

A Study of Knowledge, Attitude and Practices Regarding Smoking among Doctors of Nishtar Hospital, Multan

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ABSTRACT

Background: The World Health Organization cites Tobacco use as one of the biggest public health threats the world has ever faced. Tobacco is the number one preventable cause of disability and death. The incidence of Tobacco smoking is increasing across the globe especially amongst the youth. Since Tobacco smoking is associated with serious health problems such as Hypertension, Ischemic Heart Disease and Lung Cancer, there is an urgent need to create awareness among the masses about the health hazards and long term consequences of smoking. In Pakistan, tobacco use is common in general public and the health professionals don't lack behind this habit. **Objectives:** To determine the frequency of smoking and to create awareness and health consciousness among doctors about hazards of smoking. To understand the relationship of smoking with other diseases.

Study Design: Observational cross sectional study

Place and Duration of Study: This study was conducted at Nishtar Hospital, Multan over a period of three months 15th Jan. to 15th March 2012.

Materials and Methods: A total of 240 male doctors, 10 from each ward were selected with their informed consent. A structured questionnaire was designed. Data was collected and analyzed using EXCEL and SPSS.

Results: Out of 240 doctors, 98(40.8%) were smokers and 142(59.2%) were non-smokers. Among smokers, 168(69.8%) belonged to age group 20-30 years. 70(71.4%) smokers belonged to urban areas and 28(28.6%) belonged to rural areas. 76(77.6%) smokers belonged to literate families and 22(22.4%) belonged to illiterate families. 38(38.8%) smokers started smoking before joining medical school and 60(61.2%) started smoking after joining medical school. 52(53.2%) doctors smoked 6-10 cigarettes per day. Among smokers, 44% gave positive history of smoking in friends, 34.1% gave positive smoking history of their fathers, 17.1% gave smoking history of their brothers and 4.8% about their grandfathers. Also among non-smokers, 52.2% gave positive smoking history of their friends. Within families of smokers, there was an increase frequency of hypertension (20.4%), IHD (8.2%) and lung diseases (20.4%). 40.7% doctors (smokers and non-smokers) take smoking as 'Just a habit', 29.6% think it as 'A stress relief', 14.8% as 'Relaxation' and 3.7% for 'Concentration'. 49% smokers smoke outdoors and 19% smoke Indoors and 31.7% at all places. 62% smokers tried to quit smoking but among those, 73% stayed off for less than 3 months and 27% for more than 3 months.

Conclusion: Most of the smoker doctors are young, from urban areas, have literate families and tell positive history of smoking in their friends. Time of start of smoking is after joining medical school. Most doctors smoke outdoors and like smoking as 'Just a habit' but also keeping knowledge for its 'Health problems'. Doctors try to quit smoking but unfortunately majority of them keep themselves stay off for less than 3 months.

Key Words: Smoking, Tobacco, Nicotine, Addiction, Doctors, Health, COPD, Lung Cancer.

INTRODUCTION

The World Health Organization cites Tobacco use as one of the biggest public health threats the world has ever faced. Tobacco is the number one preventable cause of disability and death. The incidence of Tobacco smoking is increasing across the globe especially amongst the youth. Since Tobacco smoking is associated with serious health problems such as Hypertension, Ischemic Heart Disease and Lung Cancer, there is an urgent need to create awareness among the masses about the health hazards and long term consequences of smoking. In Pakistan, tobacco use is common in general public and the health professionals don't lack behind this habit.

Smoking is one of the leading causes of preventable death.. A variety of plant materials are smoked, including marijuana and hashish, but the act is most commonly associated with tobacco as smoked in a cigarette, cigar or pipe.¹

Nicotine has been consumed in the form of tobacco and other plants for many hundreds of years. High levels of nicotine in cigarette can make it harder to quit smoking².

Tobacco is considered to be a mood and behavior altering substance that is psychoactive and amusable. It is believed to be as potentially addictive as alcohol, cocaine and morphine³.

The tobacco epidemic is one of the biggest public health threats the world has ever faced. It kills nearly

six million people a year of whom more than 5 million are users and ex users and more than 600 000 are nonsmokers exposed to second-hand smoke. Approximately one person dies every six seconds due to tobacco and this accounts for one in 10 adult deaths. Up to half of current users will eventually die of a tobacco-related disease. Nearly 80% of the more than one billion smokers worldwide live in low- and middle-income countries, where the burden of tobacco-related illness and death is heaviest. Tobacco users who die prematurely deprive their families of income, raise the cost of health care and hinder economic development. In some countries, children from poor households are frequently employed in tobacco farming to provide family income. These children are especially vulnerable to "**green tobacco sickness**", which is caused by the nicotine that is absorbed through the skin from the handling of wet tobacco leaves³.

Smoking is generally five times higher among men than women⁴ however the gender gap declines with younger age^{5,6}. In developed countries smoking rates for men have peaked and have begun to decline, however for women they continue to climb⁷.

Individuals who smoke cigarettes are 12 times more likely to die from lung cancer, two to four times more likely to develop coronary heart disease, twice as likely to have a stroke, and 10 times more likely to die from chronic obstructive lung disease^{8,9}. Women who smoke have a greater degree for ectopic pregnancy and miscarriage¹⁰. The following are health effects of smoking on young adults according to WHO:

Teens who smoke are three times more likely than nonsmokers to use alcohol, eight times more likely to use marijuana, and 22 times more likely to use cocaine. Smoking is associated with a host of other risky behaviors, such as fighting and engaging in unprotected sex.¹¹

On average, someone who smokes a pack or more of cigarettes each day lives 7 years less than someone who never smoked¹².

Teenage smokers are more likely to have seen a doctor or other health professionals for an emotional or psychological complaint¹³

Tobacco use is very common in Pakistan and is still consumed in a variety of ways, like cigarette smoking, chewing tobacco, cigars etc. In addition to these, tobacco is smoked in unique local ways, which include "Beedi" (Tobacco rolled in dry leaves) and "Hookah" (Hubble - Bubble), and "Sheesha" which is an upcoming trend, especially in the higher social classes.¹⁴

In Pakistan, it is estimated that the prevalence of tobacco smoking is 36% for males and 9% for females. Among young adults especially the university students in Pakistan, the prevalence of smoking is 15% with the majority being male smokers¹⁵. Approximately 1,200 children start smoking everyday¹⁶. This represents a

huge impact not only in terms of economic costs but it is slowly depriving the country of a healthy workforce and increasing the burden of disease in the already overburdened health sector. The reason young people start to smoke is complex and multi-faceted. It includes a host of interacting biological, genetic, psychological, economic and social variables. Arguably the most modifiable determinants are social and environmental in nature, including exposure to smoking by parents, siblings, friends, and members of the general public¹⁷.

Numerous authors have observed that a young person's decision to smoke is directly influenced by peers' smoking behaviour¹⁸.

Exposure to smoking in private and public places may also influence tobacco use initiation, maintenance, and cessation.¹⁹

A study investigates smoking habits and attitudes towards smoking in general practitioners, consultants at a university hospital, medical students and students of health policy and management (H.P.M.). An anonymous, self-administered postal survey was used. 38% of general practitioners, 27% of the consultants, 18% of the medical students and 31% of H.P.M. students are current smokers.

All the health professionals can contribute to tobacco control²⁰. Community usually views physician as exemplars and as such their office and hospital should be a model of non-smoking behaviour²¹. They also serve as providers of support, information and encouragement in helping patients to achieve such a goal²². For these reasons and more, it is essential that doctors themselves don't smoke, medical students and students of health policy and management (H.P.M.) However, marked deficits have been found in the amount and type of training medical professionals receive in smoking cessation counseling with little attention paid to determination of effective training methods²³.

MATERIALS AND METHODS

It was an observational cross sectional study conducted at Nishtar Hospital, Multan over a period of three months Jan. to March 2012. A total of 240 male doctors, 10 from each ward were selected with their informed consent. A structured questionnaire was designed. Data was collected and analyzed using EXCEL and SPSS.

RESULTS

Out of 240 participants doctors, 98 (41%) were smokers and 142 (59%) were non-smokers. 41% of doctors at Nishtar Hospital Multan smoke. (Table-1). Among smokers, 168 (69.8%) belonged to age group 20-30 years, 60 (25%) had age between 31-40 years and only 12 (5.0%) were 51-60 years old. (Table-2). 70 (71.4%) smokers belonged to urban areas and 28 (28.6%) belonged to rural areas. (Table-3). 76 (77.6%)

smokers belonged to literate families and 22(22.4%) belonged to illiterate families (Table-4). 38(38.8%) smokers started smoking before joining medical school and 60(61.2%) started smoking after joining medical school (Table-5). Among the 98 smoker doctors 52(53.2%) smoked 6-10 cigarettes per day (Table-6). Within smokers, there was an increase frequency of hypertension (20.4%), IHD (8.2%) and lung diseases (20.4%) (Table-7). Among smokers, 44% gave positive history of smoking in friends, 34.1% gave positive smoking history of their fathers, 17.1% gave smoking history of their brothers and 4.8% about their grandfathers. Also among non-smokers, 52.2% gave positive smoking history of their friends (Table-8).

Table No.1: Frequency distribution of smokers and non smokers

Variable	No	%age
Smokers	98	41.00
Non-Smokers	142	59.00

41% doctors of Nishtar Hospital, Multan smoke

Table-2: Frequency distribution according to age

Age	Smoker (%) No. %age	Non-Smoker (%) No. %age
20 – 30	168 69.8	84.5
31 – 40	60 25	09.9
41 – 50	00 00.0	05.6
51- 60	12 5.2	00.0

* Most of the smokers belong to age group of 20-30 years

Table No.3: Frequency distribution of smokers according to residence

Residence	No	%age
Urban	70	71.4
Rural	28	28.6

*The data show, 71% of Smoker doctors belong to Urban areas

Table No.4: Literacy level of parents

Literacy Level	Smokers No. %age	Non-Smokers No. %age
Literate	76 77.6	92 65
Illiterate	22 22.4	50 35

*Majority of Smoker doctors (77%) belong to Literate families

Table-5: Time of starting smoking

Time	No	%age
Before joining Medical School	38	38.8
After joining Medical School	60	61.2

*Fairly good number of doctors started smoking after joining Medical School

40.7% doctors (smokers and non-smokers) take smoking as 'Just a habit', 29.6% think it as 'A stress relief', 14.8% as 'Relaxation' and 3.7% as 'Concentration' (Table-9) 49% smokers smoke

Outdoors and 19% smoke Indoors and 13.7% at all places (Table-10). 62% smokers tried to quit smoking but among those (Table-11), 73% stayed off for less than 3 months and 27% for more than 3 months (Table-12).

Table No.6: Number of cigarettes smoked per day

No. of Cigarettes	No.	%age
0 – 5	8	8.1
6 – 10	52	53.2
11 – 15	12	12.2
16 – 20	16	16.3
>20	10	10.2

*More than 50% doctors smoke 6-10 cigarettes per day

Table No.7: Frequency distribution of diseases among smokers and non-smokers

Disease	Smokers (%)	Non-Smokers(%)
Hypertension	20.4	11.3
IHD	8.2	7
Lung diseases	20.4	4.2

*Incidence of Hypertension and Lung diseases is more common in smokers

Table No.8: Frequency distribution of smoking among friends and family

H/O Smoking	Smokers (%)	Non-Smokers(%)
Friends	44	52.2
Father	34.1	27.5
Brothers	17.1	12.5
Grandfather	4.8	7.5

* A smoker decision to smoke is directly influenced by peers' smoking behavior

Table No.9: Frequency distribution of likes about smoking

Like About Smoking	No.	%age
Just a habit	33	40.7
Concentration	3	3.7
Stress-relief	24	29.6
Relaxation	12	14.8

*40% doctors take smoking as 'Just as a habit'

Table No.10: Frequency distribution according to place of smoking

Place	No.	%age
Indoors	20	19.6
Outdoors	50	49
Work	8	7.8
Driving	6	5.9
All places	14	13.7

*More than 50% doctors prefer to smoke outside

Table No.11: Frequency distribution of smokers who tried to quit smoking

Tried to Quit	No.	%age
YES	60	62
NO	38	39

*62% smoker doctors tried to quit smoking

Table No.12: Frequency distribution of time period smokers stayed off from smoking

Time Period	No	% age
>3 months	16	27
<3 months	44	73

*Unfortunately, 73% of those who tried to quit could not keep themselves off for even 3 months

DISCUSSION

All the health professionals can contribute to tobacco control²⁰. Doctors have always had an important responsibility to convince their patients not to smoke. Community usually views physician as exemplars and as such their office and hospital should be a model of non-smoking behavior²¹. They also serve as providers of support, information and encouragement in helping patients to achieve such a goal²².

We took doctors as the focus of our study as the attitudes and practices towards tobacco use of these health professionals can influence future policies and practice. If the doctors are smoking, then the credibility of anti-smoking messages to the public is lost. Medical doctors are a group that should be more aware than general population about the health hazards associated with smoking.

There is a high prevalence of smoking among doctors and smoking is on rise in Pakistan. According to a study published in American Journal of Preventive Medicine, in the year 2007, 40.7% doctors are smokers²⁴. our study also shows 40.8% doctors of Nishtar Hospital are smokers.

A research carried out by Ioic Jessar in 2005 tells 28.7% started smoking before 40 years²⁵. Whereas our research tells 69.4% smokers are in 20-30 year age groups.

A survey done among French general practitioners indicates that 84.3% doctors smoke less than 15 cigarettes per day but in our study, 50% doctors smoke less than 15 cigarettes per day.

According to a study on Greek doctors, 41% doctors started smoking after joining medical college²⁶. But our study shows 61.2% started smoking after entry in medical college.

According to our study, 50% doctors smoke outdoors but a study highlights only 30% doctors smoke outside²⁶.

Our research tells 62% tried to quit smoking but some study showed only 37% usually try²¹. This attitude may become a reason in the next few months to quit smoking. A survey indicates 68.35% doctors consider smoking a major threat to health problem²⁷, and our study shows similar results i.e. 67%. This is very interesting fact that majority of subjects in our study agreed on one point that 'Smoking is harmful for one's health'. This attitude shows very healthy trend that

smokers could not deny this fact that smoking is injurious to health'.

According to a study in Saudi, friends influence to smoke about 70% but in our study 52%. Most doctors have 1st degree relatives who are smokers according to a study carried out in Malaysia and our study reveals relatives are second to friends. This shows peer pressure also is an important reason to start smoking, it has been observed most doctors are influenced by their friends instead of their parents. Another study in Saudi tells that 51% smoke for stress relief²⁸. but according to our study, 30% smoke for stress relief. Majority of doctors in Nishtar Hospital consider smoking as 'Just a Habit'

CONCLUSION

Most of the smoker doctors are young, from urban areas, have literate families and tell positive history of smoking in their friends. Time of start of smoking is after joining medical school. Most doctors smoke outdoors and like smoking as 'Just a habit' but also keeping knowledge for its 'Health problems'. Doctors try to quit smoking but unfortunately majority of them keep themselves stay off for less than 3 months.

Recommendations:

Tobacco caused 100 million deaths in the 20th century. If current trends continue, it will cause up to one billion deaths in the 21st century.

Unchecked, tobacco-related deaths will increase to more than eight million per year by 2030. More than 80% of those deaths will be in low- and middle-income countries.

From the start of the course, students should be educated about the physiological, pathological, social and moral hazards of cigarette smoking.

Anti-smoking campaigns should be accelerated using print and electronic media.

Smoking in college, hospital and hostel premises should be strictly prohibited.

Tobacco taxes are the most effective way to reduce tobacco use, especially among young people and poor people. Advertising restrictions should be observed.

According to WHO, the six MPOWER measures to control Tobacco use are:

1. Monitor tobacco use and prevention policies
2. Protect people from tobacco use
3. Offer help to quit tobacco use
4. Warn about the dangers of tobacco
5. Enforce bans on tobacco advertising, promotion and sponsorship
6. Raise taxes on tobacco

REFERENCES

1. Boffetta P, Hecht S, Gray N, et al. Smokeless tobacco and cancer. *Lancet Oncol* 2008;9(7):665-7.

2. Centers for Disease Control and Prevention (CDC). State smoking Restrictions for Private-Sector worksites, Restaurants and Bars-United States, 2004 and 2007. MMWR 2008;57(20);549-52.
3. WHO Fact sheet No.339, May 2012.
4. Guindon, G. Emmanuel. Boisclair, David. Past, current and future trends in tobacco use. Washington DC: The International Bank for Reconstruction and Development / The World Bank; 2003.p. 13–16. Retrieved 2009-03-22
5. The World Health Organization, and the Institute for Global Tobacco Control, Johns Hopkins School of Public Health. "Women and the Tobacco Epidemic: Challenges for the 21st Century" (PDF). World Health Organization; 2001.p. 5–6, Retrieved 2009-01-02.
6. "Surgeon General's Report—Women and Smoking". Centers for Disease Control and Prevention; 2001. p. 47, Retrieved 2009-01-03.
7. Peto, Richard; Lopez, Alan D; Boreham, Jillian; Thun, Michael (PDF). Mortality from Smoking in Developed Countries 1950-2000: indirect estimates from national vital statistics. Oxford University Press; 2006.p.9, Retrieved 2009-03-22
8. Ockene Ira S, Miller NH. Cigarette smoking, cardiovascular disease, and stroke: a statement for healthcare professionals from the American Heart Association. American Heart Association Task Force on Risk Reduction. Circulation 1997; 96:3243.
9. US Department of Health and Human Services. The health benefits of smoking cessation: A report of the Surgeon General. Rockville, MD: US Department of Health and Human Services, Centers for Disease Control, Office on Smoking and Health 1990..
10. Handler A, Davis F, Ferre C, Yeko T. The relationship of smoking and ectopic pregnancy. Am J Public Health 1989;79(9):1239-42.
11. CDC. Preventing Tobacco Use Among Young People—A Report of the Surgeon General, 1994.
12. Lew EA, Garfinkel L. Differences in Mortality and Longevity by Sex, Smoking Habits and Health Status, Society of Actuaries Transactions, 1987.
13. AJHP, Arday DR, Giovino GA, Schulman J, Nelson DE, Mowery P, Samet JM, et al. Cigarette smoking and self-reported health problems among U.S. high school seniors; 1982-1989.p. 111-116.
14. Kazi HG. The health hazards of tobacco use. J Pak Med Assoc 1990; 40: 6-10.
15. US Department of Health and Human Services. The Health Benefits of smoking Cessation: A Report of the Surgeon General. U.S. Government Printing Office. Washington DC: DHHS Publication No (CDC); 1994.p.90-8416.
16. World Health Organization. Country Profiles on Tobacco Control in the Eastern Mediterranean Region. 2005: www.who.int.
17. Jackson C. Cognitive susceptibility to smoking and initiation of smoking during childhood: A longitudinal study. Prev Med 1998; 27:129-13
18. Leatherdale ST, Cameron R, Brown KS, McDonald PW. Social student smoking at school, student characteristics, and smoking onset among junior students: A multi-level analysis. Prev Med 2005; 40:853-9.
19. Farkas AJ, Gilpin EA, White MM, Pierce JP. Association between household and workplace smoking restrictions and adolescent smoking. JAMA 2000; 284:717-22.
20. The role of health professionals in tobacco control. Geneva: WHO;2005.
21. Physicians and health-care professionals counseling of smokers to quit, 1991, Mmwr 1993;42(44):854-7.
22. Nett LM: The physicians role in smoking cessation. A present and future agenda. Chest 1990;97(2 suppl):28S-32S.
23. Roche AM, Eccleston P, Sanson-Fisher R. Teaching smoking cessation skills to senior medical students: A block randomized control trail of four different approaches. Prev Med 1996;25: 251-8.
24. American Journal of Preventive Medicine by Elsevier vol 33 page 15-22 July 2007, Annals of Saudi Medicine 1999;10(3).
25. European Journal of Public Health published in 2005 Ioic Jessar, Gilles Bruches.
26. Public Health Journal, May 2007.
27. Oxford Journal: Health Promotion International vol 12.
28. Saudia Journal 2001, Southeast Asia J Trop Medical Public Health 1993.

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