Original Research Article

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A descriptive study of tobacco use in adults in an urban slum

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ABSTRACT

Background: Globally, nearly 5 million persons die every year from tobacco-related illnesses, with disproportionately higher mortality occurring in developing countries. Tobacco is used in a multitude of ways in India. By 2020 India would have the highest rate of rise in tobacco related deaths compared to all other countries. Tobacco use in India is increasing but there are considerable changes in the types and methods by which it is used. According to WHO estimates, 194 million men and 45 million women use tobacco in smoked or smokeless form in India. Tobacco use is the leading preventable cause of death in developed countries and is the second leading cause of death globally. The study was carried out to assess the practice of tobacco use among adults in urban slum. It tries to ascertain the prevalence of tobacco use in the community, identify the various forms of tobacco used. It is a questionnaire based cross sectional descriptive study.

Methods: A cross sectional descriptive study using a close-ended, pre tested structured interview schedule was prepared and the investigator conducted the interviews personally at the respondent's house who were above 18 years of age.

Results: The prevalence of tobacco use in any form was found to be 38.78%, the most common age group being 30-44 yrs. Also seeing that initiation of tobacco use took place in the age group 20-29 yrs it highlights the need of starting anti-tobacco campaigns for a younger age group but not leaving out older age groups at the same time. Sexwise distribution of tobacco use was observed to be 40.23% in males as compared to 36.17% in females.

Conclusions: Control of this deadly epidemic requires a decisive, target oriented and a well motivated approach.

Keywords: Tobacco, Forms, Urban slum, Preventive strategies

INTRODUCTION

Nearly four millions the world over would have been saved from the clutches of death due to tobacco addiction if Columbus knew what he was introducing to the world. When the Portugese came to India tobacco was introduced 400 years ago and the tradition of tobacco trade. Two Hundred years later the British introduced

commercially produced cigarettes to India and established tobacco production in the country.²

Tobacco contains more than 4000 chemicals, several of which can cause cancer. Benzpyrene is an established carcinogen. Nicotine the active alkaloid of tobacco is the principle addictive drug found in tobacco smoke. Other items include tar, carbon monoxide, ammonia, nitrogen

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oxides, arsenic, hydrogen cyanide, phenol, naphthalene, cadmium, urethane, acetone, DDT, butane and radioactive compounds.¹

While indigenous tobacco production and consumption remain a major problem, of particular concern is the penetration by transnational tobacco companies.³ The patterns of tobacco use are different in developed and developing countries. In developing countries the use by men is 50-60% and women 2-10% whereas in developed countries the usage by both men as well as women is more or less the same around 25-30%.³

Tobacco is also chewed-on its own or, with lime, betel leaf, and areca nut, as pan or betel quid. Some women even rub powdered tobacco (mishri) into their gums or even use it as toothpaste.4 Globally, nearly 5 million persons die every year from tobacco-related illnesses, with disproportionately higher mortality occurring in developing countries.5 Tobacco is used in a multitude of ways in India. It is smoked as cigarettes or as bidis, in a hookah, or in various pipes and as chutta, a cheroot smoked with lighted end inside the mouth. By 2020 India would have the highest rate of rise in tobacco related deaths compared to all other countries.⁶ Tobacco use in India is increasing but there are considerable changes in the types and methods by which it is used. According to WHO estimates, 194 million men and 45 million women use tobacco in smoked or smokeless form in India.8 Tobacco use is the leading preventable cause of death in developed countries and is the second leading cause of death globally.9

Aim

To study the practice of tobacco use among adults in an urban slum

Objectives

- 1. To determine the prevalence of tobacco use.
- 2. To identify various forms of tobacco use in the community.
- 3. Planning preventive stratagies.

METHODS

Place of study

The study was carried out in an urban slum in Pune, with estimated population of 750 adults from May 2015 to May 2016.

Unit of study

Unit of study an adult above 18 years of age

Study design

Questionnaire based descriptive cross sectional study.

Sample size

The sample size using finite population correction and catering for 10% non response was calculated to be 260. A total of 263 subjects participated in the study.

A close-ended, pre tested structured interview schedule was prepared. The investigator at the respondent's house which was selected by simple random sampling, conducted the interviews personally. All the adults above 18 years were covered by visiting their houses at various hours of the day keeping in view their working hours. The persons were explained about the objectives of the study and an informal verbal consent was obtained. All adults both participants as well as non-participants in the study were offered health education, counselling, and referral services. Epi info was used for analysis.

RESULTS

Total 144 participants were included in the study. 75 were females (52%) and rest were males (48%).

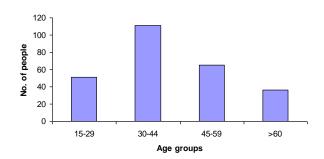


Figure 1: Distribution of age.

Maximum numbers of people interviewed were in the age group 30-44 years.

Table 1: Sex of respondents.

Sex	Number	Percentage (%)	
Female	94	35.74	
Male	169	64.25	
Total	263	100	

Out of the total people interviewed 35.74% were females and 64.25% males.

Table 2: Distribution as per tobacco use.

Tobacco use	Number	%	95% CI
Yes	102	38.78	32.9 - 45.0
No	161	61.21	55.0 - 67.1
Total	263	100	

The number of respondents who had ever used tobacco or were using tobacco in any form was 102 (38.78%) and the remaining 161 (61.21%) were non-tobacco users/had

never used tobacco. Hence prevalence of tobacco users is 38.78% with 95% CI of 32.9% - 45.0%.

Forms of tobacco used/tried

Distribution as per the form of tobacco tried/used by the students is given in Figure 2. This question got multiple responses as there were instances where a respondent had tried more than one form of tobacco.

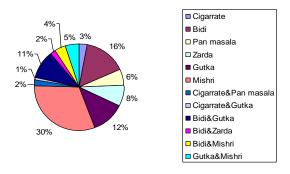


Figure 2: Forms of tobacco used.

Males preferred both smoked as well as smokeless forms whereas in females tobacco use is restricted to only smokeless forms. Further in smoked forms bidi was used most commonly and among smokeless forms mishri was used by most.

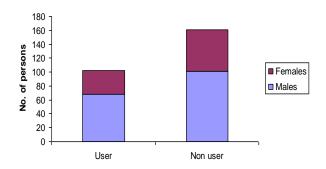


Figure 3: Relation of sex and tobacco use.

In our study 40.23% males and 36.17% females accepted to have tobacco in some form.

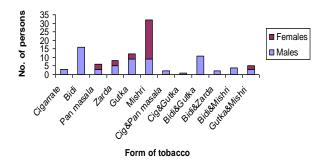


Figure 4: Tobacco preference.

It is seen from the figure that most males used Tobacoo in smoked as well as smokeless forms. However in case of females it is evident that tobacco use is restricted to the smokeless form.

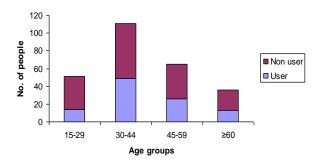


Figure 5: Age and tobacco use.

The maximum respondents in the community i.e. 42.20% were in the 30-44 age group.

DISCUSSION

The mean age of the respondents was 41.63, with a variance of 187.02 and a standard deviation (SD) of 13.67 (Figure 1). All adults who had completed 18 years of age were included in the study. The 52nd of National Sample Survey (52 NSS) conducted by National Sample Survey Organization in 1995-96 was the first nationally representative household survey to collect data on Tobacco consumption for population 10 years and older using surrogate household informants. In a National cross sectional household survey Tobacco consumption was studied among 15 years and older.¹⁰

Out of the 263 respondents in the community 35.74% were females and 64.25% were males (Table 1). According to WHO estimates, 194 million men and 45 million women use Tobacco in smoked or smokeless.

The number of respondents who had ever used tobacco or were using tobacco in any form was 102 (38.78%). The remaining 161 (61.21%) (were non-tobacco users/had never used tobacco. These are more or less similar to other studies. Multilevel cross sectional analysis of the 1998-9 Indian national family health survey revealed overall prevalence for smoking was 18.4% and for chewing 21.0%; the combined prevalence was 32.9%. In a National cross sectional household survey on Tobacco consumption thirty (30%) of the population 15 years and older- 47% men and 14% women either smoked or chewed Tobacco. By 2020 tobacco consumption has been projected to account for 13% of all deaths in India. 11

In smoked forms of Tobacco, 16 (15.68%) respondents used bidis and only 3 (2.94%) used cigarrates. In smokeless forms maximum number of respondents i.e. 32 (31.37%) used Mishri followed by Gutka 12 (11.76%),

Zarda 8 (7.84%), and Pan Masala 6 (5.88%). The remaining consumed more than one form of tobacco. Tobacco use in India is more varied than in most countries. Only 20% of total Tobacco consumption is in the form of cigarrates. Bidis account for the largest proportion of Tobacco consumption in India, at about 40% and the rest in smokeless forms. ^{2,7} Tobacco use continues to be a growing menace and in spite of this Effective tobacco control legislation is likely to encounter stiff opposition, even apart from the tobacco industry. ¹²

CONCLUSION

The study was carried out to assess the practice of tobacco use among adults in urban slum. It tries to ascertain the prevalence of tobacco use in the community, identify the various forms of tobacco used and suggest preventive strategies. The theme "Deadly in Any Form or Disguise" adopted by the WHO in 2006 holds true to this day. Basic scientific epidemiological research over the last century has proved the harmfulness of tobacco use; still the industry and the habit continue to thrive. Reducing tobacco consumption requires knowing what works, and applying this knowledge systematically. In developed countries there is no shortage of data on tobacco use. In developing countries like India, in spite a lot of research on the subject there exists a lack of standardized data on the subject. To top this implementation of existing legislations is extremely poor and consumption of tobacco is increasing by the minute. The present study brings out two important facts that use of all forms of tobacco is prevalent, smokeless form being preferred amongst females and secondly the habit starts at an early age. Preventive strategies must be use this as a cornerstone in order to be effective.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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