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Short Communication

Do physicians address their patients' smoking behavior? Results from a nationwide survey among physicians in Estonia

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ABSTRACT

Objectives: To analyze the factors that hinder physicians addressing patients' smoking behavior in Estonia where relatively high smoking among physicians has been previously reported.

Study design: Cross-sectional study.

Methods: Data from a nationwide cross-sectional postal survey of professionally active physicians in Estonia and multinomial logistic regression were used to explore the factors predicting the frequency (never vs always, often vs always) of addressing patients' smoking behavior.

Results: The majority of physicians had asked about the smoking behavior of their patients either always (14.2%) or often (75.7%). Odds of never asking (10.1% of physicians) were higher for dentists, current smokers, and for those reporting lack of time, habit, or skills. Higher odds for less frequent (vs always) asking were found for male physicians, medical residents, and among those reporting lack of time and habit.

Conclusions: Addressing patients' smoking behavior is associated with physicians' demographic characteristics, specialty, and smoking status. Also, lack of time, habits, and skills are common barriers that need to be tackled for more efficient smoking cessation counseling.

Introduction

Physicians can reduce tobacco-related harms by encouraging their patients to stop smoking. According to a recent meta-analysis,[1] a brief advice by physicians on the benefits of smoking cessation is likely to increase quit rates by 1–3 percentage points. While the public health effects of the brief counseling might be modest, the potential public health benefit of these interventions is dependent on whether physicians actually offer the advice. Deliberately addressing the patients' smoking behavior is an all-important cornerstone for the latter. A recent review focusing on developing countries[2] found that asking about smoking status was not a common

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practice among the physicians, especially among smoking physicians.

This study explores whether physicians' smoking status and their demographic and specialty is related to addressing the smoking behavior of their patients in high-income settings. We will use data from Estonia, where relatively high smoking rates among physicians have been reported previously,[3] whereas the national tobacco regulations including smoke-free environments have improved ever since. In addition to the question whether patients' smoking behavior is addressed in medical practice, we will analyze the physician-reported barriers for smoking cessation counseling.

Methods

Data on working physicians' smoking behavior in Estonia were collected in 2014 using a cross-sectional postal survey among all physicians listed in Estonian Health Care Professionals Registry ($n = 5666$). In total, 2939 eligible questionnaires were collected with a corrected response rate of 53.1%. Detailed description of the survey methodology is available elsewhere.[4] This analysis was based on a subset of 1759 practicing physicians, whose specialty gave the possibility to pay attention to the smoking habits of the patients and who had patient contacts during the past 7 days.

Multinomial logistic regression was used to analyze associations between predictor variables (see Table 1) and the frequency of smoking cessation counseling. The dependent variable was presented as follows: 'How often have you asked your patients on their smoking habits during the past 7 days?' with response options trichotomized into categories of never, often (sometimes, about every second patient and frequently), and always. The results were presented as mutually adjusted odds ratios with 95% confidence intervals. The statistical analysis was conducted using IBM SPSS Statistics for Windows, version 22 (IBM Corp., Armonk, N.Y., USA).

Results

Most physicians had asked about the smoking behavior of their patients during the past 7 days either frequently (75.7%) or always (14.2%), whereas 10.1% of physicians had not addressed patients' smoking habits. Prevalence of current smoking among physicians was 7.9% (16.8% among men and 6.0% among women). Lack of time was considered as the most common barrier to addressing patients' smoking behavior. In univariate analysis (Table 1), younger physicians, ethnic Estonians, smokers, and dentists (vs general practitioners) had higher odds of never asking their patients' smoking behavior compared with those who reported always asking about their patients' smoking status. After mutual adjustment, the odds for never counseling (vs always) were statistically significantly associated with specialty (dentists vs family doctors) and smoking status (smokers vs non-smokers). Lack of time, lack of habit, and lack of skills were significant barriers that increased the odds for not asking about patients' behavior among physicians.

When analyzing the predictors of less frequent addressing patients' smoking behavior (category often vs always), univariate model showed association with age, ethnicity, specialty, smoking status, and almost all variables of perceived barrier. After mutual adjustment, the odds for frequent counseling (vs always) were significantly associated with gender and specialty. Lack of time and lack of habit were significant barriers that increased the odds for less frequent asking about patients' behavior.

Discussion

The frequency of addressing patients' smoking behavior varied by gender, specialty, and physician's smoking status. Moreover, lack of time, lack of habits, and lack of skills were found to be associated with less frequent smoking cessation counseling.

While the majority of physicians reported addressing patients' smoking behavior often in our data, only 14% did it always. This estimate is lower compared to previous findings in European countries[5] where self-reported rates of queries on patients' smoking status have ranged from 28% to 63%. Although the inclusion of lifestyle-related aspects to medical consultation can be considered as a matter of routine in medical practice, the extent of discussing patients' smoking habits varied also by specialty. Compared with family doctors, dentists were least likely to discuss patients' smoking habits. This is surprising as smoking is a major contributor to dental problems;[6] and therefore, dentists could play an important role in smoking cessation and improve the quit rates in general population. Previous results[7] have indicated that dentists do not associate tobacco cessation counseling with a routine dental practice.

In accordance with published literature,[8] we found that smoking physicians (8% in our data) were less likely to ask about patients' smoking than their non-smoking counterparts. While the smoking rate among Estonian physicians has declined considerably between 1982 and 2014,[4] it still exceeds the levels of several other highly developed countries, such as Finland[9] in the 1990s. The decline in smoking rates in both physicians and the general public is likely influenced by changes in national tobacco legislation that, among other measures, has prohibited smoking in public areas and workplaces. Lately, an increasing number of hospitals have become tobacco free. The identified barriers to addressing patients' smoking are in accordance with results of a meta-analysis by Vogt et al.,[10] which identified lack of time, perceived ineffectiveness of interventions, and lack of confidence in ability to discuss smoking as the most common physician-level barriers. Lack of knowledge on smoking cessation counseling was also found to be an important barrier in a recent study among dental students.[7] As the medical training is provided by one academic center in Estonia, most physicians have had similar study curricula. Therefore, it is possible that the physician-reported barriers to more active counseling efforts may relate to the current training in smoking and smoking counseling. In this context, higher emphasis on smoking cessation training in the curricula could lead to better knowledge and practical skills of future physicians.