Knowledge and Attitude of Medical Students Regarding Tobacco Cessation Programme- A Questionnaire Survey

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Abstract
Background: There is however widespread under-appreciation of the health effects of tobacco use. Among available interventions to reduce tobacco-associated mortality, it is now estimated that tobacco cessation is more likely to avert millions of deaths over the next few decades than the prevention of tobacco use initiation. The present study was conducted to assess knowledge among medical students regarding tobacco-attributable disease burden & their attitudes about usage.

Materials & Methods: It included 660 medical students who were provided with 20-item questionnaire (cognitive, attitude, and practice) relating to tobacco control. All were also asked to rate subjectively, using a 3-point descriptive scale, the adequacy of their proficiency in tobacco control management, and interest in further training for tobacco control.

Results: Out of 660 subjects, males were 210 and females were 450. The difference was significant (P<0.02). 22% think that control of use of tobacco is beyond the scope of healthcare professional, 43% of them had serious reservations about patients’ ability to quit tobacco use, 12% responded that their patients should wait till their problems are sorted before trying to quit, 65% thought its duty of patients to demand help if they really want to quit. 81% of doctors asked their patients about tobacco use in any form, only 50% advised them to quit, 32% assessed readiness to quit, only 28% assisted to quit and 21% assisted to quit. The difference was significant (P<0.05). 65% doctors thought that their training is below average, 8% thought it is average and 27% replied it as above average. The difference was significant (P<0.05).

Conclusion: There is need to trained the medical students regarding various tobacco control programmes. Their knowledge regarding various programmes was low.

Keywords: Awareness, Medical, Tobacco.

Introduction
Tobacco use is now understood to impose a large and growing public health burden worldwide. Globally, tobacco use is estimated to lead to 1 in 5 male deaths and 1 in 20 female deaths among those over age 30 thus causing over 5 million deaths annually. In India, tobacco-attributable mortality is estimated to increase from 1% of total mortality in 1990 to 13% by 2020. Tobacco smoking is the practice of smoking tobacco and inhaling tobacco smoke. A more broad definition may include simply taking tobacco smoke into the mouth, and then releasing it, as is done by some with tobacco pipes and cigars. The practice was believed to begin as early as 5000–3000 BC. Tobacco was introduced to Eurasia in the late 17th century where it followed common trade routes. The practice encountered
criticism from its first import into the Western world onwards, but embedded itself in certain strata of a number of societies before becoming widespread upon the introduction of automated cigarette-rolling apparatus.\textsuperscript{2}

There is however widespread under-appreciation of the health effects of tobacco use. Among available interventions to reduce tobacco-associated mortality, it is now estimated that tobacco cessation is more likely to avert millions of deaths over the next few decades than the prevention of tobacco use initiation. Many countries have a smoking age.\textsuperscript{3} In many countries, including the United States, most European Union member states, New Zealand, Canada, South Africa, Israel, India, Brazil, Chile, Costa Rica and Australia, it is illegal to sell tobacco products to minors and in the Netherlands, Austria, Belgium, Denmark and South Africa it is illegal to sell tobacco products to people under the age of 16. Tobacco cessation is thus an increasingly relevant intervention in clinical settings in developing countries like India.\textsuperscript{4}

The present study was conducted to assess knowledge among Medical student regarding tobacco-attributable disease burden & their attitudes about usage.

Materials & Methods

The present study was conducted in the department of community medicine. It included 660 medical students of both genders. All were informed regarding the study and written consent was obtained. Ethical clearance was taken from institutional ethical committee.

General information such as name, age, gender etc was recorded. All students were provided 20- item questionnaire (cognitive, attitude, and practice) relating to tobacco control. Attitude domains were assessed according to Bloom's taxonomy of educational objectives. We used a 3-point scale with narrative description ("always or often," "sometimes," and "never/rarely"). All were also asked to rate subjectively, using a 3-point descriptive scale (low, average, and high), the adequacy of their prior training, proficiency in tobacco control management, and interest in further training for tobacco control. Results thus obtained were subjected to statistical analysis using chi- square test. P value <0.05 was considered significant.

Results

**Table I** Distribution of subjects

|       | Total- 660 |       |
|-------|------------|-------|
| Males | 210        | Females | 450 |
|       | P value    | 0.02   |

Table I shows that out of 660 subjects, males were 210 and females were 450. The difference was significant (P-0.02).

**Table II** Students attitudes on tobacco use and quitting by their patients

| Parameters                                                                 | Median score (1= strongly agree, 5= Strongly disagree) | % of residents responding |
|---------------------------------------------------------------------------|-------------------------------------------------------|---------------------------|
| Control of use of tobacco is beyond the scope of healthcare professional  | 5.0 (1)                                               | 22%                       |
| Patient should wait till their problems are sorted before trying to quit  | 5.0 (1)                                               | 12%                       |
| Doctors do not want their patients to prevent enjoying                    | 5.0 (1)                                               | 27%                       |
| Asking patients regarding tobacco is waste as doctor think they will not agree | 5.0 (1)                                               | 43%                       |
| If patients want to quit, they themselves will ask for help              | 3.0 (1)                                               | 65%                       |

Table II shows that 22% think that control of use of tobacco is beyond the scope of healthcare professional, 43% of them had serious reservations about patients' ability to quit tobacco use, 12% responded that their patients should wait till their problems are sorted before trying to quit, 65% thought its duty of patients to demand help if they really want to quit.
Graph I Use of 5- A tobacco use guidelines

Graph I shows that 81% of doctors asked their patients about tobacco use in any form, only 50% advised them to quit, 32% assessed readiness to quit, only 28% assisted to quit and 21% arranged for follow up. The difference was significant (P<0.05).

Graph II Training of doctors regarding tobacco cessation programme

Graph II shows that 65% doctors thought that their training is below average, 8% thought it is average and 27% replied it as above average. The difference was significant (P<0.05).

Discussion

On 27 February 2005, the WHO Framework Convention on Tobacco Control, took effect. The FCTC is the world's first public health treaty. Countries that sign on as parties agree to a set of common goals, minimum standards for tobacco control policy, and to cooperate in dealing with cross-border challenges such as cigarette smuggling. Currently the WHO declares that 4 billion people will be covered by the treaty, which includes 168 signatories. Among other steps, signatories are to put together legislation that will eliminate secondhand smoke in indoor
workplaces, public transport, indoor public places and, as appropriate, other public places.\textsuperscript{5} The present study was conducted to assess knowledge among Medical student regarding tobacco-attributable disease burden & their attitudes about usage.

In this study, out of 660 subjects, males were 210 and females were 450. We found that 22\% doctors held negative/ambivalent attitudes regarding role of healthcare professionals in tobacco cessation and addressing patients' tobacco use problem simultaneously with physical medical problems. 43\% of them had serious reservations about patients' ability to quit tobacco use and nearly two thirds of them would wait for their patients to ask for assistance with quitting. This is in agreement with Prochaska et al.\textsuperscript{6} We observed that 81\% of doctors asked their patients about tobacco use in any form, only 50\% advised them to quit, 32\% assessed readiness to quit, only 28\% assisted to quit and 21\% arranged for follow up. This is similar to Kviz FJ et al.\textsuperscript{7} 65\% doctors thought that their training is below average, 8\% thought it is average and 27\% replied as above average. Similar results were seen in study by Sarkar et al.\textsuperscript{8}

Tobacco control interventions in clinical settings could take the form of "in-depth counseling" where resources permit or could be "opportunistic counseling" in busy settings. Residents' training in tobacco control has been shown to be productive in many ways: it has increased knowledge, reduced skepticism, and resulted in higher level of adherence to current practice guidelines (5As). An increased likelihood of quit attempts, reduction or abstinence from cigarette use by their patients has also been demonstrated. Several authors have suggested multiple approaches to enhancing training for tobacco control-setting of educational standards, development of faculty expertise, creation of education material, and targeting of attainment of competencies in all three domains (that is, improvement in knowledge, attitudes, and routine clinical practice). Several teaching-learning aids have been suggested for those specifically interested in preparing training material. Online training material is also available from some sources.\textsuperscript{9}

Online social cessation networks attempt to emulate offline group cessation models using purpose built web applications. They are designed to promote online social support and encouragement for smokers when (usually automatically calculated) milestones are reached. Early studies have shown social cessation to be especially effective with smokers aged 19–29.\textsuperscript{10}

**Conclusion**

Medical students have low level of knowledge regarding cessation programme. There is need to educate and trained the medical profession regarding various tobacco cessation programme which is useful for the sake of patients.

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