



PREVALENCE OF SUBSTANCE ABUSE AND ITS ASSOCIATION WITH MENTAL HEALTH OF ADOLESCENTS IN PURAVIMALA TRIBAL SETTLEMENT, SOUTH INDIA

Community Medicine

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ABSTRACT

Substance abuse affects the mental health of tribal adolescents. A community based cross sectional study was conducted among 87 tribal adolescents in South Kerala to assess the prevalence of substance abuse and explored the association between mental health and substance abuse. Data was collected using predesigned and pretested questionnaire by house to house survey method using one to one interview technique. The prevalence of substance abuse was 52.9%. 65.2% males in their late adolescence were found abusers. 16.1% and 83.9% of tribal adolescents had good and poor mental health respectively. Among tribal adolescents with good and poor mental health status it was found that 7.1% and 52.9% respectively were substance abusers and this difference observed was found to be statistically highly significant ($p < 0.001$). To conclude, there is high prevalence of substance abuse among tribal adolescents associated with poor mental health status. Awareness generation on prevention of substance abuse using all sources of media and counseling on mental health are felt needs among tribal adolescents.

KEYWORDS

Tribal Adolescents, substance abuse, mental health, South India.

INTRODUCTION

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs.⁽¹⁾As many as 450 million people worldwide are estimated to be suffering at any given time from some kind of mental disorders, including behavioral and substance abuse disorders.⁽²⁾In India, 70% of high school students will have tried alcohol, half will have taken an illegal drug, 40% will have smoked a cigarette and more than 20% will have used a prescription drug for nonmedical purpose.⁽³⁾According to WHO, adolescents are young people between age of 10-19yrs.⁽⁴⁾In India, 12.8% of boys and 9.65% girls of adolescents age group suffers mental health problems⁽⁵⁾. The tribal people are often reserved to as the oppressed, suppressed, marginalized and exploited section of Indian society. The issues among the tribal are burning problems in India. Inspite of in-depth literature search there was no study from Kerala focusing on substance abuse and mental health of tribal adolescents. The life situation of tribal especially kani tribes in Puravimala area are deprivable and their struggles lasting for several years. This study is an attempt to assess the prevalence of substance abuse and its' relation to mental health of tribal adolescents in Puravimala tribal settlement of Kerala.

Materials and Methods

A community based cross sectional study was done among 87 tribal adolescents of Puravimala settlement under Amboori panchayat of Trivandrum District, South Kerala. Being a difficult to reach area after obtaining the Institutional ethical committee clearance, permission was sought from the tribal settlement authorities to visit the place for data collection. Local religious leader help was also sought to reach this unreachable area which facilitated the visit to adolescents houses. After explaining the purpose of the visit verbal consent was obtained from the adolescents and only those who consented were included in the study. Details on socio-demographic status, substance abuse and mental health status were collected using a predesigned and pretested questionnaire by house to house survey method where data was collected using one to one interview technique. Data thus collected was entered in excel and analyzed using SPSS 21.0 version software. All quantitative variables were analyzed for mean and standard deviation. All qualitative variables were analyzed for proportions. To

look for association between substance abuse and mental health status among tribal adolescents and for influence of Gender in substance abuse, Chi-square test was used as test of significance. A p value < 0.05 was considered statistically significant.

RESULTS

The socio demographic characteristics of the adolescents of Puravimala tribal settlement shows, among the study respondents 31% are early adolescence (10-14yrs) and 68.9% are late adolescence (15-19yrs). On Gender it shows almost an equal distribution (males 49.4% and females 50.6%). Educational status of fathers reveals 85.1% of them undergone primary education (upto 4th std), 9.5% are illiterate and 5.7% has secondary education. Mother's educational status shows 82.8% has primary education, 11.5% are illiterate, and 3.4% has secondary and 2.3% undergone higher secondary level. Majority of fathers (92%) and mothers (73.6%) works as coolie. 74.7% of families are nuclear, 16.1% extended and 9.2% as joint families.

Figure No. 1 Proportion of substance abusers among the study respondents (N=87)

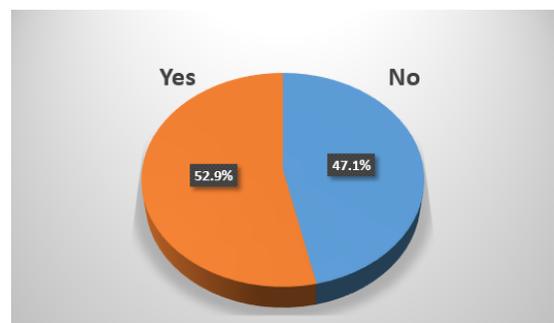
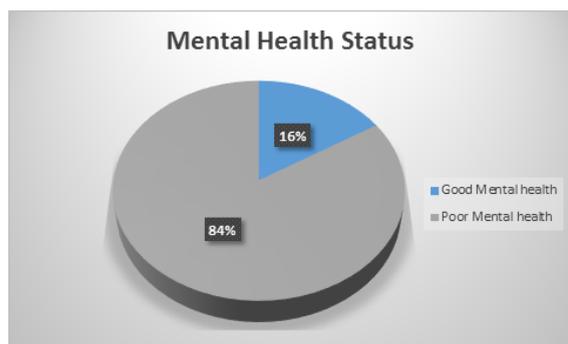


Figure 1 shows proportion of substance abusers among the study respondents at Puravimala tribal settlement, where more than half (52.9%) of adolescents are using substance abuse.

Figure No. 2 Mental Health Status of study respondents based on General Health Questionnaire 12 (GHQ 12) (N=87)

From the above figure it is found that based on General Health Questionnaire 12 (GHQ 12) only 16.1% of study participants has Good mental health whereas 83.9% of them has poor mental health.

Table No.1 Age distribution in association with substance abuse (N=46)

| Substance abuse | Early adolescence n(%) | Late adolescence n(%) | p value |
|-----------------|------------------------|-----------------------|---------|
| Yes | 6(22.2) | 40(66.7) | <0.001 |
| No | 21(77.8) | 20(33.3) | |
| Total | 27 (100) | 60 (100) | |

Considering the association of age with substance abusers at Puravimala tribal settlement, nearly one fourth of the abusers (22.2%) belong to early adolescence (10-14yrs) group and 66.7% belong to late adolescence (15-19yrs) group. This difference in association of age among adolescent substance abusers was found to be statistically very highly significant ($p < 0.001$).

Table No.2 Gender distribution in association with substance abuse (N=46)

| Gender | Substance abuse | | p value |
|--------|-----------------|-----------|---------|
| | Yes n(%) | No n(%) | |
| Male | 30(69.7%) | 13(30.2%) | 0.002 |
| Female | 16(36.3%) | 28(63.6%) | |

Above table shows the distribution of gender in association with substance abuse among Puravimala tribal adolescents. 69.7% of males are involved in substance abuse which is twice that of female users(36.3%). This difference was found to be statistically highly significant ($p = 0.002$).

Table No. 3 Mental Health status in relation to substance abuse (N=46)

| Substance abuse | Mental health status | | p value |
|-----------------|----------------------|-----------|---------|
| | Good | Poor | |
| Yes | 1(7.1%) | 45(61.6%) | 0.001 |
| No | 13(92.9%) | 41(38.4%) | |

Among Good mental health status it was found that 7.1% were using substance abuse whereas among people with Poor mental health 61.6% were found to be abusers. This difference was found to be statistically very highly significant ($p < 0.001$).

DISCUSSION

Despite a remarkable world-wide program in the field of diagnostics and curatives and preventive health, still there are people living in isolation in natural and unpolluted surroundings, far away from civilization, with their traditional values, customs, belief and myth intact. They are commonly known as "Tribals".

Substance abuse is one of the major health challenges across the globe. The most susceptible period for tobacco and alcohol use in India is during adolescence and early adulthood (15-24yrs)⁽¹⁸⁾

The present study found that the prevalence of substance abuse of

adolescents in Puravimala Tribal Settlement were 52.9%, which shows that more than half of the adolescents are using some sort of substance abuse. This finding seems similar to many studies which shows a high prevalence of substance abuse among adolescents.^(6,7,10) This may be due to adolescence exposed to such substances are more because of easier availability and low expense which could be explored further.

The present study shows that the majority of users were male (65.2%) and are at their late adolescent age group (15-19yrs). This finding is comparable with a study by Ahmed et al⁽¹⁴⁾ who found that most of the users were within the age range of 16-19yrs.

According to gender, substance abusers shows 65.2% of males are involved in substance abuse which is twice that of female users (34.8%) which is similar to a study conducted by Dhekale et al were 65.31% male and 26.46% female adolescents were found to involve in substance abuse.⁽⁸⁾ This may be because of consumption of tobacco was a social custom in tribal community. In contrast, there found a high prevalence (77%) of khaini/gutka use among the adolescent girls of a primitive tribe in Orissa⁽⁶⁾.

Based on General Health Questionnaire 12 (GHQ 12) found that, only 16.1% of study participants had Good Mental health whereas 83.9% of them had Poor Mental health. This shows that among tribal adolescents mental health status is worse.

Among Good mental health status it was found that 7.1% were using substance abuse whereas among people with Poor mental health 61.6% were found to be abusers. It found to be similar to British Columbia's Adolescent Health Survey, a self-report survey of students in Grades 7 to 12, showed that the presence of both a mental health problem and substance abuse increased simultaneously.⁽²¹⁾

CONCLUSION

The present study found that the prevalence of substance abuse of adolescents in Puravimala Tribal Settlement were 52.9%, which shows that more than half of the adolescents are using some sort of substance abuse. The present study shows that the majority of users were male (65.2%) and are at their late adolescent age group (15-19yrs). Among substance abusers, 65.2% of males are involved in substance abuse which is twice that of female users(34.8%)

Based on General Health Questionnaire 12 (GHQ 12) found that, only 16.1% of study participants had Good Mental health whereas 83.9% of them had Poor Mental health. This shows that among tribal adolescents mental health status is worse. Among Good mental health status it was found that 7.1% were using substance abuse whereas among people with Poor mental health 52.9% were found to be abusers.

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