

Study on Tobacco and Alcohol Consumption among Male in Punjab: A Cross-Sectional Study

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ABSTRACT:

Background: Tobacco and alcohol use are important public health concerns in India and major risk factors for premature mortality and non-communicable diseases. This study assessed the prevalence and sociodemographic factors associated with tobacco and alcohol consumption among men aged 15–54 years in Punjab using secondary data from the National Family Health Survey (NFHS-5), 2019–21.

Methods: A cross-sectional analysis was conducted using data from 3,296 male respondents in Punjab. Tobacco and alcohol consumption were analysed as binary outcome variables. Descriptive and bivariate analyses were performed, followed by binary logistic regression to examine associations with age, education, marital status, occupation, caste, religion, wealth index and place of residence. Analyses were conducted using SPSS version 20.

Results: Overall, 11.6% of men reported tobacco consumption and 29.0% reported alcohol consumption. Tobacco consumption was highest among men aged 45–49 years (17.9%) and 50–54 years (17.7%), while alcohol consumption was highest among men aged 50–54 years (44.5%). Consumption was also more common among men with no education and those from poorer wealth groups. Rural residence was associated with higher odds of tobacco consumption (OR=1.82, $p<0.001$). Several sociodemographic characteristics showed statistically significant associations with tobacco and alcohol consumption in the regression analysis.

Conclusion: Tobacco and alcohol consumption among men in Punjab varied across sociodemographic groups. The findings highlight the need for targeted prevention and control strategies, particularly for higher-risk and socioeconomically disadvantaged groups. Strengthening screening, early detection and context-specific public health interventions may help reduce the burden of substance use..

Keywords: Tobacco, Alcohol, NFHS-5, Men's Health, Punjab, Socio-demographic Factors, Health Informatics, Substance Use

INTRODUCTION

The problem of substance use is now the most serious and rapidly growing phenomenon worldwide. (United Nations Publication, 2021) reported that 275 million people used drugs in 2020 and over 30 million people suffered drug use disorders. This being the case, it is a thing we should not take it slightly because substance use affects every part of someone's life. It can hurt the user, people around, ruin relationships and also affect financial health.

By definition, substance use also known as drug use refers to the pattern of harmful use of any substance for mood altering purposes. Some of the abused substances include alcohol, cocaine, marijuana, heroin, morphine and many more, which contribute to significant medical, psychological and legal consequences in life. Worldwide, drug use is directly and indirectly responsible for 11.8 million deaths each year (Ritchie H. & Roser M. 2019).

Smoking, alcohol and drug use are important risk factors for premature death each year (Ritchie H & Roser M, 2019). According to the article, substance use disorders are common in men and about 1.5 of global disease burden results from alcohol and illicit drug addiction and in some countries it is over 5%. Substance use does not only lead to diseases which contribute to premature death, the phenomenon also directly leads to fatal accidents as stated by (Ritchie H & Roser M. 2019) as a direct effect which result from the use of substance.

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Different studies indicate how strongly substance use leads to road accidents. Athanasia H et al. (2019) conducted a seven-year survey on incidence of fatalities of road traffic accidents associated with alcohol consumption and use of psychoactive drugs, 40.7% of the road traffic accidents were associated with alcohol consumption, of which 87.3% were males and a high number were young compared to older age. Substance use does not only affect adult people, it also severely impacts young and adolescents as the said in the case of the survey above. In most parts of the world, the population is relatively young, 'in 2016 more than 4 in every 10 people worldwide were young than 25 years old; 26 percent were aged 0-14 and 16 percent were aged 15 – 24' (United Nations Office on Drugs and Crime, n.d.).

Substance use mostly starts in adolescent stage, as it is a critical period for the initiation of substance use. According to United Nations Office on Drug and crime report 2018 survey, it shows that drug use in general population is extent among young people and the initiation starts as early as 12 years. Substance use peak among young people aged 18- 25 years (United Nations Office on Drugs and Crime, n.d.) In India, it is estimated that, by the time most boys reach the ninth grade, about 50 percent of them have tried at least one substance (Nadeem et al., 2009). According to Singh, (2020), the prevalence of alcohol use in all states of India was 4.6% with the ratio of male to female of 17:1.

Followed by 5 cannabis at 2.8% and opioids 2.1%. The journal also states that 19% of alcohol users use it in dependent pattern. (Gupta et al., 2013) conducted a survey among adolescent students in Chandigarh, the survey showed that the prevalence of substance abuse was found to be 52.7% among the male students aged 19 to 21 years. Alcohol use was found to be the most abused substance followed by tobacco. Despite the Narcotic Drugs and Psychotropic Substance act 1985 (NDPS), cigarettes and other tobacco products act 2003 (COTPA), which prohibits and restrict the use and abuse of narcotics, illicit and licit substances, drug and substance use is still an issue in India and other parts of the world with several studies showing high prevalence of substance use.

This research study assessed the prevalence, pattern and factors, which motivate students of Panjab University, be engaging in substance use, which is one of the phenomenon, which can lead to poor performance in school and make learning environment unsafe to other learners. The study focused mainly to male students of ages 19 to 30 years. The study participants using a prevalence rate of 52.7% came to be N=384. Paper based questionnaire was distributed to 395 subjects conveniently so as to achieve the set objects of the study. It is extremely salient to be conscious of the prevalence of substance use among young people in view of the fact that, authorities can take paternalistic roles in coming up with sensitization programs and other pertinent measures to avert the problem.

REVIEW OF LITERATURE

A study by (Alebachew et al., 2019) on prevalence, associated factors and consequences of substance use among 254 health and medical science students in Ethiopia, found the prevalence to be at 45.4%. However this study showed that khat chewers were more (93.9%) followed by smokers (39.5%) and lastly drinkers at 38.6%. male students are in most cases the ones who use substance more than females. This study showed 82.5 % of the substance users were males, it was also discovered that most of the substance users start at the age of 15 going on wards and in the study 57.9% of the users started while in their first year of college. It was interesting to note that keep alert while studying (29.6%), to be free from psychological stress (23.3%), peer pressure (13%), role modeling of families and teachers (10.7%), religious purpose (8.1%), socialization purpose (7.8%) and lack of recreation (7.4%) were some reasons cited to be the cause for substance use.

A survey in united states of America by (Burstein, 2012) on use and abuse of alcohol and illicit drugs on adolescents, the study shows that adolescent start using substance and drugs from as low as 13 -14 years of age. The prevalence of substance abuse in the study was found to be 78.2% with alcohol being the main used substance at 47.1%, followed by drug use at 42.5%. Demographic factors for the use of drugs was examined. Opportunity to use substance, gender, age and ethnicity were some of the associated factors for substance use.

A cross sectional study done in Kenya among college student was looking at the prevalence and risk factors of substance use in university students. 353 students as participants showed that students use different kind of drugs which among them are alcohol, sedatives, cannabis, cocaine, tranquilizers and also heroin (John & Ochanda, 2019). From the study, alcohol was the most used with 27.5%, tobacco smoking 24%, cocaine 8.5% and hallucinogens 8.2%. The study also discussed the risk factors for substance use which among others were peer influence, family factors, socio economic factors and gender.

In a multi country cross section study conducted in 2015 in Cambodia, Indonesia, Laos, Myanmar, the Philippines, Singapore, Thailand, Malaysia and Vietnam, 7923 university students took part in the study from various universities in the mentioned countries. The mean age of the study was 20.6 years. The study looked at the prevalence and associated factors of illicit drug use among university students in the association of Southeast Asia nations (ASEAN). Multi stage cluster sampling was used in selection of participants in all the countries. Data was collected using a self-administered questionnaire, the results showed that there was country variation in the

prevalence of both infrequent and frequent drug use ranging from 0.2% in Cambodia to 45.7% in Laos for infrequent use, and ranging from 0.0% in Cambodia to 5.5% in Laos for frequent use. (Scholar & Peltzer, 2017). The study showed considerably high use of illicit drugs among the university students. The findings entails a global concern of substance use in university students which is a public health issue requiring attention. The study revealed that factors like gender, living with parents or not, economic category, health status (poor health) and proximity to drugs were among factors associated with drug use.

A systematic review on alcohol use among adolescents in India by (Nadkarni et al., 2022) the prevalence of substance use among adolescents ranged from 3.9% in school students aged 12- 18 years to a prevalence of 69.8% in 22- 23 years students. The pattern of the drinking was 0.6%- 10.4% for everyday drinkers and 19.1% - 40% once a week drinkers, 10.6% consume monthly (Nadkarni et al., 2022). (Nadkarni et al., 2022) also found that use of substance correlates with being a male, older age, going to private school than in public school, having a part time job, parents' use of substance, lack of parental supervision and also failing a subject in school.

(Gupta et al., 2013) conducted a study on the prevalence, pattern and familial effect of substance use among the male college students of Chandigarh, aged between 19 to 21 years. A cross sectional study, it was found that the prevalence of substance use was 52.7%. Alcohol was found to be the most used substance among the students, followed by smokers, tobacco chewers and lastly cannabis. The study looked also on the reasons for substance use and found out that relief from psychological stress, and easy availability of substances were the reasons for substance use.

Substance use starts from a very young age as low as age range of 10 to 15 years old (Al-alawi & Shaikh, 2018). The study showed a prevalence of 20.7% of substance abuse of grade 9 to 12 students in al-Dhahirah governorate. (Jasani et al., 2019) found age as a determinant of substance use as the prevalence for 10-13 years, 14- 16 years, and 17- 19 years were 4.50%, 19.83%, 25.67% respectively, with an overall prevalence of 30.17%. The study showed that male adolescents are prevalent in the use of substance with a prevalence of 55.33% males and 5% females.

According to a study by (Moonajilin et al., 2021) a prevalence of 21.2% was observed in Bangladeshi high school going adolescents. The study also looked into the risk factors of substance use which include gender (male), less family influence on personal life, late night sleepers and owning a personal smartphone were significantly associated with substance use.

A study done on adolescents in Egypt by (Rabie et al., 2020) found out that adolescents abuse different kinds of substances, for instance, nicotine during life time (9%), last 12 month (2.4%), alcohol (3.3%), solvents (2.7%) and cannabis (2.6%), while the overall prevalence was 1.5% with substance use higher in male adolescents.

The pattern at which students use substances differs greatly. (Musyoka et al., 2020) found that substance use, for alcohol twice or more times a month 3.7%, once a month 2%, every week 1%, and less than 1% drank daily. For cannabis, weekly 1.5% and twice a month 3.2%. The study showed a result of 25.4% as prevalence among the students who have ever used alcohol or another substance in their life time.

A study in Ethiopia on magnitude of substance abuse among students, shows most adolescents start abusing substances while in college with a pattern of 13.6% abuse daily, 10.4% twice a week, 17.6% once a week, 39.2% 3-4 times a week, 10.4% twice a week, 25.6% use less than one year (Technique et al., 2017). the study also shows a prevalence of 42.5% with a 61.5% being males and 38.5% girls.

At suburban area of Delhi (Daniel, 2017) did a survey on male adolescents regarding substance use and pattern, a prevalence of 55.38% was recorded. 72.22% subjects reported the use of substances once or twice a month citing reasons as because of peer pressure, to have a feeling of substance and also feel like an adult. The study also analyzed the relationship between substance and sociodemographic characteristics. Adolescents from nuclear family expressed more prevalence, and adolescents from education less than 10th standard reported more usage of substance than those in more than 10th standard. (Daniel, 2017).

In a study by (Kaur et al., 2019) for female college students aged 18-25 in universities of north India, with a prevalence of 13.6%. The pattern was seen as 12 out of 34 users reported the once or twice in three months, 20.5% for monthly use in three months and the proportion of users having weekly or daily was low.

The pattern of substance use in adolescents was found to be 55.8% alcohol, 50.6% smoked tobacco, 44.3% cannabis and 9.3% for other drugs for occasional use. 13.9% of the sample fulfilled the (SUD) substance use disorder diagnostic criteria for substance use except tobacco and lastly regular users. (Di & Castro-fornieles, 2011)

In 2001, a study was conducted on 364 young poly substance users. The study was looking on the reasons for substance in young people with mean age of 19.3. Of the 364, 205 were males representing 56.3%. Their ethnic groups were white Europeans, black, and Asian. The popular functions for using substance were for relax (96.7%), become intoxicated (96.4%), keep awake at night while socializing (95.9%), enhance an activity (88.5%) and alleviate depressed mood (86.8%). (Boys et al., 2001)

Adolescents from different studies state various reasons for substance use. Adolescents use substance out of

curiosity 33.1%, pleasure 29.9% relief of psychological stress 15.7% and relief of fatigue 11% (Osman et al., 2016) other reasons mentioned in the survey were to be sociable, to improve academic performance, remain awake at night, to be accepted by others and also poor relationship with parents. The survey also showed a significant prevalence of substance use at 31%. 9 (Ka et al., 2021) found a prevalence of 79.1% from a study in Nigeria on college students. Unlike other studies, this study found out that females were 2.5 times more likely to have used drugs compared to males. Reasons cited for substance use in the study were curiosity, peer pressure, school stress and also media influence. Education and occupation of parents also influenced substance use.

RATIONALE OF THE STUDY

Substance use has proven to be prevalent among the young population worldwide. Substance use is a public health issue in young population which is mostly in schools, as the studies show, most people begin the use of substances as young as 14 years going up with various reasons for the use. It is important to note that use of substance has negative impact on the said population. for instance, it can lead to injury and death from interpersonal violence, road accidents, risky sexual behaviors, poor performance in academics, depression, conduct problems, suicidal thoughts just to mention but a few. Little has been published regarding substance use among male students of Panjab University, Chandigarh, it is essential to detail the situation of substance use among the students as the findings of the study will help policy makers within the university make decisive measures regarding the problem.

AIM OF THE STUDY

To Determine the Prevalence, Pattern and factors associated with substance use in male Panjab. Objectives:

1. To determine the prevalence of substance, use in the male Punjab.
2. To determine the pattern of substance, use in male population of Punjab .
3. To investigate factors associated with substance use in men.
4. To explore the relationship between substance, use and sociodemographic characteristics.

METHODOLOGY

Study designs: - The study was a cross sectional quantitative study, Study population and setting the study which focused on males of Panjab, participants were male of the ages of 15 to 54.

The data were derived from the national family health survey NHFS-5 which is conducted in 2019-21.it provide information about population health and nutrition of people in India from each state and union territory of country .all five round of NHFS-5 were conducted under the stewardship of ministry of health and family welfare, the government of India .MoHFW designated the international institute for population sciences IIPS Mumbai as nodal agency for conducting survey like NHFS-4 4 NHFS-5 and provide district level estimate for many important indicator the content of NHFS-5 are similar to NHFS-4 to allow comparisons over time .however NHFS-5 contains some new topics such as preschool education ,disability access to toilet facility the NHFS-5 sample were designed to provide national state/union territory and district level estimate of various indicator covered in the survey.

However estimates of indicator of sexual behavior husband background and women works ;HIV AIDS knowledge attitude and Behavior and domestic violence are available only at the state/union and national level. decision about the overall sample size required for NHFS-5 were guided by several consideration paramount among which was the need to produce indicators at the district /union territory levels. Thus NHFS-5 provides information for 707 district 28 states, and 8 UT .a uniform sample design which is representative at the national state /union and district level was adopted in each round of the survey. Each district is stratified in urban and rural areas.

Each rural stratum is sub stratified into the smaller substrate which is created considering the village population and the percentage of the population belonging to scheduled caste and scheduled tribe within each explicit rural sampling stratum a sample of village was selected as primary sampling unit(PSU), before the PSU selection ,PSU were sorted according to the literacy rate of women age 6+years.the list of household was created as a results of the ,mapping and household listing operation conducted in each selected PSU before the household selection in the second stage.in all 30456 PSU were selected across the country in NHFS-5 drawn from 707 district as of march 31st,2017 of which fieldwork is completed in 30198 PSU NHFS-5 sample is a stratified two stage sample. The 2011 census served as the sampling frame for the selection of PSU , PSU were village in rural and census enumeration blocks in urban areas.

Data processing

Electronic data collected in 2019-21 national family health survey were received daily via sync cloud system at

the international institute of population science ,where data were stored on a password protected computer .response rate for 2019-21 national family health surveys.

The sample size is 3296 of males in Punjab which is taken from NHFS-5.

Variable description

Outcome variable

The outcome variable was the presence of any alcohol consumption which was recorded as yes or no.

The outcome variable was the presence of any tobacco consumption which was recorded as yes or no.

To variable consume smokeless tobacco was generated using the question.

Do you currently chew tobacco?.

Do you currently consume guthka/pan masala with tobacco?

Do you currently consume pan with tobacco?

Do you currently consume khaini?

All the responses were recorded in yes or no.

Male who consume alcohol were coded as yes or no variables was recorded using the question.

Do you currently drink alcohol? The responses was coded as yes or no.

Explanatory variables information related to socio demographic variables which including the age of the participants , education, marital status , education , place of residence (urban or rural), religion, caste.

Statistical analysis

All the analysis have been conducted using SPSS version 20.descriptive statistics along with bivariate analysis were performed at the initial stage. the logistic analysis was used to estimate the extent of association between any tobacco and alcohol consumption. the binary logistic regression model usually put into a more compact form is as follow

$$\text{Logit}[P(Y=1)]=\beta_0+\beta_1X$$

RESULTS:

Results of the study:

The study was conducted to examined the prevalence of tobacco abuse and alcohol consumptions among men aged 15-54years in India. data was collected using the secondary data methods. The data were processed through SPSS version 20 and analyzed by using appropriate descriptive statistical measures the overall results of this study have been presented in the tabular form in this chapter under the following heading. The analysis was done concerning the objective of the study.

Table 1 shows the socio economic profile of men aged 15-54 years in india.it depicts that majority of respondent (30.7%) were of age group 15-24years,29.3% were age group 25-34 years, 22.75% were age group 35-44 years,17.3% were age group 45-54 years. Most of the respondent have secondary education 66.7%,followed by 9% primary education,10.1% no education and 14% higher education. most of the respondent were married 57.6% , followed by 40.7% unmarried and 1.7% others moreover .most of the respondent were working class 82% and 18% were not working. The majority of class belongs to sc/st 48.5%,followed by 13.7%obc and 37.7% were others. The majority of respondent were others which contribute 61% followed by hindu 37.8% and muslim were 1.2%.most of the respondent have richer wealth index 58.2%,followed by 12% middle class and 5.9% low class.most of the respondent belongs to rural areas66.6% followed by 33.3% urban areas.

Table 2 presents the percentage of tobacco and alcohol consumptions of men aged 15-54 by their district wise in panjab.

In kapurthala tobacco consumption is 9.5% & alcohol is19.5%, in jalandhartobcco consumption is 11.3%& followed by alcohol is 37.5%,in hoshiarpur tobacco consumption is 4.9%,followed by alcohol 18%,in sasnagar tobacco consumption 8% % alcohol consumption is 23.5%, in fathegarh sahib tobacco consumption is 17.1% and alcohol consumption is 36.6%,in Ludhiana tobacco consumption is 17.4% & alcohol consumption is 35.9%,in mukhtasar tobacco consumption is 17.2% & alcohol consumption is 39.9%,in faridkot tobacco consumption is 15.6 & alcohol consumption is 38.7%,in bathinda tobacco consumption is 26.7% & alcohol consumption is 43.1%,in mansa tobacco consumption is 11.5% & alcohol consumption is 37.2%,in Patiala tobacco consumption

is 8.2% & alcohol consumption is 19.7%, in Amritsar tobacco consumption is 7.4% & alcohol consumption is 21%, in tarn taran tobacco consumption is 7.2% & alcohol consumption is 21.4%, in Rupnagar Patiala tobacco consumption is 9.4% & alcohol consumption is 26.5%, in Sasnagar tobacco consumption is 18.4% & alcohol consumption is 32.8%, in Sangrur tobacco consumption is 7.9% & alcohol consumption is 26.2%, in Barnala tobacco consumption is 10.8% & alcohol consumption is 33.2%, in Fazilka tobacco consumption is 7.8% & alcohol consumption is 27.7%, in Firozpur tobacco consumption is 5.9% & alcohol consumption is 28.6%, in Gurdaspur tobacco consumption is 6% & alcohol consumption is 22.7%, in Pathankot tobacco consumption is 4.5% & alcohol consumption is 28%.

Table 3 presents prevalence of tobacco and alcohol consumption among men according to backgroundwise characteristic. It reveals that men in the age group of 15-24 years have tobacco consumption of 13.9% and alcohol consumption is 20%, age group of 25-34 years have tobacco consumption 24.4% & alcohol consumption is 68.9%, age group of 35-44 years have tobacco consumption 24.9% & alcohol consumption is 75.4%, age group of 45-54 years have tobacco consumption 35.6% & alcohol consumption is 87.5%. According to their education prevalence of tobacco consumption is higher in no education 32.5% & and in alcohol consumption was higher in primary education. According to their marital status, another category is higher prevalence of tobacco consumption 39.4% and alcohol consumption is higher in other category 51.8%. By looking their occupation status working class more prevalence of tobacco consumption and alcohol consumption is higher in working class 34.2%. According to their caste SC/ST have more prevalence of tobacco consumption 14.4% and alcohol consumption is more seen in SC/ST 30.5%. Further looking into religion Muslim is more prevalent of tobacco consumption and alcohol consumption is more seen in other 29.3%. According to their wealth index lower class seen more prevalent in both tobacco and in alcohol consumption 49.8% & 80.9%. Furthermore according to their place of residence urban is seen more prevalent of tobacco consumption 14% & alcohol consumption is seen more in rural 30.6%.

Table 4 presents Determinants of Tobacco and alcohol Consumption among men by Independent Variables, Punjab, 2019-21.

Men aged 30-34 had significantly higher odds ($OR=1.16$, $p<0.000$) of having any Tobacco in comparison to men aged 25-29 years. & Men aged 35-39 had significantly higher odds ($OR=1.059$, $p<0.000$) of having any Alcohol in comparison to men aged 30-34 years. Men having primary education had higher odds ($OR=7.96$, $p<0.000$) of having any tobacco in comparison to men having secondary education. & Men having primary education had higher odds ($OR=2.90$, $p<0.000$) of having any Alcohol in comparison to men having secondary education. Men having marital status married have significantly lesser odds ($OR=0.23$, $p<0.000$) of having tobacco comparison with others status ($OR=0.25$). & Men having marital status married have significantly lesser odds ($OR=0.55$, $p<0.000$) of having comparison with others status ($OR=0.65$) having alcohol consumption. Men having occupation as working class have odds ($OR=0.31$, $p<0.000$) having tobacco comparison & Men having occupation as working class have odds ($OR=0.39$, $p<0.000$) having Alcohol comparison. Men belonging to OBC had significantly higher odds ($OR=1.22$, $p<0.000$) of having any tobacco in comparison to others having odds ($OR=0.92$, $p<0.000$) & Men belonging to OBC had significantly lesser odds ($OR=1.002$, $p<0.000$) of having any Alcohol in comparison to others having odds ($OR=1.31$, $p<0.000$). & Men belonging to Muslim caste had significantly lesser odds ($OR=1.49$, $p<0.000$) of having any Tobacco in comparison to others having odds ($OR=2.22$, $p<0.000$) & Men belonging to Muslim caste had significantly higher odds ($OR=1.07$, $p<0.000$) of having any Alcohol in comparison to others having odds ($OR=0.443$, $p<0.000$). Men having poorer wealth index have significantly higher odds ($OR=2.76$, $p<0.000$) of having any tobacco in comparison to Richest & Men having poorer wealth index have significantly higher odds ($OR=1.515$, $p<0.000$) of having any Alcohol in comparison to Richer. Men having poorer wealth index have significantly higher odds ($OR=2.76$, $p<0.000$) of having any tobacco in comparison to Richest. Men having rural place of residence had significantly higher odds ($OR=1.82$, $p<0.000$) of having any tobacco in comparison to urban & . Men having rural place of residence had significantly lesser odds ($OR=0.903$, $p<0.000$) of having any Alcohol in comparison to urban.

4.1 Discussion:

In this study using the panjab representative secondary data in India, we extremely explored the prevalence of major risk factors of tobacco use, alcohol consumption, overweight, and obesity among 15-54-aged group men. The finding of this study revealed that a large number of males in panjab were having any Substance abuse. The finding of this study showed a higher prevalence of understanding the pattern of the problem and how to best prevent and control it. The study revealed a higher prevalence of Alcohol consumption, followed by Tobacco consumption.

This study also found that tobacco product use and smoking and alcohol consumption were associated with an increased prevalence of non-communicable diseases in males. Other studies have shown that smokeless tobacco use, causes and major prevalence related problems among Indian men, especially those with low socio-economic status. (Gupta et al., 2013) conducted a study on the prevalence, pattern and familial effect of substance use among

the male college students of Chandigarh, aged between 19 to 21 years. A cross sectional study, it was found that the prevalence of substance use was 52.7%. Alcohol was found to be the most used substance among the students, followed by smokers, tobacco chewers and lastly cannabis. The study looked also on the reasons for substance use and found out that relief from psychological stress, and easy availability of substances were the reasons for substance use Combined exposure to alcohol consumption and tobacco use was strongly associated with a higher prevalence of NCDs among men).

However, the results revealed that tobacco and alcohol use management and efficient preventive strategy against the increasing trend toward NCD needs to be developed. For example, evidence shows that a 10% increase in tobacco prices will reduce smoking by about 85 in low and middle-income countries. Similarly, tax increases could be a potential strategy for controlling tobacco use, especially among the poorest areas of the population, urbanization, and advertising. The adoption of unhealthy lifestyles that contribute to inappropriate dietary choices, such as urbanization and increased sugar and fat intake, has led to weight gain in the general population, especially in men. Similarly, A systematic review on alcohol use among adolescents in India by (Nadkarni et al., 2022) the prevalence of substance use among adolescents ranged from 3.9% in school students aged 12- 18 years to a prevalence of 69.8% in 22- 23 years students. The pattern of the drinking was 0.6%- 10.4% for everyday drinkers and 19.1% - 40% once a week drinkers, 10.6% consume monthly (Nadkarni et al., 2022). (Nadkarni et al., 2022) also found that use of substance correlates with being a male, older age, going to private school than in public school, having a part time job, parents' use of substance, lack of parental supervision and also failing a subject in school

Current study shows that men who are adolescent or age of 15-24 are more likely to have Alcohol consumption and Tobacco consumption in men of age faces the results of other studies in both developed and developing countries, Furthermore, the lower level of education and increasing age being separated and divorced, and were associated with a higher risk of alcohol consumption.. Furthermore, the association of marital status and education with Alcohol consumption was similar to past studies showing that lower levels of education and being divorced, separated.

Future research is needed to confirm this association and explore the underlying mechanism. On the other hand, the current study shows that men, who are in a high household economy, are more likely to consume alcohol and tobacco. However, this may be due to low utilization of medical services, poor socio-economic background, and low likelihood of being diagnosed and reporting a medical condition (Prabhakaran, 2018, & Joseph, 2017). This study used nationally representative secondary data the findings are generalized for men of 15-54 age in panjab.

4.2 Conclusion:

The result showed that smoking and smokeless tobacco use and alcohol intake in males. Research results encourage investment in the health of health decision-makers. Especially men exposed to the risk factors of Substance abuse. The finding is also related to the focus of the Adolescent and older aged group more prevalence Is seen in this group . Furthermore, the increased coexistence of tobacco and alcohol use required different strategies to address the male vulnerability to Substance abuse. Screening and early detection of the same non-communicable diseases such specially emphasized among people who smoke and chew tobacco and consume alcohol. In addition, interventions focused on correctable factors such as smoking drinking may help prevent an increased burden.

Table No.1

Socio-economic Variables	Number	Percentage
Age		
15-19	531	16.1
20-24	480	14.6
25-29	485	14.7
30-34	480	14.6
35-39	399	12.1
40-44	350	10.6
45-49	285	8.6
50-54	286	8.7
Education		
No education	333	10.1

Primary	301	9.1
Secondary	2200	66.7
Higher	462	14.0
Marital Status		
Unmarried	1340	40.7
Married	1899	57.6
Others	57	1.7
Occupation		
Not working	594	18.0
Working	2702	82.0
Caste		
SC/ST	1599	48.5
OBC	453	13.7
Others	1244	37.7
Religion		
Hindu	1247	37.8
Muslim	40	1.2
Others	2009	61.0
Wealth Index		
Poorest	43	1.3
Poorer	151	4.6
Middle	411	12.5
Richer	773	23.5
Richest	1918	58.2
Place of Residence		
Urban	1101	33.4
Rural	2195	66.6

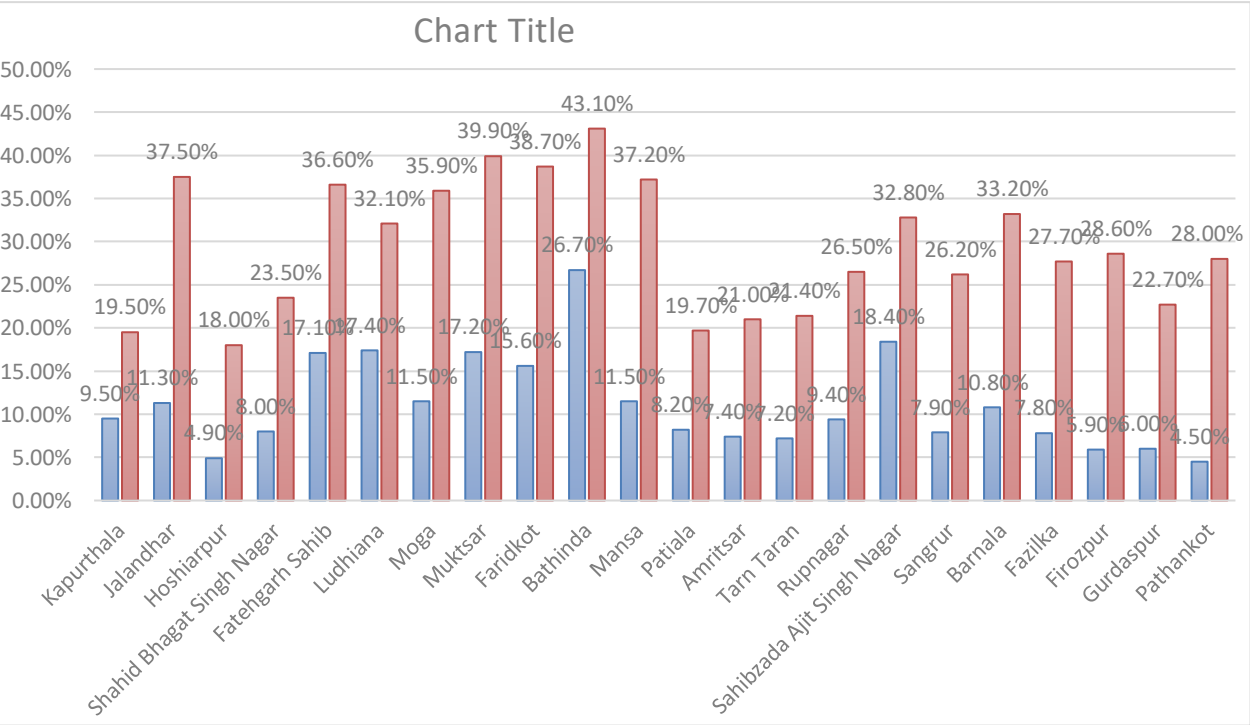


Table 3: Prevalence of Tobacco and alcohol consumption among men according to Background Characteristics, Punjab, 2019-21

Background Characteristics	Consumption	
Age	Tobacco	Alcohol
15-19	04.6%	04.4%
20-24	09.3%	15.6%
25-29	12.8%	29.2%
30-34	11.6%	39.7%
35-39	14.0%	38.3%
40-44	10.9%	37.1%
45-49	17.9%	43.0%
50-54	17.7%	44.5%
Education		
No education	32.5%	53.2%
Primary	25.9%	48.4%
Secondary	08.3%	25.0%
Higher	03.5%	18.7%
Marital Status		
Unmarried	07.5%	14.5%
Married	13.7%	39.0%
Others	39.4%	51.8%
Occupation		
Not working	02.4%	05.4%
Working	13.6%	34.2%
Caste		
SC/ST	14.4%	30.5%
OBC	10.2%	29.8%
Others	08.5%	26.7%
Religion		
Hindu	14.5%	28.6%
Muslim	26.5%	20.8%
others	09.5%	29.3%
Wealth Index		
Poorest	33.0%	40.3%
Poorer	16.8%	40.6%
Middle	21.2%	36.4%
Richer	16.9%	31.5%
Richest	07.1%	25.7%
Place of Residence		
Urban	14.0%	26.7%
Rural	09.9%	30.6%

Total	11.6%	29.0%
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Table 4: Determinants of Tobacco and alcohol Consumption among men by Independent Variables, Punjab, 2019-21

Independent Variables	Tobacco Consumption				Alcohol Consumption			
	Exp(B)	95% C.I.		p-value	Exp(B)	95% C.I.		p-value
		Lower	Upper			Lower	Upper	
Age								
15-19	1.00				1.000			
20-24	0.66	0.66	0.66	0.000	0.158	0.158	0.158	0.000
25-29	1.01	1.01	1.01	0.000	0.443	0.443	0.443	0.000
30-34	1.14	1.14	1.14	0.000	0.726	0.725	0.726	0.000
35-39	0.93	0.93	0.93	0.000	1.059	1.058	1.059	0.000
40-44	0.92	0.92	0.92	0.000	0.837	0.836	0.837	0.000
45-49	0.68	0.68	0.68	0.000	0.802	0.802	0.802	0.000
50-54	1.10	1.10	1.10	0.000	0.946	0.946	0.947	0.000
Education								
No education	1.00				1.000			
Primary	7.96	7.96	7.97	0.000	2.904	2.903	2.905	0.000
Secondary	6.44	6.44	6.44	0.000	2.778	2.777	2.779	0.000
Higher	2.39	2.39	2.40	0.000	1.406	1.405	1.406	0.000
Marital Status								
Unmarried	1.00				1.000			
Married	0.23	0.23	0.23	0.000	0.505	0.505	0.505	0.000
Others	0.25	0.25	0.25	0.000	0.655	0.655	0.656	0.000
Occupation								
Not working	1.00				1.000			
Working	0.31	0.31	0.31	0.000	0.396	0.396	0.396	0.000
Caste								
SC/ST					1.000			
OBC	1.22	1.22	1.22	0.000	1.002	1.001	1.002	0.000
Others	0.94	0.94	0.95	0.000	1.131	1.131	1.131	0.000
Religion								
Hindu					1.000			
Muslim	1.49	1.49	1.49	0.000	1.017	1.017	1.018	0.000
others	2.28	2.28	2.28	0.000	0.443	0.443	0.444	0.000
Wealth Index								
Poorest	1.00				1.000			
Poorer	2.76	2.75	2.76	0.000	1.276	1.275	1.277	0.000
Middle	1.49	1.49	1.49	0.000	1.516	1.515	1.517	0.000
Richer	2.18	2.18	2.18	0.000	1.295	1.295	1.295	0.000
Richest	2.22	2.22	2.23	0.000	1.203	1.203	1.203	0.000
Place of Residence								
Urban	1.00				1.000			

Rural	1.82	1.82	1.82	0.000	0.903	0.903	0.903	0.000
Constant	0.08			0.000	0.636			0.000

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