



Smoking habits of physicians in Enugu, Nigeria

T A Okeke

Department of Community Medicine, College of Medicine,
University of Nigeria, Enugu Campus, P.M.B. 01129, Enugu.

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Abstract

Background: Physicians are highly respected in their communities. They play a crucial role in issues related to health and people turn to them for advice and consultation. This study was therefore conducted to determine the prevalence of smoking among physicians in Enugu, Nigeria, a group of health professionals who should act as role models.

Methods: A cross-sectional descriptive survey was carried out between June and July 2004 at a tertiary health facility located in Enugu, the capital of Enugu state in south-east Nigeria. Information was obtained with the aid of a self-administered structured questionnaire.

Results: Of the 450 physicians contacted, 377 completed the questionnaire, giving a response rate of 83.8%. The mean age of the respondents was 30.9 years and majority 319(84.6%) were males. The physicians comprised of about 8 % current smokers, 13.3% ex-smokers and 78.8% who had never smoked. Majority (60%) of smokers began smoking before the age of 20 and reasons for starting included curiosity (55%), peer pressure (35%), stress of medical school (22.5%) and having a family member who smoked (10%). All respondents agreed that smoking is hazardous to health and majority recognized the association between smoking and various diseases. Non-smokers were more likely than smokers to counsel their patients on the dangers of smoking and to consider themselves as role models. This difference was found to be statistically significant ($p < 0.05$). Majority (60.5%) would recommend a ban on smoking in public places, 50.7% an increase in price of cigarettes and 31.3% prohibition of advertisement of cigarettes.

Conclusion: Because of their important role as health educators, physicians should not smoke. It is highly recommended that smoking cessation training be implemented in medical schools and also be made available to practicing Nigerian physicians through continuing medical education. A national policy on tobacco control should also be developed and strictly enforced.

Introduction

Use of tobacco is one of the major public health disasters of the 20th century.¹ Throughout the first half of the 20th century, the hazards of smoking had remained largely unsuspected until 1950, when studies conducted by Doll and Hill demonstrated that smoking was an important cause of lung cancer.² Since then, there has been immense appreciation of the health hazards associated with smoking. There are over 1.25 billion smokers in the world today, representing one-third of the world's population aged 15 years and above.¹ Currently, tobacco use is widely regarded as one of the largest causes of preventable death worldwide and the leading cause of premature death in industrialized countries.³ At present, about 4 million people a year die of tobacco-related diseases, a figure which the World Health Organization predicts will rise to 8.4 million a year by 2020, unless there

is a dramatic change in the present trends.

Recent trends indicate an earlier age of initiation and rising smoking prevalence rates among children and adolescents. If these patterns continue, tobacco use will result in the death of 250 million of the people who are children and adolescents today, many of them in the developing countries.⁴ It is estimated that about 1.2 million of the people in the world who are over 15 years of age smoke. Reports from the Global Youth Tobacco Survey (GYTS) show that in countries where the number of young smokers is not high already, it is rising.⁵ The percentage of young people using any tobacco product ranges from a high 33% to a low of about 10% and that one-fifth or more of young people begin smoking cigarettes before the age of 10 years.⁵

The rising trend in the prevalence of smoking among the general population observed in Nigeria

Correspondence to: Dr. T. A. Okeke, Department of Community Medicine, College of Medicine, University of Nigeria, Enugu Campus, P M B 01129, Enugu.

is similar to the global trend. In the early 1990's, adult per capita consumption of cigarettes averaged 370 cigarettes annually, a 32% increase from the early 1970's. According to a 1990 survey of 1,270 adults, 24.4% of males and 6.7% of females smoked cigarettes on a daily basis. The prevalence of smoking at least one pack per day among sexes was reported to be 12.0% for males and 1.8% for females.⁶

Smoking has been associated with an increased risk of not only several different cancers, including lung and bladder cancer, but also ischaemic heart disease, bronchitis, emphysema, and increased ante-natal and perinatal mortality. The health effects of tobacco consumption have strong public health implications because passive smoking presents health risks to non-smokers.²

Physicians, worldwide are highly respected in their communities. They play a crucial role in issues related to health and people turn to them for advice and consultation. They also serve as role models. It therefore underscores the need to investigate the prevalence of smoking among this group of health professionals as there is a dearth of information about the prevalence of smoking among Nigerian physicians.

Materials and methods

A descriptive cross-sectional study was conducted at the University of Nigeria Teaching Hospital, a tertiary health facility located in Enugu, the capital of Enugu state in south-east Nigeria. All the 450 doctors made up 114 females and 336 males in the employment of the hospital at the time of study, which lasted for a period of six weeks between June and July 2004, were recruited into the study. Ethical approval for the study was obtained from the Ethical Committee of the University of Nigeria Teaching Hospital, Enugu, Nigeria. Informed consent of the participants was obtained at the start of the study.

Information was obtained with the aid of self-administered structured questionnaires designed to gather demographic data, information on personal smoking habits, knowledge of smoking-related health hazards and recommendations on measures to control smoking. Data collected was analysed using EPI INFO version 6 statistical package. Differences in proportion between smokers and non-smokers were analysed using a chi-square test and $p < 0.05$ was taken as the significance level.

Results

Of the 450 questionnaires distributed, 377 were returned giving a response rate of 83.8%.

The demographic characteristics of physicians are

shown in Table 1. Majority of the respondents were male, 319 (84.6%); the modal age group was 30 - 39 years (47.7%) and the mean age was 30.9 years.

Table 1: Socio-demographic characteristics of physicians

Characteristics	No	%
Sex		
Male	319	84.6
Female	58	15.4
Age		
20-29	169	44.8
30-39	180	47.8
40-49	22	5.8
50-59	4	1.1
60 and above	2	0.5
Years of practice		
Less than 1 year	90	23.9
1-5	201	53.3
6-10	60	15.9
11-15	14	3.7
16-20	7	1.9
21 & above	5	1.3
Marital Status		
Married	149	39.5
Single	224	59.4
Divorced	3	0.8
Widow	1	0.3

There were 30 (8.0%) physicians who described themselves as current smokers. Those who reported that they had smoked in the past but have now stopped were 50 (13.3%), while 297 (78.8%) had never smoked. Overall, a total of 80 (21.2%) physicians had smoked at sometime, that is, were "ever smokers". Sixty percent of those that had ever smoked began smoking before the age of 20. Those that had never smoked were asked reasons for not taking up smoking. Majority, 177 (59.6%) responded that it was unacceptable among their circle of friends; cost of the cigarettes was the factor for 99 (33.3%) while for 84 (28.3%) and 45 (15.2%) desire to avoid health problems to themselves and to others respectively were their considerations.

For those who had ever smoked, reasons for starting included curiosity 44 (55%), peer pressure 28 (35%), stress of medical school 18 (22.5%) having a family member who smoked 8 (10%).

Majority 14 (46.7%) of current smokers smoked 1-5 cigarettes per day, followed by 10 (33.3%) who smoked 6-10 sticks, the least number, 6 (20%) smoked 11-15 sticks per day. Most (90%) smoked cigarettes and 13.3% indicated that they do smoke in their workplace. Twenty (66.7%) of the current smokers mentioned that they had attempted to quit without success. All respondents agreed that smoking is harmful to health and majority 203 (53.8%) recognized cancer of the lung as a health hazard (Table 2).

Table 2: Knowledge of harmful effects of smoking

Harmful effects	No	%
Lung cancer	203	53.8
Other cancers	131	34.7
Vascular disease	55	14.6
Pulmonary disease	44	11.7
Cardiac disease	39	10.3
Addiction	29	7.7
Gastrointestinal disease	16	4.2
Infertility	11	2.9
Foetal anomaly	5	1.3
Others	8	2.1

When asked their recommendations for the prevention and control of smoking, majority 228(60.5%) mentioned a ban on smoking in public places, followed by increase in price of cigarettes, 191 (50.7%), anti-smoking campaigns 188 (49.9%) and prohibition of advertisement of cigarettes 118(31.3%) (Table 3). When asked how they managed and health educated their patients as it relates to smoking, as shown in Table 4, non smokers were significantly more likely to counsel patients on the dangers of smoking than smokers ($X^2 = 5.39, df=1, p=0.02$). However, there was no significant difference between smoking and non smoking physicians in their likelihood to inquire about the smoking habits of their patients ($X^2 = 2.39, df=1, p=0.18$). Less smokers (26.7%) than non-smokers (62.8%) considered themselves as non-smoking role models and this differed significantly ($X^2=15.00, df=1, p=0.0002$). In terms of legislation, non-smokers were more likely (61.4%) than smokers (43.3%) to recommend a ban on smoking in public places and this difference was statistically significant ($X^2=3.74, df=1, p= 0.05$).

Discussion

In spite of the fact that all the surveyed physicians agreed that smoking is hazardous to health, about 8% still smoked, showing there is a gap between knowledge and practice. A smoking prevalence of about 8 % noted in this study is less than 28.3%

observed among Italian general practitioners⁷, 45% in Bosnia and Herzegovina⁸ and 25% in the Netherlands⁶. It is, however, higher than the 3.3% reported among physicians in the United States⁹.

The findings of this study show that Enugu-based physicians may be moving towards the "developed world" pattern, where the educated, upper socio-economic classes have been giving up smoking¹⁰. The prevalence rate of smoking found in this study is lower than that of the general Nigerian population as a previous study reported smoking prevalence rates of 24.4% and 6.7% among males and females respectively.⁶ This is not surprising because it is assumed that doctors should be more aware of the dangers of smoking than the general population.

It is interesting to note that majority of those who had ever smoked began doing so before the age of 20. This pattern is different from that observed among physicians in Syria¹¹ where smoking is initiated even in the fifth decade or later but comparable to what is seen in the developed countries where most people begin smoking before the age 19.¹² This is of concern since it has been shown that the younger the age at initiation the more likely the risk of becoming addicted, or becoming heavy smokers or dying from tobacco-related diseases.⁵

Table 3: Anti-smoking measures recommended

Anti-smoking measures	No	%
Ban on smoking in public places	228	31.4
Increase in price of cigarettes	191	26.3
Anti-smoking campaigns	188	25.9
Prohibition of advertisement for cigarettes	118	16.2

Most doctors smoked less than 10 sticks of cigarettes per day which is comparable to the results obtained in Costa Rica¹⁰ and would therefore be considered 'light' to 'moderate' smokers. It has been suggested from past studies that light/moderate smokers are more amenable to behaviour change programmes than heavy smokers.¹³ This implies that with effective smoking cessation interventions the number of smoking physicians may decrease.

Smokers were less likely than non-smokers to inquire about their patients smoking habits and to counsel them on the dangers of smoking. These observed differences were expected considering that it would naturally be more difficult for a smoking doctor to give anti-smoking advice to his

Table 4: Factors which differed between smokers and non-smokers

Factors considered	Smokers(%)	Non-smokers(%)	P-value
Inquire about patients' smoking habit			
Yes	14(46.6)	212(61)	$X^2=2.39, df=1, p=0.18$ (not-significant)
No	16(53.3)	135(38.9)	
Counsels patients on dangers of smoking			
Yes	12(40)	214(61.7)	$X^2=5.39, df=1, p=0.02$ (significant)
No	18(60)	133(38.3)	
See yourself as role model			
Yes	8(26.7)	218(62.8)	$X^2=15.00, df=1, p=0.002$ (significant)
No	22(73.3)	129(37.1)	
Prohibition of smoking			
Yes	13(43)	213(61.4)	$X^2=3.74, df=1, p=0.05$ (significant)
No	17(56.7)	134(38.6)	

patients when he does not perceive himself as a role model. It has also been noted that physicians advice may cause 10-25% of those counselled to reduce or eliminate their tobacco consumption.¹⁴ This underscores the need for physicians to stop smoking because they are expected to play an important role as exemplary health educators and benefits would be minimal if patients realized that the doctor was himself a smoker.

Less number of smoking physicians than non-smoking ones considered themselves as non-smoking role models. The observation was made in North America¹⁵ that physicians who smoke were less successful in decreasing smoking among their patients than their non-smoking colleagues. Generally among the physicians surveyed, there was a clear consensus for strict regulation of tobacco use. It was gratifying that majority of physicians recommended a ban on smoking in public places. In 1990, a Tobacco Smoking Decree was promulgated in Nigeria. The decree makes for restriction of smoking of tobacco in certain public places and also prohibits any form of tobacco advertisement that is liable to tobacco smoking in Nigeria. Further, the decree calls for mandating rotating health warnings on the dangers of cigarette smoking on cigarette packs⁶. Unfortunately this decree is not being enforced.

The benefits of smoke-free environments include not only protecting non-smokers from the toxins of second hand smoke but also a decrease in the

prevalence of smoking, the number of cigarettes smoked and mortality due to heart disease.^{16, 17} About half of the physicians suggested an increase in the price of cigarettes as a deterrent to smoking. Many cigarettes consumed in Nigeria are smuggled into the country to avoid taxes and import duties. The implication is that cigarettes are cheap, can be sold as single sticks and therefore affordable by the majority. It has been estimated that 70-80% of the cheaper brands of cigarettes sold in the country are sold by the single stick.⁶ In places where taxation of cigarettes is significant it has been shown to decrease tobacco consumption and to be an important deterrent to new smokers.¹⁸

The globalisation of the tobacco pandemic restricts the capacity of countries to unilaterally control tobacco within their sovereign borders. All transnational tobacco control issues require multilateral cooperation and effective action at the global level. In recognition of this, in May 1999 the World Health Assembly unanimously authorized WHO to proceed with the Framework Convention on Tobacco Control (FCTC). This will be the first public health treaty and could have a historic impact on tobacco use globally.²

In conclusion, counselling by health professionals on smoking cessation is crucial, if their patients are going to quit smoking. One of the most effective behaviour interventions is advice from a health professional. It is needless to say that doctors who are responsible for peoples' health should be non-

smoking role models and show leadership in implementing smoking cessation. As physician education programmes have proved to result in more effective use of cessation strategies, it is highly recommended that smoking cessation training be implemented in medical schools and also be made available to practicing Nigerian physicians through continuing medical education, to help them prepare effectively to counsel their patients on how to stop smoking.

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