Tobacco and Alcohol Use in Tribal School students from Central India

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Abstract

Background: The problem of tobacco and alcohol consumption among the residential tribal school students of tribal area is an important one. The generation of exact data pertaining to various pockets will certainly be helpful for comparison to health planners and researchers. It is also important to find out exact perceptions of these children through qualitative analyses.

Objectives: (1) To find out the proportion of school students indulging in use of tobacco and alcohol in any form. (2) To find out the perception of these school students regarding the same.

Material and Methods: The study was conducted in selected residential tribal schools of Nagpur District in Central India from July-September 2009. Quantitative data was collected using pretested pro forma while for qualitative assessment 3 Focussed Group Discussions were carried out. Appropriate statistical methods were used for analysis of the data.

Results: In all 2.86% of school students were indulging in smoking while 41.74% were using tobacco in smokeless form. Proportion of students consuming alcohol was 4.07%. Various perceptions of the participants were revealed by Focussed Group Discussions conducted.

Conclusions: Proportion of students using tobacco and alcohol is very high. The knowledge of school students regarding ill effects of these habits is poor.

Keywords: tribal school, smokeless tobacco use, addiction, focussed group discussion
Introduction

India comprises one of the largest groups of school going children especially in rural area.\(^1\) Health is an important factor for school entry, continued participation and attainment in school. Failure to nurture the health of school children can have disastrous effects on political, social and economic system of the country.\(^2\) Habit of using tobacco in any form or consumption of alcohol is certainly injurious to the health of children of school going age.\(^3\)

‘Ashram school’ is the residential school for children in tribal areas which admits mainly the children belonging to scheduled tribe and also some of the other social groups as per the government norms.\(^4\) Being a residential school, tobacco and alcohol addiction in these tribal school students is a topic of interest. So the present study was carried out to find out to study some of the important dimensions related to same issues.

Objectives

The objectives of this study are twofold:

1. To find out the proportion of school students indulging in use of tobacco and alcohol in any form
2. To find out the perception of these school students regarding same

Material and Methods

This cross sectional study was conducted from June to September 2009 at selected residential tribal schools in Nagpur district, Central India. It was carried out among school students of two schools from Nagpur District which were purposively selected and all the students from these two schools were enrolled in study. Predesigned and pretested pro forma was used for the collection of quantitative data.

The definitions used for defining current smoker, current smokeless tobacco user and current drinker were as follows:

**Current Smoker:** Someone who at the times of survey, smokes in any form either daily or occasionally, like cigarettes, *bidis*, pipe, *chilam* or any other form.\(^5\)

**Current smokeless tobacco user:** It was defined as the one who was currently using chewable tobacco products like tobacco snuff, *gutkha*, *khaini*, *misher* or any other form daily.\(^5, 6\)

**Current Drinker:** Those who consumed one or more drinks of any type of alcohol in the year preceding the survey.\(^5\)

Perceptions of students were judged by carrying out 10 Focussed Group Discussions (FGD) among selected students. Each Focussed Group Discussion was facilitated by the Post Graduate student from Government Medical College, Nagpur. A sociogram was plotted to
analyse the active participation of all the participants. The responses of the participants were recorded on paper and analysed later to draw the conclusion.

**Statistical Analysis**

Chi square test, proportion were used for the comparison of study variables between boys and girls. Statistical software used was the Statistical Package for Social Sciences (SPSS).

**Observations**

Table 1 shows the gender wise distribution of study subjects according to their personal habits. In all, 2.86 % of students were smoking, 41.74% were using tobacco in smokeless form while 4.07% were consuming alcohol. The prevalence of smoking and alcohol consumption was significantly higher in male students as compared to female students.

**Qualitative Analysis**

Below mentioned are some of the responses given by the participants during Focussed Group Discussions in their own words:

- Reasons for chewing tobacco and alcohol consumption
  - It gives feeling of being grown up.
  - So many of my seniors, teachers and family members do the same then why I should not do that?
  - It is available in nearby shop so I buy it.
  - A person should enjoy the life.
  - Tapkir / Nus (local forms of tobacco) is essential to clean the teeth daily morning.
  - Smoking gives me kick to work hard.
  - Mahua (a local made brand) wine is so joyful.
  - We provide the tendupatta (local name for the tree whose leaves are used for making bidis) to other parts of country for making bidis (local made cigarettes) so we should also enjoy it.

**Discussion**

In the present study, 4.10% boys were smokers as compared to 1.57% girls. Although the proportion is more among boys, tribal girl students succumbing to the habit of smoking at the school age itself is a matter of concern.

The habit of smoking in these school children can be attributed to easy availability of tendupatta leaves (used to make bidis in India) and household stock of tobacco by the parents. Almost equal proportion of girls were indulging in smokeless tobacco consumption as that of the boys and this is because of the habit of using masheri (a form of smokeless tobacco) for cleaning the teeth every morning and mus (another form of smokeless tobacco) used for sniffing by the girl students.
Habit of alcohol consumption in these tribal school students can be blamed to the local occupation of collecting *mahua* tree flowers for the preparation of country made liquor. These trees are abundant in the forest areas of Central India where the present study was carried out.

In a study conducted by Makwana NR et al in rural area of Jamnagar, Gujarat, India have reported 33.12% prevalence of tobacco consumption in one or the other form among the adolescents in the age group of 10-19 years. About 57.47% of those consuming tobacco were indulging in this habit for more than 12 months. The reported figures are quite comparable to our findings.7

Dongre AR et al.8 in 2008 conducted a community based research to study the pattern of tobacco among rural adolescents of Wardha district, Maharashtra (which is nearer to the study area of present study). Out of the total 385 participants in the study, 68.3% of the boys and 12.4% of the girls had consumed tobacco in any form during last 30 days. Out of the boys who had consumed tobacco, 79.2% had consumed *kharra* and 46.4% had consumed *gutkha*. Peer pressure was responsible for tobacco consumption in 51.2% of the boys. Among girls, 72% used dry snuff for teeth cleaning, 32% consumed tobacco in the form of *gutkha* while 20% consumed tobacco mixed with lime.8 The use of local made brands of tobacco and alcohol as reported by the present study has been substantiated by the findings of their study.

Haan L et al. carried out a study to find out prevalence and pattern of alcohol use among rural middle school students. They found that 27% of the participants reported having tried alcohol but not in the last month, 10% of the total sample reported having drunk in the last month and 10% reported having been drunk. Average age at first use of alcohol in the given sample was 9.5 years.9 Early average age of starting drinking alcohol as reported by them is in accordance with the present study.

Naik DB et al. also reported the proportion of 6.9% of tobacco use among the out patient department 10-20 year old study subjects.10 Whereas the findings reported by Muttappallymyalil J et al. are on lower side as compared to the present study regarding the same issuw.11

**Conclusions**

From the present study, it is concluded that the proportion of children using tobacco and alcohol is very high. School children’s knowledge regarding ill effects of tobacco and alcohol consumption is not up to the mark. Further research is required on issues unfolded in Focus Group Discussions. It will be helpful to evaluate some type of intervention in these school children to empower them to understand the ill effects of tobacco and alcohol.

**Institutional Review Board Permission**

The necessary ethical clearance was obtained from Institutional Ethics Committee, Government Medical College, Nagpur, INDIA Pin-440003 before the start of the study.
Acknowledgement

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Conflict of Interest: None

References


Table 1: Gender wise distribution of personal habits among school children

<table>
<thead>
<tr>
<th>Personal Habits</th>
<th>Total (n=908)</th>
<th>Gender</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>Male (n=463)</td>
</tr>
<tr>
<td>Smoking</td>
<td>026</td>
<td>02.86</td>
<td>019</td>
</tr>
<tr>
<td>Smokeless Tobacco Use</td>
<td>379</td>
<td>41.74</td>
<td>207</td>
</tr>
<tr>
<td>Alcohol Consumption</td>
<td>037</td>
<td>04.07</td>
<td>031</td>
</tr>
<tr>
<td>No Habit</td>
<td>511</td>
<td>56.27</td>
<td>251</td>
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