



# Addictions among Rural areas of India: a Community Based Study



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## Abstract

**Background:** Addictions are common in Indian population, mainly use of tobacco and alcohol. The addiction related data is limited from rural areas of India.

**Objective:** 1.To determine proportion of various addictions among the Rural population of pune, india. 2. To assess the pattern of addictions among the Rural population of pune, india.

**Materials and Methods:** A community-based cross-sectional study was conducted in the rural field area of Tertiary Care Institute in Pune. The study period was from 1st June 2017 to 31st July 2017. The study was carried out by using a questionnaire that consisted of 12 questions, regarding socio-demographic profile and addictions. Individuals above 15 years of age staying in the rural field practice area for more than two years were included in the study

Statistical analysis was done by using the mean, standard deviation, percentage, proportion and Chi square test.

**Results:** A total of 200 study subjects, between 16 - 85 years of age were participated in the study. Out of which 100 were female and 100 were male. Out of total 200 subjects 108 in Individuals Were Addicted to some substance mainly either tobacco or alcohol. The average age of initiation of tobacco use was found to be 25.63 years for males while it was 24.59 years for females. Out of addicted individuals in male group 65.6% consumes tobacco only whereas in female group 72.72% consumes misri only. Mean daily consumption of tobacco in male participants was found to be 4 times per day. Alcohol, cigarette/Bidi, Ganja consumption was observed 2.15, 2.16 and 3 times per day respectively. Mean daily consumption of tobacco in female participants was found to be 4 times per day which is similar of male participants.

**Conclusion:** Tobacco usage was higher among males than females. Peer pressure and stress/depression were the major contributing factors for addiction, which highlighted the need of strengthening the information, education and communication activities. Many of the study subjects were aware about disadvantages of addiction.

**Keywords:** India; Rural; Addictions; Pattern; Proportion

## Introduction

Addiction is one of the great evils of our time. It has become a serious problem in India. Young and old alike everywhere are addicted to drugs. It has resulted in increased crime, tension, disease, horror and lack of peace and security. As Per The Available Literature In India Most Addictions Include Use of tobacco both in smoking and chewing form and alcohol of which illegally prepared country liquor alcohol use is a major social as well as health issue. In India among adults, most deaths are from respiratory, vascular, or neoplastic disease or from tuberculosis; the death rates from these disease can be increased by smoking [1]. Smoking is a practice in which substance like tobacco is burned and tasted or Inhaled. Globally, smoking kills more than

four million people every year and likely to cause more premature death by 2020 [2]. India ranks third in global tobacco production and consumes almost 50% of its produce domestically. Smoking tobacco exposes the smoker to More than 7000 chemicals of which nearly 250 were proven to be harmful and nearly 69 carcinogenic respectively. Smoking has the potential to affect every part of the body and cause many diseases such as aggravation of asthma and respiratory, cardiac diseases [3].

Tobacco smoking and chewing are the main causes of lung cancer and oral cancer. Tobacco smoking and chewing are the second major causes of death in the world. The tobacco death

toll is expected to double by 2025 from the present 5 million deaths (approx). The most susceptible period for tobacco use in India is during adolescence and early adulthood (15-24 years). According to the Global Youth Tobacco Survey (GYTS) in Maharashtra, 12.9% Adolescents (13-15 years) are currently consuming some tobacco product [4]. In 2014, The World Health Organisation Released or the WHO released its Global Status report on Alcohol and Health. According to the report, about 38.3 percent of the world's population is reported to consume alcohol regularly. According to an Organization for Economic Cooperation and Development (OECD) report released in May 2015, alcoholism increased by about 55 percent between 1992 and 2012. It is a quickly rising concern among the youth of the country. Alcohol related deaths and deaths caused by diseases due to alcoholism are a major cause for concern in the country [5]. Majority Of The Studies conducted on addictions are done in urban areas of India. Very few studies are carried out in rural areas of India, as majority of the population of India is residing in rural areas, it is empirical to find out the proportion and pattern of various addictions in rural areas therefore this study was carried out with following objectives:

- a) To determine proportion of various addictions among the rural population.
- b) To assess the pattern of addictions among the rural population.

### Materials and Methods

A community-based cross-sectional study was conducted in the rural field area of Tertiary Care Institute in Pune. The study period was from 1st June 2017 to 31st July 2017. Study participants were randomly selected residents of the rural field practice area for more than 2 years, who gave written informed consent. The study was carried out by using a questionnaire that consisted of 12 questions, regarding demographic profile and addictions.

- a. Inclusion criteria: All individuals above 15 years of age staying in the above mentioned area.
- b. Exclusion criteria: Individuals who were staying alone, suffering from major mental or physical disorder, mental retardation.

### Study Tool: Questionnaire

Individuals were interviewed with the help of questionnaire which included:

- a. Socio-demographic details
- b. Information regarding addiction: Questionnaire Was to drug users to record information on the age of initiation of drug use, age of regular use, reason of initiation and maintenance and expenditure on substance.

### Statistical Analysis

Data were entered in MS Excel and analysis was done by

using statistical software MINITAB version 13. Descriptive analysis was done for all data. Numerical data is expressed as mean, standard deviation and categorical data is expressed as number and percentage. Chi square test was used as test of significance. P value for statistical significance is set at <0.05.

### Ethical considerations

The study was conducted according to the Declaration of Helsinki, the protocol was reviewed and Approved By The Ethics Committee Of The Institue. Assent was taken as well as informed consent was obtained from the study Subjects' Parents Or Guardian Who Were Between 15-18 Years age. For The Study Subjects above 18 years of age written informed consent was obtained.

### Results

**Table 1:** Distribution of addiction pattern among male study subjects (n = 64).

Sr. No	Addiction	Frequency
1	Tobacco	42
2	Alcohol	4
3	Ganja	2
4	Tobacco & Alcohol	8
5	Alcohol & Bidi/Cigarette	6
6	Alcohol & Bidi/Cigarette & Tobacco	2
Total		64

**Table 2:** Distribution of addiction pattern among female study subjects (n = 44).

Sr. No	Addiction	Frequency
1	Misri	32
2	Tobacco	6
3	Misri & Tobacco	6
Total		44

A total of 200 people, Between 15-85 Years Of Age with mean age 41.32 years for male and 35.5 years for female population were studied. Out of which 100 were female and 100 were male. Majority of the individuals were in the age group of 16-35 years (46%). Out of total 200 subjects 108 individuals were found to be addicted to some substance mainly either tobacco or alcohol. The average age of Intiation Of Addiction was found to be 25.63 years for male while it was 24.59 for female (Tables 1 & 2).

Out of 64 addicted males, 42 (65.6%) consumes tobacco only, 4 (6.25%) consumes alcohol only, 2 (3.1%) consumes Ganja only, 8 (12.5%) consumes tobacco and alcohol, 6 (9.37%) consumes alcohol and cigarette, 2 (3.1%) consumes alcohol and tobacco and cigarette. Mean years of consumption for male was observed to be 18.41 years. The main reason provided for initiation for smoking habit was peer pressure (62.5%) followed by stress/tension/depression (22%). Mean daily consumption of tobacco in male participants was found to be 4 times per day. Alcohol, cigarette/ bidi, ganja consumption was observed 2.15, 2.16 and 3 times per day respectively. Male tobacco users spend on

an average 942.19 Rs. per month of total income on tAddiction. 25% of the users tried to stop addictions whereas, 16% users found difficulties Controlling Addictions. Out of total addicted males 90.6% were aware regarding disadvantages of addiction and the rest 9.37% who did not know, we educated them about the same.

Out of 44 addicted females, 32(72.72%) consumes Misri only, 6 (13.63%) consumes tobacco only, 6 (13.63%) consumes both misri and tobacco. Mean years of consumption for female was observed to be 18.95 years. The main reason given for initiation for smoking habit was stress 50% followed by peer pressure i.e (31.81%). Mean daily consumption of tobacco in female participants was found to be 4 times per day which is similar of male participants. Misri consumption was observed to be 3.10 times per day. Female tobacco users spend on an average 230.45 Rs. per month of Total Income On Addiction. Among female participants 14% of the users tried to stop the habit whereas 9.09% users found difficulties in Controlling Addictions. All female participants were aware regarding disadvantages of consumption of misri and tobacco.

**Table 3:** Distribution of females in different age groups with or without addiction.

Age group	Total No. of females	No. of females with addiction	No. of females without addiction
16-23	28	2	26
24-31	18	6	12
32-39	26	14	12
40-47	4	2	2
48-55	12	10	2
56-63	6	6	0
64-71	6	4	2
Total	100	44	56

Chi- Square Test:  $\chi^2 = 19.828$ , DF – 1, p-value =0.000<0.05 ; Highly significant.

**Table 4:** Distribution of males in different age groups with or without addiction.

Age group	Total No. of males	No. of males with addiction	No. of males without addiction
16-25	16	10	6
26-35	30	18	12
36-45	24	12	12
46-55	8	4	4
56-65	10	10	0
66-75	8	6	2
76-85	4	4	0
Total	100	64	36

Chi- Square Test :  $\chi^2 = 4.762$ , DF – 1, p-value =0.029<0.05 ; Significant.

From table 3, majority of the females were observed in the

age group 16-23 years (28%), followed by age group 32-39 years (26%). Out of 100 females studied, 44 female were found to be addicted for substances like tobacco and misri. From table 4, majority of the males were observed in the age group 26-35 years (30%), followed by age group 36-45 years (24%). Out of 100 males studied, 64 male were found to be addicted for substances like tobacco, alcohol, cigarette/Bidi and Ganja. To apply Chi-square test we made two groups of age, first is less than 40 age and another one is above 40 age. A statistically significant association was observed between addiction and age groups, for female (P = 0.000) and for male (P = 0.029). Participants with less than 40 age group observed to be more addicted.

### Discussion

In the present community based survey, we have studied the pattern of alcohol and other substance dependence in rural and slum dwellers in population of Pune city. With respect to gender, our finding that tobacco usage was higher among males (65.6%) when compared to females (13.6%) also confirms the observation made in other study reported by Chockalingam K et al [6] on tobacco use. Females were more likely to use smokeless form of tobacco than smoke. In the present study, Mean Age Of Intiation Of Addiction Was found to be 25.63 years for male and 24.59 years for female. A similar result was seen in the study conducted by Shah BK et al. [2] i.e. 24 year.

The present study demonstrated that, the predominant factors which influenced the initiation of tobacco consumption in both the sexes were peer pressure followed by stress/depression. A similar findings were also reported by Dongre AR et al. [7,8] Out of fifty four smokers only 20% of the people wanted to stop the habit whereas study reported by Chockalingam K et al [6] showed 54% wanted to stop the habit which is comparatively large with the present study. Mean daily consumption of tobacco was observed to be 4 times per day in both the sexes however Chockalingam K et al [6] noted 5 times per day.

In the study, 64% male and 44% female subjects were found to consume tobacco products while consumption of tobacco products by male 65.31% and female 26.46% were reported in the study conducted by Dhekale DN et al. [4] As per study by Pandve HT [9,10] in rural areas of Pune 38% of the study subjects were addicted to misri which is a kind of chewing tobacco which is usually used for teeth cleaning. In the present study out of 78.57% females addicted 72.72% were addicted to misri and 13.63% of the female were addicted to both tobacco and misri. Pandve HT [10] reported 34% of the males were bidi/cigarette smokers and 15% males were alcoholic. Whereas in this study, 12.5% of the males were bidi/cigarette smokers and 15% males were alcoholic which is similar [11-13].

### Conclusion

Tobacco usage was higher among males than females. Large numbers of females were addicted to misri. The mean age of initiation of tobacco consumption was almost similar gender

wise. Peer pressure and stress/depression were the major contributing factors for addiction. Many of the study subjects were aware about disadvantages of addiction. Moreover mass campaign should be conducted by government, media and other resources to create awareness regarding harmful effects of consumption of alcohol, misri and cigarette smoking.

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