# Attitudes and Curriculum Training of Ayush Health Professional Students Towards Tobacco Control and Cessation - A Cross Sectional Study in Bengaluru

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#### **ABSTRACT**

Introduction: Hardly any studies have been done to assess the attitudes towards tobacco control and formal educational training on tobacco cessation, among the AYUSH health professional students in Bengaluru. Aim: To assess the attitudes and curriculum training regarding tobacco control and cessation, among third year Ayurvedic, Yoga and Naturopathy, Unani, Homoeopathy undergraduate students in Bengaluru.

**Material and methods:** A descriptive cross sectional, GHPSS questionnaire based survey was conducted among 198 AYUSH health professional students.

Results: Majority (89-95%) of AYUSH health professional students agree with the ban on tobacco sales to adolescents, advertising of tobacco products, banning of smoking in restaurants, bars, pubs and discos and in all enclosed Public places. Majority (97.0%) of AYUSH students agreed that health professionals should get specific training on tobacco cessation techniques. Most (88%) of the AYUSH students agreed that health professionals should serve as role models for their patients and public. About fifty percent of the AYUSH students said that they had never heard of using nicotine replacement therapies and antidepressants in tobacco cessation programs.

Conclusion: Attitudes of AYUSH health professional students towards tobacco control and role of health care providers in tobacco cessation is favorable. Training about tobacco cessation approaches given to AYUSH health professional students in their curricula should include information about available nicotine replacement therapies and other modalities to enable them to counsel their patients against tobacco use.

**Keywords:** AYUSH Health Professional Students, Tobacco Control, Cross Sectional Survey, Attitude.

## INTRODUCTION

"The Role of Health Professionals in Tobacco Control" was the theme of the World Health Organization's (WHO) 'World No Tobacco Day' in 2005. ¹But, health professionals may not be aware of their fundamental role to help people quit smoking although they are in an ideal position to advise and educate patients about the dangers of smoking. Several surveys have shown that tobacco use is prevalent among students of health professions and their approach and credibility as future treatment providers may be influenced by their own smoking habits.²

AYUSH is an acronym for Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy and are the six Indian systems of medicine prevalent and practiced in India and some of the neighboring Asian countries with very few exceptions in some of the developed countries. Therefore these health professionals form a significant segment of the health care workforce available to provide tobacco cessation services to the people of India. This study was done to assess the attitudes of AYUSH health

professional students in Bangalore to the ban on tobacco use, role of health care providers in tobacco cessation and training about tobacco use and cessation approaches given to AYUSH health professional students in their curricula.

### MATERIAL AND METHODS

A descriptive cross sectional questionnaire study, based on the methodology of the Global Health Professional Student Survey (GHPSS) was carried out during May-August 2015, with due ethical clearance, among third year undergraduate degree students of four Ayurveda, two Homeopathy, one Unani and one Naturopathy and Yogic sciences teaching institutions affiliated to the Rajiv Gandhi University of Health Sciences<sup>5</sup> in Bangalore, during regular class hours. An anonymous, self-administered GHPSS core questionnaire with India-specific questions was used to collect data on the attitudes and curriculum training regarding tobacco control and cessation. Total enumeration method was followed and third year undergraduate AYUSH students who were present on the day of data collection and willing to provide informed consent were included in the study.

### STATISTICAL ANALYSIS

Microsoft office 2007 was used for the statistical analysis. Descriptive statistics like mean and percentages were used for the analysis.

# **RESULTS**

Among the 198 respondents who participated in the study, majority were in the age group 19-24 years and 74% (n=146) were females; 58% (n=116) were from Ayurveda, 21% (n=42) from Homeopathy, 13% (n=23) from Unani and 8% (n=17) were from Naturopathy and Yogic science.

# Attitudes

Most (89.9%) of the AYUSH health professional students agreed that tobacco sales to adolescents should be banned. Among them highest percentage (97.6%) belonged to Homeopathy and least percentage (70.6%) belonged to Yogic sciences discipline. About ninety percent (88.9%) of AYUSH students agreed

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Questions	Ayurveda	veda	Yo	Yoga	Unani	ıni	Homeopathy	pathy	To	Total	Ь
	(n=116,100%)	(%001)	(n=17,100%)	(%001	(n=23,100%)	(%001	(n=42,100%)	(%001			value
	yes	0u	yes	0u	yes	0U	yes	$N_0$	yes	0u	
Should tobacco sales to adolescents be banned?	104	12	12	5	21	2	41	1	178	20	.020
	%2.68	10.3%	%9.07	29.4%	91.3%	8.7%	%9.76	2.4%	%6.68	10.1%	
Should there be a complete ban of the advertising of tobacco products?	106	10	13	4	19	4	38	4	176	22	0.221
	91.4%	8.6%	76.5%	23.5%	82.6%	17.4%	%5.06	9.5%	%6.88	11.1%	
Should smoking be banned in restaurants?	112	4	14	3	22	1	42	0	190	8	0.019
	%9.96	3.4%	82.4%		95.7%	4.3%	100.0%	%0	%0.96	4.0%	
				17.6%							
Should smoking be banned in discos/bars/pubs?	95	21	11	9	20	3	36	9	162	36	.242
	81.9%	18.1%	64.7%	35.3%	87.0%	13.0%	85.7%	14.3%	81.8%	18.2%	
Should smoking in all enclosed public places be banned?	111	5	17	0	22	1	40	2	190	∞	.850
	95.7%	4.3%	100.0%	%0	95.7%	4.3%	95.2%	4.8%	%0.96	4.0%	
Table-1: A	titudes of A	YUSH healt	Table-1: Attitudes of AYUSH health professional students to ban on tobacco use	al students t	o ban on tob	acco nse					

Questions	Ayuı	Ayurveda	Yo	Yoga	Unani	ımi	Homeopathy	pathy	Total	tal	Ь
	(n=116	(n=116,100%)	(n=17,100%)	(%001	(n=23,100%)	(%001	(n=42,100%)	(%00)			value
	yes	0u	yes	0u	yes	no	yes	No	yes	no	
Should health professionals get specific training on cessation tech-	111	5	17	0	23	0	41	1	192	9	.581
niques?	95.7%	4.3%	100.0%	%0	100%	%0	%9.76	2.4%	%0.76	3.0%	
Do health professionals serve as "Role models" for their patients and	104	12	16	1	23	0	32	10	175	23	.020
the public?	%2.68	10.3%	94.1%	2.9%	100%	%0	76.2%	23.8%	88.4%	11.6%	
Should health professionals routinely advice their patients their patients	110	9	16	1	22		42	0	190	8	.511
who smoke to quit smoking	94.8%	5.2%	94.1%	2.9%	95.7%	4.3%	100.0%	%0	%0.96	4.0%	
Should health professionals routinely advice their patients who use	103	13	15	2	22	-	42	0	182	16	.114
other tobacco products to quit using these products?	%8.8%	11.2%	88.2%	11.8%	95.7%	4.3%	100.0%	%0	91.9%	8.1%	
Do health professionals have a role in giving advice or information	110	5	15	2	23	0	41	1	190	8	.273
about smoking and tobacco cessation to patients?	95.7%	4.3%	88.2%	11.8%	100.0%	%0	%9.76	2.4%	%6.56	4.1%	
Are a patient's chances of quitting smoking and tobacco use increased	93	22	13	4	18	5	35	7	160	38	826.
if a health professional advices him or her to quit?	80.2%	19.0%	76.5%	23.5%	78.3%	21.7%	83.3%	16.7%	80.3%	19.2%	
Table-2: Attitudes of AYUSH		essional st	dents to the	role of heal	th care prov	iders in toba	health professional students to the role of health care providers in tobacco cessation	u			

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Questions During your college training:	Ayuı	Ayurveda	Λ.	Yoga	Cn	Unani	Home	Homeopath	To	Total	P value
	(n=116	(n=116,100%)	(n=17,	(n=17,100%)	(n=23,	(n=23,100%)	(n=42,	(n=42,100%)			
	yes	0u	yes	0U	yes	0U	yes	No	yes	0u	
Were you taught in any of your classes about the dangers of smoking?	94	22	15	2	19	4	39	3	167	31	.319
	81.0%	19.0%	88.2%	11.8%	%9.78	17.4%	92.9%	7.1%	84.3%	15.7%	
Did you discuss in any of your classes the reasons why people smoke?	69	47	13	4	13	10	33	6	128	70	.085
	59.5%	40.5%	76.5%	23.5%	%5'95	43.5%	78.6%	21.4%	64.6%	35.4%	
Did you learn that it is important to record tobacco use history as part	101	15	15	2	20	3	42	0	178	20	0.111
of a patient's general medical history?	87.1%	12.9%	88.2%	11.8%	%0.78	13.0%	100.0%	%0	%6.68	10.1%	
Have you ever received any formal training in smoking cessation	37	62	9	11	~	15	15	27	99	132	996.0
approaches to use with patients?	31.9%	68.1%	35.3%	64.7%	34.8%	65.2%	35.7%	64.3%	33.3%	%2'99	
Did you learn that it is important to provide educational materials to	92	24	13	4	16	7	36	9	157	41	0.482
support smoking cessation to patients who want to quit smoking?	79.3%	20.7%	76.5%	23.5%	%9.69	30.4%	85.7%	14.3%	79.3%	20.7%	
Have you ever heard of using nicotine replacement therapies in tobacco	51	65	12	5	11	12	19	23	93	105	0.232
cessation programs (such as nicotine patch or gum)?	44.0%	%0.95	%9.02	29.4%	47.8%	52.2%	45.2%	54.8%	47.0%	53.0%	
Have you ever heard of using antidepressants in tobacco cessation	52	63	6	~	10	13	18	24	68	109	0.975
programs (such as bupropion or Zyban)?	44.8%	54.3%	52.9%	47.1%	43.5%	26.5%	42.9%	57.1%	44.9%	54.5%	
Table-3: Training about tobacco use and cessation approaches given to AYUSH health professional students in their curricula	use and cess	ation approa	ches given t	o AYUSH h	ealth profess	ional studen	its in their cu	urricula			

that there should be complete ban on advertising of tobacco products. Among them highest percentage (91.4%) belonged to Ayurveda and least percentage (76.5%) belonged to Yogic sciences discipline.

Majority (97.0%) of AYUSH students agreed that health professionals should get specific training on tobacco cessation techniques. Among them highest percentage (100.0%) belonged to Yogic sciences and Unani health professional students. Least percentage (95.7%) belonged to Ayurveda discipline.

About eighty- eight (88%) percent of AYUSH students agreed that health professionals should serve as Role models for their patients and public. Among them highest percentage (100.0%) belonged to Unani and least percentage (76.2%) belonged to Homeopathy discipline.

About eighty percent (80.3%) of AYUSH students agreed that patients' chances of quitting smoking and tobacco use increased if a health professional advises him or her to quit. Among them highest percentage (83.3%) belonged to Homeopathy and least percentage (76.5%) belonged to Yogic sciences discipline.

# **Curriculum training**

Nearly ninety percent (89.9%) of AYUSH students across all disciplines agreed that during their college training, they learn that it is important to record tobacco use history as part of a patient's general medical history. Among them highest percentage (100%) belonged to Homeopathy and least percentage (87.0%) belonged to Unani discipline.

About sixty seven percent (66.7%) of AYUSH students across all disciplines agreed that during their college training, they had never received any formal training in smoking cessation approaches to use with patients. Among them highest percentage (68.1%) belonged to Ayurveda and least percentage (64.3%) belonged to Homeopathy discipline.

About eighty percent (79.3%) of AYUSH students agreed that during their college training, they had learnt that it is important to provide educational materials to support smoking cessation to patients who want to quit smoking. Among them highest percentage (85.7%) belonged to Homeopathy and least percentage (69.6%) belonged to Unani discipline.

#### **DISCUSSION**

Although AYUSH is an acronym for Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy, Siddha is not included in the present study because it is not a recognized discipline among the courses coming under the purview of the AYUSH health sciences, as per the norms of the Rajiv Gandhi University of Health Sciences.<sup>5</sup>

# Attitudes of AYUSH health professional students to ban on tobacco use

The majority of Ayurveda (89.7%), Yogic sciences (70.6%), Unani (91.3%), and Homeopathy (97.6%) health professional students think that tobacco sales to adolescents should be banned which is similar to the results of GHPSS Slovakia: 2005,<sup>6</sup> Saudi Arabia: 2010-11,<sup>7</sup> Bahrain: 2009.<sup>8</sup>

A greater percentage of Ayurveda (91.4%), Yogic sciences (76.5%), Unani (82.6%), and Homeopathy (90.5%) health professional students supported a complete ban on advertising of tobacco products, similar to that reported by GHPSS Slovakia: 2005, <sup>6</sup> Saudi Arabia: 2010-11, <sup>7</sup> Bahrain. <sup>8</sup>

In this study, all Unani (100.0%) health professional students

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and most Yogic sciences (94.1%), Ayurveda (89.7%) and Homeopathy (76.2%) health professional students across all disciplines expressed their opinion that health professionals serve as role models for their patients and public, similar to the results obtained from the GHPSS India: 2005-09 <sup>9</sup> and Egypt: 2005. <sup>10</sup>

Current study result show that Homeopathy (83.3%), Ayurveda (80.2%), Yogic sciences (76.5%) and Unani (78.3%) health professional students thought that patients' chances of quitting smoking and tobacco use increased if a health professional advises him or her to quit. This result is more than the results of Slovakia: 2005.<sup>6</sup> Health professional colleges need to implement tobacco control measures and provide training to health professions students to acknowledge their role in tobacco control

Training about tobacco use and cessation approaches given to AYUSH health professional students in their curricula.

In this study, majority of students agreed they had learnt about the importance of recording patients' tobacco use history as a part of general medical history: Homeopathy (100.0%), Ayurveda (87.1%), Yogic sciences (88.2%) and Unani (87.0%), similar to that of GHPSS Slovakia:2005 6 results. From this study, only around 35% of respondents among Homeopathy (35.7%), Yogic sciences (35.3%), Unani (34.8%), Ayurveda (31.9%) health professional students learnt cessation approaches to use with patients during their college training, which is almost similar to the results of GHPSS Sudan11 and GHPSS result data of Slovakia: 2005.6 A little more than half (53%) of the AYUSH health professional students had never heard of using Nicotine replacement therapies in tobacco cessation programs, in contrast to other health professional students in Jaipur (63.47%)<sup>12</sup> who agreed that they had heard of using Nicotine replacement therapies in tobacco cessation programs.

About half (54.5%) of the AYUSH health professional students across all disciplines had never heard of using antidepressants (such as bupropion or zyban) in tobacco cessation programs. These differences in exposure to tobacco control measures between AYUSH health professional students and those from other healthcare streams may be due to the difference in the syllabus being followed by the different disciplines of health care. This study contributes valuable information about the AYUSH health professional students of this area, and may help in the decision to include tobacco cessation education into future AYUSH health professional students' curriculum.

Although confidentiality and anonymity were maintained in this self-reported cross-sectional questionnaire study, it may have some social desirability bias. Future studies at national level can be taken up for representativeness. Nevertheless, this was the first time such a survey was conducted in these AYUSH health professional colleges in Bengaluru using a standardized methodology.

# **CONCLUSION**

Attitudes of AYUSH health professional students towards tobacco control and role of health care providers in tobacco cessation is favorable. Training about tobacco cessation approaches given to AYUSH health professional students in their curricula should include information about available nicotine replacement therapies and other modalities to enable

them to counsel their patients against tobacco use.

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