Indian Journal of Psychiatry, 2002, 44(4), 348-352

PREVALENCE AND PATTERN OF ALCOHOL AND SUBSTANCE ABUSE IN URBAN AREAS OF ROHTAK CITY

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ABSTRACT

A sample of 4,691 subjects aged 14 years and above were interviewed on a schedule based on WHO Questionnaire to collect information about prevalence & pattern of alcohol and substance abuse. The study revealed a prevalence rate of 19.78%. 42.41% of users were in the age group of 25-34 years while 44.1% were literate (up to matric). 45.04% among labourers were alcohol users. In terms of age of onset, 94.83% respondents had their first drink between the ages of 15-25 years. Most common type of alcohol consumed was country liquor by 69.07%. Majority (63.44%) of alcohol users said that they usually drink with some companion, only in the evening and night. 50.03% had arguments with family or friends after taking alcohol while 13.57% alcohol abusers confessed that they had neglected their family and work due to alcohol. In family history of 23.16% alcohol users, father was abusing alcohol. 26.61% alcohol users cited to be sociable as reason for their drinking. 16.81% users were smokers also while 6.89% had the habit of taking Pan Masala/Zarda. 2.04% of alcohol users were taking soolfa also along with alcohol while the frequency of opium and cannabis abuse was 1.51 and 1.18% respectively.

Key words: Substance abuse, Prevalence, Pattern

Global trade and liberalization of socio-cultural interaction of the society had made easy access to use and spread of narcotic substances (Murray & Lopez, 1997). Progressive increase of substance abuse in the developing countries not only adds to increasing morbidity pattern but also has been forming a nidus for several dreaded infections of recent times (Neuueark & Anthony, 1997). It has been found in studies from different countries that geographical distribution of drug abuse co-related well with the availability of drugs (Gossop & Grant, 1990). The geographical location of India between the Golden Triangle (Burma, Laos & Thailand) and Golden Crescent (Iran, Afghanistan and Pakistan) makes it a transit point for the trade of various substances (Chhabra & Puri, 1989). A key factor affecting illicit drug demand is that the age of initiation is falling almost every year, especially with regard to people seeking treatment for opiate abuse. During 1995, more young people in the age group of 15-19 years entered treatment plan than during the entire three years period from 1992 to 1994 (World Drug Report of United Nations International Drug Control Programme, UNI News, 1998). Keeping this view in mind the present study was planned to know the recent prevalence & pattern of alcohol and substance abuse in urban areas of Rohtak city.

MATERIAL AND METHOD

The present study was undertaken to determine the prevalence and pattern of alcohol and substance abuse in a selected population of
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above 14 years males in Rohtak City. Out of a total of 124 Anganwadi centers (AWC) spread over a population of 1.42 lac. (Approximately), house to house survey was conducted in 12 Anganwadi centre areas selected by stratified random sampling, 3 AWCs from each of the total four sectors. For data collection, a schedule based on the WHO Questionnaire (Alcohol and other Addictive Substance Abuse Check List) was administered to the study subjects.

Before embarking upon the study, proper counselling sessions were held in the study population to explain the aims of the study so as to elicit fullest co-operation of study subjects and allay their apprehensions whatsoever. The data collected was subjected to appropriate statistical analysis.

RESULTS

Out of 4,691 males surveyed, 928 were alcohol users, giving a prevalence of 19.78%. The study revealed that 42.4% were in the age group of 25-34 years followed by 28.01% in 35-44 years. As regards marital status, alcohol use was higher in married than in unmarried respondents.

TABLE 1
SOCIO-DEMOGRAPHIC PROFILE OF ALCOHOL USERS

| Factors  | Number(928) | Percentage |
|----------|-------------|------------|
| 25-34 years | 394         | 42.41      |
| 35-44 years | 260         | 28.01      |
| Illiterate   | 157         | 16.9       |
| Literate     | 250         | 26.9       |
| Matric       | 410         | 44.1       |
| Graduate     | 96          | 10.3       |
| Married      | 836         | 90.08      |
| Unmarried    | 92          | 9.92       |
| Labourers    | 418         | 45.04      |
| Govt Job     | 204         | 21.9       |
| Private Job  | 109         | 11.8       |

Alcohol use was found comparatively higher among matriculates (44.1%) followed by respondents studied up to primary level (26.9%). Lower prevalence was found in respondents who were illiterate or graduate/postgraduate. Occupation-wise, 45.04% alcohol users were labourers, 21.9% Govt. servants and 19.8% were private workers (Table 1).

TABLE 2
FREQUENCY OF ALCOHOL INTAKE

| Alcohol consumption | Number(928) | Percentage |
|---------------------|-------------|------------|
| < Once in a month   | 338         | 36.43      |
| Once in a month     | 173         | 18.65      |
| 2 to 3 times a month| 152         | 16.38      |
| Once a week          | 143         | 15.40      |
| 2 to 5 times a week  | 26          | 2.80       |
| Every day            | 95          | 10.34      |

In terms of age of onset, the study revealed a significant fact that 94.83% respondents had their first drink between the ages of 15-25 years. Most commonly consumed type of alcohol was country liquor (by 69.07% ) followed by English and country liquor (both by 10.99%). When alcohol users were asked about their frequency of intake, 36.43% responded that they took less than once a month. 15.38% took it 2-3 times a month while 15.40% once a week (Table 2). Analysis of amount of alcohol taken in a single sitting revealed that 46.01% had one-two pegs at a time while 29.74% had three-four pegs. Another 12.72% had five-six pegs and the rest (11.53%) had seven-eight pegs at a single sitting.

TABLE 3
PSYCHOSOCIAL IMPLICATIONS OF ALCOHOL CONSUMPTION FREQUENCY OF ALCOHOL INTAKE

| Psycho-social implication | Number(928) | Percentage |
|---------------------------|-------------|------------|
| Arguments                 | 464         | 50.03      |
| Shortage of money         | 83          | 8.94       |
| Physical fights           | 46          | 4.95       |
| Husband-wife strained relations | 31       | 3.34      |

When users were asked to analyze their amount of drinking, 56.14% labelled it less than or equal to average. Regarding the place of drinking, majority consumed it at home or friends place usually with some company only in evening and night. Only those who were chronically addicted drink the whole day 50.03% had arguments with family or friends after taking
alcohol, 4.95% had physical fights while 8.94% had shortage of money in the family due to alcohol abuse. In 3.34% cases husband wife relationships were strained (Table 3).

When medical implications of alcohol were analyzed, 25.75% alcohol abusers replied that they had remained intoxicated for more than 48 hours. 32.21% became unsteady after taking alcohol while 31.89% had slurring of speech after drinking. 39.43% had increased argumentativeness due to drinks while 12.93% took alcohol to steady their nerves. 0.54% was convicted at the time of interview due to their anti-social behaviour after taking alcohol (Table 4).

| Medical Implications       | Number(928) | Percentage |
|----------------------------|-------------|------------|
| Intoxication (>48 hrs)     | 239         | 25.75      |
| Unsteady                   | 299         | 32.21      |
| Slurring of speech         | 296         | 31.89      |
| Argumentativeness          | 366         | 39.43      |

In family history of alcohol user's father was abusing alcohol in 23.16% cases while in 7.5% cases abuse in family was present in uncle/grandfather. 26.61% alcohol users cited to be sociable as reason for their drinking, 22.95% drink to overlook worries/frustrations, 13.68% replied that they drunk to cheer up while 14.26% drank to think and work better (Table 5).

| Reasons for Alcohol Consumption | Number | Percentage |
|---------------------------------|--------|------------|
| To be Sociable                  | 247    | 26.61      |
| To forget worries               | 213    | 22.95      |
| To think & work better          | 132    | 14.26      |
| To cheer up                     | 127    | 13.68      |
| To relax                        | 68     | 7.32       |

On analysis of alcohol users for other substance abuse it was found that 16.81% users were smokers also. 6.89% had the habit of taking Pan Masala/Zarda. 2.04% of alcohol users were taking soolfa also along with alcohol. Frequency of opium and cannabis abuse came out to be 1.51% and 1.18% respectively. 42.11% of soolfa abusers were taking it less than once weekly, 31.57% once weekly or more while 26.32% were abusing soolfa almost daily. Among opium abusers 35.71% were consuming it less than once weekly, 42.86% consumed opium once weekly or more while 21.43% were abusing daily. Analysis of cannabis abusers revealed that 63.64% were abusing less than once a week while 27.27% were abusing it once a week or more. 57.69% alcoholic smokers replied that they took 1-4 cigarettes/day (only while drinking), 35.89% took 5-8 cigarettes/day while 6.42% took 9-15 cigarettes/day.

**DISCUSSION**

Alcohol was used by 19.78% of the subjects in the study sample. This finding is consistent with prevalence figures of Sethi et al. (1979) and Thacore et al. (1971). Alcohol use was maximum in the age group of 25-34 years. Similar types of observations were made by Ghulam et al. (1996), Mushtaq et al. (1993), Jena et al. (1996), and Bhowmick et al. (2001). While Sethi et al. (1979) in a study in rural population of Uttar Pradesh found maximum alcohol abusers in the age group of 35-44 years. This difference could be due to change in people's attitude towards alcohol use over these two decades, the points of time at which these studies were carried out. The finding of the present study of initiation of alcohol at younger age is in close consistence with respect to a WHO study group on "young and drugs" which stated that most of the experimentation and initiation of dependence producing drugs takes place during adolescence.

In the study population alcohol use was most common in matriculates. Results were similar to the findings of Ghulam et al. (1996) but dissimilar to the findings of Sethi et al. (1979) who reported maximum alcohol use in illiterates or had those who attained education upto primary standard (88.30%). Only 7.7% had studied upto
middle. The difference was because it was a rural study whereas index study was done in urban population.

The present study showed more alcohol use among married men similar to the findings reported by Lai & Singh (1979), Ghulam et al. (1996), and Singh et al. (2000). Higer alcohol use in married men is because of increased social responsibilities of married life as well as they also constitute major fraction of sample. Maximum alcohol use was among labourers followed by government employees; high alcohol use in service class population was due to their need to maintain social relations and alcohol acts as a media for interaction. Labour class took alcohol for seeking relief from fatigue and for relaxation purposes.

Age at which alcohol users had started taking alcohol illustrated that alcohol use was starting at a younger age as 94.8% respondents had their first drink between 15-25 years. Singh et al. (2000) also reported similar finding. Reasons stated for initiation of alcohol use so early in life were pressure from friends or peer groups and experimentation and curiosity. Most common type of alcohol consumed was country liquor by 69.07% as it was of low cost and maximum users were from low socio-economic status. Jena (1996) also reported that most commonly consumed alcohol in Bihar was locally brewed hadia (rice beer or mahua).

In present study 36.43% of alcohol users were using alcohol less than once in a month while 18.65% were using once in a month. About 16.38% were using 2-3 times a month while 15.40% once in a week. Sethi (1979) also observed similar frequency in his study in Uttar Pradesh. On analyzing their drinking quantity 62.76% labeled they are drinking less than or equal to average. Average level of drinking was decided by the assesses itself and it was not given in the tool.

When effects of alcohol use on familial and social life were studied, it reflected that 50.03% users had arguments or physical fights with family or friends. 8.94% reported financial hardships in the family due to money spent on alcohol while 3.34% subjects had strained marital relationships due to alcohol consumption.

Family history of alcohol users in the present study suggest that if there is some user already present in the family it has a strong effect at the initiation of use in the next generation. This point was further strengthened by a study among child labourers of Surat city (Bansal and Banerjee, 1993). They reported 99.5% substance abuse at work place followed by 94.3% abuse among neighbours. This high prevalence of substance abuse in the surrounding significantly prompt the initiation of substance abuse.

Most common reason cited for alcohol use in index study were to be sociable (26.61%), to forget worries/ frustrations (22.95%), to think and work better (14.26%) and to cheer up (13.68%). Proportions of these reasons may vary from one society to another due to cultural heterogeneity.

On analysis of alcohol users for other substance abuse opium abuse was prevalent among 1.51% of the study subjects which is similar to findings reported by Gupta et al. (1987) from Ludhiana and Ghulam et al. (1996) from urban population of Madhya Pradesh. Prevalence rate for cannabis abuse came out to be 1.18% while Lal and Singh (1979) reported 2.2% cannabis abuse in Punjab and Thacore (1971) reported 1.9% from Lucknow. These findings are consistent with the present study. Prevalence of tobacco (cigarettes) abuse in alcohol users came out to be 16.81%, which is very low, compared to prevalence reported by Sethi & Gupta (1972) 39.5% in a general population survey of Uttar Pradesh. The reason for low prevalence in the index study was that instead of ever smokers only current smokers were included.

The study presents a variable picture of substance abuse in urban population of Rohtak City, the study area. While potential toxicity of excessive tobacco and alcohol abuse need not be elaborated, practicing of substance abuse other than these two though in small numbers is quite alarming. Harmful effect on health from substance abuse in the area needs in-depth study. Access
to availability of narcotic substances and its spread should be checked in the entry points by creating awareness among people and implementing other legislative measures.

REFERENCES

Bansal, R.K. & Banerjee, S. (1993) Substance use by child labourers. Indian Journal of Psychiatry, 35(3), 159-161.

Bhowmick, P., Tripathi, B.M., Jhingan, H.P. & Pandey, R.M. (2001) Social support, coping resources and co-dependence in spouses of individuals with alcohol and drug dependence. Indian Journal of Psychiatry, 43(3), 219-224.

Chhabra, K. & Puri, R. (1989) Alcohol your friend or foe. Swasth Hind, 9, 240.

Gupta, R., Narang, R.L., Verma, S. & Panda, J.K. (1987) Drug abuse among non-student youth labour. Indian Journal of Psychiatry, 29(4), 359-362.

Ghulam, R., Rahman, I., Naqi, S. & Gupta, S.R. (1996) An epidemiological study of drug abuse in urban population of Madhya Pradesh. Indian Journal of Psychiatry, 38(3), 160-165.

Gossop, M. & Grant, M. (1990) Preventing and controlling drug abuse, Geneva: WHO.

Jena, R., Shukla, T.R. & Hemraj, P. (1996) Drug use in a rural community in Bihar: some psychosocial correlates. Indian Journal of Psychiatry, 38(1), 43-46.

Lal, B. & Singh, G. (1979) Drug abuse in Punjab. British Journal of Addiction, 74, 411-427.

Mushtaq, A., Marqoob & Dutta, K.S. (1993) Drug abuse in Kashmir: experience from a psychiatric disease hospital. Indian Journal of Psychiatry, 35(3), 163-165.

Murray, C.J. & Lopez, A.D. (1997) Global mortality, disability and the contribution of risk factors. Lancet, 349, 1436-1442.

Neuueark, Y.D. & Anthony, J.C. (1997) Childhood misbehaviour and the risk of injecting drug use. Drug and alcohol dependence, 48, 193-197.

Sethi, B.B. & Gupta, S.C. (1972) An analysis of 2000 private and hospital psychiatry patients. Indian Journal of Psychiatry, 14, 137-139.

Sethi, B.B. & Trivedi, J.K. (1979) Drug abuse in rural population. Indian Journal of Psychiatry, 21, 211-216.

Singh, J., Singh, G., Mohan, V. & Padda, A.S. (2000) A comparative study of prevalence of regular alcohol users among the male individuals in an urban and rural area of District Amritsar, Punjab. Indian Journal of Community Medicine, 25(2), 73-78.

Thacore, V.R. & Saxena, R.C. (1971) Epidemiology of drug abuse in Lucknow with special reference to methaqualone. Indian Journal of Pharmacology, 3, 58-60.

UNI News (1998) Say no to drugs, but stimulants are fine. The Hindustan Times, New Delhi, May 19:9(Col. 1-5).

WHO (1993) Study group on youth and drugs, TRS, 526.

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