



Received: 01-06-2023
Accepted: 11-07-2023

ISSN: 2583-049X

The Adverse Effects of Passive Smoking Associated with Socio-Demographic Characteristics of Tobacco Users: A Retrospective Study

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Abstract

This study looked at the negative effects of passive smoking on one's health as well as how the socio-demographics of tobacco users affected those effects. The National Institute of Preventive and Social Medicine (NIPSOM), in Dhaka, Bangladesh, conducted this cross-sectional study. The survey included 150 adult males and female respondents in total. Age was determined to be averaged at 38.93 ± 2.04 . The majority of respondents (103.36%) smoke smokeless tobacco, while 30% of respondents reported being unemployed based on their profession. The problem with

smoking revealed that environmental pollution was a 91.3% problem, problems with pregnant women were 89.3% problems, and the majority (52.67%) had breathing problems and 34.67% had teeth pain. It can be concluded that smoking poses a serious threat to the world's public health, causing serious mental and physical health problems. Implementing focused preventative interventions is therefore essential to deterring tobacco use. It would also be helpful to perform more research on how tobacco users estimate danger.

Keywords: Knowledge Level, Passive Smoking, Health Hazards of Tobacco, Tobacco Users

Introduction

The most extensively planted commercial non-food crop worldwide is tobacco. The epidemic of mortality due to tobacco use is still in its early stages because the risks of health consequences can take decades to manifest. The shift in smoking from developed to poor nations is a development that supports the label "public health catastrophe" for tobacco. Today, 5.6 trillion cigarettes are produced annually, accounting for over 80% of all tobacco planted worldwide. China is by far the country that produces the most cigarettes, followed by the US, which is also the biggest exporter. In many industrialized and emerging nations, an entire industry has developed into a significant economic force, encompassing a broad production sector as well as distribution and retail outlets^[1]. It is predicted that tobacco use would be responsible for 8 million annual deaths by 2030, with low- and middle-income nations accounting for 80% of those fatalities^[2]. One of the world's poorest nations, Bangladesh has a number of health risks. She was regarded as one of the greatest single health risks to mankind by the tobacco industry. More than 43 cancer-causing substances and more than 4000 toxic compounds have been found in tobacco. About 35 main fatal diseases, including COPD and lung cancer in people, have also been linked to it. Smoking generally shortens life expectancy by 20 to 25 years. Despite the knowledge that smoking shortens life by 4 minutes every stick, the younger generation is smoking more frequently. It's also not uncommon for educated individuals, such as doctors, who are well aware of the harmful effects of smoking, to yet smoke^[3]. Only 1% of people in Bangladesh may be categorized as wealthy. The World Health Organization (WHO) reports that 14 percent of males who never smoked died in middle age compared to 41 percent of those who smoked a pack or more each day. Compared to women who never smoked, just 9% of heavy smokers passed away in middle age. Tobacco usage results in over 5.4 million deaths worldwide each year^[4]. Millions of people go without vital nutrients and meals every day, yet the tobacco companies are expanding quickly in contrast. Another significant factor is the presence of smokers around. The non-smokers are indirectly harmed by smoking by others who smoke here and there. Smoking contributes to both global warming and air pollution.

Materials and Methods

This cross-sectional study was carried out at the National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh, in the Department of Health Education. The survey comprised a total of 150 respondents who were adult males and females and older than 18 years old. Based on the aims and variables of the study, a semi-structured interviewer-administered questionnaire was created for the purpose of gathering data. The questionnaire was pretested among different demographics to spot any understanding issues. The questionnaire was revised and polished after pre-testing.

Face-to-face interviews with the respondents were used to collect data using the questionnaire. The goal of the study was thoroughly communicated to the respondents before they filled out the questionnaire. Each questionnaire was reviewed for consistency and completeness, and a unique code number was utilized to handle the responses moving forward. The investigator herself edited and tidied up the information she collected. Based on the study's goals, the data were manually processed, tabulated, and analyzed. Statistical Program for Social Scientists (SPSS) Version 16 was used to examine the data. An electronic calculator was used to calculate the results. Data was presented in tabular form, analyzed, and the results were then interpreted using the table and graph.

Results

Fig 1 demonstrates that the majority of our patients (27.3%) were between the ages of 21 and 25, while 22.7% were between the ages of 26 and 30. 10.7%, 10%, 9.3%, & 7.3% of all participants were, respectively, between the ages of 41-45, 36-40, 31-35, and 46-50 years old. 48 ± 12 years old was the average age. Age was determined to be averaged at 38.93 ± 2.04.

Fig 2 showed the responders are displayed by profession. Out of 150 respondents, 30% were unemployed, 26% were business owners, 23% were in the service industry, 12% were in other professions, 7% were day laborers, and 2% were stay-at-home mothers.

Multiple responses to the tobacco consumption pattern were displayed in Fig 3. It was discovered that the majority of respondents—103.36 percent—used smokeless tobacco, followed by smoking tobacco—63.34 percent—and other types of tobacco—3.34%.

Table 1 revealed that 89.3% of pregnant women's problems were related to smoking, while 91.3% were related to environmental pollutants.

The categories of smoking-related problems were listed in Table 2. It was discovered that 52.67% of smoking's problems were breathing. As for non-smokers, 90.7% of respondents reported having the same issue, while 9.3% were unsure.

Results of knowledge of tobacco's health risks were shown in Table 3. It was discovered that 78.66% of men had high levels of knowledge, 7.33% had ordinary levels, and 3.33% had low levels. 9.35% of female respondents had strong knowledge, while 1.33% had ordinary knowledge. Regarding education, we discovered that the majority of respondents (24.66%) had solid knowledge and had earned honors.

The respondents' health issues were displayed in Table 4 below. It was discovered that 34.67% of respondents had

oral discomfort, 33.33% had respiratory issues, 26.67% had visual problems, 20% had nausea and/or vomiting, 18.67% had high blood pressure, 3.33% had low blood pressure, and 2% had cancer.

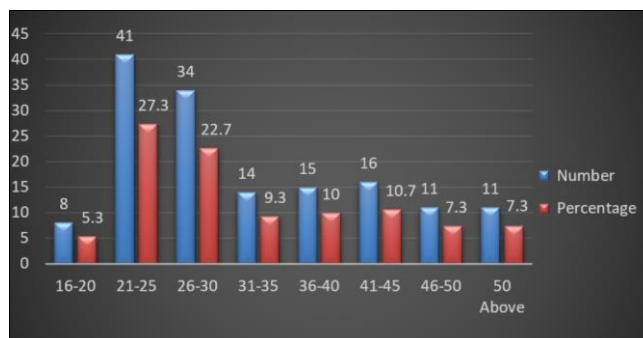


Fig 1: Distribution of the respondents according to Age

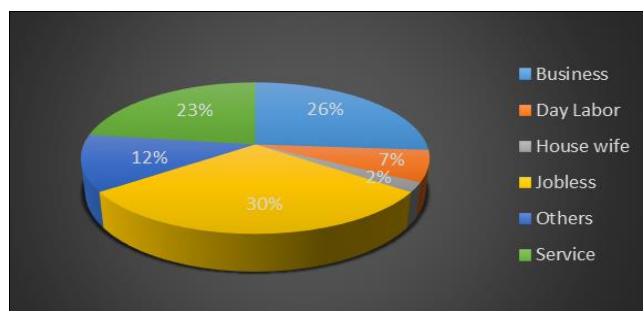


Fig 2: Distribution of the respondents according to profession

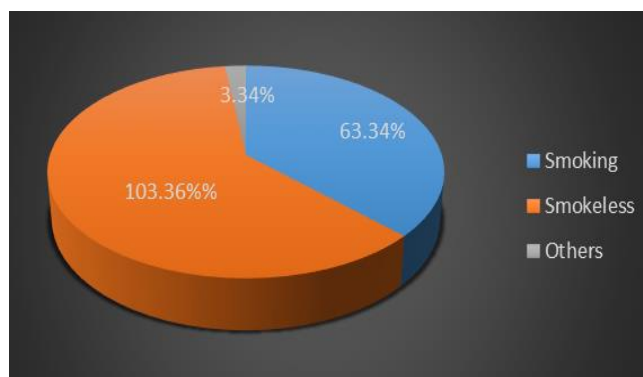


Fig 3: Distribution of the respondents by pattern of tobacco consumption

Table 1: Distribution of the respondents according to knowledge of problem for smoking

Knowledge of problem	Frequency		Percentage (%)
	Yes	No	
Pollution problem of environment	137	13	91.3
	13		8.7
Problem of pregnant woman	134	16	89.3
	16		10.7

Table 2: Distribution of the respondents according to types of problem due to smoking

Types of problem	Frequency		Percentage(%)
	Smoke	Problem of non-smoker	
Problem of smoking	64	136	42.67
	79	14	52.67
	52		34.67
Problem of non-smoker	136		90.7
	14		9.3

Table 3: Distribution of the respondents according to Knowledge level of health Hazards of tobacco

Variables		Knowledge Level					
		Poor knowledge		Average knowledge		Good knowledge	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Sex	Male	5	3.33	11	7.33	118	78.66
	Female	0	0	2	1.33	14	9.35
Education	Illiterate	2	1.33	4	2.67	3	2
	Primary	1	0.66	2	1.33	15	10
	SSC	2	1.33	3	2	16	10.66
	HSC	1	0.66	2	1.33	17	11.33
	Honors	0	0	10	6.66	37	24.66
	Masters	0	0	14	9.34	16	10.66
	Technology	0	0	0	0	5	3.33

Table 4: Distribution of the respondents according to health problem of the respondents

Health problem	Frequency (multiple answer)	Percentage
High Blood Pressure	28	18.67
Low Blood Pressure	5	3.33
Abdominal Pain/Vomiting	30	20
Difficulty in Respiration	50	33.33
Cancer	3	2
Dental Pain	52	34.67
Difficulty in Vision	40	26.67

Discussion

Bangladesh was the location of the study on the health hazards of tobacco users. The study found that, out of 150 respondents, the study population's mean age was 38.933 years, with a standard deviation of 2.04364. The majority of respondents (27.30%) were between the ages of 21 and 25; 22.70% were between the ages of 26 and 30; 10.70% were between the ages of 41 and 45; 10% were between the ages of 36 and 41; 9.30% were between the ages of 31 and 35; 7.30% were between the ages of 46 and 50; 7.30% were in the over-50 age group; and 5.30% were in the 16 to 20 age group (Fig 1).

Out of 150 respondents, 30% were unemployed, 26% were business owners, 22.7% were in the military, 12% were in various professions, 6.7% worked as day laborers, and 2% were housewives (Fig 2). Out of 150 respondents, the consumption pattern reveals that 63.34% smoked tobacco, 103.36% used smokeless tobacco, and 3.34% used other types of tobacco (Fig 3). Out of 150 respondents, 91.3% were aware that smoking pollutes the environment, while 8.7% were unaware (Table 1). Of the 150 respondents, 89.30% were aware of the issue, while 10.70% were unaware (Table 1). Smoking also causes problems for pregnant women if anyone smokes nearby (Table 1).

The US Department of Health and Human Services did a study of a similar nature and found that children whose parents smoke are more likely to get chest illnesses than children whose parents do not smoke. Additionally, it has been discovered that children whose parents smoked were more likely to experience significant illnesses during the first few years of life. The single biggest issue affecting today's children, who are the unwitting victims of tobacco smoke pollution, is passive smoking. The negative effects that develop early^[5].

Out of 150 respondents, 52.67% reported breathing difficulties, 42.67% said they produced smoke in the environment, and 36.67% said they coughed when they smoked (Table 2). Rashid Mia did a similar study in 1992 on the behavioral influences of smoking among residents of a rural Bangladeshi community in the village of Hazipur under Dharma Thana. Out of 117 respondents, he discovered that 44.44 percent of them said that smoking caused bronchitis and cough.6 Out of 150 respondents, 90.7% indicated that non-smokers had the same problem as smokers, and 9.3% had no knowledge of it (Table 2).

Out of 134 respondents, 78.66% of men had strong understanding of the health risks associated with tobacco use, 7.33% had average knowledge, and 3.33% had poor knowledge, according to data on sex and knowledge levels. Out of 16 respondents, 9.35% of the female respondents had strong knowledge of the health risks of tobacco use, while 1.33% had moderate knowledge. (Table-3). According to health issues, the survey indicated that out of 150 respondents, 34.67% experienced dental pain, 33.33% had respiratory issues, 26.67% had visual problems, 20% had nausea or vomiting along with their abdomen discomfort, 18.67% had high blood pressure, and 3.33% had low blood pressure. 2% of the respondents had cancer (Table-3).

The results were different from those of a research done in 1987 by Shanmugandan, S. *et al* among rural residents of India's Madurai region, where she reported cold rates of 29.4%, chest pain rates of 28.7%, cold and chest pain rates of 16.3%, dental difficulties of 9.5%, gastrointestinal problems of 12.6%, and dry lips rates of 3.9%^[7].

However, there are certain limitations to this study. First of all, since it is a cross-sectional study, we are unable to draw any judgments about causality. Second, the point estimates and related variance estimates could be skewed because it did not use random sampling but rather conventional sampling techniques. Finally, because the data used did not come from a survey specifically about smoking, the replies were restricted to smoking status and knowledge of the risks associated with smoking.

Conclusion

Because of the huge financial burden it places on developing nations like Bangladesh, tobacco is frequently referred to as a silent killer. Serious disabilities can be caused by diseases linked to tobacco use in both men and women, including pregnant women who smoke or use tobacco in any way. People still use tobacco despite having sufficient understanding of its negative effects. Therefore, to deter tobacco use, preventive initiatives should be specifically targeted at tobacco users. Furthermore, it would be advantageous to carry out more research on smokers' risk perception.

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