FACTORS INFLUENCING SHISHA SMOKING AMONG ADULTS IN KABALAGALA, MAKINDYE DIVISION

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NOVEMBER 2014

DECLARATION

I, **MOSETI N. FAITH** declare that this work I have submitted is entirely my own effort and has not been presented for a degree in any other university.

I certify that all the material in the dissertation which is not my own has been identified and acknowledged.

FAITH MOSETI **DATE**

…… ……..

APPROVAL

This report entitled Factors influencing shisha smoking among adults in Kabalagala, Makindye division has been done under my supervision and has been submitted to the school of nursing at International Health Sciences University with my approval as the supervisor.

I certify that I have read this dissertation and it is fully adequate in scope, as an undergraduate report for the award of Bachelor of Nursing Science.

MR. AFAYO ROBERT **DATE**

……. **……..**

DEDICATION

I wish to dedicate this work to my supervisor, Mr. Afayo Robert for guiding me through my research. Special dedication to my family especially to my Father Protus Moseti, Mother Jane Moseti, my brothers; Kelvin Bonyi and Melchzedek Bosire for the encouragement and putting me on the right path during my years of study.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

OPERATIONAL DEFINITIONS

Adult- is a person who has attained the age of maturity as specified by law.

Attitude- a way of thinking or feeling about something, typically one that is reflected in a person's behavior.

Shisha- an oriental tobacco pipe with a long flexible tube connected to a container where the smoke is cooled by passing through water. It is sometimes mixed with fruit or sugar molasses

Tobacco- leaves of certain varieties of the plant cultivated and harvested to make cigarettes, for smoking in pipes or chewing.

LIST OF ABBREVIATIONS USED

WHO: world health organization

SPS: shisha pipe smoking

MoH: ministry of health

WPS: water pipe smoking

GYTS: global youth tobacco survey

UBOS: Uganda bureau of statistics

UDHS: Uganda demographic health survey

CDC: centre for disease control

ABSTRACT

Introduction

The study investigated the factors influencing shisha smoking among adults in Kabalagala, Makindye division.

Objectives

1) To determine the shisha smoking status of adults in Kabalagala, Makindye division. 2) To determine the socio demographic factors influencing shisha smoking among adults in Kabalagala, Makindye division. 3) To identify the environmental factors influencing shisha smoking among the adults in Kabalagala, Makindye division .4) To identify the psychological factors influencing shisha smoking among the adults in Kabalagala, Makindye division.

Methodology

A cross sectional study design was carried out in Kabalagala on adults, both smokers and non smokers of shisha. Using self-administered questionnaires, a total of 250 respondents were sampled using convenience sampling technique.

For uni-variate analysis, data was run using frequencies and percentages, and the results presented in form of frequency tables and pie-chart. At bi-variate level, Chi-square tests were used to show the levels of association between the dependent and independent variables through cross tabulations and results presented in tables.

Results

Of the 250 respondents, 103 (83.4%) practice shisha smoking and only 147 (16.6%) don't smoke shisha. The socio demographic factors; marital status (X^2 = 8.861, p = 0.031) and religion (X^2 = 17.956, p <0.001) were associated to the shisha smoking among adults. The environmental factors; cost(X^2=52.518, p<0.001), availability(X^2=4.029, p=0.045) peer pressure(X^2=16.022, p=0.03) and parent smoking status(X^2=0.09, p=0.03) were associated to the shisha smoking practice. The psychological factors: history of loss friend/relative(X^2=4.023, p=0.045) and history of stress(X^2=66.260, p<0.001); were also associated to the shisha smoking practice among adults.

Conclusion and Recommendation

Socio demographic factors; knowledge, perception, marital status and religion. Environmental; peer pressure, cost and availability are the major factors influencing shisha smoking in Kabalagala, Makindye division psychological factors:loss of friend/relative and history of stress are the major factors influencing shisha smoking in Kabalagala,Makindye division.

The researcher recommends the Ministry of Health together with the government to diversify health education on health issues in all public health facilities and communities so as to emphasis more on health issues, put guidelines for all the public health workers on following the laws and regulations regarding tobacco to ensure compliance and reduction of illegal tobacco and tobacco products to the country. In addition, ban all advertisements on tobacco products through media such newspapers, radios, televisions and billboards to reduce its use to the youths and young adults.

CHAPTER ONE

Introduction

1.0 Background to the study

Shisha smoking is a cultural way of tobacco intake in various parts of the world including North Africa, Middle East and Southeast Asia. It is also known by other names depending on the area where it is used e.g water pipe, hookah, narghille, hubble-bubble or goza. It consists of the head, body, hose, water bowl and mouth piece. Tobacco is the main component used in shisha. It is put in the head which is mostly covered with perforated aluminium foil and then some hot charcoal placed over it. Water is put halfway the water bowl and the tube submerged and through it the smoke enters. During the inhalation process, the smoke passes through the submerged tube into the hose tube and finally to the smoker through the mouthpiece. The temperature of the smoke is lowered by the water. The shisha mouthpiece is mostly shared by several individuals during a smoking session. The composition varies with some having flavorings and additives that can reduce the nicotine content.

World health organization (WHO 2005) has shown that an hour session of shisha smoking, involves inhaling 100-200 times the volume of smoke (Maziak et.al 2007) and still contains many of the same harmful substances associated with disease and addiction.

Shisha smoking used to be considered an activity restricted solely to the east Mediterranean region. However in recent years, its global popularity has spread rapidly to countries outside the Middle East region. In Western Europe, there are no specific figures but shisha smoking is mainly common in the Uk, Italy, Greece, Cyprus, Turkey and Spain and in the Eastern Europe,

its wide spread across most of the former soviet countries such as Croatia, Bosnia, Bulgaria, Macedonia, Serbia and Azerbaijan (Neergaard, &Montgomery, 2007)

Similarly in Africa, there are no figures available but shisha smoking is more spread in afro Arab countries such as Egypt, Tunisia, Algeria, Chad and Somalia as well as other countries like Djibouti and Ethiopia. The practice is slowly but steadily spreading towards sub Saharan Africa in Somalia, Eritrea, Sudan, and Southern Africa and in East Africa countries like Uganda which hosts many people from foreign countries which practice shisha smoking. Shisha smoking has gained popularity over the decade. The practice used to be restricted among the elderly people; but in the recent years, it has spread to various categories of people including adolescents and adults (Maziak and Ward, 2004)

The growing popularity to the shisha smoking practice is attributed to various factors; but the most common are lack of knowledge about the health risks associated with shisha smoking. There has been an increase in the shisha use around Kabalagala, Makindye division. Most notably among the youth and adults. Monitoring study from the global youth tobacco survey (GYTS, 2012) showed that the prevalence of current tobacco smoking among Ugandan adults aged 15-54 stood at about 25% although some people in the society feel the problem is insignificant; shisha smoking is threatening to add another hindrance to Uganda's development efforts. shisha smoking has also been associated with sleeping disturbances (Riedel et al.,2004;Rapp et al.,2007)incidences of cardiovascular diseases like blood pressure and increased carbon dioxide in blood(Shafagoj,2002;Munckhof et al.,2003)

In Kabalagala, the practice is more common in restaurants, coffee shops and homes where people gather during their social interactions. These restaurants known to offer these services include

Fuegos bar and restaurant, timelezz club, de posh pub, the Obama's restaurant, the fuse and punch line night club among others. Much as the practice is gaining popularity among the Ugandan nationals, little is known about the health risks and its practices in the society. This study therefore aims to assess factors influencing shisha smoking among adults in Kabalagala, Makindye division.

1.1 Problem statement

shisha smoking is gaining popularity in Uganda. The ministry of health (MoH) is leading the country's efforts in eliminating this epidemic by implementing the regulations to protect individuals from the tobacco smoke, Offer the affected help to quit tobacco use through rehabilitation and counseling services, warn the nation on the dangers of tobacco use, strengthen the ban of tobacco advertisement and also raise taxes on tobacco.

Despite all these efforts to create a smoke free environment, there is still increase use of tobacco products among young adults and youths. They attribute shisha smoking to having no effects on the body and this has even lead to many shisha bar businesses and tobacco outlets to continue selling the products in the country in order to sustain their market and clientele.

According to the Uganda Bureau of Statistics, the number of young males who smoke has increased from 12 in every 100 (2001) to 19 in every 100 (2011) young males. Also, the number of young female smokers has increased from 11 to 15 in every 100 female youth. It is estimated that the percentage of smokers would have increased to 30 per cent by 2030 if Africa does not find ways through which it can effectively discourage tobacco smoking. (Tobacco control journal 2013)

The substances in the shisha are known to cause respiratory cancers, oral cancers, lung cancers, heart disease and Infections like hepatitis C. These are rampant among individuals sharing the pipe. There is a serious risk of transmission of communicable diseases such as tuberculosis when a mouthpiece is shared with friends (WHO 2005).This form of tobacco use is a significant contributor to the maintenance of high rates of tobacco use among youth and young adults in effect negating the gains achieved by the global decline in overall tobacco smoking in recent years. Indeed, the widespread of shisha smoking popularity has led to suggestions that hookah pipe smoking represents the second major tobacco epidemic. These increasing rates therefore prompted the researcher to carry out this study that seeks to identify the factors influencing shisha smoking among adults in Kabalagala, Makindye division.

1.2 Objectives

1.2.1 General objective

To investigate the factors influencing shisha smoking among adults in Kabalagala , Makindye division.

1.2.2 Specific objectives

To determine the shisha smoking status of adults in Kabalagala, Makindye division

To determine the socio demographic factors influencing shisha smoking among adults in Kabalagala, Makindye division

To identify the environmental factors influencing shisha smoking among the adults in Kabalagala, Makindye division

To identify the psychological factors influencing shisha smoking among the adults in Kabalagala, Makindye division.

1.3 Research questions

- What is the shisha smoking status of adults in Kabalagala, Makindye division?
- What are the socio demographic factors influencing shisha smoking among adults in Kabalagala, Makindye division?
- What are the environmental factors influencing shisha smoking among the adults in Kabalagala, Makindye division?
- What are the psychological factors influencing shisha smoking among the adults in Kabalagala, Makindye division?

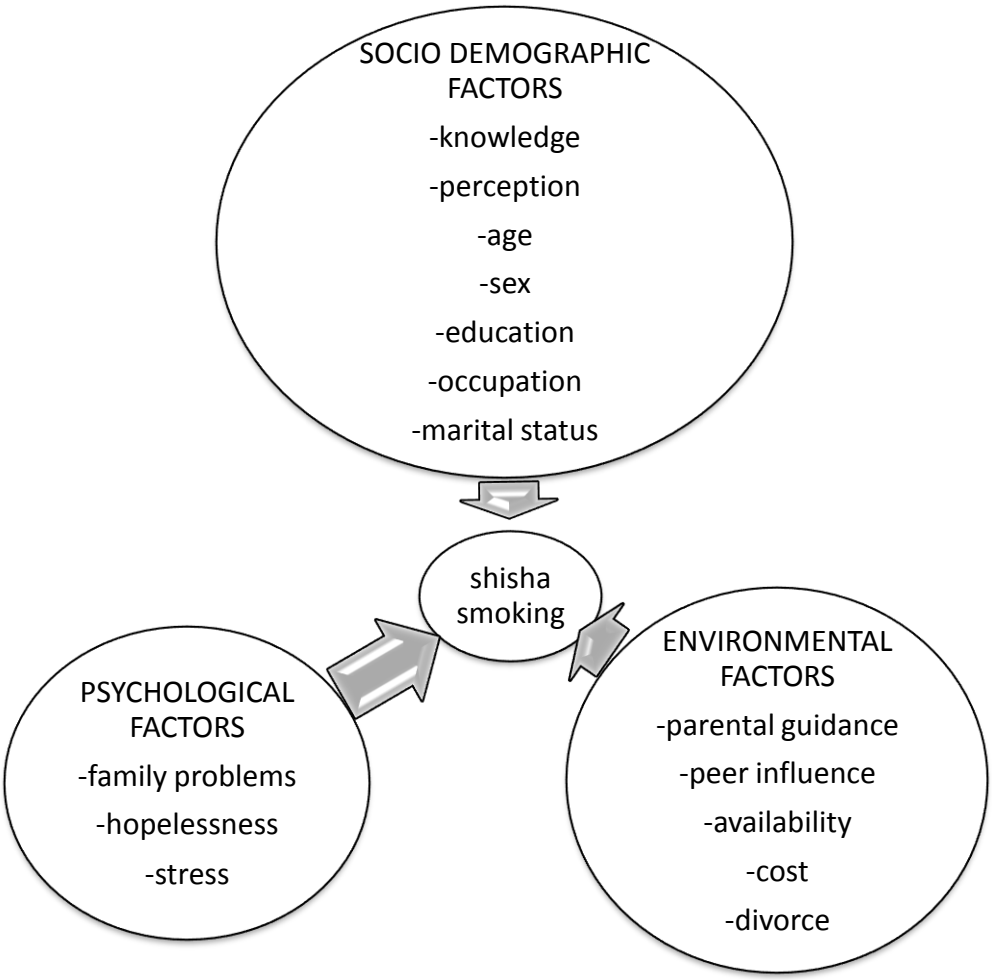
1.4 Significance of the study

All forms of tobacco smoking continue to be the number one cause of preventable morbidity and mortalities worldwide. There is still a need to conduct this study to determine the environmental, individual and psychological factors among adults in Kabalagala, Makindye division that influence shisha smoking practice. Failure to carry out this study, it may be hard to come up with new reforms, interventions and ways to regulate the tobacco consumption. The findings of the study will generate relevant policy suggestions through recommendations such as medical education as well as better licensing laws that could help protect the adults and young people from engaging into an addiction they never knew. It is aimed to make recommendations on educating people about the health risks associated with shisha smoking, changing the people's perception of shisha smoking in a positive way. The findings of this study can inform policy

formulation as they are based on valid research. The local councils of Kabalagala, Makindye division if granted with the same powers to deal with the sale of shisha or any tobacco as they do for alcohol at premises that disobey the smoking ban and sell of shisha to the community, this would reduce the health risks and a healthy lifestyle will be established.

1.5 CONCEPTUAL FRAMEWORK FOR FACTORS INFLUENCING SHISHA SMOKING AMONG ADULTS IN KABALAGALA , MAKINDYE DIVISION.

Figure 1: Conceptual framework for factors influencing shisha smoking among adults in Kabalagala, Makindye division



The conceptual framework seeks to explain the relationship between the variables under study: Individual factors, environmental factors, psychological factors which are the presumed independent variables and they are hypothesized to influence the shisha smoking practice, the dependent variable among adults in Kabalagala, Makindye division.

CHAPTER TWO

Literature review

2.0 Introduction

This chapter presents literature review of topic under study. It is arranged under different themes of study which include environmental factors, individual factors and psychological factors influencing shisha smoking.

2.1 Shisha smoking status

Researchers measured significant amounts of volatile organic compounds, carbon monoxide and nitrogen oxides in a room following a hookah pipe smoking session. These data confirm the risks posed to smokers and non-smokers in close proximity to a hookah pipe.

Second hand smoke from shisha can be a health risk for nonsmokers. It contains smoke from the tobacco as well as smoke from the heating source e.g charcoal (CDC 2012) the potential of environmental tobacco smoke produced by hookah pipes to damage the health of smokers and nearby non-smokers was debatable.

2.2 Prevalence of shisha smoking

In spite of several studies, it is important to note that other empirical studies have established the prevalence of shisha smoking among the Ugandan population. Shisha smoking prevalence in Ugandan adults as of 2009 was, 7% (WHO report on the global tobacco epidemic, 2011) According to Uganda bureau of statistics (UBOS), the prevalence of cigarette smoking among adults in 2011 was 25% among males and 3% among females (Uganda Demographic Health Survey [UDHS] 2001). (WHO, Joint national capacity assessment on the implementation of effective tobacco control policies in Uganda 2012)

2.3 socio demographic factors

Globally, 4.9 million deaths each year are attributed to tobacco use and this may increase to ten million within the next twenty to thirty years, with 70% of these deaths occurring in developing countries (Maziak et al, 2004).Lack of knowledge about the potential health risks associated with shisha smoking is one of the reasons that have contributed to the rapid increase in the practice. Many studies have proved that shisha tobacco smoking has been associated with exposure to the same toxicants, including nicotine and Carbon monoxide (Cobb *et al*. 2011) there is evident lack of public knowledge about potential hazards among users and this has led to extensive misperceptions that it is safe(Rastam et.al.,2006)

A number of authors have carried out studies on the knowledge and perception of adults towards shisha smoking in different parts of the world; they obtained results indicating a significant difference in knowledge of the health risks of shisha smoking among adults who were current or occasional smokers of shisha in comparison to the adults who never smoked. They concluded that shisha pipe smoking (SPS) among some adults was associated with inadequate knowledge to its health risks. This is because there is no health a warning on the packets as for the cigarettes on the dangers and that it does not have chemicals or tar in so it is not that harmful (NHS Harrow, 2011)

Another powerful factor driving the epidemic is the social setting of entertainment areas in which the shisha pipe is usually offered for smoking. It has already been shown that most of the people who engage in shisha smoking have false attitudes about the practice, they believe that shisha smoking is less dangerous than cigarette smoking (Maziak et al., 2004) this is because of their assumptions that the nicotine content in the shisha is lower than that of cigarettes and that the water used, filters out all the chemicals including nicotine. Smokers report that the practice

fosters a sense of togetherness and it also reinforces cultural identity. The link between the emergence of shisha pipe smoking (SPS) and clusters of people of Middle Eastern origin appears to have served as a stepping stone for the subsequent spread of the practice and habit to people of various cultural groups.

It has been estimated that more than one hundred million people use shisha for tobacco smoking on a daily basis (Harvard Medical School 2008). Surprisingly, the shisha tobacco smoking is becoming increasingly popular among adolescents and young adults, especially high school (Korn *et al*. 2008) and university students. Interestingly, the prevalence of exclusive shisha tobacco smoking of university students was higher than cigarette smoking as stated by 21.1% and 7.6%, respectively (Tamim *et al*. 2003).

In regards of gender, a study (Redhwan A Al-Naggar1, and Yuri V Bobryshev, 2012) found that gender was significantly associated with this practice. An earlier study of Poyrazoglu et al. (2010) also reported that gender has significant effects on the prevalence of shisha smoking. Male gender was associated with shisha smoking in a number of studies (Eissenberg et al., 2008, Smith-Simone et al., 2008; Primack et al., 2008; 2010). Maziak et al. (2004) reported that the shisha smoking was more common among older and male students.

In the late 20th Century, additives and more flavors were developed in Egypt in an effort to attract more female consumers (American Lung Association, 2007). Encouraging societal acceptance has also resulted in the rise of tobacco usage among women in the Middle East; many of them initially knew that the practice was only for the elderly in harmony with previously established societal norms. Furthermore, the shisha tobacco smoking was generally more positively perceived than cigarette smoking, especially by women (Maziak *et al*. 2004).

There is no education about the harmfulness of shisha smoking and the policies to limit its use are not implemented to prevent the use of tobacco among the people who smoke the shisha. Adults, who were more educated, married, or had a higher income had equal chances of involvement like their counterparts. some of the individuals learnt the practice out of curiosity and as a result it lead to drop out of school while others have never gone to school and therefore become shisha smokers not knowing the dangers it poses to their daily living.

2.4 Environmental factors

Adults acknowledge smoking shisha to peer pressure among friends as the leading causes to why they are smokers. Since young people watch the elders smoke, they think it is acceptable. Seeing other family member's smoke easily influences younger generations towards the smoking practice. Similarly to the study (Baker and Rice (2008), which found that peer influence, was the significant factor for water-pipe tobacco smoking (WPS), the adolescents in this study and their parents considered water-pipe tobacco smoking as an acceptable activity in the society. Moreover, some reports revealed that the water-pipe tobacco smoking has been used during group communication, family gathering (Chaaya *et al*. 2004) as well as to make smokers look traditional, social, and attractive(Maziak et al., 2004)after the first attempt of shisha smoking, the substance became the main attraction for individuals to continue with the practice. The various fruity flavors used, mask the toxic substances in the tobacco and thus motivate them to further continue smoking.

Water pipe tobacco smoking has had cultural relevance in many Middle Eastern, Indian, and Asian countries for centuries. More recently, however, the practice has not only increased in popularity in these geographic areas, but has spread to Western Europe and North America. In some cultures, shisha smoking represents bonding; moreover families maintain these customs

and move with them. Lack of guidance can lead to younger adults indulging in this practice as they have no one to guide them towards doing the correct things. Some authors cite the unique degree of parental acceptance as a significant contributing factor to the increased popularity particularly among younger smokers.

A survey (Qudsia Anjum Farah Ahmed Tabinda Ashfaq, 2007) conducted in high socio-economic schools of Karachi reported that Shisha is gaining popularity among the young generation and it is easily available in the restaurants, hotels and Shisha cafes. With the increasing popularity of shisha around the world and particularly in Uganda, there has been need to move its location from homes to open public place and make it available to everyone. Therefore most café owners have discovered a new way to make their businesses thrive by making available the shisha pipes in accordance to customer's demands.

This form of tobacco smoking has been made so cheap so that everyone in the various locations can be able to afford. As a result, many people are at will to try out new experiences. The practice of sharing the shisha pot has also made it easier for individuals to share on the costs. The affordable cost has been noted by the smokers and non smokers as a contributing factor to the influence of the practice.

Some of the married adults also waste a lot of time and money in bars and restaurants during shisha session as they would smoke to their satisfaction and also buy for their friends as this provides for social interaction and in the long run they forget to fulfill their responsibilities at their homes. This practice eventually, among the addicts leads to loss their loved ones as they cannot carry out duties effectively without smoking.

2.5 Psychological factors

Young adults and youths view smoking shisha as being more helpful in relieving stress and a better way to gather among friends in social occasions and are therefore more likely to indulge into shisha smoking practice. As a result, risk behaviors are adopted by individuals to combat the stressors that are encountered and this leads to vices such as tobacco smoking and illegal drug use (Patterson, Lerman, Kaufmann, Neuner, & Audrain-McGovern, 2004).It has been estimated that college students smoke and of these, seventy-five Percent will continue to smoke into adulthood (Park, &Kang, 2004). Others might be smoking due to failure in events in their lifes this is intended to get the pressure off their body without putting into consideration the health effects it might cause them in the long run.

Tobacco smoking in some countries is habitual. In some situations, it is characterized as a personal habit that represents an important aspect of preservation of culture. The social acceptability and togetherness that shisha smoking invites has extended beyond the boundaries of the Eastern Mediterranean Region and on to persons and surrounding hookah bars (Lenney & Enderby, 2008; Lyon, 2008;Primack, et al., 2008).in places where this norm is unacceptable due to conflicting religious practices there arises family contradictions and this contributes to influential ways that appeals the non smokers to attempt the practice. Individuals that involve in Shisha session at home can inconvenience their family and friends that are a non-smoker of Shisha and do not like the smell of the smoke. Therefore they will avoid visiting the residence of these people who practice shisha smoking. Thus, driving their family and friends away to socialize with them, this will result into a severed relationship in the long run and this is the genesis of problems within the family.

The country has lost so many important citizens; talented, bright professors and doctors to this new craze, shisha smoking. All these educated adults got hooked and later they end up with nothing to live for as they end up so wasted and dependent on this addiction.

Most of the young adults who have completed their education irrespective of their education level indulge into smoking shisha as they wait for their employment from the respective field of study. During this time they spend all the little money they have in smoking shisha as they know that it will help them think well and concentrate in their activities. These factors contribute to this kind of practice which causes detrimental effects to the current generation which then leads to maladaptive behaviors among individuals who can't go a day without smoking.

CHAPTER THREE

Research methodology

3.0 Introduction

This chapter described the methodology that was used in the study, factors influencing shisha smoking among adults in Kabalagala, Makindye division. It presents the study design, sources of data, study population, sample size calculation, sampling procedures, study variables, data collection techniques and tools, data analysis, quality control issues and ethical consideration

3.1 Study Design

This study used a Cross-sectional research design. This study design, allowed the researcher to obtain diverse information about demographic, environmental and psychological factors of respondents towards shisha smoking at a single point in time. In this study quantitative data was collected and analyzed correctly to make the study analytical in nature.

3.2 Sources of data

3.2.1 Primary data

In this study, primary sources of data was through information collected from filled self administered questionnaires by respondents at Kabalagala, Makindye division.

3.2.2 Secondary data

Secondary source of data include monthly reports from the ministry of health, policy statements. WHO journals and advisory notes and other studies carried out about the subject matter

3.3 Study area

Kabalagala is a well known suburb in Kampala, the capital city of Uganda located about 6 kilometers south east of the city. Kabalagala is found Makindye division and is bordered by Kibuli to the northwest, Namuwongo to the northeast, Muyenga to the east and southeast, Kansanga to the south, Lukuli to the southwest and Nsambya to the west.

3.4 Study population

The study population comprised of adults living in Kabalagala, Makindye division. The study included all adults who are 18 years of age up to 45years.

3.5 Sample size calculation

Sample size was calculated using kish- Leslie standard formula

$$n=\frac{Z^2 P (1-P)}{d^2}$$

n- Sample size

Z- Standard value of 1.96.

P- Prevalence of tobacco smoking among adults in Uganda taken to be 28% (WHO Joint national capacity assessment on the implementation of effective tobacco control policies in Uganda 2012)

d- Permissible error= 0.05

$$n=\frac{1.96^2 x0.28x0.72}{0.05^2}$$

n= 309

However, due to the challenges met by the researcher and the research assistants like spoilt self administered questionnaires which were not completed by respondents and some which were not returned by the respondents we ended up with a sample size of **250**, a difference of 59 from the actual calculated sample size of 309.

3.6 Selection criteria

3.6.1 Inclusion criteria

The following were included in the study;

-Adults in any bar within kabalagala.

-Adults who consented to participate in the study

3.6.2 Exclusion criteria

The following were excluded from the study;

-Adults who don’t smoke

3.7 Sampling procedures

Convenience sampling technique was used to recruit adults to participate in the study until the required sample size was achieved.

3.8 Study variables

3.8.1 Dependent variables

The dependent variable was Shisha smoking

3.8.2 Independent variable

The independent variables included:

Environmental factors (parental guidance, peer influence, availability and cost)

Individual factors (knowledge, perception, age, sex, education, occupation, marital status)

Psychological factors (family problems, lack of employment, hopelessness).

3.9 Data collection techniques

Once permission is granted, the researcher and the research assistant will obtain data by a semi-structured questionnaire from the respondents at Kabalagala, Makindye division. This will help identify variables that cannot be directly observed such as opinions, feelings and perception of individuals towards shisha smoking. The questionnaires will be guided by research questions, objectives and type of study design. The questionnaire will be pretested to ensure validity and reliability carried out in some respondents. The questionnaires will then be distributed to the respondents during the evening relaxing hours. The purpose of the study will clearly be explained to them and at the end of the session, completed questionnaire will be collected and the respondents thanked.

3.10 Data collection tool

Standardized questionnaires were the main instrument used to collect data among adults who engaged in the practice living in the study area. Questionnaires were helpful to the respondent in that it gave them enough time to think about the questions before answering them.

3.11 Data management analysis and presentation

Data was collected by the help of two research assistants in the community where the study was carried out. The research assistants underwent two days training about the data management and analysis. The raw data was obtained and cleaned daily to ensure that the questionnaires were accurately completed and corrections made in areas where errors had occurred before information was entered.

Questionnaires were coded manually then entered into the computer using the statistical package for social sciences (SPSS 16) for analysis. After entering the data, it was analyzed. Descriptive data was analyzed using percentages in tables and pie chart. Chi-square analysis was used to determine the degree and significance of the relationship between the dependent variable and independent variable.

3.12 Quality control issues

Research assistants were trained about data collection, analysis and management. Coding was done to avoid repetition of questions during entry, questionnaires were checked for accuracy and completeness at the end of each day and use of recognized and reliable data analysis software program.

3.13 Plan for dissemination

The findings of the study will be presented to the: ministry of health in Uganda, local council for Kabalagala, Makindye division and to the School of Nursing of International health sciences university.

3.14 Ethical issues

Research protocols and the tool used for data collection were approved from the ethical committee of International Health Sciences University that allowed the researcher to collect data in the study area that was presented to the community leaders. Also informed written consent was obtained from individual respondents at the beginning of the exercise. Data confidentiality was also preserved.

The researcher also ensured highest level of respect and at the same time discipline to all the respondents irrespective of their age, health, social status that portrayed a good image of the research and the institution where she studied from. Together with the help of the research assistants, the researcher reached out to each and every respondent and followed every step of research and avoided fabrication and falsification that made the study based on reality and empirical evidence. In cases where respondents were not willing to participate, they were not forced.

CHAPTER FOUR

Results of the study

4.0 Introduction

This chapter presents the findings of the study, analysis and the interpretation. The findings have been presented in form of frequency tables and pie-chart for uni-variate analysis. At bi-variate level of analysis chi-square tests were used to test the levels of association between the independent and dependent variables.

Data presentation

A total of 309 questionnaires were completed. Fifty questionnaires, which were distributed to the respondents, were not returned and nine questionnaires were destroyed, consequently excluded leaving a final sample size of 250.

4.1 socio-demographic characteristics of respondents

The highest number of respondents143 (57.2%) were male, majority of the respondents 115(46.0%) were in the age group of 25-31 years. The highest level of education attained by the respondents was tertiary level 177 (70.8%) and only 4 (1.6%) had never attended school. Of the 250 respondents, 148 (59.2%) were single. Majority of the respondents140 (56.0%) were employed and of the respondents who were employed, 69 (27.6%) were professional workers. Majority of the respondents160 (64%) had knowledge about the health effects of shisha smoking and only 4(1.6%) reported that it improves health. On the other hand, 150(60%) of the respondents had the opinion that shisha is bad and only 15(6%) of the respondents could not give

their opinion about shisha smoking among adults. Of the 250 respondents, majority of them were Catholics 85 (34.0%) and the least were Muslims 27(10.8%).Illustrated in Table 1 below.

Table 1 : Socio-demographic characteristics of respondents

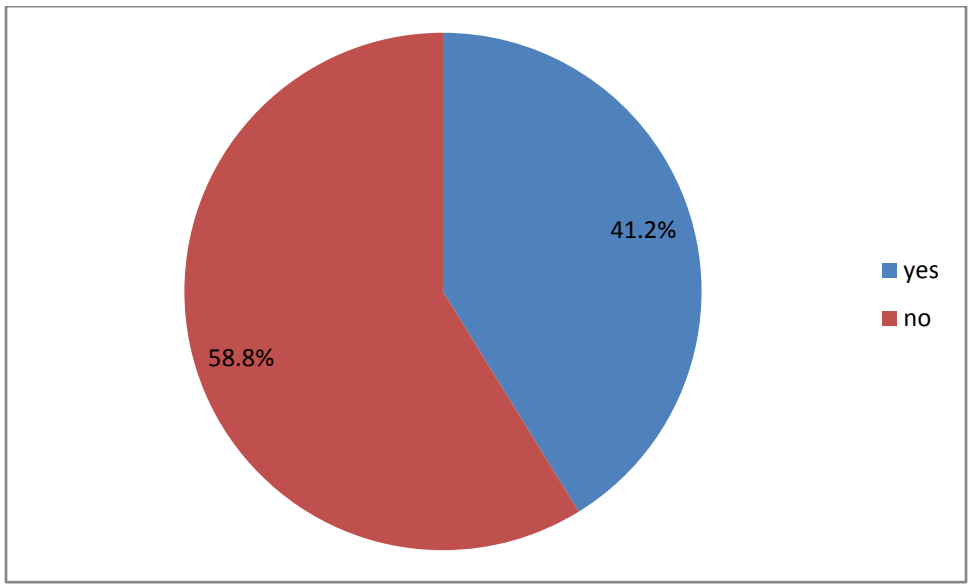
Variable	Frequency (N)=250	Percentage (%)
Gender		
Male	143	57.2
Female	107	42.8
Age		
18-24	89	35.6
25-31	115	46
32-38	42	16.8
39-45	4	1.6
Education status		
Primary	14	5.6
Secondary	55	22
Tertiary	177	70.8
never attended any	4	1.6
Marital status		
Single	148	59.2
Married	86	34.4
Divorced	12	4.8
Others	4	1.6
Employment status		
Employed	140	56
Unemployed	110	44
Current occupation		
Professional	69	27.6
university student	18	7.2
self employed	45	18
Others	8	3.2
Knowledge		
Improves health	4	1.6
Harmful to health	160	64
Makes no difference to health	51	20.4
Not sure	35	14
Perception		

Good	49	19.6
Neither good nor bad	36	14.4
Bad	150	60
Cannot say	15	6
Religion		
Catholic	85	34
Anglican	44	17.6
Muslim	27	10.8
SDA	42	16.8
Pentecostal	52	20.8

Distribution of adults according to shisha smoking status

Out of the 250 respondents who participated in the study, 103(41.2%) participants answered the question 'do you smoke shisha?' producing a positive response to smoking shisha while 147(58.8%) reported they do not smoke shisha this is as shown in figure1 below

Figure 2 : Shisha smoking status of respondents



4.2 Description of environmental factors influencing shisha smoking among adults

Table 2-Environmental factors influencing shisha smoking among adults.

Variables	Do you practice shisha smoking	
	Yes (%)	No (%)
Cost of shisha		
1000-5000 ugx	9(47.4%)	10(52.6%)
6000-10000 ugx	71(61.7%)	44(38.3%)
>10,000 ugx	21(33.3%)	42(66.7%)
I don't know	2(3.8%)	51(96.2%)
Place of smoking	4(80%)	1(20.0%)
Home	10(83.3%)	2(16.7%)
Restaurant	3(60.0%)	2(40.0%)
Coffee shop	83(77.6%)	24(22.4%)
Clubs		
Availability of shisha		9(25.7%)
Yes	94(43.7%	26(74.3%)
No	121(56.3%)	
Grew up with		
With both parents	69(41.1%)	99(58.9%)
Single parent	20(38.5%)	32(61.5%)
Guardian	12(57.1%)	9(42.9)
Siblings	2(22.2%)	7(77.8%)
Parents smoking status		
smoker	6(40.0%)	97(41.3%)

Non-smoker	9(60.0%)	138(58.7%)
Learnt about shisha smoking from:		
From family members	9(42.9%)	12(57.1%)
From friends	77(49.0%)	80(51.0%)
From siblings	4(23.5%)	13(76.5%)
From media	12(30.8%)	27(69.2%)
Others(specify)	1(6.2%)	15(93.8%)
Have friends who smoke shisha?		
Yes	90(45.0%)	13(260%)
No	110(55.0%)	37(74.0%)
Current marital status of parents		
Divorced/separated	2(15.4%)	11(84.6%)
Single parent	18(46.2%)	21(53.8%)
Married	53(39.3%)	82(60.7%)
Widowed	15(44.1%)	19(55.9%)
Deceased	15(51.7%	14(48.3%)

Majority of the respondents 71 (61.7%) who practice shisha smoking, reported that they spend 6000-10000 Ugx on buying shisha pipes on a daily basis. Those participants who do not smoke, majority 51(96.2%) reported that they do not know the cost of shisha pipe session. Most of the participants 10(83.3%) smoke from restaurants and 103(69.4%) of the participants both smokers and non-smokers reported that shisha is usually available. Respondents who grew up with their

guardians12 (57.1%) make up the greatest percentage of those who smoke shisha signifying some degree of lack of parental guidance.

Among the respondents who smoke shisha, 9(60%) reported that their parents do not indulge into shisha smoking while those who do not smoke shisha reported that138(58.7%) of their parents also do not practice shisha smoking. In this study 77(49.0%) of the participants reported that they were influenced by their friends to start smoking and only1 (6.2%) learnt from other areas such as parties. More than half of the respondents 110 (55%) who practice shisha smoking also reported that they do not have friends who practice shisha smoking. Greater percentage of the respondents (51.7%) 15 showed that they are smokers as most of their parents are deceased so no one is on the look out to what they do in their lives. This is as shown in the Table 2 above.

4.3 Descriptive of psychological factors influencing shisha smoking among adults

Of the 250 respondents, 25(54.3%) participants who are shisha smokers reported history of loss of a friend/relative due to shisha smoking in the past month while 126(61.8%) non-smokers did not report loss of friend/relative in the previous month. Most of the participants who practice shisha smoking 67(75.3%) also reported that they smoked because they were stressed. Some of the respondents 84(61.3%) said that they smoke not because they experience hopelessness while 63(55.8%) they do not smoke and they do not have any history of hopelessness in their life. Shown in Table 3 below

Table 3: psychological factors influencing shisha smoking

Variables	**Do you smoke shisha**	
	Yes (%)	**No (%)**
History of loss of a friend/relative		
Yes	25(54.3%)	78(38.2%)
No	21(45.7%)	126(61.8%)
History of stress		
Yes	67(75.3%)	36(22.4%)
No	22(24.7%)	125(77.6%)
History of hopelessness		
Yes	53(38.7%)	50(44.2%)
No	84(61.3%	63(55.8%)

Table 4: Relationship between socio-demographic factors and shisha smoking among adults (bivariate analysis)

Variables	**Have you ever practiced shisha smoking**		**X^2**	**d.f**	**p-value**
	Yes (%)	**No (%)**			
Gender			**1.034**	**1**	**0.309**
Male	55(38.5%)	88(61.5%)			
female	48(44.9%)	59(55.1%)			
Age			**1.656**	**3**	**0.647**
18-24	32(36.0%)	57(64%)			
25-31	51(44.3%)	64(55.7%)			
32-38	18(42.9%)	24(57.1%)			
39-45	2(50%)	2(50%)			
Education			**1.955**	**3**	**0.582**
Primary	6(42.9%)	8(57.1%)			
Secondary	22(40%)	33(60%)			

Tertiary Never attended any	72(40.7%) 3(75%)	105(59.3%) 1(25%)			
Marital Status Single Married Divorced Others(specify)	 54(36.5%) 41(47.7%) 8(66.7%) 0(0.0%)	 94(63.5%) 45(52.3%) 4(33.3%) 4(100%)	**8.861**	**3**	**0.031***
Employment Employed unemployed	 55(39.3%) 48(43.6%)	 85(60.7%) 62(56.4%)	**0.481**	**1**	**0.286**
Current occupation Professional University student Self employed Others(specify)	 24(34.8%) 6(33.3%) 22(48.9%) 3(37.5%)	 45(65.2%) 12(66.7%) 23(51.1%) 5(62.5%)	**3.046**	**4**	**0.550**
Religion catholic Anglican Muslim SDA Pentecostal	 22(25.9%) 25(56.8%) 9(33.3%) 18(42.9%) 29(55.8%)	 63(74.1%) 19(43.2%) 18(66.7%) 24(57.1%) 23(44.2%)	**17.956**	**4**	**<0.001***
Knowledge about shisha smoking Improves health Harmful to health Makes no difference to health Not sure	 3(75%) 37(23.1%) 40(78.4%) 23(65.7%)	 1(25%) 123(76.9%) 11(21.6%) 12(34.3%)	**61.328**	**3**	**<0.001***
Perception towards smoking Good Neither good nor bad Bad Cannot say	 49(100%) 18(50%) 31(20.7%) 5(33.3%)	 0(0%) 18(50%) 119(79.3%) 10(66.7%)	**97.572**	**3**	**<0.001***

Key:*statistically significant

The Pearson's chi-square was used to determine which individual factors influence shisha smoking among adults in Kabalagala, Makindye division through cross tabulation analysis. There was a statistical significant relationship between marital status(x^2=8.861, p=0.031), religion(x^2=17.956, p=<0.001), knowledge(X^2=61.328, p=<0.001), perception(X^2=97.572, p=<0.001) and shisha smoking among adults. Shown in Table.4 above

Table 5: Relationship between environmental factors and shisha smoking among adults.

Variables	Do you practice shisha smoking		X^2	d.f	p-value
	Yes (%)	No (%)			
Cost of shisha			**52.518**	**3**	**<0.001***
1000-5000 Ugx	9(47.4%)	10(52.6%)			
6000-10000 Ugx	71(61.7%)	44(38.3%)			
>10,000 Ugx	21(33.3%)	42(66.7%)			
I don't know	2(3.8%)	51(96.2%)			
Place of smoking			**1.131**	**3**	**0.770**
Home	4(80%)	1(20.0%)			
Restaurant	10(83.3%)	2(16.7%)			
Coffee shop	3(60.0%)	2(40.0%)			
Clubs	83(77.6%)	24(22.4%)			
Availability of shisha			**4.029**	**1**	**0.045***
Yes	94(43.7%	9(25.7%)			
No	121(56.3%)	26(74.3%)			
Grew up with			**3.703**	**3**	**0.295**
With both parents	69(41.1%)	99(58.9%)			
Single parent	20(38.5%)	32(61.5%)			
Guardian	12(57.1%)	9(42.9)			
Siblings	2(22.2%)	7(77.8%)			
parents smoking status			**0.09**	**4**	**0.03***

Yes No	6(40.0%) 9(60.0%)	97(41.3%) 138(58.7%)			
Learnt about shisha smoking from From family members From friends From siblings From media Others(specify)	 9(42.9%) 77(49.0%) 4(23.5%) 12(30.8%) 1(6.2%)	 12(57.1%) 80(51.0%) 13(76.5%) 27(69.2%) 15(93.8%)	**16.022**	**4**	**0.03***
Have friends who smoke shisha Yes No	 90(45.0%) 110(55.0%)	 13(260%) 37(74.0%)	**5.961**	**1**	**0.015***
Current marital status of parents Divorced/separated Single parent Married Widowed Deceased	 2(15.4%) 18(46.2%) 53(39.3%) 15(44.1%) 15(51.7%	 11(84.6%) 21(53.8%) 82(60.7%) 19(55.9%) 14(48.3%)	**5.627**	**4**	**0.229**

Among the environmental factors studied, there was a statistical significant relationship between cost of Shisha (x^2=52.518, p=<0.001), availability(x^2=4.029 p=0.045), peer pressure(x^2=16.022 p=0.03) and friends who smoke(x^2=5.961 p=0.015) and shisha smoking status among adults. Shown in Table 5 above.

Table 6: Relationship between psychological factors and shisha smoking among adults.

Variables	**Do you smoke shisha**		X^2	**d.f**	p-value
	Yes (%)	**No (%)**			
Have you recently lost a friend/relative			4.023	1	0.045*
Yes	25(54.3%)	78(38.2%)			
No	21(45.7%)	126(61.8%)			
History of stress			66.260	1	0.000
Yes	67(75.3%)	36(22.4%)			
No	22(24.7%)	125(77.6%)			
History of hopelessness			0.791	1	0.374
Yes	53(38.7%)	50(44.2%)			
No	84(61.3%	63(55.8%)			

History of stress(x^2=66.260, p<0.001), and history of loss of a friend/relative(x^2=4.023 p=0.045) were the only psychological factors that are statistically associated with smoking shisha as shown in Table 6 above.

CHAPTER FIVE

Discussion of results

5.0 Introduction

This chapter presents the discussion of the findings based on the specific objectives of the research study. The researcher attempts to compare findings of the study with findings of various scholars who were cited in the literature review.

5.1 Shisha smoking status

In this study it was discovered that four out of ten respondents engage in shisha smoking. This is in line with the prevalence from the ministry of health of Uganda which shows that tobacco use among adults is moderate. This shows that out of every ten individuals, three are male and only one female engage in tobacco uptake. The global youth tobacco survey (GYTS 2007) also revealed that one student out of ten uses other tobacco products. This statistic indicates, moderate uptake of tobacco smoking among adults in Kabalagala, Makindye division. This in contrary to data from (Harvard medical school 2008)which estimates that more than 100 million people use shisha for tobacco smoking on a daily basis.

There has been a significant increase in worldwide prevalence rates of shisha pipe smoking reported over the years. At a Lebanese (Beirut) university the rate of smoking among students rose from 30% in 1998 to 43% in 2002(Jamil H, Elsouhag D et.al).Although reported at various sites within the Middle East, smoking status rates of hookah pipe smoking among adults have steadily increased during the past . These high rates bear evidence to the ever increasing popularity of different forms of tobacco smoking, even in countries with long histories of water

pipe usage. Initial prevalence rates of shisha smoking prior to 2007 ranged from 15-20%, but two studies in 2007 and 2008 found prevalence rates of 41% and 30% respectively (Maziak W. et al.)

Although the rate of the 2008 study was not the highest reported, it was of considerable importance in that it represented both a very large randomly selected sample.

5.2 Individual factors influencing shisha smoking among adults

In the study findings it was found that, majority of the adults who smoke shisha were male. This was consistent with other studies (Redhwan A Al-Naggarl, and Yuri V Bobryshev, 2012) found that male gender was significantly associated with the practice, shisha smoking. In this study the findings showed that, male participants who practiced shisha smoking were many compared to their female counterparts and this shows that shisha is gaining popularity making it universally more popular among female adults. There was high shisha use among male participants but the outcome was still low and this failed to achieve significance with respect to shisha smoking among adults. The attributable reason for more men participating in shisha smoking was realized that they have better earning jobs whose earnings they can use to their satisfaction as compared to women who have to give the basic needs a priority.

There was a discrepancy in the findings of this study compared to studies carried out by other scholars as shisha smoking in other area is an old practice compared to kabalagala,makindye division where the product is new in the market and not many people know about it.

In line with other studies, shisha tobacco smoking is becoming increasingly popular among young adults (Korn *et al*. 2008) and university students. Interestingly, the prevalence of exclusive shisha tobacco smoking of university students was higher however the research study

did not find association between shisha smoking and age,this could be because the sample method used was different as in other studies carried out.

According to findings in this study, marital status of respondents was a predictor of shisha smoking practice. There are no studies carried out to show the relationship between marital status and shisha smoking. However the findings of this research signify that the majority of the respondents were single with fewer responsibilities therefore they have the time to discover new kind of tobacco uptake that they desire.

Majority of the respondents are employed and most of them are self employed. There is however no previous study elsewhere that has found the relationship between occupation and shisha smoking.

In Kabalagala, majority of the respondents lack knowledge about the potential health risks associated with shisha smoking. This is in line with the studies carried out in different parts of the world; the results indicated a significant difference in knowledge of the health risks among adults. This was because there is no health warning on the packets as for cigarette on the dangers. (NHS Harrow, 2011)The knowledge pertaining to the adverse health effects associated with water pipe smoking has been thought to influence the decision to smoke.

The absolute risks associated with hookah pipe smoking have been acknowledged by the majority of respondents lack of knowledge regardless of whether or not they smoked .the low knowledge of the harmful effects of tobacco smoking in Kabalagala, Makindye division appears consistent with international trends.

In the findings, religion as a factor was associated with shisha smoking. Some people believe that, communal smoking is sacred and a common ritual to many native American tribe as part of

their religion. (Armstrong, 2008:638) this can be due to stay in touch with the Supreme Being. This study found different results in relation to studies carried out elsewhere, which showed the respondents were mostly from the muslim religion as the sample was carried out among muslim believers.

5.3 Environmental factors influencing shisha smoking among adults

Family and friends are responsible for introduction to new shisha smokers in over 90% of the cases. This use of shisha by friends has shown a positive independent factor that promotes use of tobacco products to other members. This is similar to a study by (Baker and Rice (2008), which found that peer influence was the significant factor for water-pipe tobacco smoking. This is in line with the findings of this study which showed an association between peer pressure and shisha smoking.

A survey (Qudsia Anjum Farah Ahmed Tabinda Ashfaq, 2007) conducted in high socio-economic schools of Karachi reported that Shisha is gaining popularity among the young generation and it is easily available in the restaurants, hotels and Shisha cafes. This was similar to this study which showed that readily available shisha in public places was a powerful driver influencing adults to smoke shisha. The most popular place to smoke shisha was at the clubs. Nevertheless, more than half of the smokers reported use in the restaurants.

This provided a clear indication of the important role played by the restaurants in the spread of this habit and underlined the potential impact that regulation of smoking within the environment had. One finding, contrary to other studies, was the relatively small contribution made by bars and cafes as the primary place for shisha smoking. The unique characteristic also considered when planning local tobacco control programmes.

The findings from this research provided evidence that, out of the respondents who participated in the study, seven out of ten respondents attributed to spend more than 6000 Ugandan shillings on shisha pipe on a daily basis as it easier for individuals to split the cost of the shisha pipe making it inexpensive way to spend time with friends. this in relation done elsewhere was at a lower range but a major contributing factor towards poverty as individuals use the little amount they get to engage in smoking.

In other studies, this form of tobacco smoking had been made so cheap so that everyone in various locations could be able to afford. As a result, the study found out that there was an association between the cost and shisha smoking among adults.

5.4 Psychological factors influencing shisha smoking among adults

In a study by (Patterson, Lerman, Kaufmann, Neuner & Audrian-Mcgovern, 2004) it was estimated that youths and young adults smoke and of these, 75% will continue to smoke into adulthood. Others might be smoking due to failure in events in their lives as this is intended to get pressure off their body. This is similar to this study which found out that stress plays an important role towards adult smoking of a shisha pipe.

The researcher found out that, the respondents agreed to smoking shisha as they were feeling hopeless in life. This was statistically significant in this study. This explains that some respondents indulge into this kind of smoking in order to console themselves through the hardships of life however this difference to other studies indicated that the sample size was small compared to other studies where the respondents were many. also the sampling method used on this study was different unlike the other studies where cohort studies were used hence giving rise to many respondents hence easier to associate these factors.

5.5 Study limitations

The limitations to this study include:

- Information bias
  -This led to underestimation of shisha smoking status, some respondents did not give the exact information they knew about the practice
- Generalization of results
  - Comprised of Kabalagala residents therefore makes it difficult to generalize the findings to other settings and entire country.
- Selection bias
  -This results to underestimation as not all members may have chosen to participate in the study.

5.6 clinical implications

Smoking is the leading cause of preventable and premature deaths worldwide. The study findings revealed that individuals, who engage in any form of tobacco uptake, are exposed to main risk factors for a number of chronic diseases including cancer, heart diseases and tuberculosis. This means that a large number of participants don't understand the long terms health effects of shisha smoking as they have a false perception about shisha smoking. The lack knowledge also leads to increase in tobacco uptake and increase of mortality rates.

Research on shisha and other tobacco products among among adults has been done globally and regionally. However, there is limited research in Uganda on factors influencing shisha smoking among adults. Therefore public health researchers should utilize these findings as a foundation for further research in order to motivate other health workers consequently reduce the tobacco prevalence and contribute to the development of the country.

CHAPTER SIX

Conclusions and recommendations

6.0 Introduction

Gives the study conclusions that are drawn from the study and the recommendations based on the discussions and findings of the study

The main objective was to find factors influencing adults to shisha smoking and come up with appropriate suggestions for smoking ban.

6.2 Conclusions

According to this research, shisha smoking status among adults in Kabalagala,Makindye division was moderate.

There was an association between marital status, religion, knowledge about shisha smoking and perception towards shisha smoking and shisha smoking among adults.

The cost, availability of shisha pipes, parent smoking status and peer pressure also showed an association to shisha smoking among adults.

There was also an association between history of loss of friend/relative, history of stress and shisha smoking of adults.

6.3 Recommendations

The prevalence of shisha smoking among the adults in Kabalagala, Makindye division is 103 out of 250 respondents. Findings from this study suggest the need for multi-sectoral approach with the aim of preventing and reducing the increasing rate of shisha smoking in Kabalagala, Makindye division. The following are the recommendations necessary in-order to control the tobacco menace:

1. The government of Uganda together with ministry of health should conduct a health campaign targeting the members of the community to create awareness of the health hazards of shisha smoking and educate them about some of the diseases that can be transmitted through sharing of the shisha pipes.
2. The stakeholders involved like public health care inspectors should support the government in its endeavors to banning the smoking advertisements, sponsorship of tobacco products/events and smoking in public places that are aimed at encouraging other individuals to start smoking.
3. The government should also aim at increasing taxes on the tobacco products. This will help in curbing the increasing rates of tobacco consumption among the youths and adults during the period.
4. The government together with the institution of higher taxation must set strict laws on shisha pipe tobacco and strict regulation of its sale.
5. Ministry of health should design mass health education programs and messages designed to warn individuals about the dangers of tobacco and tobacco products.
6. The public health workers should make it a priority to help affected individuals to quit the tobacco use

6.4 Recommendations for further research

1. Need for the study to be duplicated in other geographical areas in Uganda to prevent generalization of results.
2. Similar studies should be carried out on medical students at universities to identify factors influencing shisha smoking and plan interventions that will decrease the practice by medical students.

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APPENDIX I

Consent form

TOPIC: FACTORS INFLUENCING SHISHA SMOKING AMONG ADULTS IN KABALAGALA, MAKINDYE DIVISION.

Dear respondent,

I MOSETI N.FAITH a fourth year student at International Health Sciences University, Kampala finalizing my Bachelors of Nursing Science is kindly requesting for your participation in the research study mentioned above. The research is being conducted for the partial fulfilment for the award of a degree in nursing. The study will help me identify factors influencing shisha smoking among adults and is also expected to suggest significant policy statements through its recommendations on health information pertaining to this kind of practice.

Please note that all information gathered from this study will remain private and confidential and there are no risks involved in this study. Information obtained will be used to enhance knowledge of the common good in a bid to improve healthy practices and reduce morbidity and mortality. Ethical measures will be undertaken to ensure privacy and anonymity. You are free to withdraw consent and discontinue participating in the study although your full participation will be highly appreciated.

This is to certify that to the best of my knowledge, I have read and understood the above information. I agree to take part in this study willingly and freely, and that there are no risks or materials/financial incentives involved.

Respondent's Signature/ thumbprint…… Date…….

APPENDIX II

Research questionnaire

INTERNATIONAL HEALTH SCIENCES UNIVERSITY

SCHOOL OF NURSING

QUESTIONNAIRE NUMBER.....

SECTION A: demographic characteristics

1. Gender

a. Male [ ]

b. Female [ ]

2. What is your age?

a. 18-24 years [ ]

b. 25-31 years [ ]

c. 32-38 years [ ]

d. 39-45 years [ ]

3. Level of education

a. Primary [ ]

b. Secondary [ ]

c. Tertiary [ ]

d. Never attended any [ ]

4. Current marital status

a. Single [ ]
b. Married [ ]
c. Divorced [ ]
d. Others (specify).....

5. Employment status

a. Employed [ ]
b. Un-employed [ ]

6. If employed, what is your current occupation?

a. professional [ ]
b. university student [ ]
c. Self employed [ ]
d. Others (specify).....

7. Religion

a. Catholic [ ]
b. Anglican [ ]
c. Muslim [ ]
d. SDA [ ]
e. Pentecost [ ]

Shisha smoking

8. Do you smoke shisha?

a. Yes [ ]

b. No [ ]

9. If yes, why do you smoke shisha?

.....

.....

10. Do you think shisha smoking is harmful?

a. Yes [ ]

b. No [ ]

11. What do you think is the effect of shisha pipe smoking?

a. Improves health [ ]

b. Harmful to health [ ]

c. Makes no difference to health [ ]

d. Not sure [ ]

12. What is your opinion of shisha smoking?

a. Good [ ]

b. Neither good nor bad [ ]

c. Bad [ ]

d. Cannot say [ ]

13. Shisha smoking is dangerous to your health

a. Agree [ ]

b. Neither agree nor disagree [ ]

c. Disagree [ ]

d. Don't know [ ]

SECTION B: Environmental factors

14. How much does a shisha session cost?

a. <1000 Ugx [ ]

b. 1000-5000 Ugx [ ]

c. 6000-10,000 Ugx [ ]

d. >10,000 Ugx [ ]

e. I don't know [ ]

15. Where do you smoke the shisha from?

a. Home [ ]

b. Restaurant [ ]

c. Coffee shop [ ]

d. Clubs [ ]

16. Is shisha available (accessible)

a. Yes [ ]

b. No [ ]

17. With whom did you grow up with?

a. With both parents [ ]
b. Single parent [ ]
c. Guardian [ ]
d. Siblings [ ]

18. Are your parents/guardians smokers of shisha?

a. Yes [ ]
b. No [ ]

19. How did you learn about shisha smoking?

a. From family members [ ]
b. From friends [ ]
c. From siblings [ ]
d. From media [ ]
e. Other (specify).....

20. Do you have friends who smoke shisha?

a. Yes [ ]
b. No [ ]

21. What is the current marital status of your parents?

a. Divorced/separated [ ]
b. Single parent [ ]

c. Married [ ]

d. Widowed [ ]

SECTION C: Psychological factors

22. Have you recently lost any significant other (relative/friend) in the last 6months that has affected you so much that it requires smoking?

a. Yes [ ]

b. No[ ]

23. Do you think shisha smoking can relieve stress?

a. Yes [ ]

b. No [ ]

24. Have you ever smoked shisha because you were stressed?

a. Yes [ ]

b. No [ ]

25. Can hopelessness in life compel one to smoke shisha?

a. Yes [ ]

b. No [ ]

THANKS A LOT.

APPENDIX II

IHSU INTERNATIONAL HEALTH SCIENCES UNIVERSITY

PART OF INTERNATIONAL MEDICAL GROUP

KCCA URBAN VILLAGE COUNCIL KABALAGALA CENTRAL

Office of the Dean, School of Nursing

Kampala, On the 5th day of August, 2014

TO WHOM IT MAY CONCERN

Re: Assistance for Research

Greetings from International Health Sciences University.

This is to introduce to you **Moseti N. Faith** Reg. No. **2010-BNS-FT-005,** who is a student of this University. As part of the requirements for the award of a Bachelor of Nursing Sciences of this University, the student is required to carry out field research for the submission of a Research Project.

Faith would like to carry out research on issues related to: **Factors influencing shisha smoking among adults in Kabalagala, Makindye Division**

I therefore request you to render her such assistance as may be necessary for her research.

I, and indeed the entire University are thanking you in anticipation for the assistance you will render to her.

Sincerely Yours,

International Health Sciences University
05 AUG 2014
SCHOOL OF NURSING
P. O. Box 7782, Kampala (U)

MRS. WAFULA ELIZABETH

DEAN