Original Research Article

An epidemiological study to assess prevalence and behavior related to substance abuse among urban Bikaner population Rajasthan

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ABSTRACT

Background: Substance abuse exists in the world since time immortal; it has become a serious global problem in recent times.

Methods: This was a cross sectional community based study performed from March 2016 to August 2016 among resident of UHTC Mukta Prasad dispensary (urban health and training center) attached to Sardar Patel Medical College, Bikaner.

Results: Overall prevalence was 25.14%. Majority of people were using only tobacco (67.07%) while 20.12% people were consuming tobacco and alcohol both, only alcohol was used by 10.98% people and rest (1.83%) were having other types of substances like Doda-post etc.

Conclusions: Almost 1/4th of study population was abusing one or the other substance. Most commonly abused substances were tobacco and tobacco+alcohol.

Keywords: Tobacco, Substances, Abuse

INTRODUCTION

Substance abuse exists in the world since time immortal; it has become a serious global problem in recent times.1,2 Substance abuse is a complex and multidimensional problem and result of interaction between individual, drug and community. The traditional way of giving emphasis on biological and pharmacological factors involved with substance abuse has diverted attention away from important socio-demographic issues. Changing cultural values, increasing economic stress and dwindling supportive bonds have much important role into initiation of substance use. People are most likely to begin Substance abuse during adolescence and young adulthood.3 51.73% of rural and 45.9% of urban Indians are below 24 years can be considered at risk for substance abuse and is an alarming situation.4

The present study is an effort to find out prevalence of substance abuse among urban population of Bikaner alongside addressing their socio-demographic variables.

Objective

1. To find out prevalence of substance abuse among study population.

2. To study association of the socio-demographic factors with substance abuse.
METHODS

This was a cross sectional community based study performed from march 2016 to august 2016 among resident of UHTC Mukta Prasad dispensary (Urban health & training center) attached to Sardar Patel Medical College, Bikaner. After taking perm ission from IEC (institutional ethical committee) and IRB( institutional research board) eligible study population was selected through systematic random sampling. Among selected Households those who gave informed verbal consent and were willing to partici pate are administered a pre-tested pre-structured questionnaire. Performa containing question related to socio demographic information administered to resident of selected households thereafter to the person who answer yes for substance abuse questionnaire administered. Data Analysis was done through SPSS 22.0.

RESULTS

In the study 250 households were visited and they had a population of 1305. In the study 81.84% respondents were Literate. Substance abuse prevalence was 40.71% and 7.11% among males and female respectively. Overall prevalence was 25.14% (Figure 1). Majority of people were using only tobacco (67.07%) while 20.12% people were consuming tobacco and alcohol both, only alcohol was used by 10.98% people and rest (1.83%) were having other types of substances like Doda-post etc.

On studying socio-demographic profile of substance abusers, in present study majority belonged to non-nuclear households (59.45%), 86.28% belonged to Hindu religion, substance abuse was highest among married (79.57%). In present study highest number of substance abuser were illiterate (27.74%) Substance abuse was highest among self-employed population.

Association between substance abuse behavior and structure of household, caste category, socio-economic class, marital status, gender, age group, education and occupation were found statistically significant (p<0.05) but was found not significant with religion (p>0.05) (Table 1).

Table 1: Socio-demographic profile of substance abusers (N=1305).

| S. No. | Socio-demographic character | Subs tance abuse Never used | Substance abuse Ever used | $\chi^2$ | P |
|-------|-----------------------------|----------------------------|---------------------------|--------|---|
|       | (n=328)                     | No. | %   | No. | %   |     |     |
| 1     | Structure of household      |     |     |     |     |     |     |
| 1     | Non-nuclear                 | 518 | 72.65 | 195 | 27.35 |     |     |
| 2     | Nuclear                     | 459 | 77.54 | 133 | 22.46 | 3.843 | 0.05 |
| 2     | Religion                    |     |     |     |     |     |     |
| 3     | Hindu                       | 847 | 74.95 | 283 | 25.05 |     |     |
| 3     | Muslim                      | 79  | 75.96 | 25  | 24.04 | 0.419 | 0.811|
| 3     | Sikh                        | 51  | 71.84 | 20  | 28.16 |     |     |
| 3     | Category                    |     |     |     |     |     |     |
| 3     | Unreserved                  | 406 | 77.93 | 115 | 22.07 |     |     |
| 3     | Other backward class        | 370 | 75.36 | 121 | 24.64 |     |     |
| 3     | Schedule caste              | 150 | 76.53 | 46  | 23.47 | 28.55 | 0.0001|
| 3     | Schedule tribe caste        | 51  | 52.58 | 46  | 47.42 |     |     |
| 4     | Socio-economic status       |     |     |     |     |     |     |
| 4     | Class-I                     | 260 | 81.5  | 59  | 18.5  |     |     |
| 4     | Class-II                    | 368 | 81.42 | 84  | 18.58 |     |     |
| 4     | Class-III                   | 135 | 69.23 | 60  | 30.77 | 50.167 | 0.0001|
| 4     | Class-IV                    | 83  | 69.75 | 36  | 30.25 |     |     |
| 4     | Class-V                     | 131 | 59.55 | 89  | 40.45 |     |     |
| 6     | Marital status              |     |     |     |     |     |     |
| 6     | Married                     | 501 | 65.75 | 261 | 34.25 |     |     |
| 6     | Single                      | 451 | 89.48 | 53  | 10.52 | 93.304 | 0.0001|
| 6     | Divorced/widow/widower      | 25  | 64.1  | 14  | 35.9  |     |     |
| 7     | Gender                      |     |     |     |     |     |     |
| 7     | Male                        | 415 | 59.29 | 285 | 40.71 |     |     |
| 7     | Female                      | 562 | 92.89 | 43  | 7.11  | 193.001 | 0.0001|
On studying socio-demographic profile of substance abusers, 86.28% belonged to Hindu religion, 79.57% were married, 27.74% were illiterate. Maximum 22.67% self-employed population was abusing substance followed by laborers (18.32%).

Association between substance abuse behavior and structure of household, caste, category, socio-economic class, marital status, education and occupation were found statistically significant ($p<0.05$) but was not significant with Religion ($p>0.05$) (Table - 1). Similar findings were observed by Ranjan et al, Hazarika et al, Kar et al, Jannu et al, Kadri et al etc. 8,10-13

Maximum number of substance abusers belong to 21 to 30 year age group (21.95%) followed by age group 41 to 50 (20.12%) and 31 to 40 (19.82%). The findings are consistent with study by Kadri et al, Singh et al. 13,14 Substance abuses were higher in illiterate show role of education in understanding substance abuse hazards and health awareness.

Unemployed having more substance abuse may be due to financial instability, lack of confidence and lack of social involvement.

The differences in results can be contributed to the reason that the studies mentioned were carried out in different geographical, cultural and social environment than those of my study.

**CONCLUSION**

Almost 1/4th of study population was abusing one or the other substance. Most commonly abused substances were tobacco and tobacco+alcohol. Education and type of occupation are still significantly associated with higher substance abuse prevalence. Mass community awareness campaigns and one to one counseling sessions are needed.
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