children report that although they learn early on about the dangers of drugs, many do not learn about the dangers of drinking alcohol.

Hawks R D, Bahr SJ, Wang G (2012) Weber country Department of substance abuse evaluated the extent to which parental codependence was associated with adolescent substance use and other adolescent problem behaviors. The sample was comprised of 293 adolescent and their parents who were interviewed by trained intake workers. It was revealed that adolescent substance use was associated with parental suffering but not with parental persecution or rescuing.

3) Literature related to incidence and prevalence of substance abuse

Jaydip Sarkar et al. (2013) conducted study on Psychiatric morbidity of cannabis abuse, at a tertiary referral center in Bangalore, by reviewing selected case-notes with any cannabis related diagnosis, during the period between 1984-1994. The findings revealed all 244 case-notes were identified as having cannabis related diagnosis were male. This study further revealed. 43% of subjects had started using cannabis during the second decades of their lives. In 127 patients (52%) a psychiatric disorder had occurred following cannabis use while for 18 patients (7%) psychiatric disturbance had preceded the onset of cannabis use.

A study conducted by Jermy Aldworth et al. (2013) revealed the results from the National survey on Drug use and health that an estimated 19.5 million Americans aged 12 or older were current illicit drug users, meaning they had used an illicit drug during the month prior to the survey interview. Marijuana was the most commonly used illicit drug. It was used by 75% of illicit drug users. An estimated 2 million persons (0.9%) were cocaine users. Hallucinogens were used by 1.2 million persons (0.5%). Rates of drug use showed substantial variation among young persons. It peaked among 18 to 20 year old (22.5%).

According to a Rapid Assessment Survey conducted on Drug abuse (2012) in Bangalore city by National Institute of Mental Health and Neuro Sciences Bangalore reported that apart from alcohol, cannabis was found to be the most commonly used drug in the community. This was followed by opiates, and then by inhalants. Drug choice appeared to be determined by availability, cost and socio-economic background. Sexual exposure to commercial sex workers was a common phenomenon among drug users. Heroin was reported as a drug of abuse in Bangalore in 1980. In the later 1980's Pentazocine and Buprenorphine abuse was reported. The mid, 1990's saw a shift to oral narcotic analgesics, but the last few years witnessed the reemergence of heroin.

Arlington V.A (2011) conducted a study on the prevalence and effects of inhalant abuse among adolescents. The report of the study shows that the Inhalant abuse was prevalent among adolescent's aged 12 to 17 and many adolescents use inhalant for at least one year. Some of the most commonly abused substances included glues, paints, correction fluid and gasoline. Some identified problems relating to inhalant abuse included cardiovascular, renal, pulmonary, hepatic, bone marrow, prenatal, and teratogenic disorders. Inhalant abuse was associated with other risks such as poly-substance abuse and violent behaviors. The study recommend that health care providers become more aware of the inhalant abuse, its prevalence in the population they serve, commonly used products, and the medical consequences of intoxication and habitual use. The author suggests that education is an important part of preventing inhalant abuse.
among adolescents.

Ivan D Montoya et al. (2010) in their study on Psychiatric Care of Patients with Depression and Co-morbid substance use disorders stated that concurrent presence of depression and substance use disorders (SUDS) were frequent and highly correlated. The Study showed a prevalence of 22.9% of SUD among individuals with a major depressive episode in general population in the United States.

Jamshid Ahmad and Ahmad Ghanizadeb (2010) conducted a study on current substance use among Iranian medical students. The findings revealed that there has been an increasing trend towards psychoactive substance use, often involving experimentation with more than one drug, among youth, especially medical students. One hundred eighty four medical students were selected randomly. Of the participants 43.5% admitted the use of psychoactive substances. Cigarette (34.8%) was the most frequently used substance followed by alcohol (16.8%); opium (7.1%); morphine (3.8%); hashish (3.3%) marijuana (2.2%) and heroin (1.1%). It was found 7.1% of the students used drugs regularly. Some were using more than one substance. Use of psychoactive substance was significantly related to sex. Pleasurable purposes and release of tension were the most common motivations reported for using drugs.

A report by the commission of substance abuse among America's Adolescents showed since 1992 daily smoking has been rising among adolescents. The percentage of 8th graders, who have tried crack, powder cocaine or heroin, though small, has been creeping up since 1991. Beer and other alcohol continue to be the substance teens use most. In 1996, 55% of 8th graders, 72% of 10th graders, and four out of five 12th graders (79%) said they had tried alcohol and inhalants. Steroid use continues to be a problem, particularly among male athletes such as football players and wrestlers, but also among other adolescent males.

Pauline and Elliott conducted self-reported survey among adolescent students concerning their use of drugs especially alcohol, tobacco, cannabis, and the harmful consequences of such use in Nova Scotia. A total of 3452 in 1991 and 3740 in 1996 junior and high school students in randomly selected classes in the public school system were the samples. The prevalence of cigarette smoking and the use of hallucinogens and stimulants were markedly higher in 1996 than in 1991. Over one fifth (21.9%) of the students reported multiple drug use of alcohol and tobacco and cannabis in the 12 months before the 1996 survey.

Ledoux Choquet M (2009) conducted a study on "Psychotropic drug use in adolescence; Why more girls?" in France. As a part of a cross sectional survey on adolescent health, psychotropic drug use were investigated by a self-administered questionnaire on school based adolescents aged 12-20 years. The study revealed that 27.5% of the girls and 13.8% of the boys had taken a psychotropic drug during the 12 previous months. Female overuse was observed for different type of problems related to family, social relationship, distress, anxiety, sleep disturbances etc.

A study done on " Why do College Students drink?" by Califano et al. (2008) stated that college students often intentionally chose to get drunk for a conscious purpose. Many college students drank with the intention of losing control, rebelling against authority, and created a 'counter culture.' Research conducted at Mississippi State University revealed five primary drinking factors like: escapism, relational, pleasures, sociability, and tension reduction. Family histories of alcoholism led to abusive drinking that emerged even before students began college.

Narendranath and Bhattacharya (2008) conducted a study among undergraduate medical students in two medical colleges of Calcutta. The study indicated that the prevalence of total drug abusers were 76.8% of the respondent student population. The drug abuse rate gradually increased with advancement of each academic year that is from 24% in 1st year to 74.4% in the final year. The prevalence among boys (58.4%) was significantly higher than girls. Twenty-five percentages of hostelries were found to be more drug users than non-hostelries. In the pattern of drug abuse12.6% of students used tobacco and 3.6% alcohol. Most common combination was of alcohol and tobacco. Other drugs constituted 12.7% students.

4) Literature related to adverse effects of substance abuse

Valerie Reitman (2017) reported that Adolescent Substance abuse is a chronic problem that contributes to automobile accidents, unwanted pregnancies, sexually transmitted diseases, suicide and crime, and can also be a symptom of underlying mental problems such as depression.

Deepthi Pagare et al (2015) conducted a study on Risk factors of substance use among street children from New Delhi. Among the 115 children interviewed, 57.4% had indulged in substance use any time in their life. The most common substance consumed was nicotine, as cigarettes or beedis and gutkha form of sniffing of adhesive glue, petrol, gasoline, thinner and spirit the harmful effects of substance use named by children were lung problems (28.2%) like "burning of lungs" and tuberculosis (6%) some stomach ailment like stones, rupture and bloody vomiting (12%), cancer (10.9%), death 10%), blackening of teeth and rupture of cheeks (7.3%), closing of heart or kidney stones(5%).

Jayaram et al. (2014) in his study on substance no use, done among students, unskilled workers, skilled workers and professionals at Chennai, pointed out that nicotine was one of the major causes of premature death and smoking was said to be on the increase in developing nations. Alcohol and illicit drugs were strongly associated with medical and psychiatric morbidity, accidents, violence, homicide, suicide, occupational dysfunction and reduction in life span. Nicotine ranked third, alcohol fifth and illicit drugs ninth amongst the ten major risk factors, which contributed to the global burden of disease.

Janet C Greenblatt (2014) conducted a survey study at Rockville on Patterns of Alcohol use among Adolescents and associations with Emotional and Behavioral problems reported that nearly 8000 drivers aged 15 to 20 involved in fatal motor vehicle crashes in 1996. 21.2% had been drunk
and 13.8% were legally intoxicated. People who drank before the age of 15 were four times likely to develop alcohol dependence and alcohol abuse than those who delayed drinking until age 21.

According to a morbidity and mortality weekly report in the United States approximately three/fourths of all deaths among persons aged 10-24 years result from only four causes: motor-vehicle crashes, other unintentional injuries, homicide, and suicide results from the 1999 national youth risk behaviors that increase their likelihood of death from these four causes including alcohol and illicit drug use.

A study done by Patrick Dixon on drug addiction said that drug used by teenagers had rocketed by 70% since 1992. Teenagers were in the front line of addiction, a quarter of all senior high school students used illegal drugs at least once a month, while 7% took drugs every day. On an average, one in ten older pupils was likely to be significantly affected almost every day by their daily intake of illegal drugs. As drug addiction at school caused loss of concentration, delinquency and encouraged truancy- all of which cost money in terms of wasted education.

Srilal (2012) conducted a study on "Personality and adjustment of adolescent children of Alcoholics." The objective of investigation was to study the personality and nature of adjustment of adolescent children of alcoholic dependent fathers and adolescent children of non-alcoholic dependent fathers. A sample of 20 adolescent children of alcoholic dependent fathers and 20 of non-alcoholic fathers, between the ages of 13-18 years were taken. The findings of the study revealed that there was significant difference between the personality factors of both the group and children having alcohol dependent fathers were facing unsatisfactory adjustment significantly on home, health, social and emotional aspects than the non-alcoholic fathers.

3. Objectives of the Study

The objectives of the study are to:
- Assess the knowledge level of adolescents related to selected substance abuse.
- Determine the association between the knowledge of adolescents and selected variables such as age, sex, religion, type of family, place of residence, income of family, education level of parents, occupation of parents, use of drugs by family members, number of children in the family and exposure to mass-media.

4. Material and Methods

The current study was descriptive and descriptive research design was adopted for this study. The study sampling technique used was stratified Random sampling technique. Data was collected from 100 adolescents (50 Boys and 50 Girls) in 2019. After a thorough review of literature related to topic the tool was developed. The data was collected by using Demographic data profile sheet, Self- Structured Checklist. The study was delimited to adolescents in Desh Bhagat University School of Nursing and by linguistic requirements of the questionnaire. Analysis of data was done by using descriptive, inferential statistics and answering the questionnaire.

5. Results

Section I

Description of sample characteristics

| Table 1: Frequency and percentage distribution of socio-demographic characteristics of adolescents, N=100 |
|---|---|---|---|---|---|
| S. No. | Variable | Boys | Girls |
| | Frequency | Percentage | Frequency | Percentage |
| Age: | | | | |
| 16 years | 12 | 12 | 12 | 12 |
| 17 years | 21 | 21 | 33 | 33 |
| 18 years | 15 | 15 | 04 | 04 |
| 19 years | 02 | 02 | 01 | 01 |
| Education: | | | | |
| I PUC | 25 | 25 | 25 | 25 |
| II PUC | 25 | 25 | 25 | 25 |
| Religion: | | | | |
| Hindu | 32 | 32 | 37 | 37 |
| Muslim | 12 | 12 | 08 | 08 |
| Christian | 05 | 05 | 04 | 04 |
| Jain | 01 | 01 | 01 | 01 |

Table 1 depicts the age wise distribution of the sample shows that majority of the boys (21%) and girls (33%) are in the age group of 17 years followed by (15%) boys are found in 18 years, while (12%) girls are in 16 years.

With regard to sex and level of education, they are in equal number. 25% boys and 25% girls are studying in 1st DBU while other 25% boys and 25% girls are studying in 2nd DBU.

Distribution of respondents according to the religion shows, that majority of the respondents (32%) boys and (37%) girls are Hindus, (12%) boys and (8%) girls are Muslims, while (5%) boys and (4%) girls are Christians and (1%) of each group are Jains.

Section II

Objective: To assess the knowledge level of adolescents related to selected substance abuse.

| Table 2: Overall Analysis of Knowledge Scores on Substance Abuse among Boys and Girls. |
|---|---|---|---|---|
| S. No. | No. of items | Maximum Score | Mean | Sd | Mean Percentage |
| 1 | 55 | 116 | 40.32 | 9.80 | 34.75 |

Table 2 depicts that the overall mean knowledge scores of respondents is 40.32. This indicates that the respondents possess inadequate knowledge on substance abuse.

| Table 3: Mean Knowledge Scores of Girls and Boys, N=100 |
|---|---|---|---|---|
| Group | Knowledge Score | Mean | Standard Deviation | Student ‘t’ value | d f |
| Boys N=50 | 2059 | 41.28 | 11.7 | 0.9 * | 99 |

* indicates the respondents possess inadequate knowledge on substance abuse.
use of drugs by family members, number of children in the family and exposure to mass-media.

The above table shows that the mean knowledge between Girls and Boys found statistically non-significant.

**Table 4: Association between Age and knowledge scores of Boys and Girls**

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Boys</th>
<th>Girls</th>
<th>df</th>
<th>( \chi^2 )</th>
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<tr>
<td><strong>Age</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Below 17 &amp; 17 years</td>
<td>24</td>
<td>04</td>
<td>6.64</td>
<td>7.5*</td>
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<tr>
<td>Above 17 years</td>
<td>04</td>
<td>11</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Below 17 &amp; 17 years</td>
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<td>24</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Above 17 years</td>
<td>05</td>
<td>00</td>
<td>05</td>
<td></td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
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<tr>
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<td>25</td>
<td></td>
</tr>
<tr>
<td>2nd PUC</td>
<td>12</td>
<td>13</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>1st PUC</td>
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<td>2nd PUC</td>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindu</td>
<td>20</td>
<td>13</td>
<td>23</td>
<td></td>
</tr>
<tr>
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<td>05</td>
<td>07</td>
<td>12</td>
<td></td>
</tr>
<tr>
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<td>02</td>
<td>03</td>
<td>05</td>
<td></td>
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<tr>
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<tr>
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<td></td>
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<tr>
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<td>03</td>
<td>01</td>
<td>04</td>
<td></td>
</tr>
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<td><strong>Types of Family</strong></td>
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<tr>
<td>Nuclear</td>
<td>14</td>
<td>14</td>
<td>28</td>
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<td>Joint</td>
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<tr>
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<tr>
<td>Rural</td>
<td>01</td>
<td>00</td>
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<td></td>
</tr>
</tbody>
</table>

\*Significant (p<0.001)

**Table 4** depicted the association of knowledge regarding antenatal care among pregnant mother with selected demographic variables. Chi Square have shown that there was no significant association of demographic variables age, educational level, occupation, parity and social status of the family. Hence it was concluded from the table that the H2 Hypothesis is rejected and null hypothesis is accepted that there is no association between the knowledge regarding antenatal care of pregnant mother with their selected demographic variables.

**6. Discussion**

The real voyage of discovery consists not in seeking new landscapes but in having new eyes.

-Marcel Proust

The present study revealed that 21% boys and 33% girls belonged to the age group for 17 years, 15% boys belonged to 18 years, while 12% girls belonged to 16 years of age.

**7. Conclusion**

On the basis of present study, the following conclusions can be drawn.

1) The respondents had inadequate knowledge regarding substance abuse, as the overall mean knowledge score was 40.32.
2) The mean knowledge score was high on narcotics for both boys and girls, also according to the findings the male respondents had higher mean knowledge score than the female respondents.
3) There is association between age and knowledge scores of boys. The Chi-square test did not establish any significant association between knowledge scores and education of respondents, religion, type of family, place of residence, income of family, occupation of parents, and education level of parents.
4) Significant association was found between the age factor of the boys and the knowledge scores, source of knowledge by relatives and knowledge scores of boys and source of knowledge by television and knowledge source of girls.

**8. Recommendation**

On the basis of the findings of the study, the following recommendations had been made for the further study:

1) A similar study on a large sample may help to draw more

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definite conclusions and make generalization.
2) A comparative study may be conducted between rural and urban adolescence with regard to their knowledge on substance abuse.
3) A study may be conducted to identify the substance abusers in reducing their psychosocial problem.

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