International Journal of Community Medicine and Public Health
Sumana M et al. Int J Community Med Public Health. 2017 Mar;4(3):634-639
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20170509

Original Research Article

Clinician's practices and perspectives regarding tobacco cessation in a teaching Hospital, Karnataka, India

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Received: 16 January 2017
Revised: 16 January 2017
Accepted: 20 January 2017

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ABSTRACT

Background: Cessation of tobacco is important to prevent non-communicable diseases and mortality. Smokers frequently approach doctors for various health ailments. This opportunity can be utilized to give tobacco cessation advice. This study aims to assess the clinician's practice perspectives barriers and need for the training related to tobacco cessation.
Methods: A cross-sectional study was conducted to explore tobacco cessation practices of clinicians of a teaching hospital attached to Medical College in Hassan, Karnataka, India. 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 84.4% of clinicians said they ask about smoking history but only 50.9% said they assess patients' willingness to quit smoking. 37% assist patients to quit smoking and 29.8% arranged follow up visits. 25% 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

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]

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.

METHODS

A cross sectional study was carried out in the teaching hospital attached to Medical College in Hassan over a three months' period from June to August 2016. 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 3 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 3 times. Those who did not respond even after three reminders were considered as non-responders.

Information was sought regarding physician's primary details (like designation and department), 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 specialities 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.

Ethical clearance

Ethical clearance was obtained from Institutional Ethics Committee of Hassan Institute of Medical Sciences, Hassan. Informed consent was obtained from the participants prior to the survey.

Statistical analysis

Descriptive statistics like proportion (percentage) was calculated for qualitative data. To test the association between categorical variables Chi-square test was applied. Analysis was performed with Epi.info version 7.2 and $P<0.05$ was statistically significant.

RESULTS

Out of 72 in the selected departments included in the study 58 (80.5%) clinicians participated in the study by returning the completed questionaire in the specified time period. Among 58, distribution of the clinicians by medical faculty was as follows: medicine 6 (11%), surgery 14 (24%), orthopaedics 11 (19%), psychiatry 2 (3.4%), others 25 (43.1%) departments. Other departments included ENT, Oncology, Dental, Ophthalmology, pulmonology and skin.

Almost 84.4% of clinicians said they ask about smoking history. 94.8% advice patients to stop smoking but only 50.9% said they assess patients' willingness to quit smoking. 37% assist patients to quit smoking and 29.8% arranged follow up visits (Table 1). All the physicians and surgeons mentioned they Ask patients for the smoking history. Clinicians in Medicine department 'usually' prescribed pharmacotherapies more than other specialties. Clinicians cessation activities varied from department to department (Table 2).

Average time spent on each visit by clinicians discussing with patient about quitting tobacco was 2 min in 59%, 36% spent 2-5 min, 3.4% spent 5-10 min time to discussed with patients about quitting tobacco (Figure 1). 46% said they 'usually' discussed counselling option with smokers. Most of them said they would practice face to face brief counselling.

25% of clinicians mentioned undergraduate and postgraduate training prepared them to help patients quit

smoking. Remaining said it was inadequate or not at all useful. 6.9% knew where the De addiction centre at workplace was. 43% knew where other de addiction centres in city.

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

Percentage of physician who "usually"	Clinicians N=58 n (%)	Patients N = 100 n (%)	
		N*	n (%)
Ask about smoking status	49 (84.4)	120	79 (65.8)
Advice patients to stop smoking	55 (94.8)	73	58 (79.4)
Asses patient willingness to quit	28 (50.9)	73	40 (29.2)
Assist patient to quit smoking	21 (36.8)	73	20 (27.3)
Refer patients who smoke to others for appropriate cessation treatment	21 (36.8)	73	11 (15.0)
Monitor patient progress in attempting to quit	10 (17.8)	73	9 (12.3)
Arrange follow up visits with patient to address smoking	17 (29.8)	73	9 (12.3)

N = 120 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=6 n (%)	Surgery N=14 n (%)	Ortho N=11 n (%)	Psychiatry N=2 n (%)	Others N=25 n (%)	p value
Ask about smoking status	6 (100)	14 (100)	10 (90.9)	1 (50)	18 (72)	0.06
Advice patients to stop smoking	6 (100)	13 (92.8)	11 (100)	2 (100)	23 (92)	0.81
Asses patient willingness to quit	5 (83)	11 (78)	4 (40)	2 (100)	6 (25)	0.00
Assist patient to quit smoking	3 (50)	7 (50)	4 (36)	1 (50)	6 (25)	0.54
Refer patients who smoke to others for appropriate cessation treatment	4 (66)	6 (42)	4 (36)	2 (100)	5 (21)	0.07
Monitor patient progress in attempting to quit	1 (16)	6 (42)	0	1 (50)	2 (8.7)	0.02
Arrange follow up visits with patient to address smoking	4 (66)	6 (42)	1 (9)	1 (50)	5 (21)	0.06
Treatment strategies usually prescribed						
Pharmacotherapy		4 (33)	2 (20)	1 (50)	5 (31)	0.00
Counseling	2 (33)	4 (33)	6 (60)	1 (50)	5 (31)	0.26

Table 3: Treatment strategies, training and education.

	n (%)	n (%)	n (%)
How often do you discuss treatment strategies with patients	**Never**	**Sometimes**	**Usually**
Pharmacotherapies	18 (35)	29 (56.8)	4 (7.8)
Counseling	10 (20)	17 (34)	23 (46)
Enlist support	12 (26)	18 (39)	16 (34.7)
Training and education	**Not at all**	**Inadequate**	**Very well**
Under graduate medical education	9 (16.6)	31 (57.4)	14 (25)
Graduate medical education	4 (7)	34 (65.3)	14 (25)
Continued medical education	9 (16.9)	22 (41.5)	22 (41.5)
Knowledge of tobacco de addiction centre	**Yes**	**No**	**Don't know**
De addiction centre at work place	4 (6.9)	41 (70)	13 (22)
Other de addiction centre in city	25 (43)	33 (56.9)	

7.8% usually prescribed pharmacotherapy. Nicotin patch, gum, lozenge was commonly prescribed. Pharmacotherapy was commonly prescribed by physicians and counselling was commonly practiced by psychiatrists. All the clinicians agreed that it is their role to help, motivate, discuss, speak, refer and monitor patients who smoke to quit. All respondents reported that a physician's role includes assisting patients who are motivated to stop smoking and motivating patients to stop smoking.

Patients not motivated to quit, limited contact time with patients, patients being less compliant and coverage for cessation interventions is limited were the barriers more frequently mentioned by the physicians. The responses by physician to a series of general knowledge questions on tobacco use and treatment effectiveness was compared with findings of clinical studies on tobacco use described in recent scientific literature.[5,6,8-11] Majority of physicians reported perspectives consistent with the literature. 86% knew correctly that doctors' advice motivates patients to quit, smoking is a chronic relapsing disorder and intensive interventions are more effective than brief treatment. About half of the doctors felt smoking cessation interferes with recovery from chemical dependency which is proved incorrect by different studies. Interestingly 96.4% incorrectly agreed that medication was effective only when accompanied by counselling.

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	58 (100)
Motivate patients to stop smoking	58 (100)
Discuss smoking behavior with patients	51 (91)
Speak with family about supporting the patients in trying to quit smoking	53 (92.9)
Refer smokers to others for treatment	44 (77)
Monitor patient progress in attempting to quit	47 (85.4)
Discuss relapse with the patients	50 (87.7)
Establish smoking cessation practices for staff	51 (94.4)
Significant barriers reported	
Time with patients is limited	12 (23.5)
Coverage for cessation interventions is limited	7 (15.9)
Patients have more immediate problems to address	20 (40)
Patients are not motivated to quit	14 (29)
My experience with intervening with smokers is limited	22 (44.9)
Other practice priorities reduce my ability to address smoking with patients	23 (51.1)
Cessation heightens patients with other symptoms	34 (69.3)
Patients usually fail to quit	18 (38.3)
No financial incentive	38 (74.5)
Pharmacotherapies prescribed	
Nicotine gum	9 (24.3)
Buproprion	Nil
Nicotine patch	3 (8.1)
Nicotine lozenge	1 (2.7)
Nicotine nasal spray	Nil
None	24 (64.8)

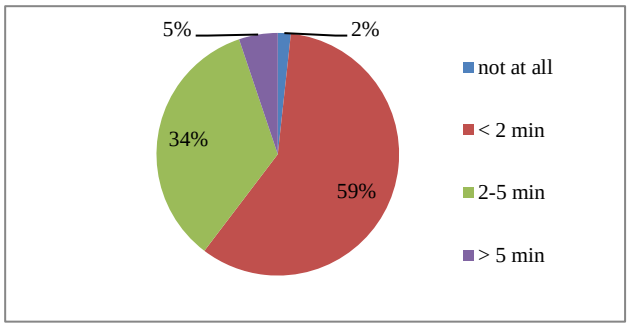

Figure 1: Average time spent on each visit by physicians discussing with patients about quitting tobacco use.

Out of 120 patients who were interviewed 40 each from the department of Medicine, Surgery, 20 from other departments included in the study. 61% were current smokers. 55% showed willingness to quit the habit. The top reason to quit was stated as health benefit. Same 5 'A's related questions which was asked to clinicians was asked to the patients, the results showed a significant gap in the replay between doctors and patients (Table 1).

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 94% of the physician's advice to quit smoking, however 84% of them ask about the smoking status, but only 36% of them assist the patient to quit and 29% 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 follow-up.[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 25% 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 under graduates 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]

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

	Clinical findings	Agree	Disagree
Physician advice motivates patient to quit (USPHS)	True	49 (85.9)	9 (14.1)
Smoking is a chronic relapsing disorder (An et.al.,)	True	53 (94.6)	5 (5.4)
Intensive intervention are more effective than brief treatment (USPHS)	True	47 (85.4)	11 (14.6)
Smoking cessation interferes with recovery from chemical dependence (Bobo et al.,1999; pletcher 1993)	False	24 (44)	34 (56)
Medication is effective only when accompanied by counseling (hughes 1999)	False	55 (96.4)	3 (3.6)

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

In the present study 45% 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 50% of the physician had a knowledge of deaddiction center. 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 2 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.

Limitations

Limitation of our study is that the study cannot be generalized as the sample size is less and doctors working in other settings have not been included. Current study has used a self-administered questionnaire than a face to face interview which can have effect on the responses. Further studies can include regarding the 5 R's Motivational Intervention (Relevance, Risks, Rewards, Roadblocks and Repetition).

CONCLUSION

Majority of physicians recognize the seriousness of problem around tobacco use and the pressing need to address it in their clinical practice. They understand the magnitude of benefit from smoking cessation and their pivotal role in implementing it. Although, they feel that they possess the knowledge and information related to smoking cessation they are unaware of the effective methods and lack the skills to implement the tobacco cessation treatment strategies consistently. Therefore effective physicians' training skill building through practical training and also including the tobacco cessation activities in under graduate and post graduate teaching curriculum in order to improve their capacity to intervene in the field of tobacco cessation.

ACKNOWLEDGEMENTS

Authors would like to thank Dr. Madhu B Associate Professor JSS Medical college Mysore for her constant guidance. Authors would also like to thank all the staff of Community Medicine department HIMS Hassan. And Authors whole heartedly would like to thank the clinicians of Hassan medical college for filling the proforma with utmost care.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Sumana M, Sreelatha CY, Sundar M, Das N. Clinician's practices and perspectives regarding tobacco cessation in a teaching Hospital, Karnataka, India. Int J Community Med Public Health 2017;4:634-9.