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# Study on the use of Tobacco among Male Medical Students in BLDEU, S Shri B M Patil Medical College Hospital and Research Center, Bijapur

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## ABSTRACT

**Objectives:** Is use of tobacco a major health problem among medical students? To find out the factors associated with the use of tobacco.

**Materials and Method:** A cross sectional study was done on 260 under graduate male medical students Using pre designed pretested questionnaire to study about the problem and various correlates of the tobacco use, Data was analyzed through chai-square test and Fisher's exact test.

**Results:** Among the tobacco users (31.53%),smoking was find in 24% and 2.6% tobacco chewing in the form of gutkha, khaini thota dried tobacco leaves 6.5%.Hostellers were found to be more frequent tobacco users as compared to day-scholars. There was a significant relationship between the presence of a smoker in the family and picking up the habit in the present study.

**Conclusions:** Tobacco use is significant problem among the male medical students and we need to take step to stop its use by them so as to prevent them from being exposed to its harmful effects

***Keywords:*** *Medical Student, Smoking, Tobacco*

## INTRODUCTION

Use of tobacco is the second major cause of death in the world[1]. Each year, tobacco abuse kills some 5 million people worldwide and this number is increasing. WHO estimates that, unless current smoking patterns are reversed, tobacco will be responsible for 10million deaths per year, by the decade 2020-2030, with 70% of them occurring in developing countries[2-4]

Education regarding harmful effects of the use of tobacco and related diseases is essential for the undergraduate medical students, especially to reduce the burden of the deadly effects of the same. Physicians occupy a key position in this regard as they are uniquely placed to lead smoking cessation programmes in the community[5]. But if the future physicians themselves are entangled in the web of the abuse and dependence on tobacco, then the plight of the smoking cessation programmes can well be imagined

As medical students, who are usually in their adolescence, progress through the medical school, their behavior regarding the use of tobacco equals or even exceeds the rates in the non medical peer groups, despite their knowledge of smoking-related diseases. As such, many researchers have worked on this group.

As future doctors who will witness the burden of smoking-related disease among their practices, medical students represent a primary target for prevention programmes. Therefore, the aim of the study was to evaluate the use of tobacco in the medical students and to elucidate the factors associated with its use.

## OBJECTIVES

1. Is use of tobacco a major health problem among medical students?
2. To find out the factors associated with the use of tobacco.

## MATERIALS AND METHOD

### Study design and participants

A cross-sectional study was done among the male medical undergraduate students of BLDEU's Shri B M Patil Medical college Bijapur. The students were briefed about the purpose of the study. Out of the total male medical students, we could distribute the pre tested structured questionnaires to a total of 267 undergraduate male medical students. Participation in the study was voluntary and verbal informed consent was taken from the participating students. Out of the total 267 students, only 260 students had responded and 07 had given incomplete response and hence were therefore excluded from the study. Thus 260 completed questionnaires were used for analysis. Students were instructed not to write their names to ensure confidentiality and elicit correct responses from them. The information was collected regarding age, religion, residential background, current place of living, age at initiation, precipitating factor for the initiation, form of product used, pattern of tobacco use and tobacco used in the family

## DEFINITIONS

**Ever use:** having used tobacco even once in their life time

**Current use:** having used tobacco at least once in the last 30 days preceding the survey

**Never use:** having not used even once in their life time[6]

**Study period:** The survey was conducted from- September 12 to October 12

### Statistical analysis

Was done by using rates and ratios, percentages and chi-square test, Fisher's Exact Test was used for statistical significance.

## OBSERVATION AND RESULTS

### Form and pattern of tobacco use

The results in the present study revealed that, out of total students (n=260) 82 (31.53%) were found to be current tobacco users. Among these 63 students, ie 24.23%were found to be consuming tobacco as cigarettes or other forms of smoking, while the use of smokeless tobacco in the form of Gutka, khaini, thota (dried tobacco leaves) was found in 17 ie 6.5% of the total current tobacco users (table 1).The mean age of our study subject was 22.5± 1.3 years.

### Current tobacco use in the students and its correlates

We also came to a significant conclusion through this study that the residential background of the student, ie rural or urban, was not significantly associated with the tobacco use. Another important observation was that religion also had no association with the use of tobacco. The apparent difference in the percentage of tobacco use in Hindus and Muslims was not statistically significant.

**Table 1. Form and pattern of use of tobacco.**

| Smoking Status | Number | Percentage (95% - CI ) |
|---|---|---|
| Current Tobacco users*(82) | 63 | 24.23 |
| Smoking | 17 | 6.5 |
| Use of Tobacco in any other form | | |
| Non – Tobacco users currently 178 | | |
| Ever users | 20 | 8.0 |
| Never users | 158 | 57.2 |

## MULTIPLE RESPONSES

The current place of residence was found to significantly affect the use of tobacco. The hostellers ( 31.8%) were found to be using more tobacco as compared to day-scholars (13.6%).

The familial aggregation of the tobacco use was also quite evident in the present study, with tobacco use being more common among students belonging to families where tobacco use is prevalent (Table 2)

An enquiry in to the factors leading to the initiation of the use of tobacco revealed that it is mostly initiated due to peer pressure. The other, less important factors responsible were curiosity and the effect of family members.

## DISCUSSION

Various efforts have been made in the direction of assessing the effect of various factors on smoking behavior among the medical students in different parts of the world. With the increasing use of the smokeless forms of tobacco as well, it has become important to bring out the overall use of tobacco and its various correlates. Therefore we have tried to find out the overall burden of tobacco use among the male medical students, who may serve as the role model for the patients with respect to the smoking cessation activities

The proportion of current tobacco users in our study sample was found to be 31.53% with the smokers constituting 24.23% The overall prevalence of current use of tobacco in the population above 10 years of age was observed to be 36.5% in Uttar Pradesh (50% among males and 9.1% among females),while that of current smoking was 18.1% (27.1% among males and 2.6% among females) in Uttar Pradesh[7]. The percentage of currents smoking in our study sample is comparable to that in the general population and is a matter of serious concern. The finding of our study are also comparable to the results of a similar study done in the neighboring country Pakistan , which revealed a 22% prevalence of smoking among the male medical students[8]. The figures are comparable to our study and reveal that religion, most probably , does not have much effect on the use of tobacco. A report from the study in 15 medical schools from nine Asian countries revealed that the prevalence of daily smoking in males varied from 4 to 11% from first year to final year; of occasional smoking 18 and 24 %, respectively[9], indicating that the use of tobacco does not respect international boundaries. However, the Rates of smoking vary from that in our study because this study was spread over nine countries which have a variation in the use of tobacco between them. The figures obtained were a reflection of an average of all the nine countries and are therefore less specific and comparable with our study which is more localized . The corresponding figures of tobacco use in similar studies done in Kerala (14.1%)[10] ,Orissa (12.4%)[11] and West Bengal (3.2%) among the newly admitted medical students[12] were found to be quite low, which may be due to the various other un identified factors.

**Table 2. Bivariate Analysis of current tobacco use in the students**

| Characteristics of students (n= ) | Tobacco users | Non-Tobacco users | $X^2$ Value | P- Value |
|---|---|---|---|---|
| **Religion** | | | | |
| Hindus(244) | 80 | 164 | Fisher's | P=0.1033 |
| Muslims(16) | 2 | 14 | exact test | No Association |
| **Current place of residence** | | | | |
| Hostellers(224) | 78 | 146 | 0.1695 | P=0.6805 |
| Day scholars(26) | 8 | 18 | | No Association |
| **Practice among family members** | | | | |
| Family users(133) | 70 | 63 | 61.094 | P<0.001 |
| No-Family users(127) | 10 | 117 | | Association is significant |
| **Family background** | | | | |
| Rural (63) | 25 | 38 | 1.81 | P=0.1785 No |
| Urban (187) | 57 | 130 | | Association |

The absence of an association between the residential background and the tobacco use highlights the importance of the spread of the epidemic of tobacco use. Similar observations have been made in the young boys in the general population of Uttar Pradesh and in another similar study on the male medical students in 1989[13], which may be an indication that the trend of tobacco use is deep-rooted and not a recent one.

The preventive effect of religion and other cultural factors on behavior related to the use of tobacco losing its impact, with religion having no significance in the present study

The preventive effect of parental supervision on the use of tobacco was quite evident in our study and another similar one in Orissa, with hostellers using more tobacco as compared to day scholars.

There was a significant relationship between the presence of a smoker in the family and picking up the habit in the present as well as other studies.

The over whelming effect of peer pressure on the initiation of tobacco use is a matter of serious concern because it is very difficult to prevent the effect of this factor in an age group which likes the company of their friends as well as is influenced maximally by them, more so while living in a hostel away from their homes. It has a direct or indirect synergistic effect to the other factors and needs in depth research.

**Limitation**

There could be a possibility that students who are using tobacco would not have participated in the study despite the assurance of maintaining confidentiality.

## CONCLUSION

We took medical students as the focus of our study, as the approach and credibility of future doctors as treatment provides for smoking-and tobacco related diseases may be influenced by their smoking habits. The results in our study are discouraging and reveal that the medical knowledge regarding the ill effects of tobacco use have not enabled them to check its use.

**Recommendations**

- Strong health education and health promotion messages about ill effects on health due to use of tobacco.
- Legislative steps banning the use of tobacco in the college campus
- Specific training and counseling of the students on regular basis to overcome of this habit

**Conflict of Interest:** None declared

**Source of Funding:** Not Applicable

**Ethical Clearance:** Attached

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