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**TOBACCO USE AND RELATED FACTORS AMONG
NIGERIAN UNIVERSITY STUDENTS LIVING IN
ISTANBUL, TURKEY.**

MASTERS OF SCIENCE THESIS

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THESIS APPROVAL PAGE

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ONAY

Bu tez Yeditepe Üniversitesi Lisansüstü Eğitim-Öğretim ve Sınav Yönetmeliğinin ilgili maddeleri uyarınca yukarıdaki jüri tarafından uygun görülmüş ve Enstitü Yönetim Kurulu'nun/...../..... tarih ve sayılı kararı ile onaylanmıştır.

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DECLARATION

I hereby declare that this thesis is my original work and that, to the best of my knowledge and belief, it does not contain any previously published or written works by other authors, nor does it contain any works that have been approved for the award of any other degree, with the exception of those where appropriate citation has been made in the text.



Date

Signature

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LIST OF ACRONYMS AND ABBREVIATIONS

W.H. O	World health organization
COPD	Chronic obstructive pulmonary disease
GATS	Global adult tobacco survey
CDC	Centre for disease control and prevention
SPSS	Statistical Package for the Social Sciences
P VALUE	Probability value



ABSTRACT

Funmilayo, O. (2023) Tobacco use and related effects among Nigerian university students living in Istanbul Turkey. Yeditepe University, Institute of Health Science, Department of Public Health, MSc thesis, Istanbul.

The purpose of the study is to find out the rate of tobacco usage, and factors among Nigerian University students living in Istanbul, Turkey.

To assess these challenges and understand their impact on students, this cross-sectional study was conducted. Nigerian university students living in Istanbul Turkey were chosen as the study population. The Instrument used to collect the data was a questionnaire. This study used a descriptive Survey research design approach. A total of 348 respondents comprising of 183 males (52.6%) and 165 females(47.4%) from Nigeria who are Undergraduates and Graduate students were employed for the study. The participants ages were within the range of 15-34. There was no association between place of residence, demographic factor(marital status) and current tobacco usage. However, there is an association between educational level and current tobacco usage. The perception of tobacco hazards influences usage of tobacco products. Finally, there is a correlation between the amount of discomfort caused by tobacco smoke and being an active smoker.

SPSS version 26 was used. Data were analyzed using Inferential and Descriptive methods. ($P<0.05$) was considered statistically significant for the analysis, which included descriptive and chi-square statistics. In summary, these findings reveals the low rate of tobacco products among the study population.

KEYWORDS: Tobacco use, Tobacco usage, Smoking, Nigerian university students, Istanbul, Turkey.

ÖZET

Funmilayo, O. (2023) İstanbul Türkiye'de yaşayan Nijeryalı üniversite öğrencileri arasında tütün kullanımı ve ilgili etkiler. Yeditepe Üniversitesi Sağlık Bilimleri Enstitüsü Halk Sağlığı Anabilim Dalı Yüksek Lisans Tezi, İstanbul.

Bu çalışmanın amacı Türkiye'de İstanbul'da yaşayan Nijeryalı Üniversite öğrencilerinin tütün kullanım oranlarını ve etkenlerini belirlemektir. Bu zorlukları değerlendirmek ve öğrenciler üzerindeki etkilerini anlamak için bu kesitsel çalışma yapılmıştır. Çalışma evreni olarak İstanbul Türkiye'de yaşayan Nijeryalı üniversite öğrencileri seçilmiştir. Veri toplamak için kullanılan araç bir ankettir. Bu çalışma, tanımlayıcı bir Anket araştırma tasarımı yaklaşımı kullanmıştır. Araştırma için Nijerya'dan Lisans ve Yüksek Lisans öğrencisi 183 erkek (%52,6) ve 165 kadın (%47,4) olmak üzere toplam 348 kişi istihdam edilmiştir. Katılımcıların yaşları 15-34 aralığındaydı. İkamet yeri, demografik faktör (medeni durum) ve mevcut tütün kullanımı arasında ilişki yoktu. Bununla birlikte, eğitim düzeyi ile mevcut tütün kullanımı arasında bir ilişki vardır. Tütün tehlikelerinin algılanması, tütün ürünlerinin kullanımını etkiler. Son olarak, tütün dumanının neden olduğu rahatsızlık miktarı ile aktif bir sigara içicisi olmak arasında bir ilişki vardır.

SPSS sürüm 26 kullanıldı. Veriler, Çıkarımsal ve Tanımlayıcı yöntemler kullanılarak analiz edildi. ($P<0.05$), tanımlayıcı ve ki-kare istatistiklerini içeren analiz için istatistiksel olarak anlamlı kabul edildi. Özetle, bu bulgular çalışma popülasyonunda tütün ürünlerinin oranının düşük olduğunu ortaya koymaktadır.

ANAHTAR KELİMELELER: Tütün kullanımı, Tütün kullanımı, Sigara kullanımı, Nijeryalı üniversite öğrencileri, İstanbul, Türkiye

INTRODUCTION

1.1 Background to the Study

Smoking is the fastest-spreading and longest-lasting epidemic, according to the World Health Organization (WHO) (1). There are currently 1.3 billion smokers worldwide, and it is predicted that by 2025, there will be 1.7 billion (2). It has been determined that 84% of smokers are in developing countries (3).

According to the World Health Organization's report on the global tobacco epidemic, the tobacco epidemic is one of the biggest threats to global public health today, killing over 8 million people annually [4,5]. Despite the fact that it seems like tobacco use has continued to decrease proportionately in many countries, the number of tobacco users worldwide, especially in developing countries, has remained high. In addition, using tobacco products like cigarettes and water pipes has grown in popularity among college and high school students. The misconception that the water pipe 'filters' the smoke, making it less dangerous than other forms of tobacco smoking, is partially to blame for this increase in popularity. [6].

This topic of tobacco use among Nigerian students living in Istanbul, Turkey, is the focus of this research project. The aim of this study is to investigate the prevalence of tobacco use among Nigerian students living in Istanbul, Turkey. Tobacco use is extremely harmful to one's health, yet it is estimated that roughly one-third of adults in the globe who are 15 years old and older smokes [7]. Particularly in developing nations like Nigeria, tobacco usage on college campuses is still receiving more attention. [8]. Tobacco use contributes to a number of untimely deaths and is one of the leading global causes of preventable morbidity and mortality. According to the WHO report on the global tobacco epidemic 2021, tobacco actually kills half of its users each year, technically killing more than 8 million people annually, and it costs the world economy US\$ 1.4 trillion annually. Since low- and middle-income nations (like Nigeria) account for approximately 80% of the world's tobacco-related deaths, this has a significant impact on their citizens. [9] The prevalence is increasing, particularly in emerging nations. Accordingly, it is anticipated that emerging nations will experience a predominance of the projected illness and mortality due to tobacco usage. Off-campus housing (30.2%), social centers (30.2%), and bars or clubs (28.1%) were the most

frequented locations for tobacco use. [10]. Furthermore, many young people on campus are exposed to peer pressure for the first time, interested, and willing to attempt new habits without the constant supervision of their parents. Studies on university students in Nigeria have revealed that environmental risk factors, such as exposure to tobacco advertisements, and personal risk factors, such as risk-taking behavior, stress, depression, friends, family, and anxiety alleviation, are the main causes of tobacco use. The main causes of smoking were gender, age, ethnicity, and family circumstances. The prevalence of new alluring products like electronic cigarettes and shisha, pop culture, expectations of some other people, the rise in affordability, and unenforced anti-tobacco laws may also be contributing factors. It is expected that tobacco use will continue to rise, particularly among students. A different study also revealed that curiosity is the main reason for tobacco use. [11]

1.2 Research Aims and Objectives

1. To investigate the rate of tobacco use among Nigerian students living in Istanbul, Turkey.
2. To discover the type of tobacco product that is commonly used by Nigerian university students in Turkey.
3. To investigate the perception, association and factors that contributed to tobacco use among Nigerian university students in Istanbul Turkey.

1.3 Significance of The Study

In Nigeria, tobacco issues are getting worse [12]. Additionally, Nigeria has the largest tobacco market in Africa. [13]. The main purpose of this study is to investigate the rate of tobacco use among Nigerian students in Turkey. That being said, In Nigeria, the smoking rate for 2020 was 3.70 percent, a 0.2% decrease from 2019[14]. The prevalence of smokers may be declining in Nigeria but one out of ten Nigerians still smokes daily. [15] A recent report by the Global Audit on Tobacco Survey (GATS) revealed that Nigeria had a low incidence of tobacco usage, which may not sit well with the civil society organizations that have fought against tobacco smoking, advertising, and production. [16]. This study is an important effort to advance public health, this research assesses the respondents' knowledge of the dangers associated with smoking. The purpose for which the study's findings will be used makes it extremely necessary. This research will bring forth new ideas. The outcome of this thesis will lead to new possibilities for the society as a whole. As this study is aimed at tobacco use and its related factors, The results of this study can be helpful

to inform health policy makers about the magnitude and characteristics of tobacco users among Nigerian university students living in Istanbul Turkey, it can also serve as a baseline data for future studies. Its descriptive findings would give an insight on the impact of the Tobacco smoking among the research participants. This experience can create guidance for prospective studies to be conducted later. The outcome of the thesis will lead to new possibilities for the society as a whole. The findings of this study will be utilized to persuade customers to think twice before engaging in an activity. This will significantly contribute to modeling the conduct that general awareness has produced in them.

Finally, the study's findings should contribute to raising public awareness of the negative health impacts of tobacco smoking in general, particularly among university students. It will help the young people understand that using this product in excess or even in tiny amounts has inhibiting effects on the brain.

1.4 Statement of the Problem

Tobacco use is quite common in Turkey. In fact, In Turkey, smoking is a significant public health issue [17]. For tobacco companies, Africa has emerged as a top market. [18] A report from OECD (Organization for Economic Co-operation and Development) in 2015 mentions that Turkey is the 11th country in the world for tobacco smoking figures, with an average of 24% of its population. [19].

Even though the Nigerian government places a strong emphasis on the negative effects of tobacco use and despite extensive public education campaigns by governmental, nonprofit, religious, and educational institutions on the dangers of tobacco use, youth tobacco use is on the rise in Nigeria. In Nigeria, 5.6% of adults (aged 15 and over) use tobacco products. The study intends to explore tobacco use and related factors. Despite a possible decline in smokers in Nigeria, one in ten Nigerians still smokes every day. [20]. To the society as a whole, friends, relatives, peer pressure, curiosity, depression, anxiety and other vices are all associated with tobacco use. Therefore, this study is motivated by the controversy that surrounds tobacco use among university students. To this goal, and in light of the issues already mentioned, this research aims at knowing the level of use or prevalence of tobacco among Nigerian university students in Turkey, Istanbul city as a study area.

1.5 Variables Included in the Analyses

Current tobacco users are defined as people who are; currently smoking or using any tobacco product, either regularly or occasionally, using the following questions.:

1) Do you currently use any tobacco product(s)? a) Yes, I do, daily b) Yes, I do, non-daily c) In the past I used to, but I gave up all forms of tobacco products completely

d) I never used any tobacco products

2) 'How many times do you use tobacco weekly?

< Less than 7 cigarettes/ 7 times a week 7 - 35 times a week 36 - 70 times a week

71 - 140 times a week

> Greater than 140 times a week.

The number of people who have ever used tobacco but do not currently smoke or use any other form of tobacco was used to define **Former tobacco users**.

People who reported having never smoked in their lifetime were considered **Never tobacco users**.

A person who has smoked 100 cigarettes is known as an **Established smoker**

Relevant independent variables included in the analyses were gender (male/female), age, place of residence (living alone with friends/living with relatives), educational level (two categories), The level of knowledge of danger of tobacco product on our health: 'Based on your knowledge, on a scale between 1 - 5, how dangerous is cigarette to our health?

Educational level was grouped into two categories (undergraduate and graduate)

Third hand tobacco smoke is made up of the pollutants that settle indoors when tobacco is smoked.

1 Time use means 1 cigarette use or 1 session of water pipe or 1 E-cigarette use etc.

LITERATURE REVIEW

2.1 Concept of Tobacco Use

Turkey produces tobacco, hence there is a high prevalence of tobacco usage there. It is tenth on the list of nations with the highest tobacco consumption worldwide (21). As a result, smoking is a significant public health issue in Turkey. Any ongoing consumption of tobacco plant leaves and their byproducts is referred to as "tobacco use." The most common method of consuming tobacco is through the smoke of cigarettes, pipes, and cigars. There is no level of cigarette exposure that is safe; all kinds of tobacco are toxic. The most prevalent method of tobacco consumption worldwide is cigarette smoking. Other tobacco products include cigars, cigarillos, roll-your-own tobacco, pipe tobacco, bidis, and kreteks, as well as different smokeless tobacco items. Various tobacco preparations that are snorted, sucked, or chewed are referred to as smokeless tobacco. [22] Young adulthood is a crucial time for tobacco use, and this period is frequently characterized by an increase in use or a late commencement of use [23]. Typical tobacco products include cigarettes, e-cigarettes, water pipes (shishas), and pipes. A study conducted showed that the most common risk factors for tobacco use among the Nigerian college aged population include peer influence, family conditions, and media advertisements.[24] Also, a similar result was obtained by a study conducted by Bankole K. Oyewole et al which shows that peer pressure is an important risk factor[25] Numerous studies have shown tobacco use are related to a number of variables, such as age, gender, marital status, education, employment, occupation, religion, ethnicity, place of residence, stress, loneliness, peers, advertisement, male gender and parental smoking, Also, poor academic performance has been linked to related factors of tobacco use [26,27].In a study conducted by Arute et al, the respondents said that using tobacco helps them relieve stress, helps them forget their worries and also helps them concentrate on reading better.[28]. Also, the study conducted by Abiola et al says that friends influence, advertisement, parental influence and relatives influence are factors of tobacco usage. Sign of maturity, being a male, and Poor knowledge of tobacco-related health risks are also factors [29], Some researches revealed that peer pressure is a significant gateway to tobacco usage [26,30],

In 1988, a study comprising the whole Turkish population found that the prevalence of smoking was 44.5% in inhabitants over 15 years of age, with a much higher percentage of men among smokers (62.8% men vs 24.0% women). [31].Among the gender-specific studies conducted in

Nigeria, the result showed that smoking prevalence pattern and the number of smokers were higher among males than females, this finding is consistent with several published works on smoking in Nigeria and overseas [23,32]. Also, in a study from Ilorin, conducted by Fawibe and Shittu, showed results that the prevalence of smoking among undergraduates was 5.7% (men 7.7%, women 2.0%), [33]. However, this research doesn't focus on gender-specific studies. In a study conducted by Aniwada et al, the principal conclusions of this investigation were that males and females consume tobacco similarly, and tobacco use was low which is contrary to other publications. [20,34]

Furthermore, Owopetu, O. F., et al investigated in a cross-sectional study of tobacco use among undergraduates in South-Western Nigeria. The result showed that There was a strong correlation between sex, educational level, and current smoking status. [35]

2.2 Reasons for Tobacco Use

Young people regard smoking as being glamorous because their role models are movie stars, musicians, and other celebrities. Many people also view it as a status symbol, a means to signal to your friends and classmates that you have reached adulthood. [36] The issue of the cause of tobacco smoking among university students has been raised, and it appears to be a challenging one. Because the causes differ from product to product and person to person, it is difficult, if not impossible, to provide a satisfactory response. Poor environmental conditions, fear of minorities, and other attempts to avoid peer pressure and enjoyment are a few causes. According to studies carried out among university students in Nigeria, the main causes of smoking were environmental risk factors such as exposure to tobacco advertisements, residence, stress and depression, friends, anxiety alleviation, gender, age, ethnicity, and family circumstances. The use of tobacco products, in particular, is projected to rise quickly. Among students due to curiosity, Also, another study showed that curiosity is the main reason for tobacco use, others include appealing products such as Shisha and electronic cigarettes. [25,32,33]. Smoking is more likely to start among people who have friends, parents, or both who smoke. Some smokers claim that they did so because they "just wanted to try it" or because they believed smoking was "cool." [37].

However, the major reasons for tobacco use by university students may include the following amongst others:

2.2.1 Peer Group Influence

Based on several studies previously done, peer pressure seems to be the major reason why the majority of students use tobacco products. One respondent reported having initiated tobacco use when he was in middle school. As he and his friends after school will stay in an uncompleted building and try out cigarette or roll your own cigarette. In my opinion they are not to be blamed because students don't want to lose the friendship they have built in years, so if a certain friend introduced them to use cigarette, they wouldn't refuse due to the fear of losing someone they love and being alone. If someone wants to add more meaning to their lives, they might attempt smoking to develop a sense of community. [38]

2.2.2 Influence of social structures

This element is linked to life's unrelenting harshness. In this instance, life itself is a gigantic handball that must be kicked. Academic difficulty, despair, poverty, family issues, inherited physical defects, and a growing wealth divide make life feel like one long mental future. Therefore, university students find answers by utilizing various goods that comfort them at that moment of need with the belief that they would feel much better after using it/them. This gives them the courage to confront such situations and the task ahead.

2.2.3 Curiosity

One of the main causes of becoming a smoker is the desire to try it out for fun. The majority of respondents who had used tobacco or are presently using it admitted to doing so for fun and with their friends. This indicates that the company of friends who are smokers is a strong pull for initiating smoking. The respondents claimed that they began to feel a "sense of belonging" when they witnessed their peers smoking.

2.3 Implications of Tobacco Use

The tobacco industry specifically targeted women in the 1960s and 1970s. [39] Compared to males who smoke, women who smoke have a higher risk of dying from COPD. Compared to the 270,000 men who die from smoking-related disease each year, more than 200,000 women pass away from it every year. [40] Smoking damages almost all of the body's organs, brings on a host of illnesses, and has a negative impact on smokers' overall health. Both the short- and long-term benefits of giving up smoking apply to you and the people you care about. According to estimates, the annual death toll might reach over 8 million by 2030 [41]. In addition to emphysema and chronic bronchitis, smoking also increases the risk of developing cancer, heart disease, stroke, lung

conditions, diabetes, and chronic obstructive pulmonary disease (COPD). Smoking also raises the risk of developing tuberculosis, several eye conditions, and immune system issues, such as rheumatoid arthritis. [42,43].

2.4 Study Hypothesis

The study was guided by the following hypothesis.

Hypothesis one

H0: There is no association between the place of living and current use of tobacco products.

H1: There is an association between the place of living and current use of tobacco product.

Hypothesis two(a)

H0: There is no association between demographic factors (marital status) and the current use of tobacco products.

H1: There is an association between demographic factors (marital status) and the current use of tobacco products.

Hypothesis 2(b)

H0: There is no association between demographic factors (level of education) and the current use of tobacco products.

H1: There is an association between demographic factors (level of education) and the current use of tobacco products.

Hypothesis 3

H0: The perception of the dangers of tobacco has no impact on the use of tobacco products.

H1: The perception of the dangers of tobacco has an impact on the use of tobacco products.

Hypothesis 4

H0: There is no correlation between the level of discomfort around tobacco smoke and being an active tobacco smoker.

H1: There is correlation between the level of discomfort around tobacco smoke and being an active tobacco smoker.

METHODOLOGY

3.1 Research Approach

In this study, the survey design will be used. A survey design is used to access and forecast the opinions, responses, or positions of a sizable population on a particular subject, such as the issue of tobacco use among Nigerian students studying in Istanbul, Turkey. [44] When conducting a survey, the researcher creates a list of questions and presents them to each participant uniformly, usually through an interview or questionnaire. However, for this research work, the questionnaire method was used.

3.2 Area of Study

Turkish universities in Istanbul are the topic of study. The Republic of Turkey encompasses the entire Balkan region of south-eastern Europe, and the Anatolian Peninsula in south-west Asia. The total area is 783 562 km², of which 23 764 km² is in Europe and 755 688 km² is in south-west Asia. Ankara is the country's capital. With a population of around 15 million, Istanbul is the city with the highest density of people and serves as the nation's financial, economic, and cultural hub. There are 81 provinces spread throughout 7 different geographic areas. There are districts, sub-districts, and villages within each province. There are 923 districts altogether [45]

3.3 Participants in the Study

Participants of this study are students from Yeditepe University, Istanbul University, Istanbul Okan University, Istanbul Esenyurt University, Istanbul Kultur University, Istanbul Gelisim University, Istanbul Aydin University, Altinbas University, Halic University, Uskudar University, Beykent University, Mamara University, Yildiz Technical University, Beykoz University, Istanbul Medipol University, Istanbul Arel University, Acibadem University, Bahcesehir University, Fernabache University, Istinye University, and Maltepe University. It is unknown how many students currently attend each university.'

3.4 Sample Size

This survey will include 348 respondents in total, all of whom will be students at the aforementioned universities.

3.5 A Sample Approach

As there is a sizable community of universities in Istanbul, the study's population area, a straightforward random sample approach was used to select the population.

3.6 Instrument of data collection

Data gathering involved the use of a questionnaire guide. There are two sections in the questionnaire. The questionnaire's section A contains questions that ask for personal information about the responder. The questionnaire's part B contains questions about how tobacco products are utilized.

3.7 Method of Analysis

The data here will be analyzed using the IBM-SPSS statistics computer package version 26. Simple frequencies and percentages were used as descriptive statistics tools to measure the various socio-demographic characteristics

Chi-squared tests were performed to determine the association between smoking and related factors. A p-value of 0.05 was deemed significant.

3.8 Ethical Considerations

Authorities from the Yeditepe University Ethical Research Committee granted their approval. The ethics approval number was 202205Y0252.

Each participant signed a consent form after receiving full information. Each participant was informed that they might decline or withdraw from the study at any time without suffering any consequences.

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter details the survey questions asked of the chosen respondents and the analysis of the dataset. The data was analyzed using descriptive statistics, and the hypothesis was tested using inferential statistics. The data interpretation and the respondents' simple frequency are displayed in the data analysis. A total of 400 questionnaire forms were distributed to 400 participants. However, there were 348 (three hundred and forty-eight) responders who actually returned back the questionnaire and gave usable answers.

4.2 Socio-Demographic Characteristics of The Respondent

Variables	Frequency	Percentage
Gender		
Male	183	52.6%
Female	165	47.4%
Total	348	100%
Marital Status		
Single	319	91.7%
Married	29	8.3%
Total	348	100%

Age Group		
15 - 19	22	6.6%
20 – 24	113	34.1%
25 - 29	143	43.2%
30-34	53	16.0%
Total	331	100%
Place of Living		
Living alone or with friends	314	90.2%
Living with relatives	34	9.8%
Total	348	100%
Level of education		
Undergraduate	188	54.0%
Graduate	160	46.0%
Total	348	100%

Table 1.1: Showing the socio-demographic characteristics of the respondent.

4.2.1 Analysis of Demographic information

This section also offers information on the frequency distribution and demographics of the respondents. As seen in Table 1.1, Only 6.6 percent of the responses are between the ages of 15 and 19, while the majority are between the ages of 25 and 29. (43.2 percent). Ages 20 to 24 account for 34.1 percent of the population, while 30 to 34 years old account for 16.0 percent. Before reaching the age group of 30-34, the percentage of respondents climbs in lockstep with the age group. Male respondents account for more than half of the sample (183, or 52.6 percent), with female respondents accounting for 165, or 47.4 percent. Only 29 (8.3%) of the 348 respondents are married, with the majority (91.7 percent, 319 respondents) being single. Only 46% of the 348 respondents live with family, with the vast majority (54%) living alone or with friends. While graduates account for 46.0 percent of total replies, undergraduate students account for the majority of respondents (54.0 percent).

	Frequency	Percentage
< Less than 7 cigarettes/7 times a week	28	84.8%
7 - 35 times a week	3	9.1%
36 - 70 times a week	1	3.0%
71 - 140 times a week	1	3.0%
Total	33	100%

Table 1.2: How many times do you use tobacco weekly?

Most respondents, 28 (84.8 percent) use tobacco products little more than seven times per week, according to data table 1.2. 9.1 percent [3] of all respondents smoke 7 to 35 times each week. Only 1 (3.0%) of respondents use tobacco products 36-70 times per week, whereas 1 (3.0%) uses tobacco products 71-140 times per week.

	Frequency	Percentage
Cigarette	16	47.1%
Water pipe (shisha)	18	52.9%
Total	34	100%

Table 1.3: Among the tobacco products you have been using, which product do you use most?

According to data table 1.3, most respondents 18 (52.9 percent) use water pipes(shisha) the most out of all tobacco products, while only 47.1 percent [16] use cigarette.

4.3 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
How old were you when you reached 100 times of tobacco use level?	24	16	33	24.88	3.938
How old were you when you first tried Cigarette?	58	14	26	19.95	3.300
How old were you when you first tried Water pipe (shisha)?	78	14	30	22.68	3.375
How old were you when you first tried E-cigarette?	9	17	30	22.00	4.500
How old were you when you first tried Hand rolled	25	12	25	18.72	4.354

cigarette / Roll your own cigarette?					
How old were you when you first tried Cigar?	11	18	26	23.09	3.208
How old were you when you first tried Pipe?	9	18	26	23.11	2.759

Table 1.4: Showing the descriptive analysis of the respondent.

Table 1.4 shows the descriptive analysis. The average age and standard deviation of the 24 respondents who responded to the question, "How old were you when you reached 100 times of tobacco consumption level?" are 24.88 and 3.938, respectively, in the table above, with a minimum age of 16 and a maximum age of 33. The average age and standard deviation of the 58 respondents when they first started smoking cigarettes are respectively 19.95 and 3.300, with a minimum age of 14 and a maximum age of 26. The average age and standard deviation of the 78 respondents when they first smoked a water pipe (shisha) was 22.68 and 3.375, respectively, with a minimum age of 14 and a maximum age of 30. The average age and standard deviation of the nine respondents when they first smoked E-shisha were 22.00 and 4.500, respectively, with a minimum age of 17 and a maximum age of 30. The average age and standard deviation of the 25 respondents when they first smoked a hand-rolled cigarette was 18.72 and 4.354, respectively, with a minimum age of 12 and a maximum age of 25. The average age and standard deviation of the eleven respondents when they first smoked a cigar are 23.09 and 3.208, respectively, with a minimum age of 18 and a maximum age of 26. With a minimum age of 18 and a maximum age of 26, the average age and standard deviation at when the nine respondents began smoking was 23.11 and 2.759, respectively.

4.4 Inferential Analysis

4.4.1 Formulated Hypothesis one

H0: There is no association between the place of living and current use of tobacco products.

H1: There is an association between the place of living and current use of tobacco product.

Table 1.5: Cross-tabulation of the frequency distribution of current tobacco product usage shared across their place of residence.

		Currently use of tobacco product		Total	P -value
		smokers	non-smokers including quitters		
Place of Living	living alone or with friends	26	288	314	.269
	living with relatives	1	33	34	
Total		27	321	348	

4.4.1.1 Interpretation of Result

The hypothesis is designed to investigate the relationship between residential location and current tobacco product use. The null hypothesis (H0) asserts that there is no relationship between location of residence and current tobacco product usage, whereas the alternative hypothesis (H1) argues that there is a relationship between these two variables. A Chi-Square test was used to put these assumptions to the test. The Chi-Square test is a statistical tool for determining if observed and predicted frequencies of categorical data differ considerably. The observed frequencies in this case correspond to the number of participants whose place of residence impacts their consumption of tobacco products. The predicted frequencies, on the other hand, refer to the number of individuals who would have used tobacco regardless of where they lived.

According to table 1.5, 26 of the 27 respondents who are presently smokers of tobacco products live alone or with friends, while just one respondent lives with his relatives. Only 33 of the 321 non-smokers (including quitters) live with relatives, while the remaining 288 live alone or with a friend. According to the findings, peer group may not be the primary reason why certain respondents now use tobacco products.

According to the findings $P < 0.269$ which indicates that the null hypothesis is true and should be accepted.

Overall, the Chi-Square test results give significant evidence to support the null hypothesis (H_0), that there is no connection or association between place of residence and current tobacco product usage.

4.4.2 Formulated Hypothesis two (a)

H_0 : There is no association between demographic factors (marital status) and the current use of tobacco products.

H_1 : There is an association between demographic factors (marital status) and the current use of tobacco products.

Table 1.6: Cross-tabulation of the frequency distributions of demographic characteristics (marital status) and cigarette usage

		Current use of tobacco product		Total	P value
		smokers	non-smokers including quitters		
Marital Status	Single	24	295	319	.587
	Married	3	26	29	
Total		27	321	348	

4.4.2.1 Interpretation of Result

The hypothesis is designed to investigate the relationship between demographic characteristics (marriage status) and current tobacco product consumption. The null hypothesis (H0) indicates that there is no relationship between demographic parameters (married status) and current use of tobacco products, but the alternative hypothesis (H1) argues that there is. A Chi-Square test was used to put these assumptions to the test. The Chi-Square test is a statistical tool for determining if observed and predicted frequencies of categorical data differ considerably.

According to the finding, $P < 0.587$ indicating that the null hypothesis is true and should be accepted.

Furthermore, this result indicates that there is no linear relationship between demographic characteristics (married status) and current cigarette usage. Overall, the Chi-Square test results give significant evidence to support the null hypothesis (H0), that there is no relationship between demographic characteristics (married status) and current tobacco product usage.

4.4.3 Formulated Hypothesis two (b):

H0: There is no association between demographic factors (level of education) and the current use of tobacco products.

H1: There is an association between demographic factors (level of education) and the current use of tobacco products.

Table 1.7: Cross-tabulation of the frequency distributions of demographic characteristics (education levels) and tobacco consumption

		Current use of tobacco product		Total	P value
		smokers	non-smokers including quitters		
	undergraduate	7	181	188	.002

Levels of education	graduate	20	140	160	
Total		27	321	348	

4.4.3.1 Interpretation of Result

The hypothesis is designed to investigate the relationship between demographic characteristics (levels of education) and current tobacco product consumption. The null hypothesis (H0) indicates that there is no relationship between demographic characteristics (degree of education) and current usage of tobacco products, but the alternative hypothesis (H1) argues that there is. A Chi-Square test was used to put these assumptions to the test. The Chi-Square test is a statistical tool for determining if observed and predicted frequencies of categorical data differ considerably. The observed frequencies in this case correspond to the number of participants whose degree of education impacts their consumption of tobacco products. The predicted frequencies, on the other hand, relate to the number of individuals who would have used cigarettes if their degree of education had not been a factor.

According to table 1.7, 20 of the 27 respondents who are presently smokers of tobacco products are undergraduate students, whereas just seven are graduates. There are 140 doctoral students and 181 undergraduate students among the 321 nonsmokers (including quitters) who responded.

The $P > 0.002$, indicating that the null hypothesis is false and should be rejected.

Furthermore, this figure indicates that there is a linear relationship between demographic characteristics (degree of education) and current tobacco product consumption.

Overall, the Chi-Square test results give good evidence to support the alternate hypothesis (H1) that there is an association between demographic factors (education levels) and current tobacco product usage.

4.4.4. Formulated Hypothesis three

H0: The perception of the dangers of tobacco has no impact on the use of tobacco products.

H1: The perception of the dangers of tobacco has an impact on the use of tobacco products.

Table 1.8: A cross-tabulation of the frequency distributions of perceived hazard and current tobacco product usage.

		Tobacco_current_use_cat22		Total	P value
		smokers	non-smokers including quitters		.000
Perception of Danger	Safe	0	0	0	
	Neutral	10	21	31	
	Dangerous	17	300	317	
Total		27	321	348	

4.4.4.1 Interpretation of Result

The hypothesis is designed to investigate if the perception of the dangers of tobacco has no effect on the usage of tobacco products. The null hypothesis (H0) asserts that the perception of tobacco danger has no effect on the use of tobacco products, whereas the alternative hypothesis (H1) indicates that the perception of tobacco dangers has an effect on the use of tobacco products. A Chi-Square test was used to put these assumptions to the test. The Chi-Square test is a statistical tool for determining if observed and predicted frequencies of categorical data differ considerably. In this situation, the observed frequencies pertain to the number of individuals whose perception of cigarette hazards influences their use of tobacco. The predicted frequencies, on the other hand, correspond to the number of individuals whose perception of cigarette hazard has no effect on their tobacco use.

According to Table 1.8, 17 of the 27 current smokers of tobacco products report feeling dangerous, and 10 reported neutral regarding the impression of risk. Only twenty-one nonsmokers (including quitters) says he feels neutral, and 300 say they feel extremely dangerous about the perceived threat of consuming a tobacco product.

This result shows that $P > 0.00$, indicating that the null hypothesis is false and should be rejected. Overall, the Chi-Square test results give substantial evidence to support the alternate hypothesis (H1) that the perception of cigarette hazards influences the usage of tobacco products.

4.4.5 Formulated Hypothesis four

H0: There is no correlation between the level of discomfort around tobacco smoke and being an active tobacco smoker.

H1: There is correlation between the level of discomfort around tobacco smoke and being an active tobacco smoker.

Table 1.9: Chi-Square Tests

	Value	df	Asymptotic Significance (2 sided)
Pearson Chi-Square	46.690 ^a	2	.000
Likelihood Ratio	36.003	2	.000
Linear-by-Linear Association	40.449	1	.000
N of Valid Cases	348		

a. 1 cell (16.7%) has expected count less than 5. The minimum expected count is 4.11.

4.4.5.1 Interpretation of Result

The hypothesis is designed to investigate whether there is a correlation between the amounts of discomfort caused by tobacco smoke and being an active tobacco smoker. The null hypothesis (H0) claims that there is no correlation between the level of discomfort around tobacco smoke and being an active tobacco smoker, whereas the alternative hypothesis (H1) claims that there is a

relationship between the level of discomfort around tobacco smoke and being an active tobacco smoker. A Chi-Square test was used to put these assumptions to the test. The Chi-Square test is a statistical tool for determining if observed and predicted frequencies of categorical data differ considerably. In this scenario, the observed frequencies pertain to the number of individuals who are active cigarette smokers, which may reduce their level of discomfort when exposed to tobacco smoke. The predicted frequencies, on the other hand, pertain to the number of individuals for whom being an active cigarette smoker did not reduce their degree of discomfort when exposed to tobacco smoke.

The Pearson Chi-Square value, the Likelihood Ratio, and the Linear-by-Linear Association value were obtained from the table 2.3 Chi-Square test. With 2 degrees of freedom and an asymptotic significance of 0.00, the Pearson Chi-Square value is 46.690. This implies that the observed frequencies vary greatly from the anticipated frequencies, and the likelihood of this happening by chance is extremely low (p.001). The Likelihood Ratio value is 36.003, with 2 degrees of freedom and an asymptotic significance of 0.00, indicating that the null hypothesis should be rejected.

Furthermore, with one degree of freedom and an asymptotic significance of 0.000, the Linear-by-Linear Association value is 40.449. This result indicates that there is a correlation between the amount of discomfort caused by tobacco smoke and being an active smoker.

Overall, the Chi-Square test findings give substantial support for the alternate hypothesis (H1) that there is a correlation between the amount of discomfort near tobacco smoke and being an active tobacco smoker.

4.5 Discussion of Findings

The stated hypothesis was evaluated by chi-square, and the findings show that there is no relationship between where you reside and whether you now use tobacco products. As a result, we accept the null hypothesis (H0), that there is no association between where you reside and whether or not you use tobacco products, and reject the alternate hypothesis (H1), that there is a relationship between where you live and whether or not you use tobacco products. But this result is same with a study conducted in Nigeria by Elias C. Aniwada et al. [20,34] However, several studies documented that tobacco use and cigarette smoking is associated with place of residence. The

study conducted in 2008 by Ali Yawar Alam et al [46], which states that there was a positive association between tobacco use and rural area of residence

The developed hypothesis was tested using Chi-square to support hypotheses two (a), and the findings show that there is no association between demographic variables (married status) and current cigarette smoking. As a result, we accept the null hypothesis (H_0), which states that there is no relationship between demographic factors (marital status) and current tobacco use, and reject the alternate hypothesis (H_1), which states that there is a relationship between demographic factors (marital status) and current tobacco use.

The built hypothesis was tested using Chi-square to validate hypothesis two(b), and the findings show that there is an association between demographic factors (levels of education) and current cigarette smoking. The alternate hypothesis (H_1), which claims that there is an association between demographic characteristics (education levels) and current tobacco product usage, is accepted. As a consequence, we reject the null hypothesis (H_0), which claims that there is no relationship between demographic characteristics (education levels) and current tobacco product usage.

The third proposed hypothesis was examined using chi-square, and the results show that people's views of the hazards connected with tobacco impact their usage of tobacco products. The alternative hypothesis (H_1), which claims that perceptions of tobacco's dangers impact tobacco product usage, is now recognized. As a consequence, we reject the null hypothesis (H_0), which claims that awareness of the hazards of tobacco has no effect on tobacco product usage.

The chi-square test was used to examine hypothesis four. The findings suggest a relationship between the level of discomfort induced by cigarette smoke and the existence of current tobacco use. As a consequence, we reject the null hypothesis (H_0), which says that there is no association between tobacco smoke discomfort and actively smoking, and accept the alternate hypothesis (H_1), which argues that there is a relationship between tobacco smoke discomfort and actively smoking.

Furthermore, among the participants who answered the open-ended question of what factor/ factors motivated you to the first use of tobacco product?

Majority of the respondents' responses to this question was curiosity, depression, failure, frustration, friends, and that they wanted to just explore and try something new. One of the respondents said he tried cigarette because of his poor academic performance. Another one said I tried tobacco because of low self-esteem. Another respondent said I tried it out of loneliness.

However, peer pressure seems to be the major factor for tobacco use. Based on the questionnaire and responses of participants in question 25.

Could you please tell your story of your first tried tobacco product? Majority of the Participants recorded I am not a smoker, or I have never tried smoking before. However, one of the participants who is a smoker from this research work recorded that my first tobacco product journey was roll your own cigarette, I tried it with a bunch of my friends after school, I didn't enjoy it because the feeling was dying and choking, I am never going to try tobacco product again in my life no matter what even if I am offered a million dollars. About five participants recorded that their first ever tried tobacco product was water pipe smoking (shisha) and the feeling was that they choked and coughed after trying it. Some other participants decided not to tell their stories probably because they feel shy or don't feel safe sharing their experiences. On the other hand, other participants said it was a bad experience for them.

Another question asked the participants to think about the period in which they had become an established smoker and tell a story about what factors contributed them to their first 100-time use of tobacco product? Some of the responses recorded was that I am not an established smoker, I have never used any tobacco products, while others recorded that the factors that contributed to their first 100-time use was as a result of frustration, being bored, depression, breakup from a relationship, academic failure, stress and some said after trying it for the first time in their lives, they couldn't just stop anymore despite trying.

SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Summary

Because of the harmful effects on people's physical, psychological, social, and educational health, tobacco use is one of Nigeria's most significant societal concerns. Professionals, social workers, academics, psychologists, and sociologists have been working to discover solutions to what appears to be an endemic issue in Nigerian culture and even in Turkey, the research region. Unsupported claims and widely held opinions regarding tobacco smoking among Nigerian university students led to the creation of this study. Therefore, this study was conducted to know about tobacco usage among Nigerian university students who reside in Istanbul, Turkey.

5.2 Conclusion

In conclusion, there is an extremely little tobacco use among Nigerian university students studying in Istanbul, Turkey which is so surprising because the study area seems to be well known and recognized for its high use of tobacco products. I think it is a good thing that Nigerian students aren't influenced by their environment. From the result, Cigarettes and water pipes (also known as "shisha") were the most popular forms of tobacco consumption among Nigerian students in Istanbul, Turkey whereas pipes were the least popular. The most typical combination was shisha and cigarettes. None of them had ever used or experimented with heated tobacco products (IQOS, glo). Educational level, residence, marital status were the identified predictors. These results demonstrate the significant and pressing need for increased knowledge of tobacco prevention and control strategies among students. The majority of respondents weren't entirely sure of what third-hand smoking meant. The lack of awareness and information may indicate the need to raise awareness of the issue as well as the severity of the hazards. Although the low incidence of use among Nigerian university students residing in Istanbul, Turkey, is a good thing, political will and tough laws must be implemented to prevent people from beginning to use tobacco while enticing current users to quit.

5.3 Recommendation

According to the report, tobacco use among Nigerian university students is a problem that is harmful to everyone and every country. Given this situation, the question of how to address the complex problem of student tobacco use arises. The following advice can be useful to administrators and policy makers in the fight against tobacco use among college students. To keep the youths joyfully occupied, there needs to be better educational programs, materials, and

leadership possibilities available. This would go a long way toward resolving the problem. To assist those who have used tobacco, the government should establish rehabilitation facilities. Additionally, there is a need for agency to raise public awareness of and educate the public about the social breakdown. In order to reduce tobacco, use and raise public awareness of its risks, community organizations, health care providers, and social service providers must identify high-risk groups and promote smoke-free living. By educating students about the risks of tobacco use and the value of life, schools and universities may help establish a social atmosphere that discourages smoking. Additionally, laws should be passed to penalize haulage firms, particularly carriers, that fail to adopt and execute procedures to avoid facility abuse by drug traffickers.

5.4 Limitation of The Study

There are some limitations to this study. First of all, this survey was limited to only Nigerian students living in Istanbul Turkey. This may have limited the generalizability of the findings. Also, the data were collected among students that were actively registered in school and self-reported use of tobacco products may have been under-reported, and recall bias was likely to occur in the study; hence, we ensured that standard self-structured questions alongside check questions were used.

Despite these limitations, this study has shown that although the prevalence of tobacco use is so low among the study population. However, the prevalence of tobacco use in general in the study region is very high.

Therefore, it is important to develop strong in-country tobacco control efforts targeted to those who have never smoked as well as current smokers within our higher institutions of learning. Making campuses smoke-free or even tobacco-free is a step towards a healthier direction in terms of addiction and substance abuse among college students. Creating a tobacco-free environment is not only working towards making the smokers themselves healthier, by encouraging them to use less, or even quit, but it also creates a much healthier environment for non-smokers as well. Lastly, it's critical to create powerful anti-smoking programs with this population in mind, based on the WHO MPOWER anti-smoking policy package. [47]

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7 APPENDICES
APPENDIX 1. ETHICAL APPROVAL



T.C.
YEDİTEPE ÜNİVERSİTESİ REKTÖRLÜĞÜ
Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu

Sayı : E.83321821-805.02.03-27
Konu : Non Interventional Clinical Research
Ethics Board Decision

Sayın Prof. Dr. Recep Erol Sezer

Yeditepe University Non-Interventional Clinical Research Ethics Board has reviewed the research proposal placed upon ethical approval for the project as the research title, the researchers, the application number, the ethics board meeting details, and the provided documents have been outlined below. This research proposal has been evaluated by the members of the ethics board and full ethical **APPROVAL** has been granted.

Research Title:	Tobacco Use And Related Factors Among Nigerian University Students Living in Istanbul,Turkey. (A Cross Sectional Questionnaire Survey).)
Researchers:	Funmilayo Boluwatife Olowu,Prof. Dr. Recep Erol Sezer
Application Number:	202205Y0252

ETHICS BOARD MEETING DETAILS			
Meeting Date:	10 June 2022	Meeting Place:	Online (Google Meet)

PROVIDED DOCUMENTS	
Wet signed application file, file uploaded to a CD or USB media, and electronic submission	
Title of research and the names of the researchers	

Letter of application
Application Form
Nature of the Research;
☐ Type
☐ Significance and distinctive value
☐ Aims and objectives
☐ Method
☐ Management of the research
☐ Widespread impact
☐ Pertinence of the budget and reason (if applicable)
☐ Timeframe and convenience
☐ References
Informed consent form (uniquely prepared for the research)
Letter of Undertaking-1

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Belge Doğrulama Adresi : <http://belgedogrulama.yeditepe.edu.tr/bg.aspx?id=2D9E9137-E0EA-4ED2-B272-C6EFCA6E11DB>

Yeditepe Üniversitesi 26 Ağustos Yerleşimi, İnönü Mahallesi Kayışdağı

Bilgi İçin: Sinem

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Kep Adresi : yeditepeuniversitesi@hs03.kep.tr

ARI

Caddesi 34755

Unvan:

Uzman

Telefon No:

Yardımcısı



A commitment to undertake the responsibility of obtaining institutions permission from where the data collection will be made
Letter of Undertaking-2
A commitment to read the latest version of the World Medical Association Declaration of Helsinki and all relevant guidelines of the Ministry of Health
Letter of Undertaking-3
A commitment on whether there are previous ethical board applications
Letter of Undertaking-4
A commitment that no action will be taken during the research that is not included in the research budget and that will bring additional burden to the volunteer or the Social Security Institution
Letter of Undertaking-5
A commitment to reading the circular on treatment approaches and scientific research in COVID-19 patients
Letter of Undertaking-6
A commitment to reading the document of Research Application Permissions that is published by Ministry of Education
'Resume Forms' filled separately by all the researchers and signed
Additional documents (Scale permissions used, if any, etc.)

Prof. Dr. Didem ÖZDEMİR
ÖZENEN
Chair

Assoc. Prof. Dr. Gökhan ERTAŞ
Deputy Chair

Assoc. Prof. Dr. Elif SUNGURTEKİN
EKÇİ
Reporter

Prof. Dr. Feryal SUBAŞI
Member

Assoc. Prof. Dr. Mehmet Engin
CELEP
Member

Assoc. Prof. Dr. Binnur OKAN BAKIR
Member

Assist. Prof. Dr. Elif Çiğdem
KELEŞ
Member

Assist. Prof. Dr. Emine Nur
ÖZDAMAR
Member

Assist. Prof. Dr. Sevim ŞEN
Member

Bu belge, güvenli elektronik imza ile imzalanmıştır.

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Kep Adresi : yeditepeuniversitesi@hs03.kep.tr

Bilgi İçin: Sinem

Unvan: Uzman

Telefon No:



APPENDIX 2 CONSENT FORM AND QUESTIONNAIRE

Hello,

You have been invited to participate in a Research Project titled: "Tobacco Use And Related Factors Among Nigerian University Students Living in Istanbul, Turkey", A Cross Sectionnaire Questionnaire Survey that is conducted by Funmilayo Boluwatife Olowu and Prof Dr. Recep Erol Sezer at Yeditepe University (Medical Faculty, Public Health Department) in Istanbul, Turkey.

The purpose of this project is to investigate tobacco use and its related factors among Nigerian university students living in Istanbul, Turkey. Only Nigerian university Students aged 18 or older are eligible to participate.

Your participation in this project is voluntary, there is no explicit or implicit coercion whatsoever to participate.

Participation involves filling this online questionnaire.

The filling of the questionnaire will take about 10 minutes of your time to complete.

You don't have to answer the questions that can make you feel uncomfortable in any way.

You have the right to withdraw from the questionnaire at any time.

You will not be identified by name or function in any report(s) using information obtained from this questionnaire.

Your confidentiality as a participant in this study will remain secure.

In all cases, subsequent uses of records and data will be subject to standard data use policies at the Yeditepe University (Data Protection Policy).

Taking part in this research study is entirely up to you.

SECTION A

Background Information

1. Year of Birth*

2004, 2003, 2002, 2001,2000, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992, 1991,
Less than 1991

2. Which of the following best describes your gender identity? *

Male

Female

Prefer not to say

Other: -----

3. Marital Status*

Single

Married

Divorced

Other: -----

4. Name of University*

Your answer -----

5. Level of Education*

a) Undergraduate

b) Masters

c) PhD

6. Place of Living*

a) On campus alone

b) Off campus alone

c) On campus with roommate(s)

d) Off campus with housemate(s)

e) Off campus with relatives

f) Other (please specify): -----

7. Number of housemates/roommates (excluding yourself) ? *

Your answer -----

8. How many of them use any tobacco product(s)? *

Your answer -----

9. First identify your 3 closest friends, and then answer this question; How many of them use any tobacco products? *

Your answer -----

10. What year did you first come to Turkey for your university education? *

Your answer -----

11. What month did you first come to Turkey for your university education? *

Your answer -----

SECTION B

Tobacco Smoking Products & Smokers

12. Have you ever tried the following tobacco products, even one puff?*

- a) Cigarette
- b) Water pipe (shisha)
- c) E-cigarette
- d) Hand rolled / Roll your own cigarette
- e) Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)
- f) Cigar
- g) Pipe
- h) Heated tobacco product (e.g. IQOS and glo)

13. Which of the following tobacco products did you try first?

- a) Cigarette
- b) Water pipe (shisha)
- c) E-cigarette
- d) Hand rolled / Roll your own cigarette
- e) Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)
- f) Cigar
- g) Pipe
- h) Heated tobacco product (e.g. IQOS and glo)

14. When you first entered Turkey for your university education, could you describe your tobacco use situation?*

Definition of times (1 time use means 1 cigarette use or 1 session of water pipe, or 1 E-cigarette use and so on...)

- a) I had not used or tried any tobacco product.
- b) I had tried or experimented at least one tobacco product but then I stopped experimenting it (them) completely
- c) I had used at least one tobacco product, at least 100 times until that time point and kept using it (them) until I entered Turkey and I still use it (them)

d) I had used at least one tobacco product, at least 100 times but then I stopped using it (them) completely

15. Have you had at least 100 times of tobacco use during your entire life? No matter which tobacco products you have used.*

Definition of times (1 time use means 1 cigarette use or 1 session of water pipe, or 1 E-cigarette use and so on...)

Yes

No

16. How old were you when you reached 100 times of tobacco use level?

Definition of times (1 time use means 1 cigarette use or 1 session of water pipe, or 1 E-cigarette use and so on...)

Your answer -----

17. How old were you when you first tried Cigarette?

Your answer -----

18. How old were you when you first tried Water pipe (shisha)?

Your answer -----

19. How old were you when you first tried E-cigarette?

Your answer -----

20. How old were you when you first tried Hand rolled cigarette / Roll your own cigarette?

Your answer -----

21. How old were you when you first tried Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)?

Your answer -----

22. How old were you when you first tried Cigar?

Your answer -----

23. How old were you when you first tried Pipe?

Your answer -----

24. How old were you when you first tried Heated tobacco product (e.g. IQOS, glo)

Your answer -----

25. Could you please tell your story of your first tried tobacco product ?

(First tried tobacco product, whatever it may be e.g. E-cigarette, Cigar ,Pipe. etc.).

Your answer -----

26. Think about that period in which you had become an established smoker. Could you please tell your story about what factors contributed / motivated you to the first 100 time use of tobacco product? (smoking, vaping, chewing)

(An established smoker is a person who has smoked 100 cigarettes)

Your answer -----

27. Do you currently use any tobacco product(s)?*

- a) Yes I do, daily
- b) Yes, I do, non-daily
- c) In the past I used to, but I gave up all forms of tobacco products completely
- d) I never used any tobacco products

28. Which of these products do you currently use?

- a) Cigarette
- b) Water pipe (shisha)
- c) E-cigarette
- d) Hand rolled / Roll your own cigarette
- e) Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)
- f) Cigar
- g) Pipe

h) Heated tobacco product (e.g. IQOS and glo)

29. Have you used any of the following tobacco products, even one puff in the last 30 days?

a) Cigarette

b) Water pipe (shisha)

c) E-cigarette

d) Hand rolled / Roll your own cigarette

e) Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)

f) Cigar

g) Pipe

h) Heated tobacco product (e.g. IQOS and glo)

30. How many times do you use tobacco weekly?

Definition of times (1 time use means 1 cigarette use or 1 session of water pipe, or 1 E-cigarette use and so on...)

a) < Less than 7 cigarettes/7 times a week

b) 7 - 35 times a week

c) 36 - 70 times a week

d) 71 - 140 times a week

e) > Greater than 140 times a week

31. Among the tobacco products you have been using, which product do you use most?

a) Cigarette

b) Water pipe (shisha)

c) E-cigarette

d) Hand rolled / Roll your own cigarette

e) Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)

f) Cigar

g) Pipe

h) Heated tobacco product (e.g. IQOS and glo)

32. Which product do you like most?

- a) Cigarette
- b) Water pipe (shisha)
- c) E-cigarette
- d) Hand rolled / Roll your own cigarette
- e) Chewed tobacco products (e.g. smokeless tobacco, chewing tobacco, snuff)
- f) Cigar
- g) Pipe
- h) Heated tobacco product (e.g. IQOS and glo)

33. How soon after you wake up do you usually have your first smoke?*

FORMER SMOKERS - Please, answer based on your former smoking activity.

CURRENT SMOKERS - Please, answer based on your current smoking activity.

- a) Within 5 minutes
- b) 6-30 minutes
- c) 31-60 minutes
- d) More than 60 minutes
- e) I don't smoke

34. How long has it been since you completely stopped all types of tobacco product use?

Answers should be in (months) -----

35. Which of the following statements describes your intention to stop tobacco use?

- a) I have no intention to quit all kinds of tobacco use completely in the next 6 months
- b) I seriously consider quitting all kinds of tobacco use completely in the next 6 months
- c) I have decided to quit all kinds of tobacco use completely in the next 30 days
- d) Other:

36. During the last 1 year, did you make a quit attempt?

Yes

No

37. Have you ever heard about the term 'Third-hand Tobacco Smoking' (THTS)? *

Yes

No

Maybe

38. How often do you go to the cafeteria/café? *

- a) More than once a day b) A few times in a week c) Less than a week d) Almost never

Use the Scale below for Questions 39 and 40.

1	2	3	4	5
Very Comfortable	Comfortable	Neutral	Uncomfortable	Very Uncomfortable

39. On a scale between 1 - 5, how uncomfortable do you feel when people close to you smoke indoors (at home, restaurants/cafes, bars, etc.)? *

1 2 3 4 5

40. On a scale between 1 - 5, how uncomfortable do you feel when people close to you smoke outdoors (at bus stations, playgrounds, parks, stadiums, beaches, etc.)? *

1 2 3 4 5

Use the Scale below for Questions 41 - 46.

1	2	3	4	5
Very Safe	Safe	Unsure	Dangerous	Very Dangerous

41. Based on your knowledge, on a scale between 1 - 5, how dangerous are cigarettes to our health?

1 2 3 4 5

42. Based on your knowledge, on a scale between 1 - 5, how dangerous is waterpipe (shisha) to our health? *

1 2 3 4 5

43. Based on your knowledge, on a scale between 1 - 5, how dangerous is E-cigarette to our health? *

1 2 3 4 5

44. Based on your knowledge, on a scale between 1 - 5, how dangerous is cigar to our health? *

1 2 3 4 5

45. Based on your knowledge, on a scale between 1 - 5, how dangerous is pipe to our health?*

1 2 3 4 5

46. Based on your knowledge, on a scale between 1 - 5, how dangerous is heated tobacco (e.g. IQOS, glo) to our health? *

1 2 3 4 5



APPENDIX 3 CURRICULUM VITAE

Curriculum Vitae

Personal Informations

Name	Funmilayo Boluwatife	Surname	Olowu
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Education

Degree	Department	The name of the Institution Graduated From	Graduation year
University	Pharmacy	Near East University, Northern Cyprus	2019
High school	Science	Omotayo College Ogijo, Ogun State	2012
Languages		Grades (#)	
English		Native	
Yoruba		Native	
Turkish		Good User	

All the grades must be listed if there is more than one (KPDS, ÜDS, TOEFL; EELTS vs),

Computer Skills

Program	Level
Microsoft Office	Excellent
Spss	Average
Microsoft Excel	Good

*Excellent, good, average or basic

Scientific

works

The articles published in the journals indexed by SCI, SSCI, AHCI

The health scare of COVID-19 amidst pandemics and the immune-related pharmaceutical products spillovers in the USA

