

Frequency of Smoking Among Employees at a Tertiary Care Children Hospital, Karachi

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ABSTRACT:

Objective: To determine the frequency of smokers among employees at National Institute of Child Health, (NICH) Karachi.

Subjects and Methods: Total no. of 150 employees from NICH (including doctors, paramedics, administration staff, security staff, account staff, house keeping staff and others) participated in the study after giving verbal consent. A self-administered pre-coded proforma was used as an instrument to collect the information.

Results: A total no. of 150 health care professionals and others participated in the study. There were 111(74%) males, 39(26%) were females. The male to female ratio was 1:2.8. No female was found to be a smoker in our setting. 14.6% of smokers were in between 25-36 years of age. Frequency of smoking was found to be high in both Matric and MBBS categories i.e. 7.3% and 6.7% respectively. The frequency of smoking was found to be much higher (17%) in married males as compared to un-married employees (06%). More than seventy percent (24) had started smoking in between 12-24 years of age. Around 44% of smokers used more than ten cigarettes per day. More than 97% of the participants were aware of potential health hazards of smoking.

Conclusion: In our setting, overall frequency of smoking is still high (22.7%) in health care workers indicated it is that in spite of awareness regarding injurious effects of smoking, the health care professionals do not realize that smoking is one of the major causes of increase in morbidity and mortality due to respiratory and cardiac ailments.

Key words: Smoking, non-smokers, smokers, health care workers.

INTRODUCTION

Tobacco smoking is considered to be one of the major precursors of cardiovascular and lung disorder leading to severe life threatening health problems like cancer, stroke and other heart diseases,¹ as it is previously proven that about 60 constituents of tobacco are carcinogens, tumor initiators and tumor promoters.² So, the analogous relationship of smoking with disease related to lungs, heart, blood vessels and cancer of bronchus, oral cavity and kidney are well established.³⁻⁵ Every year around 4 million people loose their lives due to smoking.⁶ Smoking is increasing in Pakistan,⁷ it is estimated that 36% of adult males, and 9% of females smoke, and the cigarette consumption per person per year in Pakistan is among the highest in South Asia.⁸ Tobacco smoking produces health problems among smokers and increased

number and severity of respiratory illnesses decrease physical fitness. Smoking is not only risky for the smokers' health but also for those who are around them. Meta-analysis of previous studies shows that frequency of smoking varies from 19% to 33% in different communities of the country.⁹⁻¹⁴ In light of these variations, we conducted our study among health care workers (assuming the most part of the community was aware of the health hazards of smoking) of National Institute of Child Health (NICH), a tertiary health care facility of Karachi with a head count of around six hundred employees. The aim of this study was to determine the frequency of smokers among employees at National Institute of Child Health, Karachi.

SUBJECTS AND METHODS

The study was conducted at National Institute of Child Health from June 2008 to December 2008. Total of 150 employees of the institute irrespective of their age and gender participated in the study after giving informed verbal consent. Equal percentages (around 25% from each

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Received: August 05, 2009; accepted: November 11, 2009

category) of participants were randomly included. Doctors category included 45 clinicians out of 180 doctors, the second category consisted of 272 paramedics out of which 68 were included, third category comprised 24 participants out of 96 working individuals in security and house keeping section and final category comprised 13 admin. and accounts section participants with a head count of 56. A structured, close ended proforma was used together information from the participants. First section of proforma contained, demographic information including age, gender, education status, department, designation, ethnic distribution and marital status of participants. Second part includes, age at first use, knowledge about potential health hazards of smoking, reasons for smoking and attitude of non-smokers with smokers. The study population consisted almost all categories of health care professionals including doctors, nurses, para-medics and other health care workers including clerical staff, security guards, peons etc. Trained research staff interviewed the participants individually to collect data. All the data were recorded on computer through SPSS version 13 for final analyses.

RESULTS

A total no. of 150 employees of NICH participated in the study after giving informed verbal consent. There were 111(74%) males and 39(26%) were females. The male to female ratio was 2.8:1. No female health care worker was a smoker in our setting while every third male employee was a smoker. Frequency of smoking was found to be very high in security and housekeeping staff (45.83%) and participants from admissible and accounts section (38.46%). Majority (42%) of participants were just matric, representing clerical staff, security guards (chowkidars), sweepers, peons and khakroobs. While the 3rd largest smoking category embodied MBBS doctors (22.22%). Paramedical participants were highest in number but was the smallest group (11.76%) in terms of tobacco smoking among all four categories. Very high rate (14.6%) of smoking was found between 25-36 years of age. The frequency of smoking was much higher (17%) in married male employees as compared to un-married employees (06%). More than 97% of the participants were aware of the potential health hazards of smoking (see Table I).

More than seventy per cent of the study participants told

Table 1: Demographic Characteristics of Health Care Providers at a Tertiary Care Hospital

	Characteristics	No. of Subjects N	Smokers N (%)	Non-Smokers N (%)
Age Categorization				
•	Up to24 years	21	3 (2)	18 (12)
•	25-36 years	101	22 (14.6)	79 (52.7)
•	36 +	28	9 (6)	19 (12.63)

	Gender	No. of Subjects N	Smokers N (%)	Non-Smokers N (%)
•	Male	111	34 (22.7)	77 (51.3)
•	Female	39	-	39 (26)

	Job Category*	No. of Subjects N	Smokers N (%)	Non-Smokers N (%)
•	Doctors(MBBS)	45	10(22.22)	35(77.78)
•	Paramedical Staff	68	08(11.76)	60(88.24)
•	Security and housekeeping staff	24	11(45.83)	13(54.17)
•	Admin. And accounts	13	05(38.46)	08(61.54)

*Note : Injob category percentages are calculated and expressed individually for each category

	Ethnic Distribution	No. of Subjects N	Smokers N (%)	Non-Smokers N (%)
•	Urdu	36	8 (5.33)	28 (18.67)
•	Sindhi	43	8 (5.33)	35 (23.33)
•	Punjabi	45	14 (9.33)	31 (20.67)
•	Balochi	8	1(0.66)	7(4.66)
•	Pushto	8	1(0.66)	7 (4.66)
•	Others	10	2 (1.33)	8 (5.33)

	Marital Status	No. of Subjects N	Smokers N (%)	Non-Smokers N (%)
•	Married	83	25 (16.66)	58 (38.67)
•	Un-Married	67	9 (6)	58 (38.67)

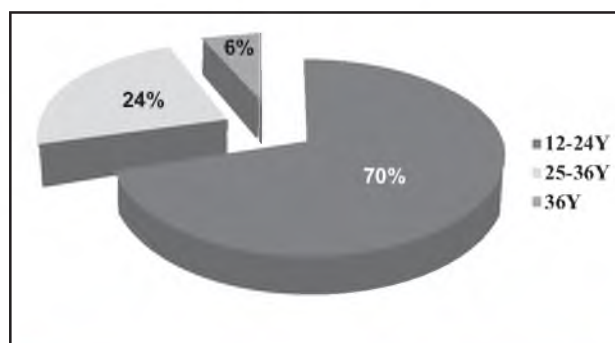


Figure – 1 : Age at First Use of Cigarette

that they had started smoking in between 12-24 years of age. While, only 6% had become addicted to tobacco smoking in the age of 36 years or more (Fig. I). Around 44% of smokers used more than ten cigarettes per day, more than 35% were using 5-10 cigarettes per day, while

remaining 21% were using less than five cigarettes per day (Fig. II).

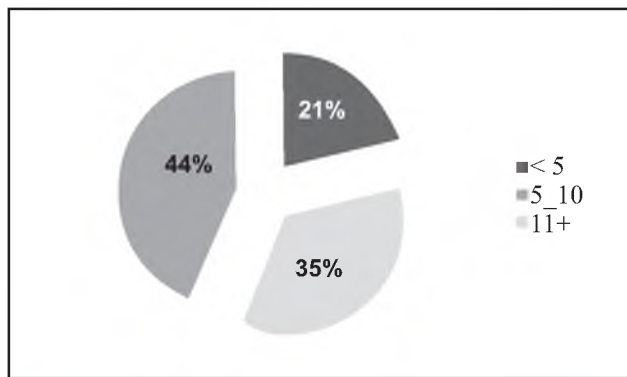


Figure – 2 : Number Of Cigarettes per day burned by smokers

Around 35% of the smokers told us that they smoked to relieve anxiety, tension and for mental satisfaction. More than 23% smoked cigarettes without any reason. Around 17% smokers reflected that it was a cheap and affordable habit, while about 24% believed that they smoked because it was a luxurious habit (Fig. III). Attitude of non smokers with smokers during cigarette smoking was categorized as normal attitude (30%), excusing attitude (50%) and abusing attitude (20%).

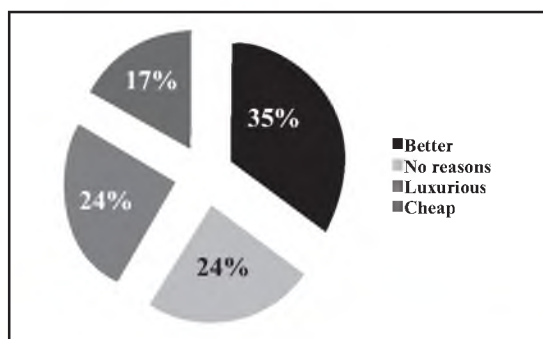


Figure – 3 : Reasons of Smoking

DISCUSSION

Information on the health hazards of smoking is a part of a number of disciplines in medical curriculum and it is expected that health care providers including Doctors, Nurses, Paramedics, and other staff of health care facilities knowing these hazards and would not take up smoking, but contrary to above argument, in our setting the frequency of cigarette smoking is still high (22.7%) in health care workers. It is also necessary to mention that here maybe

due to the weakness of small sample size, our findings cannot be generalized for the whole population. A significantly higher prevalence of smoking among men (33%) in comparison to women (9%) has been reported earlier in Pakistan.⁹⁻¹⁵ Similarly, in our study frequency of male smokers is very high (30.6%), while no female smokers were found in our setting. Earlier it is also reported that male identity and socialization are key influences in determining smoking behavior among Pakistani population.¹⁶ The sample population in our study started smoking at the age of 12-24 years, closely similar to the earlier published work on house physicians.¹⁷ Majority of the smokers (44%) smolder more than 10 cigarettes per day, showing high level of addiction to tobacco. Effective measures are needed to prevent smoking in this age group.

Over the past few decades, not much change has been seen in the frequency of smoking in Pakistan.¹⁸ Previously, there had been calls for mass health education and enforcement of a ban on smoking in public places, in order to reduce the number of smokers. Studies had underlined the importance to educate physicians and the general public about cardiac and carcinogenic effects of smoking, but unfortunately there is no clear policy on tobacco control in Pakistan.^{7,19} Interestingly, great majority (97%) of the respondents were aware and knew that smoking is unhealthy and yet they continued to smoke. It was noted that most of the smokers (35%) smoked to relieve anxiety, tension and for mental satisfaction. The ratio between married and unmarried smokers was 3:1, which was also very alarming and pointed out to the socio-economic and family issues.

Finally, in our setting overall frequency of smoking was still high (22.7%) in health care professionals than others which also indicated that in spite of awareness regarding injurious effects of smoking, health care workers did not realize that smoking was one of the major causes of increase in morbidity and mortality due to respiratory and cardiac ailments. So, there is a need to execute preventive strategies, to discourage people of smoke initiation. Public health education programs through mass media can also help to prevent people from smoking. The awareness about adverse effects of smoking, including cancer and heart diseases can be exploited in order to quit smoking in future strategies.

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