

### **ORIGINAL ARTICLE**

## Prevalence of Tobacco Habits Among Health Care Students in Jaipur

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#### Abstract

A questionnaire based study to assess the prevalence of tobacco use among undergraduate health care students of Maharaja Vinayak Health Care campus in Jaipur was done on 219 students of dental, nursing, physiotherapy and occupational therapy students. Global Health professional students survey (GHPSS), survey questionnaire given by (CDC) centre for disease control Athlanta which is a standard pre-tested questionnaire for assessing prevalence of tobacco use among health care professionals around the world was used. The present study showed 25.11% prevalence of smoking and 13.70% prevalence of chewing tobacco. This reflect alarming situation and demands urgent anti tobacco & tobacco cessation measures to be adopted by health professionals, who happens to be health promoters & health role models for society

#### **Key Words**

Chewing Tobacco, Smoking, Dental Health

#### Introduction

Tobacco is the leading preventable cause of death and more than five million people die globally from the effects of tobacco every year-more than that of HIV/AIDS, malaria and tuberculosis. Every eight seconds someone, somewhere in the world, dies as a result of tobacco use (1). It is reported that by the year 2030, the death toll is likely to exceed eight million a year (2). It also reamins a major health problem in India as well (2). It has been reported that there is an increased trend of tobacco habits among the heathcare students perusing healthcare education like any other youths. Little attention has been given to the context of when and how healthcare students undergo attitudinal and behavioral changes with respect to their own smoking habits and alcohol consumption (3).Moreover, health professionals, who happens to be health promoters/educators & health role models for society in future can have negative impact on society if they themself are involved in tabacco consumption practise.Hence, the present study was undertake to assess the prevalence of tobacco use among undergraduate healthcare students of Maharaja Vinayak healthcare campus in Jaipur and to assess the tobacco use prevalence among health care students; to assess the

perceptions and attitudes of healthcare students towards participating in tobacco control and cessation activities and to suggest measures to involve healthcare professionals in tobacco cessation and other anti-tobacco interventions

#### **Material and Methods**

It was a cross sectional descriptive questionnaire based study.

#### **Inclusion** Criteria

All the 3<sup>rd</sup> yr and 4<sup>th</sup> yrs students belonging to below mentioned colleges in the health care campus, Dhand Jaipur were included in the study.

- 1. Jaipur Dental College
- 2. Jaipur Physiotherapy College
- 3. Jaipur Nursing College
- 4. Jaipur Occupational Therapy College

#### **Exclusion** Criteria

- 1. Post graduate students of all above mentioned colleges
- 2. Staff and doctors of all mentioned colleges
- 3. All other year students other then  $3^{rd}$  and  $4^{th}$  year

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#### Assessment

Global Health professional students survey (GHPSS)questionnaire given by (CDC)centre for disease control Atlanta which is a standard pre tested questionnaire for assessing the prevalence of tobacco use among health professionals around the world was used in the study. This questionnaire is also approved by World Heath Organization(WHO)(2).

#### Results

Life time prevalence of tobacco use among  $3^{rd}$  and  $4^{th}$  year students in Maharaja Vinayak Health care campus in Jaipur was 25.11%(*Table.1*).Male students were more found than female students to smoke cigarettes. Out of the 25.11% smoking student population almost 36.36% students  $1^{st}$  tried a cigarette at the age of 16-17 yrs, 27.27% at the age of 18-19 yrs and 11% at the age of 20-24 yrs.(*Table.2*) 3.64% had smoked cigarettes on school premises/property during past year(*Table.3*). Prevalence of using chewing tobacco among 3rdand4thyr health care students was13.70% (*Table.4*).

More than 80% of students of healthcare campus favoured complete ban on advertising of tobacco products (*Table.5*) More than 79% students wanted smoking to be banned in restaurants,only 15.07% students wanted smoking to be banned in discos,bars and pubs and more than 85% wanted smoking to be banned in public places (*Table.6*). More than 97% of healthcare students in Maharaja Vinayak campus think that health professionals should get specific training on cessation techniques (*Table.7*). More than 97% of students felt that the health professionals serve as role models for their patients and public (*Table.8*). 97.72% students were of the opinion that health care professionals should routinely advise their patients who smoke to quit smoking (*Table.9*).

More than 45% wanted to stop smoking cigarettes & 30% did not want to stop smoking among the 25.11% smoker students(*Table.10*). Among the 25.11% smoking student population more than 56% had received help or advice to stop smoking cigarettes and 43% had not (*Table.11*). Majority 67% of students believed that health professionals who smoke or use other tobacco products (chewing tobacco) are less likely to advice patients to stop smoking.(*Table.12 & 13*).

More than 72% had received during college training ,formal training in smoking cessation approaches to use with patients (*Table.14*).More than 79% had during their college training learned the importance to provide educational materials to support smoking cessation to patients who wanted to quit smoking (*Table.15*). More

Table 1. Showing	Prevalence	of Smoking n	ı (%)
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Sex			
History of smoking	Male	Female	Total
Yes	42 (19.18)	13 (5.94)	55 (25.11)
No	65 (29.68)	99 (45.21)	164 (74.89)
Total	107 (48.86)	1 12 (51.14)	219(100.00)

Table 2. Showing Age at Smoking n (%)

Sex			
Ageatsmoking	Male	Female	Total
<u>&lt;</u> 10	1 (1.82)	2 (3.64)	3 (5.45)
1 1- 15	3 (5.45)	2 (3.64)	5 (9.09)
16-17	16 (29.09)	4 (7.27)	20 (36.36)
1 8- 19	13 (23.64)	2(3.64)	15(27.27)
20-24	8 (14.54)	3 (5.45)	11 (20.00)
25-29	1 (1.82)	0 (0.00)	1 (1.82)
Total	42 (76.36)	13 (23.64)	55 (100.00)

Table 3. Prevalence of Smoking at School Premises n (%)

S ex			
Smoking at school premises	Male	Female	Total
Never	10 (18.18)	13 (23.64)	23 (41.82)
Yes No Total	2 (3.64) 30 (54.54) 42 (76.36)	0 (0.00) 0 (0.00) 13 (23.64)	2 (3.64) 30 (54.54) 55 (100.00)

 Table 4. Showing Prevalence of Chewing Tabacco n (%)

Sex			
Chewing tobacco	Male	Female	Total
Yes	25(11.41%)	5 (2.28%)	30 (13.70%)
No	82 (37.43) 107 (48.86)	1 07 (48.86) 1 12	189(86.30)
Total		(51.14)	219(100.00)

 Table 5. Percentage of Student Advocateing Ban on

 Advertisement of Tabacco Products n (%)

. Sex			
Chewingtobacco	Male	Female	Total
Yes	89 (40.64)	97 (44.29)	186(84.93)
No	18 (8.22)	15 (6.85)	33 (15.07)
Total	107 (48.86)	1 12 (51.14)	219 (100.00)

 Table 6. Percentage of Student Advocateing Ban on

 Smoking in Public Places n (%)

Smoking banned	No	Total
Restaurant	174	79.44%
D is cos, pu bs, b ar s	33	15.07%
Public Place	188	85.83%
Total	219	

Table 7. Percentage of Student Advocating Training n (%)

		_	_
	Se	x	
	Male	Female	Total
Yes	104 (47.49)	110 (50.23)	214 (97.71)
No Total	3 (1.37) 107 (48.86)	2 (0.91) 112 (51.14)	5 (2.28) 219 (100.00)

 Table 8. Percentage who Felt Health Professional act as

 Health Role Models for Society n (%)

Sex			
	Male	Female	Total
Yes	103 (47.03)	110 (50.23)	213 (97.26)
No Total	4 (1.83) 107 (48.86)	2 (0.91) 112 (51.14)	6 (2.74) 219 (100.00)



# Table 9. Percentage of Student Advocating Routine Advise to Quit Smoking to Patients n (%)

Sex			
	Male	Female	Total
Yes	104 (47.49)	110 (50.23)	214 (97.72)
No	3 (1.37)	2 (0.91)	5 (2.28)
Total	107 (48.86)	1 12 (51.14)	219 (100.00)

Table 10. % age of Student Wanted to Quit Smoking n (%)

	Sex		
	Male	Female	Total
I do not currently		13 (23.64)	13 (23.64)
sm ok e n ow	0 (0.00)		
Yes	25 (45.45)	0 (0.00)	25 (45.45)
No	17 (30.91)	0 (0.00)	17 (30.91)
Total	42 (76.36)	13 (23.64)	55 (100.00)

 Table 11. % age of Student Recieved Ever Advise to Quit

 Smoking n (%)

Sex			
Male	Female	Total	
26 (47.27)	5 (9.09)	31 (56.36)	
16 (29.09) 42 (76.36)	8 (14.54) 13 (23.64)	24 (43.64) 55 (100.00)	

Table 12. % age of Student who Believed that SmokerHealth Care Professionals Less Likely to AdvisePatients Smoking Cessation Practise

	Sex		
	Male	Female	Total
Yes	26 (47.27)	5 (9.09)	31 (56.36)
No Total	16 (29.09) 42 (76.36)	8 (14.54) 13 (23.64)	24 (43.64) 55 (100.00)

Table 13. % age of Student who Believed that TobaccoConsumer Health Care Professionals LessLikely to Advise Patients Tobacco Cessation

	S ex		Tatal	
	Male	Female	Total	
Yes	78 (35.62)	69 (31.51)	147 (67.12)	
No	29 (13.24)	43 (19.63)	72 (32.88)	
Total	107 (48.86)	1 12 (51.14)	219 (100.00)	

 Table 14. % age of Student who had Recieved Formal

 Training in Smooking Cessation Approaches

	S ex		Total
	Male	Female	TOTAL
Yes	72 (32.88)	86 (39.27)	158 (72.15)
No	35 (15.98)	26 (11.87)	61 (27.85)
Total	107 (48.86)	1 12 (51.14)	219 (100.00)

Table 15. % age of Student who had Recieved FormalTraining in Providing Educational Material toPatients for Smooking Cessation Approaches

	Sex		Total
	Male	Female	Total
Yes	83 (37.90)	91 (41.55)	174 (79.45)
No	24 (10.96)	21 (9.59)	45 (20.55)
Total	107 (48.86)	1 12 (51.14)	219 (100.00)

## Table 16. % age of Student who had Heard of using Nicotine Replacement Therapies

Sex			
	Male	Female	Total
Yes	56 (26.48)	83 (37.90)	1 3 9 (6 3.4 7)
No	51 (23.29)	29 (13.24)	80 (36.53)
Total	107 (48.86)	112 (51.14)	219 (100.00)

Table 17. % age of Student who had Heard of usingAnti depressants Therapies

Sex			
	Male	Female	Total
Yes	66 (30.14)	83 (37.90)	149 (68.04)
No	41 (18.72)	29 (13.24)	70 (31.96)
Total	107 (48.86)	1 12 (51.14)	219 (100.00)

than 63% students had heard of using nicotine replacement therapies in tobacco cessation programs (*Table.16*) and more than 68% had heard of using antidepressants in tobacco cessation programs (*Table.17*).

#### Discussion

There are various studies conducted in past to evaluate the knowledge, attitude and practice of tobacco use and smoking among health care professional as well as adolescents in past (4-9).

The findings in our study show tobacco use among health professional students at Jaipur campus are 25.11% (*Table 1*) and similar results were obtained by Sinha.*et.al* (5) who reported 28.2% students who smoked ciggerattes. Prevelence of 12.1% was reported by Shah M (4) which when compared with our study was significantly less.Which probably could be because of the fact the study doen by Shah M (4) was pilot survey.

A total of 22.4 percent students had ever used a tobacco product in a study from Jammu & Kashmir (9).

Where as, 46.83%) adolescent were tobacco users in a study doen in rural setup (8). In a meta analysis (6) the prevalence of smoking among medical students was suggested to varies widely between students of different countries and also between male and female students within the same countries. In their investigation, 22% of students (male and female) were smoking in the first year of study, a rate which rises to 27% by the sixth year. Roughly one-third (32.3%) original nonsmokers in the first year had also become smokers by the end of the sixth year at medical school.

In our study the prevelance of chewing habits were 13.70% which when compared with Sinha.*et.al* (5) was less who reported 22%. This may be ascribed to preference of cigerretes over chewing tobacco in the

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present study. In our study 79.44% students favoured banning of tobacco products in restaurants (Table 6), which was similar to Shah et.al.(4) who reported 83.9% students favouring bann in restaurants. In our study 15.07% students favoured bann smoking in dicos, bars & pubs (Table 16) which when compared with Shah et.al.(4) who reported 75% dental students in India favouring ban and Sinha.et.al (5) who reported 59% medical students in favour of bann. Students felt discos, bars and pubs are the only place where they can use these products as it is banned in all public places. More than 97% (Table 9) in our present study favoured that health professionals should routinely advise their patients to quit smoking, which when compared with Shah et.al.(4) who reported 95.1% and Sinha.et.al (5) who reported 96.9% were almost similar. More than 72% (Table14) had received formal training in smoking cessation approaches to use with patients which was almost similar to Shah et.al.(4) who reported 78.9% and Sinha.et.al (5) who reported 69.1% in medical students of India. In our study 63.47% (Table 16) had heard of using nicotine replacement therapies in tobacco cessation programs which were almost similar to results of Sinha.et.al (5) who reported 61.9% and Shah et.al. (4) who had reported 75.8%.

Health professional schools, Public health organisations and education officials should discourage tobacco use among health professionals and work togather to design and implement programmes that train all health professionals in effective cessation counselling techniques.GHPSS has shown significant unmet need for cessation assistance among students as well as gaps in professional training to provide similar effective assistance to their future patients.GHPSS is helpful in evaluating the behaviour and attitudes regarding tobacco among health professional students, but additional research is necessary to improve the evidence base for effective tobacco-related curricula, especially materials that are appropriate for a range of cultural and economic settings. If the goal of the tobacco control community is to reduce substantially the use of tobacco products, then resources should be invested in improving the quality of education of health professionals with respect to tobacco control. **Recommendations From The Study** 

- 1. Develop and promote effective cessation program to reduce tobacco use among healthcare students.
- 2. Strengthen and enforce the legislation aimed at smokefree healthcare campus premises and buildings.

- 3. Strengthen knowledge of healthcare students on harmful effects of smoking and second hand smoke on body in general and mouth in particular.
- 4. Improve curriculum and introduce healthcare campus based training programmes on tobacco use cessation approaches.
- 5. Promote involvement of upcoming healthcare professionals in public health advocacy for tobacco control.
- 6. Monitor the effectiveness of tobacco control agenda regular surveillance and periodic updates.

#### Conclusion

The study reflect alarming situation and demands urgent anti tobacco & tobacco cessation measures to be adopted by health professionals, who happens to be health promoters & health role models for society.Both tobacco control and tobacco cessation activities continue to remain important public & personal health issues.

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