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# A study of socio-demographic factors contributing to the habit of drug abuse in the urban slum community of Mumbai.

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## Abstract

**Societies in all parts of the world have used substances to suppress pain and sorrow and also to get pleasurable sensations. A cross-sectional community based field survey were conducted to find out the socio-demographic factors contributing to the habit of drug abuse through door to door visit, to interview all individuals of either sex aged 15 and above in the selected sample household to enquire about drug abuse & their socio-demographic factors with structured proforma by two stage systematic sampling method, in the urban slum community of Malvani in P-North ward of Mumbai. The data collected were analyzed with the help of Mean , Standard deviation, Percentage, Chi-Square ($\chi^2$) test and Standard error of proportion. 49.7% were found positive for any type of either single or multiple drug abuse habit. 59.8% drug abusers were in the age group 15 to 34 yrs. 72.1% of drug abusers were either illiterate or primary or middle school educated. 53.1% drug abusers belonged to semiskilled group while 27.2% belonged to unemployed group. 65.2% males were having age of starting any drug in the age group 15-24 yrs. In males, reason of starting drug abuse were 81% due to peer pressure. Our results indicate that early age, illiteracy, low working status & poverty is the main socio-demographic factor for drug abuse. Peer pressure is playing very important role in initiation of any type of drug abuse.**

**Key words**: Drug abuse, socio-demographic factors, urban slum, cross sectional.

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## Introduction

The abuse of drugs and alcohol is an international problem which affects almost every country in the world, both developed and developing. Many health problems and even deaths associated with such abuse are the result of a complex interaction between the drug (and its pharmaceutical and toxicological properties), the individual (and his or her personality and health status) and the setting in which the drug is taken.

Societies in all parts of the world have used substances that suppress pain and sorrow and also provide pleasurable sensations when consumed. The oldest are those obtained from the cannabis plant, the opium poppy and the coca bush. Archaeological evidence indicates that cannabis cultivation dates back to 6000 B.C.; religious and mystical use of cannabis in Indian societies was reported from about the 7th century A.D.[1].

Around the 9th century Arab traders first brought the opium to India via the west Coast and its primary use was for medicinal purposes. By the 10th century opium use was widespread and included social use. The first recorded mention of opium as a product, and its cultivation, was in the early 14th century; the poppies were grown along the west seacoast at Cambay and Malwa [2]. With the first Moghul dynasty under the reign of Babar (1524-1530) poppy cultivation and sale of opium became state monopolies and soon were an important article of trade with China and other eastern countries [2]. The British East India Company took over the opium monopoly in 1757 and the British attempted to popularize its use to increase revenue. In Bengal, the land designated for opium growing stretched for 500 miles with more than a million registered farmers growing opium plants for the East India Company in 500,000 acres of prime land [2,3]. In India drugs are often used in open public places such as the roadside, parks, playgrounds and market complexes. Other favored sites include abandoned or under-

construction buildings, public toilets, at home, offices, railway yards, and burial grounds. Cannabis is frequently mixed with tobacco or it can be made into a powder by removing the seeds, placing them in a chillum made of earthen clay and then lighting it.

India is the biggest supplier of licit demand for opium required primarily for medicinal purposes. Besides this, India is located close to the major poppy growing areas of the world, with "Golden Crescent" (stretching from the Pakistan-Afghanistan border to northern part of Iran) on the Northwest and "Golden Triangle" (hilly tract lying in between Myanmar, Laos and Thailand) on the North–East. This makes India vulnerable to drug abuse particularly in poppy growing areas and along the transit/trafficking routes. Acetic Anhydride is manufactured in large quantities by India & China for use in textile industry. Acetic Anhydride is also diverted for synthesizing heroin from raw opium.

Recognizing the seriousness of the multi-faceted implications of the incidence of alcoholism and drug abuse in the country, the Ministry of Social Justice and Empowerment, Government of India launched a scheme for prohibition and drug abuse prevention in the year 1985-86. Since then the ministry has been promoting a community based approach towards the identification, treatment and rehabilitations of addicts. In the larger social context, a major thrust has to be given to preventive education so as to ensure that those at risk are helped before they reach a point of no return.

Alcohol has been in use in most societies for ages, regulated by traditions, social norms and natural limitations. The ill effects of alcohol consumption can arise from a single bout of drinking or from the long term effects of alcohol consumption in the form of health, social and economic effects. Alcohol use is one of the major causes of the global disease burden.

Tobacco was introduced into Europe in the late 15$^{th}$ century from America as custom of smoking dried tobacco leaves. Sometimes in the late 16$^{th}$ or early 17$^{th}$ century, Portuguese traders introduced it into India during Emperor Jehangir's rule. The emperor was gifted tobacco during his " durbar" in Agra Fort (Jehangir's Capital). Since then tobacco use has spread with remarkable rapidity seeping into all sections of society [4].

Initially, tobacco was smoked in India, but it was later used for chewing and application over the teeth and gingiva as well ( smokeless form ). In course of time, a large spectrum of methods of use were developed . It is estimated that among the 400 million individuals aged 15 years and over in India, 42% use tobacco in one form or other. 72% of tobacco users smoke bidi, 12% smoke cigarette and 16% use tobacco in smokeless form [4]. India is the 3$^{rd}$ largest producer of tobacco after China and USA [5]. Tobacco products consumption causes around 3 million death a year with 0.5 million are among women and toll is rising every year with 70% of those deaths occurring in developing countries and is expected to rise from 3 to 10 million by 2020 year [6]. Table 1 shows the existing profile of current drug users (Source: NHS[7] ).

In India, although statistics are available on infectious diseases, no separate data is available for persons with alcoholism and drug abuse. These are thus grouped together with psychiatric diseases for coding and tabulation purposes. Psychological symptoms, which include depression, anxiety, memory defects, sexual inadequacy and personality problems have also been reported as health consequences of drug abuse. Frequent absenteeism due to drug abuse has also been reported.

Abuse remains critical problems in most countries, not at least because of their far reaching social and economic repercussions. The use of drugs and illicit substances starts during adolescence and young adulthood and hence emphasizes the need for preventive education at this impressionable age. The choice of drug used depends on various factors such as sex, social customs, economic status, peer usage and popularity and easy availability. Socio-economic and health hazards resulting from substance use are enormous and intensified further due to pre-existing overpopulation and low socio-economic development. In this background, I tried to find out the socio-demographic factors contributing to the habit of drug abuse in the urban slum community in Mumbai.

## Material and Methods

This study was cross-sectional field survey through door to door visit to interview all individuals of either sex aged 15 and above in the selected sample household to enquire about drug abuse & their socio-demographic factors with structured proforma by two stage systematic sampling method. We studied urban slum community, Malvani in P-North ward of Mumbai. An Urban Health Centre has been established by P.S.M. Department of Seth G.S. Medical College at Malvani in the year 1978 to offer comprehensive health care services to about 1.5 to 2 lakh poor and needy people living in slum. This field practice area of Health Centre is divided into 8 colonies -New Collectors Compound (NCC), Old Collectors Compound (OCC), Maharashtra Housing Board Colony (MHBC), Squatter's Colony, Samna Nagar, Bombay Municipal Colony (BMC), New Bhabrekar Nagar Colony includ-

ing Ambujwadi, Akashwani Area. In stage I sampling, by Simple Random Sampling, for study purpose, 4 areas were selected by lottery method out of 7 areas (Samna Nagar were clubbed with MHB Colony because it was having just 200 houses ad near to MHB Colony).

Four selected areas were –

a. MHB Colony- It constitutes 158 chawls, each having 16 houses, approximately 2528 houses and 200 houses of Samna Nagar has been clubbed with this area, so total 2728 houses. Samna Nagar is very well organized in the 10 chawls & 20 houses in each chawl.

b. NCC Colony- Total plots in NCC were numbered upto 73, but Plot no. 1 is Garden, 27 & 28 for Maulana Azad Maternity Hospital, 49 No. Plot is not numbered. Usually 115-125 houses in each Plot, but some of the houses have become double storey & separate family is staying there, so 180 houses were considered in each plot which comes to 69 × 180 = 12420 houses.

c. Akashwani Area- It constitutes Azmi nagar, Ekta nagar, Himgiri compound, Sarvodaya Nagar, Nirankar nagar, etc of total 5443 houses. It is unauthorized slum with no MCGM amenities and situated in unorganized manner.

d. Ambujwadi- It constitutes 3000 houses, but situated in an unorganized manner. Because this is unauthorized slum so MCGM is not providing any basic amenities.

***Study Population***

Family size was considered as 6 after consultation with health post personnel for this study area. Total population were calculated on this data. As per data from office of Registrar General, India [8] 34% population belonged to age group 0-14 yrs, and 66% population aged above 15 yrs. For this age group 1.07 male/female were present. Based on this Target Population were calculated for all the area and shown in Table 2

In stage II sampling, sample size were determined as 994 based on prevalence of Alcohol & other drugs i.e. 28.7% [7] with 10% allowable error and rounded to 1000. From all the 4 areas sample size were determined based on proportionate to population size (PPS) and then systematic sampling method were applied in each area. Sampling interval were calculated for each area.

Sample size for diff. Area = Area population × Total sample size/ Total population.

No. of households required = sample size/ family size × % of popln. in aged above 15yrs

Household sampling interval= Total household/ required household

For MHB, Sample size = 115, No. of households required to be visited = 29 & Household sampling interval = 94. First house were selected by last digit of randomly picked currency note, it was 7, then other houses were selected by adding 94 to 7 and so on … ( $7^{th}$, $101^{st}$, $195^{th}$, $289^{th}$ ……).

For NCC, Sample size = 525, No. of households required to be visited = 132 & Household sampling interval =94. First house were selected by last two digit of randomly picked currency note, it was 27, then other house were selected by adding 94 to 27 i.e. 121 and every $27^{th}$ & $121^{th}$ house from every plot for simplicity ( because every plot had around 180 houses, so instead of 94, $90^{th}$ were considered as household sampling interval) were taken for study.

For Akashwani, Sample size = 230, No. of households required to be visited = 58 & Household sampling interval =94. First house were selected by last digit of randomly picked currency note, it was 9, then other houses were selected by adding 94 to 9 and so on…($9^{th}$, $103^{rd}$, $197^{th}$, $291^{st}$ ……).

For Ambujwadi, Sample size = 127 (130 were taken), No. of households required to be visited = 32 & Household sampling interval =94. First house were selected by last digit of randomly picked currency note, it was 2, then other houses were selected by adding 94 to 2 and so on…( $2^{nd}$, $96^{th}$, $190^{th}$, $284^{th}$)

For all Areas, if the concerned houses were closed, then next immediate to the selected house were visited and considered for the study. If next house was also found locked, then next to that house were taken for study.

Inclusion criteria for the study, all the male & female of age 15 and above, who were present in the selected houses were interviewed, in each houses on an average 2 to 10 people were of above criteria. Exclusion criteria were unwillingness to participate. In some houses subjects were not willing to participate in the study, but in that case we left that house and went to next open houses. In some of visited houses only female member were present, male earning member were out for duty, in that case available members were interviewed.

During visit to the sample houses, self-introduction was given to the subjects and family members and aim of study was explained to them in detail. Initial rapport with the subjects were established by some informal conversation and then interview were taken. The

data collected by above method were compiled. The data were analyzed with the help of mean , standard deviation, percentage, chi-square ($\chi^2$) test and standard error of proportion.

## Results

In this study, all the respondents were ranged between minimum age 15 yr and maximum age 89 yr i.e. range of 74. The mean age of the study population were 32.8 ± 13.48 yr, median was 30 yr & mode was 20 yr. The frequency of distribution of respondents according to age in the community decreases as age increases, 61.8% are between age group 15 to 34, around 20% (19.1) in the middle age group i.e. 35- 44, and rest 19.1% belong to more than 45 yrs. Male / Female ratio were 1.247 i.e. 1.25, it means for every 4 female, there is 5 male present , this is very high with respect to national M/F ratio which is 1.07, this high ratio may be due to want of male child by the community. Also due to selective migration of males to Mumbai to earn a living (for livelihood), leaving behind their wives / children in their native places. It was observed that more males (71%) fall in 15 to 34 yrs of age while only 50% females fall under 15 to 34 yrs of age. In middle age group (35-44) females are just double of male population. 68.1 % females were married while 50.3 % males were married. 58.2 % were married in total population. In 1000 respondents, 381 (38.1%) were Hindus, while 593 (59.3%) were Muslims. 12 (1.2 %) were Buddists & 14 (1.4%) were Christians. Data were collected from 1000 individuals aged above 15 yrs for any type of drug abuse habit and it was observed that 497 (49.7%) were found positive for any type of either single or multiple drug abuse habit. Standard error of Proportion 1.58, 95% Confidence Interval of Prevalence of drug abuse = 49.7 ± 3.16.

***Table 1. Profile of current Drug Users.***

| Sr.No. | Item | Alcohol Users | Cannabis Users | Opiate Users |
|---|---|---|---|---|
| 1. | Mean age of onset (yr) | 21.3 | 22.5 | 23.3 |
| 2. | Family Type (%) | | | |
| | Nuclear | 44.3 | 34.4 | 43.8 |
| | Joint | 18.1 | 24.9 | 13.5 |
| 3. | Illiterate (%) | 28.5 | 31.9 | 22.3 |
| 4. | Unmarried (%) | 14.6 | 11.3 | 26.7 |
| 5. | Unemployed (%) | 2.9 | 2.9 | 4.4 |
| 6. | Students (%) | 2.5 | 2.5 | 9.6 |
| 7. | Rural (%) | 78.2 | 88.6 | 81.7 |
| 8. | Urban (%) | 21.8 | 11.4 | 18.3 |

*Source: NHS (7)*

***Table 2. Calculation of Target population for study area.***

| Area | No. of Houses | Total Population | Total Population Male/Female | Target Population (66%) | Target Population Male/Female |
|---|---|---|---|---|---|
| 1.M.H.B.(including Samana Nagar) | 158×16= 2528+200 | 16368 | M – 8461<br>F – 7907 | 10803 | M – 5584<br>F – 5219 |
| 2.N.C.C. | 69×180=12420 | 74520 | M – 38520<br>F – 36000 | 49183 | M – 25423<br>F – 23760 |
| 3.Akashwani | 5443 | 32658 | M –16881<br>F – 15777 | 21554 | M – 11141<br>F – 10413 |
| 4.Ambujwadi | 3000 | 18000 | M – 9304<br>F – 8696 | 11880 | M – 6141<br>F – 5739 |
| TOTAL | 23,591 | 1,41,546 | M-73,166<br>F- 68,380 | 93,420 | M - 48,289<br>F – 45,131 |

*As shown in Table 3,*

1. 31.2% drug abusers were in the age group 25 to 34 yrs & 28.6% were in the age group 15 to 24 yrs, In other words 59.8% drug abusers were in the age group 15 to 34 yrs. In 35 to 44 age groups drug abusers are less i.e. 15.5% as compared with non drug abusers (22.7%). After 45 yr, drug abusers are again more than non abusers.
2. It was observed that 36.6 % drug abusers were Hindus, while 61.6 % Muslims. It may appear that in Muslims drug abuse were more than Hindus, but it is due to high proportion of Muslim population in the area. In Muslim population it is slightly higher prevalence of drug abuse (61.6) than the population ratio i.e. 59.3%.
3. It was observed that, 24.7% drug abusers were illiterate as compared to 16.9 % in non drug abusers group. 72.1% of drug abusers were either illiterate or primary or middle school educated. As the literacy increases, drug abusers decreases. In middle & high school educated, drug abusers were less in comparison with non drug abusers. In post graduates no drug abusers were found.
4. 53.1% drug abusers belonged to Semiskilled group while 27.2% belonged to Unemployed group. In non drug abusers, 53.3% from Unemployed group while 31% belonged to Semiskilled group. Housewives were considered in unemployed group. Not a single professional were found in the area.

***Table 3. Socio – Demographic details of study populations.***

| Variables | Drug Abuse Present (%) | Drug Abuse Absent (%) | Total (%) |
|---|---|---|---|
| ***Age group (Yr)**** | | | |
| 15- 24 | 142 (28.6%) | 171 (34.0%) | 313 (31.3%) |
| 25- 34 | 155 (31.2%) | 150 (29.8%) | 305 (30.5%) |
| 35- 44 | 77 (15.5%) | 114 (22.7%) | 191 (19.1%) |
| 45- 54 | 54 (10.9%) | 35 (7%) | 89 (8.9%) |
| 55- 64 | 40 (8%) | 31 (6.2%) | 71 (7.1%) |
| ≥ 65 | 29 (5.8%) | 2 (0.4%) | 31 (3.1%) |
| ***Religion*** | | | |
| Hindu | 182 (36.6%) | 199 (39.6%) | 381 (38.1%) |
| Muslim | 306 (61.6%) | 287 (57.1%) | 593 (59.3%) |
| Buddist | 3 (0.6%) | 9 (1.8%) | 12 (1.2%) |
| Christian | 6 (1.2%) | 8 (1.6%) | 14 (1.4%) |
| ***Literacy Status***** | | | |
| Illiterate | 123 (24.7%) | 85 (16.9%) | 208 (20.8%) |
| Primary | 120 (24.1%) | 77 (15.3%) | 197 (19.7%) |
| Middle | 116 (23.3%) | 124 (24.7%) | 240 (24.0%) |
| High School | 90 (18.1%) | 135 (26.8%) | 225 (22.5%) |
| Intermediate | 42 (8.5%) | 51 (10.1%) | 93 (9.3%) |
| Graduate | 6 (1.2%) | 29 (5.8%) | 35 (3.5%) |
| Post-graduate | Nil | 2 (0.4%) | 2 (0.2%) |
| ***Working Status****** | | | |
| Unemployed | 135 (27.2%) | 268 (53.3%) | 403 (40.3%) |
| Unskilled | 50 (10.1%) | 35 (7.0%) | 85 (8.5%) |

| | | | |
|---|---|---|---|
| Semiskilled | 264 (53.1%) | 156 (31.0%) | 420 (42.0%) |
| Skilled | 27 (5.4%) | 27 (5.4%) | 54 (5.4%) |
| Clerk/Shop owner | 10 (2%) | 8 (1.6%) | 18 (1.8%) |
| Semi-professional | 8 (1.6%) | 5 (1.0%) | 13 (1.3%) |
| Retired | 3 (0.6%) | 4 (0.8%) | 7 (0.7%) |

*$\chi^2$ = 38.6, df = 5, P < 0.001 ( highly significant)
**$\chi^2$ = 4.617, df = 3, P > 0.05 ( not significant)
***$\chi^2$ = 43.546, df = 6, P < 0.001 ( highly significant)
****$\chi^2$ = 77.762, df = 6, P < 0.001 ( highly significant)

***Table 4. Distribution of respondents according to Modified Kuppuswamy scale for Socio-economic Status and drug abuse habit of any type.***

| Socio economic Status | Drug Abuse Present | % | Drug Abuse Absent | % | Total | percentage |
|---|---|---|---|---|---|---|
| Upper | 2 | 0.4 | 2 | 0.4 | 4 | 0.4 |
| Upper Middle | 128 | 25.75 | 169 | 33.6 | 297 | 29.7 |
| Lower Middle | 141 | 28.37 | 138 | 27.4 | 279 | 27.9 |
| Upper Lower | 220 | 44.26 | 191 | 37.97 | 411 | 41.1 |
| Lower | 6 | 1.2 | 3 | 0.6 | 9 | 0.9 |
| Total | 497 | 100 | 503 | 100 | 1000 | 100 |

*$\chi^2$ = 8.356, df = 4 P > 0.05 not significant*

***Table 5. Distribution of persons according to sex and drug abuse habit of any type. (Multiple Response)***

| Drug Abuse Type | Male | % | Female | % | Total | Percentage |
|---|---|---|---|---|---|---|
| Tobacco smoking | 206 | 27.8 | 4 | 3 | 210 | 24% |
| Smokeless tobacco | 304 | 41 | 133 | 97 | 437 | 49.77% |
| Alcohol | 122 | 16.5 | 0 | 0 | 122 | 13.89% |
| Charas | 59 | 8 | 0 | 0 | 59 | 6.7% |
| Ganja | 25 | 3.37 | 0 | 0 | 25 | 2.85% |
| B. sugar | 17 | 2.3 | 0 | 0 | 17 | 1.94% |
| Opium & others | 8 | 1.08 | 0 | 0 | 8 | 0.91% |
| Total | 741 | 100 | 137 | 100 | 878 | 100 |

Out of 555 Males, 370 (66.7%) were having drug abuse habit, while in case of females, out of 445, only 28.5% were abusing any type of drugs. Out of total drug abusers (497), 370 (74.5%) were males and only 127 (25.5%) were females. When it was compared with drug abusers and non abusers according to Kuppuswamy scale for socio-economic status, it was observed that 44.26% drug abusers belonged to Upper lower class in comparison with 37.97% to non drug abusers (Table 4).

In Females, 97% were having Smokeless tobacco habit in which masheri were 43 (32%), tobacco with pan were 35 (26%), khaini 28 (21%) & gutka 22 (16.5%). In Males, 41% were having Smokeless tobacco habit, followed by 27.8% tobacco smoking, then by alcohol 16.5%, & charas 8% (Table 5).

65.2% males were having age of starting any drug in the age group 15-24 yrs. 19.6% males started even before 15yrs, minimum age of starting drug abuse were 7 yrs. In females, age of starting were shifted towards later age i.e. 37.6% started in 15-24 yrs, 30.4% started in 25- 34 yrs, and 21.6% started in more than 35 yrs of age. Only 10.4% females were started in before 15 yrs of age .

In Males, reason of starting drug abuse were 81% peer pressure, While in case of females 26% were started due to peer pressure & other 26% were started due to toothache. Addiction was the main reason for continuation of drugs as 66.8%,followed by Pleasure 14.7%, Fun 10.9% & other causes 6.2%. It was observed that, 57.7% drug abusers made efforts to quit drug abuse but did not succeed. 61.6% males and

46.4% females had made efforts to quit the habit. In 24.7% of drug abusers, past history of drug abuse habit were present.

## Discussion

Age groups of drug abusers and non drug abusers was statistically significant with $\chi^2 = 38.6$, and df = 5, P value is less than 0.001 ( Table 3). 59.8% drug abusers were in the age group 15 to 34 yrs. It could be general finding that drug abuse is more common in early age groups. More males (74.5%) had drug abuse habit than females (25.5%) This difference may be due to males having more exposure to outside world in comparison of females. So males are more vulnerable to drug abuse in comparison to females. 36.6 % drug abusers were Hindus, while 61.6 % Muslims. It may appear that in Muslims drug abuse were more than Hindus, but it is due to high proportion of Muslim population in the area. It was statistically not significant as $\chi^2 = 4.617$, and df = 3, P value was more than 0.05 (Table 3). 72.1% of drug abusers were either illiterate or primary or middle school educated, relation between literacy and drug abuse were statistically significant with $\chi^2 = 43.546$, and df = 6, P value is less than 0.001 (Table 3). As the literacy increases, drug abusers decreases. In NHS report [7], about 20% were illiterate, about 18% had studied up to primary level, an additional 25% up to middle level and very few (about 8%) were graduates and above. In our study, Relation between working status and drug abuse were statistically significant with $\chi^2 = 77.762$, and df = 8, P value is less than 0.001 (Table 3).

By applying Modified Kuppuswamy Scale for determining Socio-economic status which takes account of Education, Occupation of the head of the family and per capita income, it was observed that 99% of males belonged to only three groups i.e. Upper Lower (39.45%), Lower Middle (28.3%) & Upper Middle (31.2%). 44.26% drug abusers belonged to Upper lower class in comparison with 37.97% to non drug abusers. Relation between socio-economic status and drug abuse habit were statistically not significant.

It was observed that different drug abuse were prevalent in the area. When 1000 person were interviewed, it was found that smokeless tobacco were more prevalent in the area i.e. 43.7%, while smoking tobacco were 21%, alcohol were 12.2%, charas 5.9%, ganja 2.5%, brown sugar 1.7% & opium and others were 0.8% (Table 5). These results were based on multiple response of respondents. Mostly, alcohol, charas, ganja, brown sugar & opium were found in the combination rather than single habit. In smokeless tobacco, out of 437 respondents, gutka habit were more prevalent i.e. 156 (35.7%), followed by khaini 107 (24.5%), then by tobacco with pan 78 (17.8%) & masheri 51 (11.7%), others 45 (10.3%). In smoking tobacco, filtered cigarette were more prevalent 118 (56.2% ) followed by bidi 83 (39.5%) & others 9 (4.3%). One study among the 400 million individuals aged 15 years and over in India, showed that 42% use tobacco in one form or other. Some 72% of tobacco users smoke bidi, 12% smoke cigarette and 16% use tobacco in smokeless form [4].

In general population surveys [7], the prevalence of alcohol abuse varied between 4.2 and 30.7 percent, cannabis abuse between 0 and 5.8 percent, heroine abuse between 0 and 1.3 percent and other opiates between 0 and 10.2 percent. It was apparent that there were regional variations as regards the prevalence of the problem. In NHS report [7], 55.8% were tobacco users, 21.4% were alcohol users, 3% cannabis, 0.3% were opiates users and 3.6% were on any other Illicit Drug. One study in urban slums of Sambalpur showed 43.4% prevalence of substance abuse [9], this is slightly lower than present study prevalence 49.7%.

One cross sectional study conducted in urban area in Mumbai, a total of 211 males and 165 females participant showed prevalence of alcohol use in males = 18.96 %, in females = 0.61 %, tobacco prevalence in males = 25.12 %, females = 16.36 %, total males + females = 17.02 %, 8.08 % of males smoked (cigarette, beedi) while 17.54 % used smokeless tobacco (pan, masheri, chuna, gutka); none of the females smoked while 16.36 % used smokeless tobacco, total charas users for males was 0.47 %, no Intravenous Drug Users were reported, age of initiation of use was 21 - 30 years for most drugs except whiskey for which it was 31 - 40 years [10]. In the present study, 97% females drug abusers were using smokeless tobacco. 65.2% males were having age of starting any drug in the age group 15-24 yrs. 19.6% males started even before 15yrs, minimum age of starting drug abuse were 7 yrs. In females, age of starting were shifted towards later age i.e. 37.6% started in 15-24 yrs, 30.4% started in 25- 34 yrs, and 21.6% started in more than 35 yrs of age. Only 10.4% females were started in before 15 yrs of age. Study done by Sinha [11] had found prevalence of smoking to be 19.4% in school students of Bihar and also showed that 51.7% of school children abusing substances had a parent who smoked. In NHS report [7], it was shown that the onset of drug use begins in early twenties.

In Males, reason of starting drug abuse were 81% peer pressure, While in case of females 26% were started due to peer pressure & other 26% were started due to toothache. Other studies showed peer group pressure for initiation and continuation of substance

abuse 47.5% [12] and 48.3%[9], which is less than our study result. In another study done by TIFR, regarding tobacco, most important reason of starting is tooth related complaints (48%), followed by peer group influence (38%). Tooth related problems were common reasons for women (92%), whereas for men peer-group influence (58%) were most important [4]. Addiction was the main reason for continuation of drugs as 66.8%, followed by Pleasure 14.7%, Fun 10.9% & other causes 6.2%.

Our results indicate that early age, illiteracy, low working status & poverty is the main socio-demographic factors for drug abuse. Peer pressure is playing very important role in initiation of any type of drug abuse. As age of starting drug abuse were 15-24yrs (65.2%) & before 15 (19.6%), so preventive measures should target this population. At schools & colleges, Teachers & Professors should tell accurate scientific information and discuss the broad risk factors & harms associated with drug abuse to their students & should himself refrain from smoking. For this Teachers & Professors should be provided regular training. Parents should be regularly educated by health personnel regarding ill effects of drug abuse & current situation of it in the community to educate their children and show role model to them, because children learns from and imitate their parents. In 81% peer pressure was the reason for starting drug abuse, so young peer groups should be targeted by health personnel; dissemination of information and harmful effects of drug abuse should be discussed.

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