Original Article

Tobacco use and its correlate factors among adult males in rural area of Meerut-A cross sectional study

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Abstract

Introduction: Tobacco use is one of the important preventable causes of death and a leading public health problem all over the world. According to WHO, tobacco is the second major cause of death worldwide and is currently responsible for about 5 million death each year. This figure is expected to rise to about 8.4 million by the year 2020 with 70% of deaths occurring in developing countries.

Research questions: What is the magnitude of problem of tobacco users among adult males in rural area of Meerut?

Objectives

1. To study the prevalence of tobacco use

2. To assess the correlate factors of tobacco use.

Material and Methods: A community based cross sectional study was carried out among 393 randomly selected males aged 15-49 years belonging to Khajuri village which is the field practice area of Subharti Medical College. The data was recorded in pre-designed and semi-structured Questionnaire.

Results: Over all prevalence of 'Current users' of tobacco product was 206 (52.4%) and ever users was 80 (20.4%).Among the current tobacco users most of the participants (49%) were using smoking form of tobacco (Cigarette, Bidi, Hukka) and 34.4% were using smokeless form of tobacco (Gutkha, Khaini) and 15.5% were using both.

Conclusion: The tobacco use varied with locality, gender, age and by type of tobacco. It was significantly associated with various local socio-demographic factors like education, occupation, family type, socio-economic class and tobacco use in family or by the friends.The patterns of tobacco use different among tobacco users.

Keywords: Tobacco smoking, tobacco chewing, current user, ever user.

Introduction:

The tobacco epidemic is one of the biggest public health threats the world has ever faced. It kills nearly six million people a year of whom more than 5 million are users and ex users and more than 600 000 are nonsmokers exposed to second-hand smoke. Approximately one person dies every six seconds due to tobacco and this accounts for one in 10 adult deaths. Up to half of current users will eventually die of a tobacco-related disease[1]. Nearly two-thirds of world's population lives in just ten countries and more than 40% live in just two countries, China and India. India bears around 10% share of total smokers. Tobacco has always been a menace in developing countries like India and chewing tobacco apparently is widely prevalent in the western part of Uttar Pradesh[2].

Young adults aged 18–24 currently have a higher smoking prevalence and lower quit rate than older adults. This cohort is a critical age group given heightened tobacco industry advertising targeted to young adults following the1998 law prohibiting the marketing of tobacco products to adolescents under 18 years of age[3].

Material and Methods:

Study design:A Community based cross sectional study

Study period: The period of study was one year from to September 2011 to August 2012 which was used for data collection, compilation and presentation of findings.

Sampling method:

The proposed study was conducted in the catchment area of Khajuri RHTC the field practice area of the Department of Community Medicine SMC, Meerut. A

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pre-structured, pre-tested questionnaire was used to interview the subjects. The interview was conducted after obtaining an informed consent in local language. The Sample size was calculated by using standard formula. The prevalence of tobacco users for calculating the sample size was taken from the NFHS-3 data and absolute allowable error was taken as 5% for the same. The required sample was taken using Simple random sampling technique. Sampling universe was 788 registered families of Khajuri village and the sampling unit was a family in this study. All male adults from each family were included for the study, where on an average there were 2 male aged 15-49 years based on demographic profile of the area therefore 393/2=197 households were taken in order to cover the required sample size.

Definitions of the Variables:

Ever user. Ever smoker or chewer was defined as one who had not smoked/chewed tobacco in the past 30 days preceding the survey but had tried in the past (even once or twice).

Current user. Current user was defined as having used tobacco at least once in the last 30 days preceding the survey.

Never user. Never user was defined as having not used tobacco even once in their life time.

The tobacco use was mainly classified in two categories: smoking and smokeless. Tobacco was mainly smoked in the form of cigarette and bidi. Smokeless tobacco use in the form gutka, betel quid, khaini and snuff which are also common in different parts of India.

Statistical analysis:

Data was entered into SPSS Version 19.0 and analyzed by using appropriate tests like Chi square test, was applied to find out significant association between independent and dependent variables. A p value of less than 0.05 was considered significant. Results were expressed as in proportion.

Results:

The **table No.1** shows the pattern of tobacco use in the study population. It was revealed that prevalence of current tobacco used was 52.4% and prevalence of ever user was 20.4% and never use was 27.2%.

The **table No. 2** depicts the pattern of tobacco users among current tobacco users. It was revealed that the most common form of tobacco use was found to be bidi (46.1%) followed by Gutkha 22.3% and both bidi and Gutkha (12.1%).

Figure-1 shows that among the current tobacco users, 44.7% have tried it after18 years of age followed by 33.1% who tried tobacco first time between 15-18 year of age.

The table 3 shows that the reason for initiating the use of tobacco. The most common reason given was that tobacco use is a common practice (25.7%) followed by pressure from friends (23.3%), just want to try (20.4%), and want to look grown up (15.5%).While 15% took tobacco to relive tension.
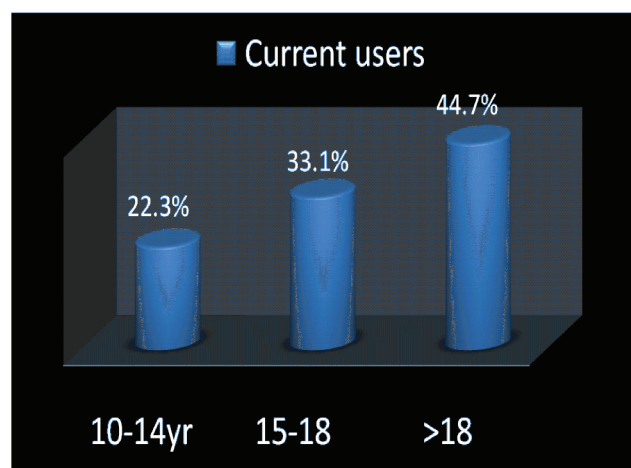
Table- 1 Prevalence of tobacco use

Pattern of tobacco users	No.	%
Current user	206	52.4
Ever user	80	20.4
Never	107	27.2

Table-2 Type of tobacco use among current users

Type of tobacco	No.	%
Cigarette	4	1.9
Bidis	95	46.1
Gutkha	46	22.3
Khaini	25	12.1
Hukka	2	1
bidi+gutka	32	15.5

Table-3 Factors that influenced current tobacco users

Reasons	No.	%
Common practice	53	25.7
Pressure from friend	48	23.3
want to look grown up	32	15.5
relives tension	31	15.0
just want to try	42	20.4

Figure-1

Discussion:

Prevalence of current tobacco users in this study was 52.4% finding of the present study is consistent with a study conducted by Mohan et al (2002)[4] in which they reported the prevalence of tobacco use in 21 year and above as 51% and M.M.Khan et al (2009)[5] who found prevalence of tobacco use as 53.6%.

The findings of the indexed study were inconsistent with that of TL Ravishankar et al (2009)[6] where prevalence of tobacco use was found to 19.3% and Jushi U et al (2010)[7] who found about 37.2% were ever tobacco user 32.9% were current user.

The difference in the prevalence of tobacco use may be due to the fact that above mentioned studies included all age groups and both sexes and those included were younger. The age groups covered by the various types of studies are diverse and since tobacco use varies greatly with age, comparison is problematic.

Among the tobacco users most of the subjects were using smoking form of tobacco followed by smokeless tobacco, which is similar to Gupta PC et al (1996)[8] who found that smoking among men was 38%.

In this study 22.3% of current user had tried the use of tobacco in the age of 10-14 years and fewer from the older group. The result of this study is consistent with Ansari Z et.al (2010)[9] who showed that the average age of initiation of tobacco use was 13.3 years, Breslau N et.al. (1996)[10] in their among young adults in southeast Michigan reported that, 33.6% smoked their first cigarette at age 13 or before, 43.2% at 14 to 16 years of age, and 23.2% began at age 17 or later.

Similar finding was also reported by Muttapppallymyalil J et al (2010)[11], Narain R et al (2011)[12], Johnston LD et al (2007)[13]. Which provides evidence that the age of starting tobacco use is decreasing and these new starters will probably smoke for more number of years as compared to the present users of tobacco and may infect succumb to the harmful effects of tobacco at a much younger age than those who started at a later age. Also to note that the law prohibits tobacco sale to those below 18 years of age and a significant proportion of youngsters starting the tobacco use is an indication towards the fact that law is not properly implemented or followed and there by exposing minors to tobacco use.

The most common reason was use of tobacco is common practice (25.7%) followed by pressure from friends (23.3%),curiosity (20.4%), and want to look grown up (15.5%).similar findings were reported by El-Gewaily M (2008)[14] who showed that friends and imitation of adults (51.2%) were the main reasons for initiating smoking habit , Powe BD et al (2005)[15] who reported that a student's chance of smoking was 15 times greater if their friends too smoked and. Subba SH et al (2011)[16] conducted a study in western Nepal and found that majority of chewers (61.2%) reported that this habit was introduced first time to them by friends. Pierce JP (2007)[17] who showed that curiosity may be a critical precursor to smoking.

The above studies revealed the main reason that is triggering tobacco use and these could be used for intervention in preventing the onset tobacco use.

Conclusion:

Tobacco use in any form (smoking or smokeless) is prevalent among the study population. Bidi smoking was the most popular form of tobacco use. It has been observed that a large number of adults pick up this habit from their family members, peers, and only for curiosity.

Enforcement of regulations on sale of tobacco products may also be useful. Legislations on the use of tobacco products need to be strengthening to decrease availability, accessibility and affordability of tobacco products to these age groups.

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