

## A questionnaire study to assess the clinician's practice perspectives barriers and need for the training related to tobacco cessation

Amar Kumar<sup>1\*</sup>, Sanjiw Kumar<sup>2</sup>

<sup>1</sup>Tutor, Department of Community Medicine, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar, India

<sup>2</sup>Tutor, Department of Community Medicine, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar, India

Received: 07-09-2020 / Revised: 14-10-2020 / Accepted: 23-11-2020

### Abstract

**Aim:** To assess the clinician's practice perspectives barriers and need for the training related to tobacco cessation.

**Methods:** A cross-sectional descriptive study was conducted to explore tobacco cessation practices of clinicians in the Department of Community Medicine, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar, India from 1 year. Pre-tested, pre-structured self-administered questionnaire was distributed to all the clinicians in person. All the Professors, Associate Professors, Assistant Professors, Senior Residents and Junior Residents in the departments coming in contact with smokers were included in the study and patients were also interviewed to assess their smoking status, willingness to quit and counselling by physicians using pre-structured oral questionnaire.

**Results:** Almost 86% of clinicians said they ask about smoking history but only 50 % said they assess patients' willingness to quit smoking. 32 % assist patients to quit smoking and 28 % arranged follow up visits. 26% of clinicians mentioned undergraduate and postgraduate training prepared them to help patients quit smoking. Remaining said it was inadequate. All agreed that it is their role to help, motivate, discuss, speak, refer and monitor patients who smoke to quit. **Conclusions:** Majority of the doctors believed that they play a very important role in tobacco cessation activities. There is a need for Undergraduate and postgraduate skill based training to assist patients quit the tobacco habit. The study showed a need for adherence and reinforcement of tobacco cessation guidelines.

**Keywords:** 5 A's, Hassan, Physician KAP, Quitting tobacco.

This is an Open Access article that uses a fund-ing model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided the original work is properly credited.

### Introduction

Tobacco is the most important public health hazard globally. It kills more people than any other lifestyle risk factor, in fact it kills more than all other risk factors put together. It is found that cessation of tobacco is accompanied by immediate positive impact on the health of the tobacco user. Many interventions have been attempted to decrease the use of tobacco like increasing the tax on tobacco products, laws to prohibit tobacco in public places, health education in the form of printed material. All these have not resulted in significant decrease in tobacco use.

The most significant step would be the health education imparted by clinicians during the consultation of a patient. Patient will be receptive for health advice during his illness. Are we as clinicians are willing to educate, motivate and reinforce people to quit smoking? Are we aware of the hazards of smoking? Is our training adequate to undertake this important health intervention task? These issues shall be studied Tobacco is one legally available drug that kills people prematurely. In 2015, over 1.1 billion people smoked tobacco. WHO has estimated that tobacco use (smoking and smokeless) is currently responsible for the death of about six million people across the world each year with many of these deaths occurring prematurely.[1] There is currently about 240 million tobacco users aged 15 years and above (195 million male users and 45 million female users) in India.[2]

### \*Correspondence

**Dr. Amar Kumar**

Tutor, Department of Community Medicine, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar, India .

E-mail: [ashokamax@gmail.com](mailto:ashokamax@gmail.com)

Cigarette smoking has long been identified as one of the leading causes of preventable death, disability, and healthcare burden.[3] Under a UN mandate to address four noncommunicable diseases (NCDs), the agreed global tobacco target is 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years.[1] 46.6% current smokers planned to quit or at least thought of quitting. Global Adult Tobacco Survey showed 46.3% of smokers were advised to quit by health care provider. As most of the smokers visit a doctor for various health related ailments and thus these clinic visits provide many opportunities for interventions and professional cessation advice.[4,5] Health care professionals who advise a patient to quit can increase patient's success rate by more than 30%.[6,7] Thus health care providers can play a key role in helping patients quit the smoking habit. A better understanding of the factors that facilitate or impede physician participation in cessation activities will help to design policies and programs to further reduce smoking.[5]

There is a need to study the current knowledge, attitude and practice of patient smoking cessation activities by clinicians of our hospital. Thus the study was designed to assess the physician practices, perspectives, resources, barriers and education relating to tobacco cessation and their perceived need for training for the same.

#### Material and Methods

A cross-sectional descriptive study was conducted in the Department of Community Medicine, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar, India.

The study protocol was reviewed by the Ethical Committee.

#### Methodology

The survey was conducted among practicing clinicians in the following specialties namely General Medicine, General Surgery, Psychiatry and Others (which included Ear, Nose and Throat, Ophthalmology, Dentistry, Orthopaedics and Community Medicine). All Professors, Associate Professors, Assistant Professors, Senior Residents and Junior Residents were given self-administered questionnaires. Questionnaire used by American Medical Colleges Association was modified according to local context and used for the study.[6] Filled up questionnaire was collected after 5 days of distributing the questionnaire. If the questionnaire not returned within a week also, the participants was contacted and reminded in person up to a maximum of 2 times. Those who did not respond even after three reminders were considered as non-responders. Information was sought regarding physician's primary details, practices using 5 A's (Ask, Assess, Advise, Assist, Arrange follow-up), perspectives, resources, barriers, education and training regarding tobacco cessation using a modified version of the questionnaire. Inpatients from the specialties was randomly selected. Apart from general information details regarding sociodemographic profile, chronic diseases, smoking status, willingness to quit etc. was collected. Questions related to physicians counselling practice was also asked.

#### Statistical Analysis

The recorded data was compiled and entered in a spreadsheet computer program (Microsoft Excel 2010) and then exported to data editor page of SPSS version 19 (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics included computation of percentages.

#### Results

**Table 1: Smoking cessation practices as reported by clinicians and patients**

Percentage of physician who "usually"	Clinicians N=50 n (%)	Patients N = 150 n (%)	
		N*	n (%)
Ask about smoking status	43(86)	150	98 (65.33)
Advice patients to stop smoking	46 (92)	90	72 (80)
Asses patient willingness to quit	25(50)	90	28 (31.11)
Assist patient to quit smoking	16 (32)	90	26 (28.89)
Refer patients who smoke to others for appropriate cessation treatment	16 (32)	90	15 (16.67)
Monitor patient progress in attempting to quit	8 (16)	90	9 (10)
Arrange follow up visits with patient to address smoking	14 (28)	90	9 (10)

N = 150 inpatients were asked if they were asked about their smoking status; \*Nonsmokers were excluded from further questions

**Table 2: Smoking cessation practices by study specialty**

	Medicine N=5 N (%)	Surgery N=13 N (%)	Ortho N=12 N (%)	Psychiatry N=2 N (%)	Others N=18 N (%)	p value
Ask about smoking status	5 (100)	13 (100)	11 (91.67)	1 (50)	14 (77.78)	0.05
Advice patients to stop smoking	5 (100)	12 (92.30)	12 (100)	2 (100)	17 (94)	0.74
Asses patient willingness to quit	4(80)	10 (76.92)	5 (41.67)	2 (100)	6 (33.33)	0.00
Assist patient to quit smoking	3 (60)	6 (46.15)	4 (33.33)	1 (50)	6 (33.33)	0.49
Refer patients who smoke to others for appropriate cessation treatment	4 (80)	5 (38)	4 (33.33)	2 (100)	5 (27.78)	0.05
Monitor patient progress in attempting to quit	1 (20)	6 (46.15)	0	1 (50)	2 (11.11)	0.01
Arrange follow up visits with patient to address smoking	3(60)	5 (38)	2 (6.67)	1 (50)	4 (22.22)	0.04
Treatment strategies usually prescribed						
Pharmacotherapy		4 (30.77)	3(25)	1 (50)	6 (33.33)	0.00
Counseling	2(40)	4 (30.77)	7(58.33)	1 (50)	6 (33.33)	0.21

**Table 3: Treatment strategies, training and education**

	N (%)	N (%)	N (%)
How often do you discuss treatment strategies with patients	Never	Sometimes	Usually
Pharmacotherapies	17 (34)	28 (56)	5 (10)
Counseling	11 (22)	15(30)	24 (48)
Enlist support	14 (28)	20 (40)	16 (34.7)
Training and education	Not at all	Inadequate	Very well
Under graduate medical education	8 (16)	29 (58)	13 (26)
Graduate medical education	4 (8)	33 (66)	13 (26)
Continued medical education	7 (14)	20 (40)	23(46)
Knowledge of tobacco de addiction centre	Yes	No	Don't know
De addiction centre at work place	3(6)	36 (72)	13(26)
Other de addiction centre in city	20 (40)	28 (56)	2(4)

**Table 4: Physician perspectives, barriers and pharmacotherapies prescribed**

Yes n (%)	
Doctors perspective on physician's role in addressing smoking cessation	
Help patients who are motivated to stop smoking	49 (98)
Motivate patients to stop smoking	50 (100)
Discuss smoking behavior with patients	45 (90)
Speak with family about supporting the patients in trying to quit smoking	46 (92)
Refer smokers to others for treatment	40 (80)
Monitor patient progress in attempting to quit	42 (84)
Discuss relapse with the patients	45 (90)
Establish smoking cessation practices for staff	46 (92)
<b>Significant barriers reported</b>	
Time with patients is limited	13 (26)
Coverage for cessation interventions is limited	7 (15.9)
Patients have more immediate problems to address	22(44)
Patients are not motivated to quit	15 (30)

My experience with intervening with smokers is limited	20 (40)
Other practice priorities reduce my ability to address smoking with patients	24 (48)
Cessation heightens patients with other symptoms	36 (72)
Patients usually fail to quit	19 (38)
No financial incentive	35 (70)
<b>Pharmacotherapies prescribed</b>	
Nicotine gum	10 (20)
Bupropion	Nil
Nicotine patch	4 (8)
Nicotine lozenge	1 (2)
Nicotine nasal spray	Nil
None	33 (66)

**Table 5: Physician general knowledge about tobacco use and treatment intervention**

	Clinical findings	Agree	Disagree
Physician advice motivates patient to quit (USPHS)	True	43 (86)	7 (14)
Smoking is a chronic relapsing disorder (An et.al.,)	True	48(96)	2 (4)
Intensive intervention are more effective than brief treatment (USPHS)	True	41 (82)	9 (18)
Smoking cessation interferes with recovery from chemical dependence (Bobo et al.,1999; pletcher 1993)	False	24 (48)	30 (60)
Medication is effective only when accompanied by counseling (hughes 1999)	False	48 (96)	2 (4)

Citation for the literature given with each statement[5,6,8-11]

### Discussion

In India, the proportion of all deaths that can be attributed to tobacco use is expected to rise substantially in the next few years, unless tobacco users are encouraged to quit.[8-10]

In this regard, health care professionals due to their position in society, have a unique role in tobacco control.[11]Randomized controlled trials have demonstrated that brief more advice from a health professional increases abstinence rates significantly by 30% as compared to no advice.[12] Therefore, every opportunity available must be utilized to offer tobacco cessation interventions actively in routine clinical practice.[13] In the present study 92% of the physician's advice to quit smoking, however 86% of them ask about the smoking status, but only 32% of them assist the patient to quit and 28% arrange follow up visits. It is clear from the study that such assistance is not being provided. The results were like other studies. In a study conducted by Association of American Medical Colleges, about 86% physicians advised the patients to quit smoking, 84% asked about the patients smoking status, 63% assessed patient's willingness to quit and 17% arranged followup.[6,14] In another study conducted by Sujatha S et al, 100% of the patient were asked about tobacco use but only 27% of the physician's advice the patient to quit tobacco and

9% arranged follow up. According to various Indian studies, most doctors did not ask for or suggest methods to quit tobacco.[15,16] However, in all the studies the physician participation was very low in providing assistance to quit and arrange regular follow-up. Thus, physicians must be encouraged to regularly assist and arrange follow-up with the patients. Present education system is failing to impart the necessary skills to physicians needed to help patients quit smoking. Just 26% of physician believe that the skills learned during undergraduates were adequate to tackle the problem. In another study, almost 100% of the physician believe that the skills learned during undergraduates was inadequate.[14] Study done at Mysore by Saud et al, found only 18% were satisfied that undergraduate and postgraduate training was adequate.[5] The study also highlighted that the reforms in education are needed so as to prepare the physician to effectively address the problem. Understanding factors that could improve education and training in the field of tobacco cessation is important as participation of physician will improve in smoking cessation activities in their patient care. The Undergraduate and Post Graduate curriculum should incorporate sufficient training in tobacco cessation strategies. Conducting continued medical education

programs in this regard are also needed to address this problem.[5]

In the present study 48% of the physician believe that their knowledge regarding smoking cessation activities are limited. The other barriers were time factor and other practice priorities. The results were similar to study conducted in Odissa and Kerala.[17,18] Large numbers of the physicians are not familiar with 5A's or 5R's guideline of tobacco cessation, whereas nearly half of the physicians do not know how to apply even though they have the knowledge.[17] It has been proved that pharmacotherapies almost double quit rates yet it is clear from the study that only one third of doctors regularly use pharmacotherapies. The results were similar to the study done in Odissa.[19] Thus, physicians should be encouraged to prescribe pharmacotherapies wherever warranted. In the present study only 46% of the physician had knowledge of de-addiction centre. Hence awareness regarding tobacco de-addiction centers is to be made both among doctors and patients and hence that the patients are referred for appropriate cessation treatment. Average time spent by most physicians with patients discussing to quit smoking at each visit was around 3 min. The results were similar to the other study done in Bangaluru.[4,15] This is one of the very few studies in India to document doctor's reported practices to promote tobacco cessation among their patients. The strength of the study is that it compares physicians in different specialties. Medical college doctors play a crucial role in grooming the future doctors hence correct knowledge attitude and practice is vital.

### Conclusion

Majority of the doctors believed that they play a very important role in tobacco cessation activities. There is a need for Undergraduate and postgraduate skill based training to assist patients quit the tobacco habit. The study showed a need for adherence and reinforcement of tobacco cessation guidelines.

### References

1. WHO.INT. WHO global report on trends in tobacco smoking 2000-2025. Available from <http://www.who.int/gho/tobacco/use/en/>.
2. Reddy KS, Gupta PC. Report on Tobacco control in India. Government of India, Ministry of Health and family welfare. 2004.
3. WHO.int. Government of India. Ministry of health and family welfare. Global Adult Tobacco Survey (GATS) Fact sheets 2009-2010 available from [http://www.who.int/tobacco/surveillance/en\\_tfi\\_india\\_gats\\_fact\\_sheet.pdf](http://www.who.int/tobacco/surveillance/en_tfi_india_gats_fact_sheet.pdf).
4. Myra A Crawford, Lesa L Woodby, Toya V Russell et al. Tobacco use assessment and counselling practices among Alabama primary care physicians. *Quality in Primary Care*. 2005;13:163-70.
5. Saud M, Madhu B, Srinath KM, Ashok NC, Renuka M. Physicians practice and perspectives regarding tobacco cessation in a teaching hospital in Mysore city, Karnataka. *Indian J Psychiatry*. 2014;56:24-8.
6. Legacy for health. org. Association of American Medical College. Physician Behaviour and practice patterns related to smoking cessation: A Report prepared for the American Legacy Foundation. 2007. Available from: [http://www.legacyforhealth.org/PDFPublications/Physicians\\_Study.pdf](http://www.legacyforhealth.org/PDFPublications/Physicians_Study.pdf)
7. Mallin R. Smoking cessation: Integration of behavioral and drug therapies. *Am Fam Physician*. 2002;65:1107-14
8. Pletcher VC. Nicotine treatment at the Drug Dependency Program of the Minneapolis VA Medical Center. A program director's perspective. *J Subst Abuse Treat*. 1993;10:139-45
9. Hughes JR. Four beliefs that may impede progress in the treatment of smoking. *Tob Control*. 1999;8:323-6.
10. Hughes JR. Motivating and helping smokers to stop smoking. *J Gen Intern Med* 2003;18:1053-7.
11. Tobacco Use and Dependence Guideline Panel. Treating Tobacco Use and Dependence: 2008 Update. Rockville (MD): US Department of Health and Human Services; 2008. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK63952/>.
12. Fiore MC, Baily WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz ER et al. Treating tobacco use and dependence, clinical practice guideline. Rockville (MD): Public Health Service, US Department of Health and Human Services; 2000. Available from: <http://www.surgeongeneral.gov/tobacco/tobagrg/htm>.
13. Richmond RL. Physicians can make a difference with smokers: Evidence-based clinical approaches. Presentation given during the Symposium on Smoking Cessation at the 29th World Conference of the IUATLD/UICTMR and Global Congress on Lung Health, Bangkok, Thailand, 23-26 November 1998. International Union Against Tuberculosis and Lung Disease.

- 
- Int J Tuberc Lung Dis. 1999;3(2):100-12.
14. Sujatha S, Iyengar A, Pruthvish S, Shivraj N. Tobacco Cessation Practices among Dental Health Professionals in Bengaluru City. *J Inter Oral Health*. 2015;7(10):1-5.
  15. Murthy P, Saddichha S. Tobacco cessation services in India: Recent developments and the need for expansion. *Indian J Cancer* 2010;47 Suppl 1:69-74.
  16. Tomar SL, Husten CG, Manley MW. Do dentists and physicians advise tobacco users to quit? *J Am Dent Assoc*. 1996;127(2):259-65.
  17. Sangamithrapatil. 5A Tobacco Cessation Strategy and Physician's Practice in Odisha, India: A Cross-Sectional Study, *Int J Prev Med*. 2014;5(3):325-32.
  18. Thankappan KR, Pradeepkumar AS, Nitcher M. Doctor's behavior and skills for cessation of tobacco in Kerala. *Indian J Med Res*. 2009;129:249-55.
  19. Pati S. A study on tobacco cessation practice among general practitioners in Orissa (India) *Lung Cancer*. 2005;49:195.

**Conflict of Interest: Nil**

**Source of support: Nil**