

# **ORIGINAL ARTICLE**

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# A STUDY ON REASONS FOR INITIATION AND FREQUENCY OF SMOKING AMONG RURAL POPULATION IN DEHRADUN DISTRICT OF UTTARAKHAND

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# **ABSTRACT**

**Background:** Tobacco is a major public health problem all over the world with 82% of the world's 1.1 billion smokers residing in low and middle income countries. The study was conducted to find the reasons for initiation and frequency of smoking tobacco used among rural population.

**Methodology:** Present study was conducted in the rural field practice area of Department of Community Medicine, Himalayan Institute of Medical Sciences, Dehradun. The households were selected by systematic random sampling and all the smoking tobacco users were personally interviewed using a pre-structured and pretested schedule.

**Results:** Overall, 663 current smokers was found in the study. Peer pressure (31.2%) was the most common reason for initiating smoking in the surveyed population. Majority (88.8%) of the current daily male smokers were smoking upto 10 cigarettes per day. Majority of the males (60.8%) were smoking more than 10 bidi per day; while majority (77.3%) of the females were smoking upto 10 bidis per day.

**Conclusion:** In the study Peer pressure was found to be the most common reason for initiating smoking. Cigarette smoking is considered as a taboo in society as revealed by no female cigarette smoker in the study.

Key words: Tobacco use, Smoking, Peer pressure

#### INTRODUCTION

Tobacco smoking has been in use for hundreds of years. In the sixteenth century, with the spread of tobacco to Europe and other parts of the world, tobacco use gained popularity in India.¹ Globally, cigarette smoking is the dominant form of tobacco use. The tobacco epidemic still remains one of the biggest public health threats and the leading cause of preventable mortality the world over. There are more than one billion smokers in the world.² Almost 35% of men in developed countries and 50% of men in developing countries smoke; while 22% of women in developed countries and 9% of women in developing countries smoke.³

More than 80% of the world's smokers live in lowand middle-income countries.<sup>4</sup> Everyday, 80,000-100,000 young people around the world become addicted to tobacco.<sup>5</sup> Cigarette smoking and use of other tobacco products is increasing in the developing world due to population growth and tobacco industry targeting. Nearly six million people die each year from tobacco use and exposure to second hand smoke worldwide.<sup>6</sup> If action is not taken to check the epidemic, the figure will reach eight million by 2030 and most of them will take place in developing countries.<sup>7</sup>

Global Adult Tobacco Survey (GATS) India revealed that more than one-third (35%) of adults in

India use tobacco in some form or the other.8 Among them 21% adults use only smokeless tobacco, 9% only smoke and 5% smoke as well as use smokeless tobacco.8 Prevalence of smoking among males is 24%, whereas the prevalence among females is 3%.8 The low level of prevalence of smoking among women is because of the fact that smoking by women is not acceptable by most of the communities. In addition, young people are at great risk of smoking resulting from peer pressure and misconceptions regarding glamour associated with it and the aggressive marketing tactics used by the tobacco industry. The present study was conducted with the objective to find out the reasons for initiation and frequency of smoking tobacco product used among the rural population.

#### MATERIAL AND METHODS

The cross sectional study was conducted in the rural field practice area of Department of Community Medicine, Himalayan institute of Medical Sciences, Dehradun. The total number of families in rural field practice area was 2518. All persons aged more than 10 years and belonging to families registered with the field practice area comprised the study population. Considering the prevalence of tobacco use as 30.7% in Uttarakhand as per GATS (2009-10) survey, sample size of 993 was calculated with a relative error of 10% of prevalence and applying standard formula of 4pq/l<sup>2</sup> and with 10% of sample size as non-response rate. Out of 993 current tobacco users, 663 current smokers were found to participate in the study. Systematic random sampling was employed to select every 3rd household and all individuals consuming smoking form of tobacco in the selected household was interviewed.

Informed verbal consent was obtained from the study subjects after obtaining approval from the institutional ethical committee. Study was conducted for a period of 6 months i.e. April-September, 2012. A pre-structured and pre-tested schedule was used for collection of relevant data regarding reasons for initation of smoking tobacco, type and frequency of smoking tobacco product used and duration of smoking. The operational

definition used for the current smokers was those who smoked regularly for within 1 month prior to examination.

Information thus obtained was entered into SPSS 17.0 version and data was expressed as percentages and proportions.

### **RESULTS**

A total of 663 current smokers participated in the study. Table-1 shows that the most common reason for initiating smoking in the surveyed population was peer pressure (31.2%), followed by enjoyment (20.0%). It was seen that in females the initiation of smoking was mostly to relieve gas problems or stomach upset (33.3%), followed by peer pressure (29.8%).

Table-2 shows that about 88.8% of the current daily male smokers were smoking upto 10 cigarettes per day, while only 2.5% were smoking more than 20 cigarettes per day. No female in our study smoked cigarette. Among the daily bidi smokers, majority of the males (60.8%) were smoking more than 10 bidi per day; while majority (77.3%) of the females were smoking upto 10 bidis per day.

A total of 663 subjects was found to be currently smoking of which 8.6% of the total current smokers were smoking for the last 1-5 years; while about three-fourth (74.1%) of them were smoking for more than 10 years.(table-3)

Table-1: Distribution of Current smokers by reasons for initiation

Reasons for initia- tion of smoking	Male (n=579)	Female (n=102)	Total (n=681)
Peer pressure	182(31.4)	25(24.5)	207(30.4)
Enjoyment	124(21.4)	8(7.8)	132(19.4)
Curiosity	68(11.7)	15(14.7)	83(12.2)
To relieve Tension	122(21.1)	6(5.8)	128(18.7)
Feels grown up	42(7.3)	1(0.9)	43(6.3)
relieves gas problem	39(6.8)	28(27.4)	67(9.8)
Others	2(0.3)	19(18.6)	21(3.0)
Total	579	102*	681

Figures in the parenthesis indicate percentage; \*Multiple responses obtained in case of females

Table-2: Current daily smokers by type and frequency of smoking

Cigarette/bidi	Daily Cigarette smokers (n=81)			Daily bidi smokers (n=436)		
smoked per day	Male (n=81)	Female (n=0)	Total (n=81)	Male (n=392)	Female (n=44)	Total (n=436)
<5	42(51.8)	0(0.0)	42(51.8)	86(21.9)	23(52.3)	109(25.0)
5-10	30(37.0)	0(0.0)	30(37.0)	68 (17.3)	11(25.0)	79(18.1)
11-20	07(8.7)	0(0.0)	07(8.7)	159(40.6)	08(18.2)	167(38.3)
>20	02(2.5)	0(0.0)	02(2.5)	79(20.2)	02(4.5)	81(18.6)

Figures in the parenthesis indicate percentage

Table-3: Current smokers by duration of smoking

Age	Duration of tobacco use (in years)						
group (in yrs)	1-5 yr (n=57)	5-10 yr (n=115)	>10 yr (n=491)	Total (n=663)			
10-19	20(100.0)	0(0.0)	0(0.0)	20(100.0)			
20-29	19(33.3)	26(45.6)	12(21.1)	57(100.0)			
30-39	08(6.8)	25(21.4)	84(71.8)	117(100.0)			
40-49	07(5.0)	25(17.9)	108(77.1)	140(100.0)			
50-59	02(1.3)	24(16.1)	123(82.6)	149(100.0)			
>60	01(0.6)	15(8.3)	164(91.1)	180(100.0)			

Figures in the parenthesis indicate percentage

#### **DISCUSSION**

The most common reason for starting smoking in our study was peer pressure (31.2%), followed by enjoyment (20.0%). Smoking initiation is largely attributed to experience the fun element as a result of increasing peer pressure from friends but gradually it turns into addiction and result in devastating health consequences in later life besides the socio-economic consequences such as poverty. Peer pressure was the most common reason (80% and 25.5%) for the initiation of tobacco use in study by Ganesh et al<sup>9</sup> and Bhojani et al<sup>10</sup> respectively among college students in Bangalore. Sah et al<sup>11</sup> on his study on school teachers on school teachers in Nepal reported peer pressure and imitation (49.2%) as the most common reason for initiation of tobacco use. Other studies<sup>12,13</sup> have also shown peer pressure as an important risk factor for smoking. On the contrary, Pandey et al14 in their study reported curiosity (37.9%) as the most common reason followed by enjoyment (21.2%).

There was no female cigarette smokers found in the study. Cigarette smoking by female is considered as a taboo especially in rural population. Also, there is a need to alleviate the myth that bidi relieves gas problem as observed by the increased bidi smoking among females. A little more than half (51.8%) of all daily cigarette smokers were smoking less than 5 cigarettes on an average per day, while 2.5% were smoking more than 20 cigarettes per day in our study. This is comparable to the findings of GATS India8, where half of all cigarette smokers (50.1%) were smoking less than 5 cigarettes on an average per day, while only 1.7% were smoking more than 25 cigarettes per day.8 The findings are also comparable to GATS Uttarakhand8, where about 54.1% of current daily cigarette smokers were smoking less than 5 cigarettes on an average per day while no one was found smoking more than 25 cigarettes per day.8 Ganesh et al9 in his study found that more than half (59.7%) were smoking less than 5 cigarettes per day and only 1.5% were smoking upto 16-20 cigarettes per day. Other studies by Owonaro et al<sup>15</sup> and Babatunde et al<sup>16</sup> in Nigeria have also reported majority of respondents smoking between 1-5 cigarettes per day. In the present study, about one-fourth (25%) of all daily bidi smokers were found to be smoking less than 5 bidi per day and 18.5% were smoking more than more than 20 bidi per day. The findings of our study are comparable to GATS Uttarakhand8, where 26.5% of all daily bidi smokers were smoking less than 5 bidis per day and only 13.3% were found to be smoking more than 25 bidis per day. According to GATS India, about 23.7% were found to be smoking less than 5 bidis per day, whereas only 10.7% were smoking more than 25 bidis per day.8

Present study revealed that nearly three-fourth (74.1%) of the smokers were smoking for more than 10 years which is comparable to Alam et al<sup>17</sup> study in Pakistan where 56% of the smokers were smoking for more than 20 years while 24% were smoking for the last 15-20 years.

#### CONCLUSION

The above study revealed peer pressure to be one of the major reason influencing initiation of smoking. There is a need to educate the rural population regarding the adverse consequences of smoking tobacco so that they do not adapt this wrong habit. Duration of tobacco use is considered to be one of the important factors influencing the tobacco habit as the current study revealed nearly three fourth of current smokers were in the habit of smoking for the past ten years.

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