

# Assessment of Smoking among Nursing Students

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**ABSTRACT**— Tobacco smoking is a global epidemic and health threat that continues to increase. Nursing students primarily develop their professional roles in smoking cessation during their academic nursing education. The purpose of the study is to examine the effect of smoking (cigarette, Hookah) during student life in his/her university. Using convenience sampling, a descriptive cross-section research design was used. Participants were nursing undergraduate students from AAUP, Palestine. Four hundred and thirteen participants participated in the study. More than half of the participants were smokers 233 (56.4%). Of those who had smoked, about 223 (54.0%) were tobacco smokers while 161 (39.0%) Hookah smoking. Around 52.8% of participants complain of headaches, 44.2% of participants complain of nervousness, and 3% of participants complain of hand tremors. A moderate relationship between smoking and gender while a small relationship with age, but there was no relationship with GPA. According to smoking Hookah, no relationship with gender or age, while a moderate relationship with GPA. The high percentage of smoking in 21-24 years. A moderate relationship between smoking and gender while a small relationship with age, but there was no relationship with GPA. According to smoking Hookah, no relationship with gender or age, while a moderate relationship with GPA. The study showed that the participants feel headache, nervousness, and a little effect hand tremor.

**KEY WORDS:** Nursing students, Smoking, Tobacco use.

## 1. INTRODUCTION

Smoking tobacco is a serious health hazard to both users themselves and the community caused by exposure to second-and third-hand tobacco smoke [1]. Smoking is the world's most preventable cause of disease and early death in developed countries. According the World Health Organization (WHO), nearly 100,000 teenage people smoke every day and 80% of them reside in developing countries [1]. Nevertheless, smoking starts across the age of 15 that has caused WHO to classify smoking as a childhood disease [2]. A survey done by the American College Health Association (ACHA) in 2012 revealed that 30 % of university students smoked tobacco at least once. [3]. The use of hookah cigarettes has been the largest among college-educated adults that hookah tobacco is marketed in more than 50 flavors, though cigarettes are only available in one flavor (menthol) [4,5]. The flavors in hookah tobacco mask respiratory irritation that is typically associated with tobacco smoking [6]. The experience of hookah tobacco smoking is usually convivial, and this experience is associated with relaxation [7]. Previous research shows that the first experience with a tobacco product portends future use and nicotine dependence [8]. The social context of hookah tobacco uses and the pleasurable sensory experience increases the likelihood of habitual hookah tobacco use and nicotine dependence [8].

Cessation of tobacco smoking behavior reduces health risks and improves quality of life [9, 10]. Smokers should be encouraged by the healthcare providers, such as physicians and nurses, to quit smoking [11]. However, one of the barriers in achieving smoking cessation is the prevalence of smoking amongst healthcare providers [12].

According to the World Health Organization (WHO) tobacco smoking is a global problem that continues to

increase and encompass the biggest health threat the world has ever faced, killing around 6 million people each year [1]. Tobacco smoking remains highly prevalent despite health hazards of smoking tobacco products. In 2015, it was estimated that 16.7% of adult men and 13.6% of adult women in the US were smokers [13]. Nurses play significant key roles in tobacco use prevention and cessation interventions [14]. While studying at academic settings, nursing students develop their professional roles in giving help to smokers who wish to quit. Consequently, it is pressingly necessary to explore tobacco smoking history and behaviors, knowledge, attitudes, and beliefs towards smoking among nursing students, and to have an insight into the nature of education they receive on smoking cessation.

The fight against smoking should be a key concern of all societal players; however, and despite the need for collective participation, health professionals are on the frontline when it comes to educating for the acquisition and maintenance of healthy behaviors, having a primary role as educators and social role models. In our reflection on the key role of healthcare professionals, we decided to focus on the smoking habits of nursing students as future professionals who have scientific knowledge in the health area in an attempt to understand what might influence them to expose themselves to risk factors, a situation that is counterproductive to their function as role models in terms of health behaviors [15]. Therefore, the purpose of the study is to examine the effect of smoking (cigarette, Hookah) during student life in his/her university.

## **2. Methods**

### ***2.1 Research Design, sample and setting***

A descriptive cross-sectional design was used for this study and was conducted in fall semester of 2017. A convenience sample of 413 nursing student who were currently enrolled in the nursing program was recruited from faculty of nursing at AAUP. The inclusion criterion for participation in the study was nursing student. Exclusion criteria was first year.

### ***2.2 Instruments***

Data collection was accomplished through using two different instruments, each student will complete: (A) demographic survey, (B) the effect of smoking during student life in the university questionnaire which was developed by the researchers. The questionnaire was sent to five experts in public health and nursing. Their comments were taken into consideration. The study initially was conducted on 20 students as a pilot study and they excluded from the actual study. The questionnaire took from the students 10 to complete it.

### ***2.3 Ethical consideration***

Data was collected anonymously and participation was voluntary. Student who agreed to participate in the study were asked to assign the informed consent and to complete the questionnaire.

## **3. Results**

The total sample was 413 participants in the study. Demographics questions asked the participant his or her age, gender, marital status, academic year, and GPA. When asked their age, 97(23.5%) of the respondents were in the age range from 18 to 20 years old, 284 (68.8%) were in the age range from 21 to 24 years old, 27 (6.5%) were 25-26 years old, and 5 (1.2%) were above 26 years old. The participants were asked their gender, and 170 (41.2 %) responded that they were female, while 243 (58.8 %) responded that they were male. They were also asked to identify their current year in school and the results were as follows; 55 (13.3 %) were in their second year, 263 (63.7 %) were in their third year, and 95 (23.0 %) were in their fourth year. According to marital status, 5 (1.2%) were married and 408 (98.8 %) were single. The participant's

GPA were being reported as follows: 36 (8.7 %) were in 1- 1.67, 53 (12.8 %) were in 1.68 – 1.99, 149 (36.1%) were in 2- 2.67, 101 (24.5%) were in 2.68- 2.99, 64 (15.5%) were in 3 -3.49, and 10 (2.4%) were in 3.5-4. The following tables and figures clarify demographic distribution of the participants. Table (1) demographic distribution of the participants

**Table (1)** demographic distribution of the participants

Item		n	%
<b>Gender</b>	Male	243	58.8
	Female	170	41.2
<b>Age</b>	18-20 years	97	23.5
	21-24 years	284	68.8
	25-26 years	27	6.5
	above 26 years	5	1.2
<b>Academic year</b>	Second year	55	13.3
	Third year	263	63.7
	Fourth year	95	23.0
<b>Marital status</b>	Married	5	1.2
	Single	408	98.8
<b>GPA</b>	1-1.67	36	8.7
	1.68-1.99	53	12.8
	2-2.67	149	36.1
	2.68-2.99	101	24.5
	3-3.49	64	15.5
	3.5-4	10	2.4

According to our study, more than half of participants were smokers 233 (56.4%). Of those who had smoked, about 223 (54.0%) were tobacco smokers while 161 (39.0%) Hookah smoking. From the tobacco smoking, about 46 (11.1%) participants were 5-10 cigarette daily, 105(25.4%) participants were most likely 11-20 cigarette /daily, 49 (11.9%) participants were smoke more than 20 cigarettes daily, and 22 (5.3%) participants smoke as desired. Of those who had smoked Hookah (n=161), 40 (9.7%) participants smoke once daily,50 (12.1%) participants were most likely twice /daily, 44 (10.7 %) participants more than twice daily, and 27 (6.5%) participants as desired.

**Table (2)** Distribution of the smoking and Hookah among participants

Item		n	%
<b>Smoking</b>	yes	233	56.4
	no	180	43.6
<b>Cigarette smoking</b>	yes	223	54.0
	no	190	46.0
<b>Hookah</b>	yes	161	39.0
	no	252	61.0
<b>Cigarette smoking</b>	5-10 cigarette	46	11.1
	11-20	105	25.4
	more than 20 cigarette	49	11.9
	as desired	22	5.3
<b>Hookah smoking</b>	once	40	9.7
	twice	50	12.1
	more than twice	44	10.7
	as desired	27	6.5

According to our study, of those who had tobacco smokers, about 161 (72.2%) were male while 62 (27.8%) female.

**Table (3)** demographic distribution of the participants according to cigarette smoking

Item		n	%
<b>Gender</b>	male	161	72.2
	female	62	27.8
<b>Marital status</b>	married	4	1.8
	single	219	98.2
<b>Academic year</b>	second year	23	10.3
	third year	138	61.9
	fourth year	62	27.8
<b>Age</b>	18-20 years	42	18.8
	21-24 years	162	72.6
	25-26 years	18	8.1
	above 26 years	1	.4
<b>GPA</b>	1-1.67	14	6.3
	1.68-1.99	52	23.3
	2-2.67	75	33.6
	2.68-2.99	53	23.8
	3-3.49	23	10.3
	3.5-4	6	2.7
<b>Total</b>		223	

According to physical change or mood disturbance due to not smoke that day, 52.8% of participants complain from headache, 44.2% of participants complain of nervousness, and 3% of participants complain of hand tremor. Pearson correlation coefficient was computed to assess the relationship between age, gender, and GPA with smoking “There was a moderate correlation between the gender and cigarette smoking ( $r = 0.276$ ,  $n = 413$ ,  $p = 0.001$ )”. According to the age “There was a small correlation between the age and cigarette smoking ( $r = 0.105$ ,  $n = 413$ ,  $p = 0.034$ )”, and there was no correlation between the GPA and cigarette smoking ( $r = 0.068$ ,  $n = 413$ ,  $p = 0.171$ )”.

Also, Pearson correlation coefficient was computed to assess the relationship between gender, age, and GPA with Hookah “There was no correlation between the gender and Hookah ( $r = 0.083$ ,  $n = 413$ ,  $p = 0.090$ )”. According to the age “There was no correlation between the age and cigarette smoking ( $r = 0.055$ ,  $n = 413$ ,  $p = 0.261$ ), and there was moderate correlation between the GPA and Hookah ( $r = 0.190$ ,  $n = 413$ ,  $p = 0.001$ )”.

#### 4. Discussion

Unfortunately, the results of this study are alarming, they indicated that smoking is still a problem for some nursing students, as 56.4% mentioned current smoking. Nonetheless, this figure is significantly higher than that of people who do not actually smoke, and it is alarming that 39.0 per cent of respondents reported Hookah smoking.

This finding is high compared favorably with other research that have used the Global Health Professions Student Survey (GHPSS) and that display a broad range of results with regard to current smoking status of students. The WHO GHPSS findings from 2005 to 2009 found that current smoking in nurses ranged from

less than 5 % to 43.9 %, based on the country surveyed, and in more than half of the countries surveyed, more than 20 % of students smoked [16]. (Warren et al., 2009). Data from a 2007 survey of nursing students in India found that 4.5 % had actually smoking [17]. The findings from Catania (Italy) in 2012 showed that 38.2 % were current smokers [11]. A survey results in Malta in 2010 showed that 27.1% of the participants were current smokers [18]. In 2012 survey of students in Mauritius (Sub-Saharan Africa) showed that 24.7% of the nursing students surveyed currently smoked [19]. The current study results may be indicated that our nursing students facing challenges in their university life especially in clinical part or absent of health promotion programs. They need to focus in these challenges and trying to alleviate or solving these them. The study showed that the participants feel headache, nervousness, and a little effect hand tremor. These are expected as adverse effect for tobacco smoking and use of Hookah smoking. A moderate relationship between smoking and gender while a small relationship with age, but there was no relationship with GPA. According to smoking Hookah, no relationship with gender or age, while a moderate relationship with GPA.

## 5. Conclusion

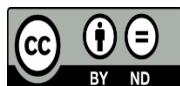
We concluded that the prevalence of tobacco smoking in this study was 56.4%, being higher in men (72.2% vs. 27.8%). The high percentage of smoking in 21-24 years. A moderate relationship between smoking and gender while a small relationship with age, but there was no relationship with GPA. According to smoking Hookah, no relationship with gender or age, while a moderate relationship with GPA. The study showed that the participants feel headache, nervousness, and a little effect hand tremor.

The study recommended that the infrastructure of student health centers present in college campuses across the nation could thus play a pivotal role in prevention of a new tobacco epidemic among young adults. Adding training modules on smoking cessation to undergraduate nursing program curricula is highly suggested. Future research is recommended to explore the lived experiences and consequences of smoking behavior among former smoker's group.

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