

Use of Tobacco Consumption among Health Sciences Students in Kathmandu Valley, Nepal

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ABSTRACT

Introduction: Health professional students play a critical role in tobacco control by providing services, advocating for policies and serving as role models for social change. However, health science students are, themselves consuming tobacco products. The overall objective was to find out the prevalence of the use of tobacco among health science students of Kathmandu.

Methods: A descriptive cross-sectional study design was used to conduct the study. Convenient sampling was adopted for college selection in Kathmandu valley and respondent selection. Self-administered questionnaire was used to collect the information from 216 respondents. The obtained data was coded, decoded where necessary, calculated, analyzed, tabulated and interpreted by using IBM SPSS 21 statistical tool.

Results: The findings of the study shows that 51.4 percent of the respondents ever used and 44.1 percent among them still use tobacco products. Prevalence of tobacco consumption was 22.68 percent. Hukkah consumption was relatively higher than the use of other tobacco products. 64.9 percent of the respondents started using tobacco products due to curiosity. 37.8 percent of the students started using tobacco products at 18-19 years of age.

Conclusions: There was a substantial amount of tobacco use among the health science students themselves. Thus, frequent positive reinforcement of antismoking campaign focusing more on youth and focus on tobacco prevention and cessation training/counseling in health science colleges would be desirable.

Keywords: *Consumption; Nepal; Students; Tobacco.*

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INTRODUCTION

Tobacco use is one of the main risk factors for a number of chronic diseases, including cancer, lung diseases, and cardiovascular diseases.¹ Despite this, it is common throughout the world. Tobacco use puts a significant burden of disease and death on the public's health.² Around 80% of the 1.3 billion smokers worldwide live in low- and middle-income countries, where the burden of tobacco-related illness and death is heaviest.¹ Adolescents and young adults, especially students, correspond to groups with high vulnerability to tobacco consumption.³

Various researches have been done studies regarding the consumption of tobacco by students in Nepal which have shown high prevalence rates.^{4,5,6} Similar studies in Kathmandu and that too, done on health science students are rare.

We aimed to find out the prevalence of the use of tobacco among health science students of Kathmandu valley.

METHODS

A descriptive cross-sectional study was conducted among 216 health science students in Kathmandu valley. Data was collected from February to March 2019. Ethical approval letter from Nepal Health Research Council (Ref no. 2004, 2019) was obtained. Permission letter was obtained from all selected colleges to carry out the study.

The study area was health sciences colleges in Kathmandu Valley. We selected 4 colleges conveniently. Study participants were bachelor level health science students with background of Public Health, Pharmacy and Nursing. Absentees and the students who were unwilling to participate or provide data were excluded from the study.

The sample size was determined using the formula, $(n) = Z^2 pq/d^2$ where, n =required sample size d = margin of error (5%) $p = 16.3\% = 0.163$ (Prevalence from a study conducted in Nepal⁷) $q = 1-p = 0.837$ $z = 1.96$ at 95% level of confidence. $n = (1.96)^2 * 0.163 * 0.837 / (0.05)^2 = 210$ 216 students were recruited in the study. Students were selected conveniently.

Questionnaire was used through self-administered process to collect the data in the study. Semi-structured questionnaire was developed as a means to collect all the necessary information for the completion of the research study. The variables included in our study were: socio-demographic characteristic, use and availability of tobacco products.

Collected data were entered and analyzed in SPSS version 21. Descriptive analysis was done and presented through frequency and percentage.

RESULTS

Table 1 shows that 48.6 percent out of the 51.4 percent who had ever tried tobacco still used tobacco products. Most (75.7 percent) of the users consumed Hukkah. Majority (37.8 percent) of the users started using tobacco products at age 18-19. Majority (64.9 percent) of the users started using tobacco products due to curiosity. Out of the current users ($n=49$), 36.7 percent consumed tobacco products rarely. Most (28.6 percent) users consume tobacco products at social events and 26.5 percent of the respondents used tobacco in public places. 91.8 percent of the users shared their products with their friends. 20.4 percent of the respondents used tobacco products even in illness.

Table 1. Use of Tobacco Products

Variables	n (%)
Ever tried tobacco (n= 216)	
Yes	111(51.4)
No	105(48.6)
Used tobacco products (n= 111)	
Cigarette	44(39.6)
Hukkah	84(75.7)
Betel nuts	36(32.4)
Others	12(10.8)
Still use tobacco (n= 111)	
Yes	49(44.1)
No	62(55.9)
Starting age (n= 111)	
10 or younger	13(11.7)
11-15	6(5.4)
16-17	27(24.3)

18-19	42(37.8)
20-24	23(20.7)
Reason of starting (n= 111)	
Curiosity	72(64.9)
Peer pressure	22(19.8)
Cope from stress	5(4.5)
Influenced by others	11(9.9)
Others	1(0.9)
Consumption frequency (n= 49)	
Daily	15(30.6)
Less than daily	16(32.7)
Rarely	18(36.7)
Consumption place (n= 49)	
Home	8(16.3)
College	5(10.2)
Friend's house	7(14.3)
Social events	14(28.6)
Public places	7(14.3)
Restaurants/Cafe	8(16.3)
Share with friends (n= 49)	
Yes	45(91.8)
No	4(8.2)
Use in public place (n= 49)	
Yes	13(26.5)
No	36(73.5)
Consumption even in illness (n= 49)	
Yes	10(20.4)
No	39(79.6)

Out of 30 male respondents who had ever tried tobacco products, 23 of them were current users and among 81 female respondents who had ever tried tobacco products, 26 of them were current users. It was seen that most consumption was done by Pharmacy students, in comparison to Public Health and Nursing students.

Table 2. Use of tobacco according to gender and faculty (n=111)

Gender	Current users n(%)	Total users n(%)
Male	23(20.7)	30 (27.0)
Female	26 (23.4)	81 (73.0)
Total	49 (44.1)	111 (100.0)
Faculty		

Public Health	15 (13.5)	33 (29.7)
Pharmacy	20 (18)	41 (36.9)
Nursing	14 (12.6)	37 (33.3)
Total	62 (55.9)	111 (100.0)

Table 3 shows that the majority (73.5 percent) of the current users get their tobacco products from shop/store. According to most (40.8 percent) of the current users, the walking distance of the place where they get their tobacco products is <5 min. Out of 44.1 percent users, only 22.4 percent of the users got their tobacco products on credit.

Table 3. Availability of tobacco products (n=49)

Variables	n (%)
Place of getting tobacco products (n=49)	
Shop/Store	36(73.5)
From someone else	2(4.1)
Cafe/ restaurant	11(22.4)
Distance of place from where tobacco products are got (n=49)	
<5 min	20(40.8)
5-10 min	9(18.4)
10-15 min	9(18.4)
15-20 min	6(12.2)
>20 min	5(10.2)
Availability of tobacco products on credit (n=49)	
Yes	11(22.4)
No	38(77.6)

Table 4 reveals that the majority (90.3 percent) of the respondents were of the age group 20-24 years. Among them, 77.3 percent were female and only 22.7 percent were male. Majority (32.9 percent) of the respondents were Janajati and a vast majority (95.4 percent) of respondents were Hindu. Most (59.3 percent) of the respondents had 5-9 members in their family. The major family occupation of the majority of the respondents (35.2 percent) was business. 54.2 percent of the respondents' family income per month was >Rs. 30,000.

Out of the 205 respondents that received pocket money, 83 (40.5 percent) respondents received around Rs.500-1000 per week. Among the 11 respondents who self-earn, 9.1 percent earn >Rs. 7000 per week.

Table 4. Socio-demographic and economic characters (n=216)

Variables	n (%)
Age	
≤19 years	4(1.9)
20-24	195(90.3)
25-29	16(7.4)
≥30	1(0.5)
Gender	
Male	49(22.7)
Female	167(77.3)
Ethnicity	
Brahmin	68(31.5)
Chhetri	53(24.5)
Janajati	71(32.9)
Madhesi	22(10.2)
Others	2(0.9)
Religion	
Hindu	206(95.4)
Buddhist	6(2.8)
Muslim	2(0.9)
Christian	2(0.9)
Family occupation	
Agriculture	37(17.1)
Animal husbandry	1(0.5)
Business	76(35.2)
Government job	61(28.2)
Non-government job	30(13.9)
Retired person	11(5.1)
Family income	
<10,000	3(1.4)
10,000-20,000	33(15.3)
20,000-30,000	63(29.2)
>30,000	117(54.2)
Family members	
≤4	81(37.5)
5-9	128(59.3)
10-14	4(1.9)
≥15	3(1.4)
Pocket money	
<500	69(33.7)
500-1000	83(40.5)
1000-1500	29(14.1)

1500-2000	17(8.3)
2000-2500	2(1.0)
2500-3000	3(1.5)
>3000	2(1.0)
Self-earning	
<2000	4(36.4)
2000-3000	4(36.4)
4000-5000	2(18.2)
>7000	1(9.1)

DISCUSSION

The major objective of this study was to find the prevalence and current situation of tobacco consumption among health science students in Kathmandu, Nepal. The prevalence of current tobacco consumption among health science students was found to be 22.6 percent, which is nearly equal to the previous study (24.2 percent) conducted in Private Medical College, Belgaum.⁹ In our study, hukkah consumption was relatively higher than the use of other tobacco products such as cigarette, betel nuts, paan, pinky, bidi or gutkha, whereas, in a study previously conducted, cigarette smoking consumption was higher than the use of other tobacco products like chewing tobacco, snuff, bidis, hukkah, cigar or pipes.⁷

The percent of students who had ever used or experimented with tobacco products was 51.4 percent, which was relatively high as compared to the previous study (27.1 percent).⁸ Among the ever tobacco users, 48.6 percent had quit using tobacco, which was very high as compared to previous study (3 percent) conducted in Belgaum.⁸

Majority of the tobacco products users (ever used and current users) were male as compared to females. A study conducted among health sciences students in Cuba and Mexico showed high substantial levels in females as well.⁹ Majority (37.8 percent) of the students in our study started using tobacco products at 18-19 years, which might comply to the previous study which reported that majority (63 percent) of them started at the age of 10-19 years¹⁰ and also the study conducted by Poudel et al. 2013 stated that 68 percentage of the respondents had started tobacco at the age of 11 to 20 years.¹¹ Majority (64.9 percent) of the respondents started using tobacco products due to curiosity in our study, whereas, in the study conducted in B.P. Koirala Institute of Health Sciences,

Nepal reported peer pressure as the major cause behind smoking (29.5%).¹²

CONCLUSIONS

Health science students are the health professionals of tomorrow. Thus, health professional students are expected to play a critical role in tobacco control by providing services, advocating for policies and serving as role models for social change. But, according to the findings, a large proportion of health science students, themselves, are involved in tobacco consumption. This implies that the knowledge has not necessarily translated into health behavioral outcomes.

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Not Applicable

CONFLICT OF INTEREST

None

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