

Knowledge of Health Consequences of Passive Smoking among Student Nurses

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Abstract: - **Background:** Passive smoking is an important public health problem with resultant adverse health effects on health outcomes.

Purpose: The aim of the survey was to assess the level of awareness of the health consequences of passive smoking among student nurses.

Materials and Methods: A descriptive study was conducted among student nurses in a tertiary institution in South East Nigeria. A total of 160 student Nurses were selected using accidental sampling method. The instrument for data collection was a self-structured questionnaire. The study protocol was reviewed and approved before the actual study. A total of 160 nurses completed the questionnaire while all (100%) administered copies were suitable for analysis. Descriptive statistic was used to analyze data.

Results: Findings from the study provided answers to the research questions and showed that 85% of the respondents were aware of passive smoking, 90.6% were aware of the health consequences while 69.4% knew that lung cancer is a health consequence of passive smoking.

Conclusion: Information about the health consequences of passive smoking is on the rise.

I. INTRODUCTION

Smoking is a major public health problem worldwide. There have been thousands of studies investigating the impact of active smoking on health, and the overall toxic effects of active smoking are generally recognized as documented by Akl, Gaddam, Gunukula, Honeine, Jaoude and Irani ^[1]. In comparison, the effects of passive smoking on health are not fully understood. Existing studies suggest that passive smoking and active smoking might equally increase the risk of certain diseases, such as female breast cancer ^[2], allergic rhinitis, allergic dermatitis, and food allergy ^[3]. According to a study ^[4] a substantial body of research about environmental tobacco smoke and health has appeared Shiyi, Chen, Yong, and Zuxun ^[5] added.

Involuntary (or passive) smoking as documented by Tobacco Free Initiative ^[6] is the exposure to second-hand tobacco smoke (SHS) which is a mixture of exhaled mainstream smoke and side stream smoke released from a smouldering cigarette or other smoking device (cigar, pipe, bidi, etc.) and diluted with ambient air. Involuntary smoking involves inhaling carcinogens and other toxic components that are present in second-hand tobacco smoke. To confirm passive smoking among living beings, Jo, Oh and Dong ^[7] measured

breath carbon monoxide (CO) concentrations prior to and at prescribed time intervals after exposure to passive smoking under controlled conditions, along with the air CO concentration in the exposure room during the exposure periods. The post exposure breath CO levels were 1.4-2.7 times higher than the background breath CO levels after 30 minutes of exposure, yet only slightly after 10 minutes of exposure; thereby confirming that exposure to CO from passive smoking causes a significant body burden of CO. The air CO concentration gradually increased during the burning of a cigarette(s), regardless of the exposure during whereas it is slightly decreased after burning. Passive smoking was hardly talked about 20 years ago. Little thought used to be given to non-smokers living and working in smoky environment and the effects this had on their health (Tobacco Free Initiative, 2019).

There are several environmental habits that affect the human. A survey ^[8] opined that the factor most widely noted is air pollution (indoor and outdoor air pollution). Edinburgh ^[9] opined that people underestimate the health risks from smoking and the effects on others of second hand smoke. A non smoker who lives with a smoker may be exposed to about 1% of their tobacco smoke from passive smoking. This can increase their chances of developing lung cancer or dying from a heart attack. The same applies to people who work in a smoky atmosphere, which is why some countries has a ban on smoking in enclosed public places such as work-places, pubs and restaurants.

Nishiyama, Yasugi and Ohishi ^[10] recorded that there is a great discrepancy between the acceptance of the health effects of smoking and passive smoking and the evaluated socialization it brings hence suggested that to formulate an effective tobacco control strategy in paramedical schools, it would work best to add smoking cessation topics to the curriculum. Jinot and Bayard ^[11] claimed that passive smoking is associated with lower respiratory infections such as bronchitis and pneumonia, fluid in the middle ear as in children and symptoms of upper respiratory irritation.

II. MATERIALS AND METHODS

The study adopted descriptive cross-sectional design. Student nurses of the Department of Nursing Science, Faculty of Health Sciences and Technology, Nnamdi Azikiwe University, Anambra State, Nigeria were respondents in the study. Total student nurses' population was 200 during the

2009/2010 academic session. The study applied accidental sampling technique to select 160 (80%) study participants. A researcher-prepared questionnaire was used as instrument for data collection. Instrument was test for validity and reliability. Participation was voluntary while the researcher explained the content of the questionnaire as well as the purpose of the

study during the assessment process including an assurance of anonymity. Questionnaires were administered to participants who completed and returned all (100%) without any loses. Descriptive data analyses was done and presented in tables and charts.

III. RESULTS

Table 1: Respondents' socio-demographics data

Demographic data	Options	Student Nurses (%) n=160
Age range	<20 years	21 (13.1)
	21-30 years	123 (76.9)
	31-40 years	6 (3.8)
	>40 years	10 (6.2)
	Total	160 (100)
Gender	Male	32 (20)
	Female	128 (80)
	Total	160 (100)
Year of Study	Second	41 (25.6)
	Third	27 (16.9)
	Fourth	27 (16.9)
	Fifth	65 (40.6)
	Total	160 (100)
Marital Status	Single	140 (87.5)
	Married	34 (12.5)
	Separated	0 (0.0)
	Divorced	0 (0.0)
	Total	160 (100)

Table 1 above shows that most, 123 (76.9%), of the respondents were between 21-30 years, only 32 (20%) are male, the proportion of respondents from third and fourth

year are equal, 27 (16.9%), while 65 (40.6%) are in their final (5th) year of the academic programme. A significant proportion, 140 (87.5%), are single

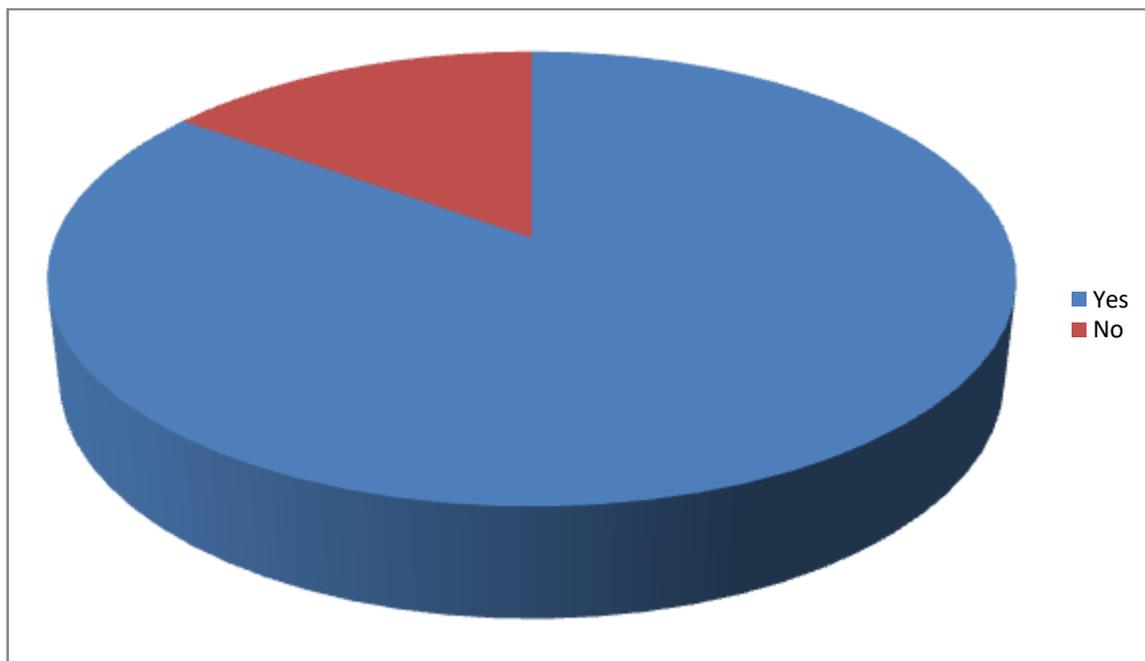


Fig 1: Pie Chart showing the frequency distribution of the level of awareness of passive smoking among respondents

The Pie Chart above shows that 136 (85%) of the respondents are aware of passive smoking while 24 (15%) are not aware.

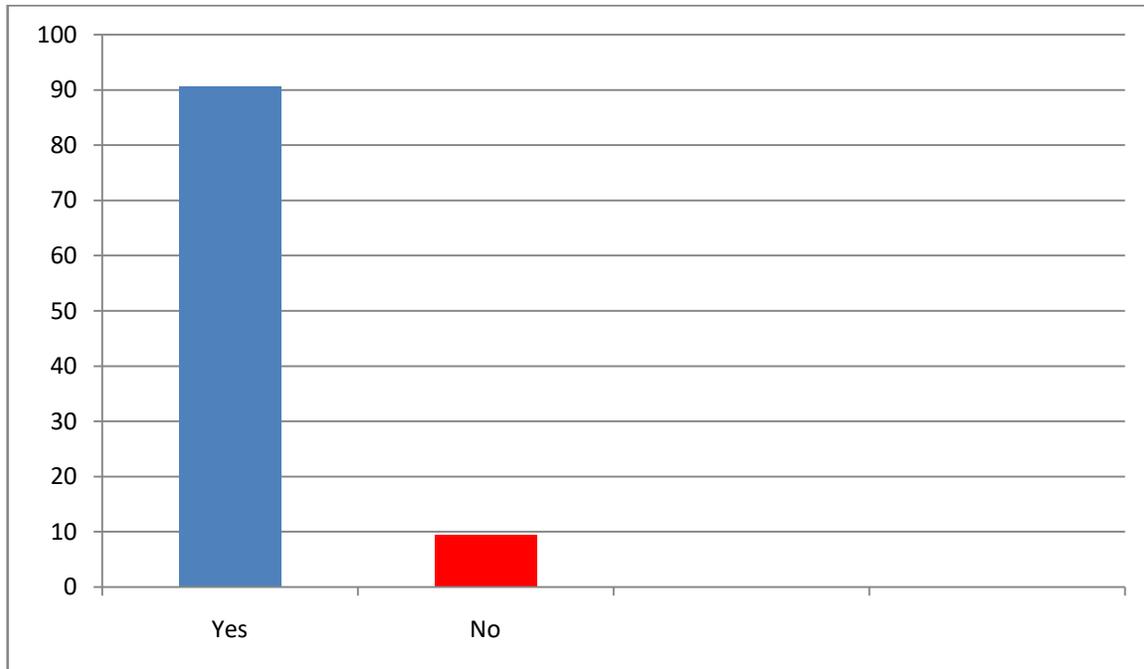


Fig 2: Frequency distribution of the level of awareness of health consequences of passive smoking.

Fig 2 above shows that 145 (90.6%) of the respondents are aware of the health consequences of passive smoking while only 15 (9.4%) are not aware.

Table 2: Showing the frequency distribution of respondents’ opinion about types of health consequences of passive smoking

Parameters	Options	Student Nurses (%) n= 160
What are the health consequences medication error on the passive smoking? (choose one option)	None	6 (3.8)
	Coronary heart disease	18 (11.2)
	Sudden death syndrome	
	Respiratory tract infections	8 (5.0)
	Lung cancer	
	Cervical cancer	20 (12.5)
	Cleft lip and palate	
	Stroke	90 (56.3)
	Mental retardation	1 (0.6)
	Liver cirrhosis	1 (0.6)
	Reduced life span	8 (5.0)
	Abortion/miscarriage	1 (0.6)
	Allergic reactions	2 (1.3)
	Asthmatic attack	1 (0.6)
	Total	1 (0.6)
		2 (1.3)
	160 (100)	

Table 2 shows that 90 (56.3%) of the respondents indicated that lung cancer is a health consequence of passive smoking, 20 (12.5) noted respiratory tract infection, 18 (11.3%) indicated coronary heart disease while others noted stroke, liver cirrhosis, reduced lifespan, etc as consequences of passive smoking.

IV. DISCUSSION

Air pollution (indoor and outdoor air pollution) is the most widely known environmental hazard that affects human

health as documented by Fuentes-Leonarte, Ballester and Tenias^[8]. This study assessed the knowledge of passive smoking and its health consequences among student nurses of Nnamdi Azikiwe University Nnewi Campus Anambra State Nigeria. It revealed that greater percentages (85%) are aware of passive smoking while 90.6% of the respondents were aware of the health consequences. However, 15% and 9.4% indicated otherwise respectively. This is consistent with a study^[9] that recorded that people underestimate the health risks from smoking and the effects on others of second hand

smoke. Nishiyama, Yasugi and Ohishi^[10] had similar report. The researcher is of the view that a greater population have heard of the health consequences of passive smoking and despite this knowledge; some persons (non smokers) are not perturbed instead they insist on co-habiting with smokers. Hence the need for extensive general public health education.

With regards to assessing student nurses' opinion about the various health consequences of passive smoking known to the respondents, 90 (56.3%) of the respondents indicated that lung cancer is a health consequence of passive smoking, 20 (12.5) noted respiratory tract infection, while 18 (11.3%) indicated coronary heart disease as consequences of passive smoking. This corroborates the report^[11] which recorded that passive smoking is associated with lower respiratory infections such as bronchitis and pneumonia, fluid in the middle ear as in children and symptoms of upper respiratory irritation. Andreas^[12] concluded that the examination of the relationship between passive smoking and cardiovascular disease. The research is of the opinion that these findings do not dispute the fact that some participants who are aware of passive smoking may not be aware of the health consequences.

V. CONCLUSION

The aim of nursing is to bring clients and patients to as near normal as possible so that functionality will not be impaired. Deliberate efforts are essential to raise awareness of the health effects of passive smoking so as to decrease the exposure at residential, public places as well as prompt policy making against environmental tobacco smoking which indirectly leads to passive smoking. In addition, limitation encountered during the study is that the study did not assess the impact of passive smoking on the respondents.

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