STUDY OF PATTERN OF TOBACCO CONSUMPTION AMONG AUTO RICKSHAW DRIVERS IN A SUBURBAN AREA

Community Medicine

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ABSTRACT

Background: Globally, tobacco use is the second-leading cause of preventable deaths. India is the second largest consumer of tobacco in the world and professional drivers tend to have higher prevalence ratios of Tobacco use than the general population.
Aim And Objectives: To study pattern of tobacco consumption, identify the reasons for consumption and to assess the knowledge of harmful effect of tobacco amongst Auto-rickshaw drivers.
Materials and Methods: Cross sectional study conducted among 75 drivers in a suburban area
Results: Study findings indicate that majority of the drivers are Tobacco users (82.6%). Majority of them (69.3%) were using Tobacco in the form of Gutkha. The reasons for continuous consumption were addiction, to reduce stress and to be awake etc. 96% respondents were aware of the harmful effects of the Tobacco.

KEYWORDS

Tobacco, Knowledge, Auto-rickshaw Driver, Harmful effects, Addiction

Background:
Tobacco use is a major preventable cause of premature death and diseases, currently leading to five million deaths worldwide which are expected to raise over eight million deaths worldwide by 2030. [2][1]

Globally, cigarette smoking is the dominant form of tobacco use. The prevalence of tobacco consumption is reported by the World Health Organization (WHO), which focuses on smoking not on smokeless chewing of tobacco. India is the second largest consumer of tobacco in the world. [9]

Globally, tobacco use is the second-leading cause of preventable death, being responsible for more than 5 million deaths annually.

In the recent past tobacco use has increased drastically thereby leading the tobacco industry as a major source of revenue to a majority of nations and also a root cause of various catastrophes to human health.

Tobacco use has declined in high income, developed countries and increased attention has turned towards its growth in middle and low income countries[4] The reasons for the above mentioned reversal of scenario may be increased awareness among public, increased and intensified health education programs and political commitment. These reasons are very important because if a clear understanding of the above mentioned reasons is obtained, they can be modified to our social and cultural needs and can be applied to our population. [7]

World Health Organization (WHO) estimates show that tobacco use will prematurely kill ten million people per year 2020 if current trends are not reversed. [3]

Estimates show that tobacco deaths in India may exceed 1.5 million annually by 2020 if necessary steps are not taken to curb the tobacco use. [6] After China, it has been estimated by the WHO that India would have second largest number of smokers in the world. The National Family Health Survey-3 (2005-06) data revealed that 57% of adult men and 3.1% of adult women used one or more tobacco products. Among adolescent students the Global Youth tobacco survey 2006 estimated that 17.3% of boys and 9.75 % of girls in India are tobacco consumers. [8]

AIM:
To study tobacco consumption pattern among auto rickshaw drivers in a Suburban Area.

OBJECTIVES:
To study pattern of tobacco consumption amongst study subjects
To identify the reasons for consumption of tobacco amongst study subjects
To asses knowledge of harmful effect of tobacco amongst rickshaw drivers

To evolve recommendations for tobacco related risk reduction amongst auto rickshaw drivers

METHODOLOGY:
A cross sectional study was conducted among 75 auto rickshaw drivers, at Malvani urban health centre, Mumbai over a period of 3 months between February 2017 to April 2017. The sample size was calculated by using the formula as follows:

Taking prevalence of tobacco consumption among auto-rickshaw drivers as 84.2 [5], at alpha 5% and confidence interval 95% the estimated sample for a given study is calculated by the formula which is as follows -
Sample size $(n) = z2 \, p \, q \, / \, E2$
z = relative deviate (at 95% confidence level) = 1.96
p = prevalence of occupation exposure = 84.2
q = 100-p = 15.8

Allowable error = Degree of precision in terms of actual percent difference
(10% of p)

Auto rickshaw drivers, who have a valid license were included in the study. The semi-structured questionnaire was tested by doing a Pilot Study in auto rickshaw drivers visiting at UHC. Pilot study was conducted in 20 auto rickshaw drivers and case record form was modified and validated accordingly. Study subjects were identified as per the inclusion criteria mentioned previously. With cooperation of union leader of auto rickshaw union, data was collected from auto rickshaw drivers at auto rickshaw stand and from those visiting Malvani urban health center. After preliminary self introduction, purpose of the visit was explained to the study subjects. After obtaining informed consent, validated semi-structured questionnaire was administered to study subjects. A separate room was used to collect data from auto drivers at UHC to maintain privacy and confidentiality

RESULTS:
A total of 75 auto-rickshaw drivers were interviewed. The mean age of the study subjects was 38.2 years with SD of 10.8, majority of them are between 20-40 years of age

Table 1: Age wise distribution of study subjects

Age of the drivers	No. of drivers
20-30	23
30-40	23
40-50	18
>50	11

Table 2: Distribution of study subjects according to the education

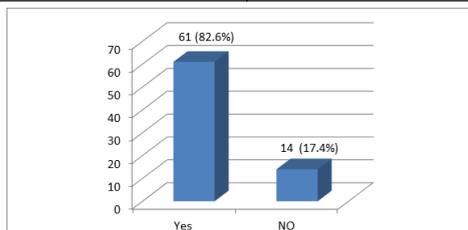| Education	No of Subjects
Illiterate	19
1-7th std	32
7-10th std	17
>10th	7

Figure 1: Frequency of study subjects using Tobacco

Out of total 75 auto-rickshaw drivers, 61 (82.6%) consumed tobacco and only 14 (17.4%) study subjects did not use tobacco in any form.

Table 3: Pattern of tobacco consumption

Pattern of tobacco consumption	No. of drivers	%
Smoking	13	21.3
Smokeless	34	55.7
Both	14	23
Total	61	100

Table 4: Forms of Tobacco consumption n=61

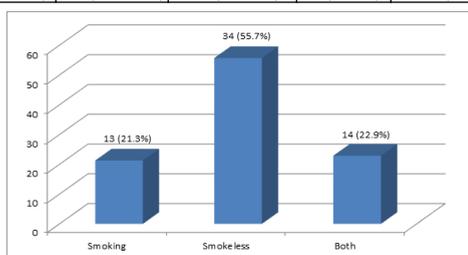| Smoking (27)		Smokeless (48)		
Bidi	Cigarette	Ghutka	Khaini	Pan Masala
17 (27.8%)	10 (16.39%)	42 (68.8%)	4 (6.5%)	2 (1.6%)

Figure 2: Pattern of Tobacco consumption n=61

Auto rickshaw drivers use tobacco in the form of bidi, cigarette, ghutka, khaini and pan masala.

Majority of them uses tobacco in the form of Gutkha (68.8%) & Bidi (27.8%).

Table 5: Reasons for initiation of Tobacco n=61

Reasons for initiation of tobacco consumption	Frequency
Peer pressure	42 (68.8%)
Curiosity	16 (26.2%)
Influence from family member	7 (11.4%)
Others (Advertisements, Style)	12 (19.6%)

Multiple answers were given by the study subjects; the main reason for the initiation of tobacco use is the pressure from friends and curiosity.

Table 6: Reasons for continuous use of Tobacco n=61

Reasons for continuous use	Frequency
Addiction	31 (50.8%)
Reduce stress	20 (32.7%)
To be awake	17 (27.8%)
Other	7 (11.47%)

Majority of the study subjects said the reason for continuous use of tobacco was addiction (50.8%) and stress reduction (32.7%) while 27.8% consumed tobacco to be awake during night hours.

Table 7: Knowledge of harmful effects of tobacco n=61

Harmful effects	Frequency
Cancer	40 (65.5%)
Mouth ulcer	26 (42.6%)
Bleeding gums	32 (52.4%)
Cough	12 (19.6%)
Blackening of lips	21 (34.4%)
Discoloration of teeth	9 (14.7%)

Multiple answers were given by the study subjects. More than 50% study subjects were aware of the fact that tobacco causes cancer of mouth.

DISCUSSION :

A cross sectional study was conducted among 75 auto-rickshaw drivers coming to urban health center and at auto rickshaw stand near the UHC. In our study we found that majority of them were belonging to age group 20-40 years, educated up to 7th std and married**.** We found a high prevalence of tobacco use among drivers. Figure 1 shows out of total 75 auto rickshaw drivers, 81.3% (n=61) auto rickshaw drivers were using tobacco. In **Rajesh K. et al.**[10] study 46% were using tobacco. Table no. 3 & 4 indicate that more than half of them were using smokeless tobacco in the form of Gutkha (68.8%). 27.8%, 16.39%, 6.5% and 1.5% were using bidi, cigarette, khaini and pan masala respectively. In a similar study conducted by **Dr. Sudhir R. et al.**[11] 72% & 40% drivers were using tobacco in the form of Gutkha & Bidi respectively**.** In Table no. 5 it is given that the main reason for initiation of using tobacco is peer pressure and curiosity. Similar reason for initiation was found in **Arvind K. et al.**[12] study. Tobacco addiction and stress were the main reasons for the continuous use of tobacco products (Table no. 6). Majority of the study subjects are aware of harmful effects of tobacco like cancer, mouth ulcer, cough, bleeding gums and blackening of teeth and lips etc.

CONCLUSION:

In conclusion we say that consumption of tobacco among auto rickshaw drivers was very high. Auto rickshaw drivers were mostly using tobacco in the form of Gutkha (smokeless) and bidi (smoke) in comparison to the other products. The most common reason for initiation of tobacco use was peer pressure, which is also a high focus area of the government. Mostly they use tobacco products to reduce stress, to be awake or to remove nervousness but a large number of participants were using tobacco due to addiction. Though the awareness level regarding the ill effects of tobacco among the auto rickshaw drivers was high, they were still consuming tobacco products because of its addiction.

Recommendation:

As the main reason for continuous use of tobacco was addiction, more de-addiction centers should be established in the country and the present centers should be more facilitated. Although selling of chewable tobacco has been banned in Maharashtra since 2012 but gutkha never really stopped selling in the state. Steps should be taken to stop selling of tobacco legally and illegally also.

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