FACTORS INFLUENCING THE PREVALENCE OF KHAT CHEWING AMONG THE YOUTH IN EASTLEIGH, NAIROBI, KENYA

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DECLARATION AND APPROVAL

Declaration by the Student

This thesis is my original work and has never been presented for the award of any degree in any university.

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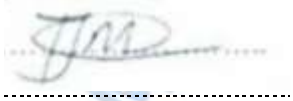

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DEDICATION

This Research Project is dedicated to my parents Mr. Abdulkadir & Mrs. Anab for their support in all my undertakings throughout my studies.

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I sincerely thank the Almighty God for the gift of life and for enabling me to carry out this research project and acquire more knowledge with regard to this topic. My gratitude also goes to my Supervisors Dr Juma Joseph and Dr Jane Karimi for their guidance and engagement throughout the process of compiling this Research project.

ABSTRACT

The consumption of khat has a significant health and financial impact to the nation, as well as an increasing public health hazard. khat usage reduces users' effectiveness, makes them more sensitive to health issues, and increases their chance of committing crimes. In this sense, they pose a risk to society and place a strain on the health system. As such, the current study examined factors attributing to the prevalence of khat effects of Khat chewing on well-being among the youth in Eastleigh, Nairobi, Kenya. The following objectives guided the study; to find out factors that contribute to Khat chewing to determine the prevalence of khat chewing, to assess the effects of khat consumption awareness on health, and to assess the effects awareness of khat consumption on social-economic life among youth in Eastleigh, Nairobi County, Kenya. The research was led by Social Learning and Reference Group theories, which were critical in understanding why individuals engage in Khat intake and other Khat-related behaviour. The study used a survey research approach in which a questionnaire was used to collect information from a sample of participants. The research focused on 200 teenagers from Section I, 150 from Section II, and 100 from Section III, which has a smaller population than the other sections. The research also targeted (2) two people from each Division who were above the age of 35. As a result, the study's target population was 456 people. The research sample included 384 youth and six Key Informants, totaling 390 individuals. The three Divisions in this research were chosen on purpose since they represent Eastleigh's three major Divisions. As a result, their findings most likely mirrored the real situation in the targeted group. A pilot study was conducted prior to data collection to evaluate the questionnaire utilized in this investigation. To ensure validity, the researcher sent the questionnaire results to specialists who determined if the questions were acceptable. In assessing consistency for multi-item measures, a cut-off of more than 0.7 was considered adequate. Chi-square inferential statistics were employed to establish a one-to-one link between the independent and dependent variables. This served as the foundation for either rejecting or accepting the null hypothesis. To examine qualitative data, the researcher used the content analysis approach. Graphs, tables, and pie charts were used to present a result. NACOTSI, MKU, and consent from respondents were consulted on ethical considerations in this sstudy. According to the report, 36.06% of respondents were introduced to Khat by their neighbours or peers. According to the research, 70% of youngsters ingest Khat, indicating that khat usage is widespread in EightLeigh. The study discovered that 66.67% were aware of the negative consequences of khat intake on health yet continued to use it. According to the survey, the rate of khat use is high, and most youngsters are aware of the effects of khat consumption on health and social-economic life. As a result, the research advised that the government and stakeholders educate the people about the health risks associated with Khat.

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LIST OF ABBREVIATIONS AND ACRONYMS

KII: Key Informant Interviews

NACADA: National Agency for Campaign against Drug Abuse

NACOSTI: National Commission for Science, Technology and Innovation

NGOs: Non-Governmental Organization

MKU: Mount Kenya University

SPSS: Statistical Package for the Social Sciences

UK: United Kingdom

UNDCP: United Nations Drug Control Programme

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Khat is primarily grown in Ethiopia, Yemen, and other African nations along the coast of the Indian Ocean. It prefers altitudes ranging from 5000 to 6500 feet above sea level, which is also an altitude that is ideal for growing tea and coffee. Khat is a plant that is used to make a traditional African medicine (Gelaw & Haile-Amlak, 2017). It is estimated that more than 10 million individuals throughout the world partake in the use of khat (Widmann & Odenwald, 2014). According to a variety of studies, the frequency with which people use khat differs according to factors such as age, gender, place of residence, and livelihood. According to the findings of a survey that was carried out in Yemen, for instance, 82 percent of males and 43 percent of women stated that they had used khat at least once throughout their lives (Thomas, 2013).

The eating of khat has been a tradition throughout the Horn of Africa and the Middle East for the last several decades. After a period of time, this pattern of conduct has become widespread around the globe. The younger generation has taken up the practise despite the fact that smoking is harmful to their health. Studies have shown that there is a significant incidence of khat use among students in both high schools and universities, and these studies give pertinent information to back this assertion. Cathinone, an amphetamine-like alkaloid, is found in the fresh leaves and buds of the Khat plant. This alkaloid is responsible for the plant's pharmacological activity. Students at higher education institutions take khat to enhance their mental alertness and to motivate them to exert maximum effort in their academic pursuits (Mahfouz & Alsanosy, 2015). During the times when Muslims are required to fast and pray, it is customarily used for such purposes. However, in modern times, a significant number of Christians, particularly young people, also use it (Megersa,

2014). In both public and private high schools, alcohol and khat were the "drugs" that were used most often by students who had ever experimented with substance use (Megersa, 2014). Insomnia is a frequent issue connected with the usage of khat, which causes the chewer to use/misuse sedatives and to indulge in alcohol as a method of alleviating the adverse effect. [Chewers] (Kassaye, 2017).

Cathinone, an amphetamine-like alkaloid, is found in the leaves and buds of the Khat plant. This alkaloid is responsible for the plant's pharmacological effect. Students who want to remain awake and work hard on their schoolwork consume Khat in order to do so (Mahfouz and Alsanosy, 2015). It is often ingested for the purpose of prayer and during the time of fasting that is observed by Muslims. However, in modern times, a significant number of Christians, especially younger Christians, also chew it (Megersa, 2014). Both private and public secondary school pupils were more likely to try alcohol and khat than any other illicit substance (Megersa, 2014). One of the most common side effects of using khat is an inability to get enough sleep, which often leads users to overuse or mistreat substances like alcohol and depressants in an attempt to fight the feeling of being too sleepy.

In Africa, the practise of chewing khat by youngsters is frowned upon, and parents will often continue to discourage their sons even well into adulthood if they are boys (Lulekal, 2014). People between the ages of 15 and 24 are considered to be part of the young population. More than a billion people throughout the world are considered to be of young age, the majority of whom reside in countries that are still developing. There are around 33 percent of Kenya's total population that is comprised of young people (Kassaye, 2017). In Kenya, obtaining hard drugs like heroin and cocaine is very uncommon. However, khat is cultivated and used extensively throughout the nation in a number of different regions. 0.7% of kids who were actively enrolled in school acknowledged to using drugs other than Khat,

as comparison to 5.1% of students who were not actively enrolled in school (Mahfouz & Alsanosy, 2015).

It has been proven by a number of researchers in Africa and elsewhere in the globe that the lifetime prevalence of khat use as well as the present prevalence of khat consumption among high school, college, and university students varies greatly from location to location. The prevalence was 3.2% among students in secondary schools (Lakew, 2014), 24.2% (95% CI; 22.2% - 26.2%) among high school students in Eastern Ethiopia (Aklog, 2013), 21.4% among high school students in Jazan (Hussien, 2009), and 23.1% among students in higher education in the Jazan region of Saudi Arabia (Lakew, 2014).

In addition, the percentage of high school pupils who also chew khat is substantially lower than the percentage of college and university students who do so. According to the findings of a survey that was carried out at Bahir Dar College in Ethiopia, the percentage of people who chew khat was 19.6%. (Megersa, 2014). The lifetime prevalence was found to be 26.7%, while the present prevalence was found to be 17.5%, according to a research that was carried out by Lulekal (2014) in North West Ethiopia colleges. In addition, the prevalence of khat chewing in various universities in Ethiopia was indicated in studies carried out by various scholars. For example, Cafer (2016) found that 28.7% of students chewed khat, while Atatkie and Worku (2015) found that 7.8% of students did so, Aklog (2013) found that 14.1% of students did so, and Cafer (2016) found that 30.3% of students did so (Hassan & Hudson, 2015).

Many different communities partake in the consumption of khat. Having said that, the young population is related with an increased incidence of khat chewing. According to the findings of a research that was carried out in Ethiopia, the age group between 16 and 30 years old has the highest prevalence of khat use, accounting for 62% of the total usage of

khat throughout the country (Izugbara, 2015). Additionally, a study that was carried out by Widmann and Odenwald, (2014) in three towns located in the south-west region of Uganda revealed that chewing Khat was the most prevalent form of drug use among law enforcement officers at a rate of 97.1%, while transporters and students were reported as consuming the drug at a rate of 68.8% and 9.2% respectively. The majority of those who used khat were between the ages of 16 and 25 years old, according to the findings of the research. In addition, the results of a number of studies carried out in rural areas of Ethiopia show that 55.7 percent of the people in the sample had used khat at some time in their life, and that 50% of them were current users (Widmann &Odenwald, 2014).

The use of khat, also known as Catha edulis Forsk, is a deeply ingrained social and cultural practise in several of the nations in which it is most often used. There are likely millions of individuals throughout the globe who chew khat, particularly in the countries of Ethiopia and Kenya; perhaps 10 million people chew khat leaf on a regular basis. There are a few countries in which the practise of chewing khat (Catha edulis Forsk), often known as catha, is common, and the habit has been ingrained as a social and cultural heritage. One million people across the world use Khat, with an estimated ten million using the substance on a daily basis. The majority of these users are concentrated in the countries of Ethiopia and Kenya (Mahfouz & Alsanosy, 2015).

The khat plant, also known as miraa, may be found growing in Kenya, and its consumption is a common practise among the young people of Eastleigh and Nairobi in Kenya. People who use it are subject to certain social, economic, and health consequences as a result. At the present time in Kenya, the use of Khat has developed into an integral part of the culture of young people (Gelaw & Haile-Amlak, 2017).

Tobacco products, alcohol, and khat are just some of the drugs that are seeing an increase in overuse or abuse in Kenya (Catha edulis Forsk). In spite of this, the vast bulk of the research was carried out at the community and secondary school levels. In light of this, the purpose of the present research is to investigate the extent to which young people in Eastleigh, Nairobi, Kenya are aware of the consequences of chewing khat as well as their habits of doing so.

1.2 Statement of the Problem

Khat chewing is common in certain parts of Kenya, particularly among young people in Nairobi's Eastleigh district. Due to the negative health implications of khat chewing, the Kenyan Health agency, the authorities, and the local church are attempting to launch a major campaign against the practice. This has not produced much since many young people have grown addicted to the practice of khat chewing, which has negative health consequences. According to Alemu et al. (2020), khat addicts are on the rise nationwide, particularly in Nairobi's outskirts, notably the Eastleigh Estate neighborhood. Substance misuse has become increasingly widespread among Kenyan youngsters, with 7 to 38% misusing khat. Nevertheless, the incidence of drug misuse in Eastleigh Estate remains unknown.

Some studies have shown that khat plant leaf extracts cathinone, an active norepinephrine reuptake inhibitor comparable in structure and pharmacologic effects to amphetamine in affecting the central nervous. Intoxication with khat is self-limiting, but continued usage may result in various health problems, including gastrointestinal effects, endocrine disruption, central neurological effects, and psychiatric impacts, among other things. It also causes social and economic harm to the person and society (Adane et al., 2021). The accessibility of khat, young people's interest, and poorly known and documented against khat trafficking are all contributing to khat awareness among youth.

This also simplifies youngsters' understanding of how and where to chew khat, which leads to addiction and a cascading of psycho-social and physical issues, making khat chewing a massive problem that requires immediate action. Using khat has a significant health care and financial impact on the nation, as well as an increasing public health hazard. Excessive khat usage reduces users' productivity, makes them more sensitive to health issues, and increases their probability of committing crimes. As a consequence, they pose a risk to society and place a strain on the healthcare system. Increased khat usage has also been linked to unemployment/underemployment, family disturbance, high rates of school dropouts, availability, and affordability (Al-Hajj et al., 2020).

Based on the Population Census (2021), khat is also used for human conveniences, such as reducing fatigue and stress and coping with hostile climates in which the consumers live. For example, more than half of the residents of Eastleigh Estate dwell in slums, start engaging in unofficial ventures and have low levels of education. Despite the abundance of knowledge on the negative health implications of khat consumption, khat chewing remains the standard among Kenyan adolescents. The present corpus of research is very lacking in terms of the related causes and prevalence of Khat usage in Eastleigh Estate, Nairobi Area. The purpose of this research was to determine the extent of Khat use and the aspects related to Khat consumption among the youth in Nairobi's Eastleigh estate in order to bridge the existing information gap and add to the existing initiatives by the Health Service Team and other interested parties to control Khat misuse.

1.3 General Objective

The study sought to establish factors, prevalence and awareness of the effects of khat chewing on well-being among the youth in Eastleigh, Nairobi, Kenya.

1.4 Objectives of the Study

i. To find out factors that contribute to khat chewing among youths in Eastleigh, Nairobi County, Kenya
ii. To determine the prevalence of khat chewing among youth in Eastleigh, Nairobi County, Kenya
iii. To assess level of awareness of the effects of khat chewing on social-economic life among youth in Eastleigh, Nairobi County, Kenya
iv. To assess the level of awareness of the effects of khat chewing on health among youth in Eastleigh, Nairobi County, Kenya

1.5 Research Questions

i. What are the factors that contribute to khat chewing among youth in Eastleigh, Nairobi County, Kenya?
ii. What is the prevalence of khat chewing among youth in Eastleigh, Nairobi County, Kenya?
iii. What is the level of awareness of the effects of khat chewing on social-economic life among youth in Eastleigh, Nairobi County, Kenya?
iv. How does awareness affect khat chewing on health among youth in Eastleigh, Nairobi County, Kenya?

1.6 Hypotheses

The study was guided by the following hypotheses;

H_{01}: There is no statistically significant relationship between awareness of effects of khat and health among youth in Eastleigh, Nairobi County, Kenya

H_{02}: There is no statistically significant relationship between awareness of effects of khat and social-economical life among youth in Eastleigh, Nairobi County, Kenya

1.7 Justification of Study

Research findings regarding the incidence factors related to the employ of khat in Eastleigh Estate, Nairobi City, have not received much attention, even though drug addiction is thoroughly covered in the current body of research (Alkhulaidi et al., 2021, Astatkie & Worku, (2015), and Begum, (2018). Even the studies that have been undertaken concerning the misuse of Khat in Kenya have focused chiefly on alcohol consumption and have been conducted in locations outside of Nairobi County, which, interestingly, is supposed to be the center for drug addiction (Begum, 2018). Because of this, it is difficult to determine the elements connected with khat usage, its incidence, and its negative impact on one's health in Eastleigh Estate, which is located in Nairobi City. In addition, despite the enhancements in the way the city provides health services, the drug usage rate continues to rise (Chong et al., 2020).

The misuse of khat has been identified as a high-cost societal issue related to antisocial and criminal behavior (Alemu et al., 2020). If khat is not managed, it would be impossible for Kenya to meet the first Millennium Development Goal, which is to reduce the level of poverty. Therefore, it is vital to conduct this research to give data that assisted stakeholders in gaining a better understanding of the scope of the issue and enhancing any measures already in place to reduce the risk of morbidity and death related to khat chewing. Additionally, academics utilized it as a foundation for future research on khat chewing based on their findings.

1.8 Significance of the study

Government, training institutions and the community: The research will make it possible for the government, training institutions, and the community to take a more proactive approach to addressing the issues that are being faced by the young and to design solutions to minimise those challenges. In conclusion, the research will provide relevant data to decision-makers in the field of drug misuse prevention, which includes both leading organisations and other key participants in the field.

Researchers: Because it will provide a foundation for both future empirical and conceptual research, the results of this study will be useful to researchers as well as those whose work focuses on the prevalence of drug usage. In addition, the research will make it possible for administrations, training institutions, and churches to take a more proactive approach to addressing the obstacles that are being faced by the kids and to design solutions to reduce the difficulties.

Policy Makers: The significance of the study lies in the fact that its findings, should they be utilised, have the potential to inform and strengthen the policy-making processes that are carried out by organisations such as the National Agency for Campaign against Drug Abuse (NACADA), private institutions, the United Nations Drug Control Programme (UNDCP), and individuals on the effects that khat chewing has on the wellbeing of families. This research has produced tangible data, which may make it easier to formulate policies and programmes that will improve the welfare of the families of people who use Khat.

1.9 Scope of the Study

Geographical Scope: The research was carried out at Eastleigh, which is located in Nairobi County, Kenya. This location was chosen because of the high concentration of khat in the vicinity. To investigate the determinants, prevalence, and level of knowledge about the impacts of khat chewing among young people in Eastleigh, which is located in Nairobi, Kenya. The participants in this research were khat users who fell into the age range of 18 to 35 years old and lived in Eastleigh, which is located in the city of Nairobi in Kenya. As soon as NACOSTI and MKU gave their approval, this study was carried out in Eastleigh Nairobi, which is located in Kenya. This investigation is scheduled to be carried out between the months of August and October, according to the researcher's hopes. The researcher conducted a review on the relationship between independent, moderating, and dependent variables, which included factors, prevalence, and awareness of the effects of khat chewing among young people in Eastleigh, Nairobi, Kenya. The study was based on the conceptual framework that the researcher developed.

1.10 Study Limitations

It is reasonable to anticipate that this study will have certain shortcomings, such as the possibility that some of the respondents will be illiterate and, as a result, unable to fill out the questionnaires, as well as the possibility that the respondents will be reluctant to share information that they may consider to be too sensitive. Despite this, the way in which the questionnaire was constructed made it such that sensitive themes were shielded from direct interpretation. This played a significant part in reducing the likelihood of respondents being biassed and reluctant to answer questions.

1.11 Assumptions of the Study

The research that was planned relied on a few different presumptions. It is presumed that the respondents who volunteered to take part in the research answered the questions in the

manner in which they were posed honestly and properly. The researcher also makes the assumption that the youngsters ceased using khat after becoming aware of its negative impacts on their health as well as their social and economic circumstances.

1.12 Operational Definition of Key Terms

Awareness: knowledge or perception of a situation or fact

Economic situation: means the condition of the economy in a certain nation or area. When the economy is growing, the economic climate is said to be healthy, but when it is declining, it is said to be unfavourable.

Effects: This is a reference to the various effects, both good and negative, that are presented by the ingestion of Khat.

Khat consumptions: Chewing the green twigs that hang from a Khat tree is referred to as "khat consumption" in this research.

Prevalence: In the context of this investigation, the word "prevalence" refers to the state of being common, and it is differentiated from "occurrence."

Social life: According to this research, having a social life implies spending time with your friends and interacting with others from diverse walks of life.

Youth: Youth refers to the demographic including individuals with ages ranging from 14 to 24 years old.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

This chapter presents some of the research and literature that has been done on the consequences of khat use and awareness among young people in Eastleigh, Nairobi, Kenya. The theoretical review, the conceptual framework, the research gap, and ultimately a summary of the literature review are all included in this chapter.

2.1 Empirical Review

2.1.1 Factors That Contribute to Khat Chewing Among Youths

Family Related Factors. In a variety of different ways, families have an effect on the manner in which children use substances. A number of studies have addressed a few of the familial variables that are more predictive of childhood drug misuse. These factors, which include, for example, a parental history of chewing behaviour that puts the kid at risk for drug abuse, have been the subject of discussion. According to the findings of a research carried out in Kisumu town, Kenya, by Ofulla and Owuor (2016), the majority of secondary school pupils who chew khat come from homes in which at least one member of the household chews the substance. These people included their siblings, their parents, as well as other relatives from their extended family who were living with them.

In addition, Glennon (2014) discovered that young people who come from broken households had a significantly increased risk of engaging in the usage of khat. The absence of parental supervision is another another aspect of the family that plays a role. A lot of parents don't have the time or the ability to be physically there with their kids to offer them with direction. Because of the distance that their children must go for reasons like school and other commitments, some parents have little to no contact with other members of their families. These phenomena are the starting point for and contribute to a rise in drug usage

among students. According to the findings of a research that was carried out by Ofulla and Owuor (2016), the influence of peers is a significant factor in persuading many young people to experiment with substance usage. This is due to the fact that adolescents and young adults often face the influence of their peers. As they strive to rely less on parents, adolescents demonstrate increased reliance on their pals. Friends may contribute to one another's development of a drug habit in a number of ways: by pushing users to participate in drug-using activities in groups, by encouraging users to continue drug use, and by helping users deny that they have a problem with drugs. This is on the premise that peer pressure is a fact of puberty and youth. As they seek to rely less on parents/guardians, adolescents display increased dependence on friends and peers. The drug habits of one friend are encouraged by the other friend's participation in a group activity, the friend's encouragement to continue abusing drugs, and the friend's promotion of the belief that the friend does not have a problem with drug misuse.

As a result of an increase in supply, the price of medications has decreased in a number of countries, which indicates that these substances are readily available at a reduced price. In Ethiopia, the khat plant grows in almost every available space, thus customers may easily get it in the neighbourhood in which they reside. In addition to that, it is easily available and reasonably priced. In addition, another element is the prevalence of drug addiction in the society, which has led to the development of a "drug culture" characterised by the social acceptance of drug use. Numerous parents and guardians provide a significant amount of income to their children, which enables their offspring to acquire whatever it is that they wish, including illegal substances. Those who are not granted resort to engaging in illegal activities such as stealing and prostitution in order to get money (Andreae & Rhodes, 2016).

2.1.2 The Prevalence of Khat Chewing Among Youth

The general pervasiveness of khat consumption in all of the considered populace was found to be 21.4%, according to the findings of a cross-sectional study that was carried out in Saudi Arabia in 2006 on students from 10 different universities and high schools. The purpose of the study was to evaluate the prevalence of khat consumption. There were 1783 male khat chewers and 51 female khat chewers. This is a 37.7 percent male to female ratio. At contrast to universities, the prevalence was much higher in schools where attendance was voluntary (21.5 percent) (15.2 percent).

The percentage of people who chewed khat was much higher in urban areas (24.5%) compared to rural areas (20.50%) (Ageely, 2009). In 2003, Jimma University in Ethiopia conducted a cross-sectional study on 400 members of the Jimma college staff in order to survey the prevalence of khat consumption and its connections to various socio-statistic factors. The results of this study revealed that the current pervasiveness of khat consumption was approximately 30.8 percent. There were more people who identified as Muslims (49.0 percent) than other religious gatherings, more people who identified as Tigres (42.9 percent) than other ethnic gatherings, and more people who identified as technical (33.8 percent) than academic staff. There were more male consumers (33.0 percent) than their female counterparts (20 percent). In addition, married people were more likely to chew khat (32.4 percent) than single people were (34.4 percent), those aged 18-24 years were more likely to chew khat (34.4 percent) than other age groups, and general experts were more likely to eat khat (40.5 percent) than other expert groups. It is estimated that around 50.4% of the people who chew Khat have been absent from their general job at Jimma University on at least one occasion due to biting (Reda & Wondmagegn, 2012).

A limited number of research on the use of khat by among youths in Kenya particularly in Nairobi (Regassa & Regassa, 2021). The majority of these studies have been carried out in the United Kingdom, and it is not apparent to what degree one can conclude that their results are reflective of patterns of khat use in other parts of Europe. Even so, the utilization of khat is low and restricted to nations with immigrant societies whether it be from East Africa, justified situated at the center of the Horn of Africa along with Djibouti, Ethiopia, Somalia, and Kenya; either from far in the Arabian Peninsula, Yemen, and territories of Saudi-Arabia. This is because East Africans are the primary source of immigrants to Europe. Although there is a lack of statistics on the usage of khat and the patterns of use of khat in Europe, which makes it impossible to define the prevalence of khat in the EU, there have been rising reports of seizures of the plant in the EU. As a result, the statistics on seizures provide a perspective on the issue, despite the fact that they might be challenging to understand. According to the most current estimates, Europe is responsible for around 40 percent of the khat that is confiscated across the globe (Pendl et al., 2021). On the other hand, the results of a recent research on the prevalence of khat usage that was released by the EMCDDA contradict the earlier European estimates of its use. In the paper, EMCDDA argues that European research do not give a solid foundation for predicting prevalence rates of khat, but estimations may provide insight into patterns of use of the substance. In general, studies reveal rather high levels of current usage, which range from 34–67 percent, with up to 10 percent of users engaging in daily use in Europe (Pendl et al., 2021)

The European Monitoring Center for Drugs and Drug Addiction (EMCDDA) contends that available studies do point to significant levels of khat use within some migrant communities that reside in different EU Member States and none member states such as Norway and Switzerland. In particular, more use of the khat plant among male immigrants is reported, generally in group settings (Patel et al., 2021). On the other hand, there may be a propensity

among women to under-report their use of khat, which is a more stigmatized behavior and is more likely to take place in the privacy of one's own home or alone (Abebe, 2018).

In 1990, it was believed that over 5 million servings of khat were consumed every day throughout the globe (Brenneisen et al., 1990). According to the findings of a research that was carried out 20 years later in the Netherlands, it is believed that 10 million individuals throughout the globe chew khat on a daily basis (Begum et al., 2019). In contrast, the EMCDDA said that there are no accurate data available on the number of people who use khat on a regular basis around the globe, but that estimates might vary up to 20 million (Baraka et al., 2020). These occurrences point to a considerable rise in the practice of chewing khat, which may be seen not only in less developed nations that are well-known for the production of khat, but also in more developed nations where it is imported for commercial reasons. In today's world, khat has made its way across international borders despite the fact that certain countries have passed legislation to prohibit the use of this substance inside their borders. For example, khat usage is common among immigrants from Ethiopia, Somalia, and Yemen in Europe, despite the fact that the law treats their habit differently depending on their country of origin (Patel et al., 2021).

On the one hand, it would seem that the number of people who use khat in Europe is increasing, but on the other hand, the scope and nature of the issue are not well known by the scientific community (Abebe, 2018). Despite this, a number of studies have shown that there are in fact two separate populations of khat consumers on this continent (Sawicka et al., 2020). First, there seems to be an increasing interest in herbal and unregulated psychoactive compounds among a subset of younger people in Europe. The second category of people that chew khat in Europe are immigrants from countries where it is usual to do so. The majority of these immigrants are from Somalia, Yemen, and Ethiopia (Sawicka et al., 2020). According to the findings of an EMCDDA study that investigated the availability of

psychoactive drugs on the internet, users in Europe have access to both khat and a variety of synthetic cathinones (Baraka et al., 2020).

There are many ways that hashish may enter Sweden: by air cargo and couriers at Stockholm Arlanda and Gothenburg Landvetter airports; through Germany and Denmark to Ske; and through London and Amsterdam, which are the two primary entrance routes for hashish (Begum et al., 2019). The Swedish Customs Authority (Tullverket) estimates that between 150 and 300 tonnes of khat are brought into the nation illegally every year; however, the Swedish government does not have accurate statistics on this topic (Begum et al., 2019). Despite this, the EMCDDA reports that the number of khat seizures in Sweden has almost quadrupled over the course of the last five years. For instance, Sweden alone was responsible for the seizure of 11 tons of 17 khat in the year 2008. (Baraka et al., 2020). In spite of this, it is believed that between 2,000 and 3,000 people in Somali groups in Sweden are now using khat, although the scope of usage outside of migrant groups is highly restricted (Abebe, 2018). According to the EMCDDA, the selling of khat in Sweden is comparable to the sale of other drugs. It takes happen on the peripheries of public areas like parking lots, for example. Private residences are often hired out for chewing bouts during the colder months, while public parks are preferred during the warmer months.

There were almost no reports on the prevalence of khat among school kids that could be identified in the relevant body of research. A study conducted in Ethiopia revealed that students had a khat chewing prevalence rate of 26.7% across their lives (Reda & Wondmagegn, 2012). According to the findings of yet another research, the prevalence of khat chewing among high school students in the southwestern region of Ethiopia was estimated to be 64.9 percent. The prevalence percentage of current khat use among students

studying medicine and complementary medicine in the northwestern region of Ethiopia was 22.3 percent (Kebede & Gebremichael, 2005).

According to Al-Motarreb and Broadley (2010), it was found that the current prevalence of khat use among the general population in the Jazan range is 48.7 percent (45.7% in rural areas, compared to 61.7 percent in urban districts) (Al-Motarreb & Broadley, 2010). The following regions had a high usage rate for it: Sabiya (72.5%), Jizan (61.7%), Alhurath (58.1%), Abu Arish (56.8%), and Samtah (55.1%). Even if they continue to chew the leaves right up to the time of their tests, there is growing evidence that the new generation of students supports the prohibition on khat due to the shift in awareness that has occurred in recent years (Al-Motarreb & Broadley, 2010). In any event, the prevalence of khat use among secondary school students and undergraduates in the Jazan area was not anticipated in advance.

2.1.3 Awareness of the Effects of khat Chewing

Malasevskaia et al., (2020) conducted an investigation with the objective of discovering more about the intake of khat by medical students in Asia. The respondents demonstrated knowledge on the effects that chewing khat has on one's health and said that it would not be appropriate for health professionals to consume it. However, they believed that it was not the responsibility of the health care practitioners to enquire about the patients' khat chewing habits or to advise against the use of the substance. To mitigate Khat's deleterious effects on both the health of the individual user and the general population as a whole, medical professionals should be responsible for educating patients and customers about the risks that may be associated with the use of the drug (Malasevskaia et al., 2020). Since there has been no previously documented study carried out in this region, the primary objective of this enquiry is to increase the level of information about the health and social-economic

repercussions of khat usage among the youths in Eastleigh, which is located in Nairobi County.

The vast majority of the study has been carried out in a variety of countries; nevertheless, the information that pertains to Kenya is insufficient. According to a major arrangement published by the National Authority for Campaign against Alcohol and Drug Abuse (NACADA) during 2009-2014, the usage of Miraa is very prevalent in Kenya. In addition, the use of alcoholic beverages and illicit drugs is believed to be at its highest rate among young adults between the ages of 15 and 29, while it is at its lowest rate among those aged 65 and older (Aricha et al., 2021). Students who are enrolled in secondary schools are included in this category, which has a greater incidence of drug misuse. People who were born and reared in areas where khat is grown, such as Eastleigh, are more at risk of developing health difficulties and social and economic problems at an early age as a consequence of chewing khat. This is only one of the many negative effects of khat use (Aricha et al., 2021). The information that was gathered might be used to organise programmes that educate the youngsters, their parents, and the administration of the school about the need of putting an end to the habits of khat chewing.

A research by Debecho et al., (2021) was carried out in the North Eastern and Eastern regions of Kenya, which are the places in Kenya where khat usage is often prevalent. The findings showed that eighty percent of the respondents were regular chewers of khat, and the vast majority of them (eighty percent) had relatives who participated in the khat habit. A widespread lack of understanding about the potentially harmful effects of khat usage was observed. Only forty percent of those who were questioned admitted that the drug had a negative impact on their performance at work (Debecho et al., 2021). The habit of using khat was associated with pressure on family relationships, antisocial behaviour, and negative health effects such as a sleeping issue.

College students in Ethiopia were polled as part of a quantitative research conducted by Malasevskaia et al., (2020), to determine their level of knowledge about the intake of khat. The findings of the studies have led the researchers to the conclusion that khat does not pose a significant threat to the health and tissues of humans. These factors have caused confusion about the relationship between khat use and its effects. In this view, people who chew khat are likely going to rely on this knowledge and comfort themselves, and as a result, they are going to continue with their consuming tendencies ignorant of the way that many research have built up detrimental health consequences to its use. According to the findings of one research, there is no evidence to support the hypothesis that chewing khat has particularly negative impacts on oral or dental health. A study that was conducted in Yemen revealed that there was no part of biting khat, and it advised poor dental hygiene as a cause in periodontal disease. Chewing khat has been reported to have beneficial effects on the periodontium, maybe because it has a purging effect on the dental biofilm via the use of mechanical forces.

2.1.4 Khat Consumption and Wellbeing

Since khat is composed of a number of different components, consuming it may have a wide range of consequences on one's health. In their study, Yimer and Khan (2015) observed a rise in temperature and pulse rate, in addition to mydriasis, in a group of 30 persons who chewed khat. Consumption of khat has been linked to mild elevations in blood pressure, transitory facial and conjunctival congestion, extra-systoles, and higher respiratory rate, according to studies that were conducted after the first findings were published. It has also been claimed that chewing tobacco may inhibit micturition, cause increased diuresis (as a result of ingesting significant quantities of fluids while chewing), diminish libido, and result in impotence and spermatorrhea (Yimer & Khan, 2015).

According to Thomas and Williams (2013), the usage of khat among immigrants in London neighborhoods resulted in a decrease in anti-social behavior like as fighting, noise pollution, and cigarette smoking on the sidewalks. According to the two papers, these anti-social behaviors can only be regulated if concrete legislative frameworks are implemented to restrict khat usage in order to minimize its impact on consumers and their families. The data also suggested that the use of Khat made it easier for immigrants in London to engage with one another and communicate with one another. In their study, Oyugi et al. (2021) did not consider the use of khat among immigrants in London to be a threat to the families, nor did they link the restriction on importing the drug to its impact on consumption. He interviewed 207 Somali people now residing in the city of London for his study. The use of khat was linked to a sense of cultural identity, high unemployment rates, and a greater availability of spare time for the habit. Chewing Khat has been linked to a number of negative side effects, including anxiety, irritation, agitation, and violence. Only a minority of the respondents, six percent, acknowledged to using cannabis when they chewed Khat, whereas the majority of the respondents chewed tobacco and smoked cigarettes.

Begum (2018) found a correlation between the use of khat and a reduced incidence of criminality and violent acts. However, among the Ethiopians and Yemenis, there was no mention of any relation of violence to Khat usage. Among the women, just six out of 602 respondents claimed an association of Khat with domestic abuse. In addition, Wolde (2021) conducted a research to determine whether or not there was a connection between the usage of khat and psychotic illnesses among Somali immigrants in the UK. The research used a population sample consisting of 180 Somali participants, including both males and women. The outcomes of the research suggested that there was no connection between using khat and experiencing psychotic illnesses. The frequency of khat usage was not shown to be connected with typical psychotic symptoms such as anxiety and sadness, according to the

findings of the research. The research made the connection between the result and the social and cultural context in which khat was consumed by Somali immigrants.

A research was conducted by Atnafie et al., (2020) with the goals of determining the patterns of khat usage among Somali-Australians in Australia and exploring their perspectives on the connections between khat use and personal health. For the purpose of the research, semi-structured focus group discussions were conducted with adult members of Somali communities in Brisbane. According to the findings of the research, those who chewed khat had decreased appetites, higher levels of anxiety and loneliness, and increased levels of activity. This research gave insights on the impacts of khat usage, and as a result, it supplied background information on the subject matter of the present study, despite the fact that the study did not reveal any correlation between its effects and the welfare of families. According to the findings of Thomas and Williams' survey of UK Somali women who had used khat, the most significant effect of using the drug was a breakdown in the family unit (2013). In a related manner, Mohamed et al., (2022) conducted research in Denmark on Somali residents and revealed that 2/3 of Extreme Khat consumers were married and had not finished secondary school. This was found to be the case amongst Severe Khat users. Per the Oyugi et al. (2021), this might have been caused by a divergence of money toward consuming khat and a disregard of the obligations that come with having a family.

Awale and Ali (2018) discovered that chewing Khat on a daily basis led to negative consequences on the health and socioeconomic position of the families. [Citation needed] They observed adverse impacts such as a reduction in the number of hours spent working, a fall in socioeconomic production, hunger, and a diversion of resources that were intended for use within the family. Communities who chew Khat in Ethiopia, Somalia, Uganda, and Kenya have reported experiencing the effects that have been described above. The same research also found that modest consumption of khat led to beneficial benefits such as an

increase in the amount of workouts and an improvement in job performance. Consumers of khat often spend their money on activities linked to chewing khat, disregarding the need of their family in the process (Awale and Ali, 2018). In addition to these impacts, they observed that khat chewing has become a common practice across a variety of demographics, including students, workers, and housewives. The number of respondents ranged from 15 to 76 years old, and the sample size was 800. The researchers came to the conclusion that eating khat was not related with any negative psychological impacts 29. In addition to this, khat has been suggested as a contributory element in cases of unstable families, divorce, and violent behavior (Oyugi et al., 2021). Sometimes, in order to finance khat chewing, the typical family's income has to be cut in half (Wolde,2021). A research on the socio-economic factors connected to the use of and abuse of khat in Garissa, Kenya was carried out by Atnafie et al. (2020).

The number of respondents in the sample was one hundred fifty, and they were chosen at random from the same number of homes. According to the conclusions of the research, the use of khat was promoted by rapid societal change (60 percent), the availability of khat (35 percent), boredom (35 percent), and the influence of friends (50 percent). Other impacts, including marital instability, neglect of children, bad health, poverty, and disregard of employment on the part of Khat users, were recorded. According to a study published by the United Nations Educational, Scientific, and Cultural Organization (Begum, 2018), khat is a social drug that has consequences for the users' social lives as well as their physical health. The data for the research were gathered using a survey with a cross-sectional design from a wide variety of stakeholders located within Embu County. According to the findings of the research, the khat industry in Embu County had a negative impact on the educational system there. The report also identified a lack of effective measures to reduce the impact that khat intake has on a student's ability to attend school. Notably, one of the factors that

contribute to the overall health and happiness of the institution of the family is its level of educational attainment.

There haven't been many studies done on the oral health effects of khat chewing in populations that are dispersed around the world. Orlien et al. (2020) found that among 75 Yemeni khat chewers in Sheffield, there was a correlation between self-reported oral difficulties and reliance on either khat or nicotine. After chewing khat, Somali people in East London reported developing oral infections, tooth discolouration, cuts, and difficulty eating (Orlien et al.). They also reported having problems eating (2020). The presence of oral cancer, namely squamous cell carcinoma, on the floor of the mouth of a 42-year-old female khat chewer from Kenya was reported by Kithinji, (2019), in London. The patient was from Kenya. In addition to this, it was alleged that the individual in question consumed alcohol and smoked more than thirty cigarettes on a daily basis. Plasma cell gingivitis was found in the buccal sulcus of a Somali khat chewer who lived in London, according to Mohamed et al., (2022). This was found at the area where the khat was put. It would seem that study into the effects of khat use on dental health has not been given any consideration, despite the rising number of immigrants to the UK from countries where khat is produced (such as Somalia, Yemen, and Kenya). The effects of khat chewing on oral health were originally recorded in the form of professional observations in the nations that are major producers of khat. These findings included stomatitis with secondary infection (Kithinji, 2019). On the other hand, there is just a little amount of research available that suggests chewing khat may have an effect on several elements of oral health.

There haven't been many studies done on the effects that chewing khat has on periodontal disease. In a study of people who had attended the hospital, Al-Hajj et al., (2020) found that the periodontal pocket depth on the side of the mouth that was used for chewing was shallower than the depth on the side of the mouth that was not used for chewing. Bakhadher

et al. provided support for this theory (2018). This gave the impression that khat had a good impact on the chewing side of things. In addition, Al-Hajj et al., (2020) conducted a survey among 1001 Yemenis in various locations in Yemen. They found that among 309 khat chewers, the mean CPITN, the clinical loss of attachment, and the calculus index were all higher than they were in non-chewers. This was the case regardless of whether or not the participants chewed khat. These distinctions were most noticeable in the khat consumers aged 12 to 24 years old. When comparing the loss of periodontal attachment between chewers and non-chewers, Mengel et al. (1996) discovered that chewers had more periodontal loss on the side that did not include khat chewing, but non-chewers had no side specification. In a cross-sectional research including 2500 Yemenis, of whom 1528 were khat chewers and 972 were not, Bakhadher et al., (2018) found that 31 percent of the 1528 khat chewers had periodontal pockets and 98 had gum recession. There was a significant correlation between the frequency and duration of khat chewing and periodontal disorders (p 0.05).

In contrast, Jorgensen and Maalim, (2018) conducted a case-control study in Kenya consisting of 231 mirra (khat) chewers and 199 non-khat chewers. They found that the oral hygiene status of mirra chewers was generally better than non-mirra chewers, and that there were no significant differences in the average loss of attachment of teeth between mirra and non-mirra khat chewers. The researchers came to the conclusion that khat does not have a role in the development of periodontal diseases. In a cross-sectional study conducted by Amran et al., (2022), khat was found to change the subgingival periodontal bacteria among khat chewers. The participants in the study were all male and ranged in age from 19 to 28 years old. None of the participants had any systemic diseases or conditions that affected the periodontium. Despite this, the results were not inconsistent with the concept of healthy periodontal tissue.

It is important to point out that the aforementioned studies did not report validated criteria for measuring periodontal disease, selection criteria for participants, or control for other factors that could have confounded the results, such as systemic diseases or behavioral factors, particularly smoking, which was common among chewers. It is noteworthy to highlight this fact here. Therefore, the evidence of the effects that chewing khat has on the periodontal health of khat chewers is ambiguous, and further study is required in this area.

Chewing khat is a habit that has recently been suggested to be an emerging risk factor for the aetiology of oral cancer in regions such as the Arabian peninsula and the Horn of Africa (Al-Hajj et al., 2020). This is in addition to other risk factors such as chewing betel quid and tobacco in regions such as India and the south Asian continent (Bakhadher et al., 2018). Chewing khat may induce oral keratosis and white lesion owing to mucosal alterations, according to research done by Amran et al., (2022), which was conducted on people who attended dental school and hospitals in Yemen and chewed khat. Keratoses were observed to have occurred on the side of the mouth that is used to chew khat, which is typically the muco-buccal location. However, Maalim (2018) among the fifty percent of the white lesion of the 121 male volunteers who were assessed did not study the related behaviors with khat chewing such as tobacco usage. These behaviors include chewing tobacco. Also, the pattern of khat chewing, which includes the frequency, quantity, and session length of khat chewing, was not recorded separately from the number of years that khat chewing had been done. There were no indications of neoplasia in the instance that Kithinji, (2019) described as having brown gingival pigmentation that was caused by eating khat.

In a new grading system of white lesion based on consensus criteria, Keough and Ghitter (2021) carried out a cross sectional investigation among an opportunity sample of 2500 Yemeni dental clinic participants. The purpose of the study was to determine the prevalence of white lesions. 342 out of 1528 (1328 males and 198 females) khat chewers were

observed to have white lesions of varying degrees. This represents 22.4 percent of the total population. The distribution was as follows: 65 out of a total of 198 female khat chewers, or 32.8 percent; 277 out of a total of 1330 male chewers, or 20.8 percent. This led researchers to conclude that the white lesion is more common in females than in men. The severity of the white lesion was shown to be correlated with the number of years of khat chewing as well as the frequency of days. Chewing khat was revealed to be an independent risk factor for getting white lesion among the 90 people who self-reported consuming khat and did not use any type of tobacco. This number represents 25.9 percent of the whole sample.

However, these self-reports of not using tobacco were not tested, and multivariate analysis may be performed, as stated by Chong et al. (2020), to examine complicated causal models. The research came to the conclusion that khat causes white lesions. The clinical aspects were used as the basis for the report of the white lesion in both of the investigations that were stated above. Concerns about dysphasia or cancers were not verified with further tests, such as histopathology examinations. No evidence was found of chewing khat or using tobacco in any form (either smoking or smokeless tobacco-ST). The findings should be taken with caution due to the inadequacy of the sampling procedure as well as the lack of sample selection criteria that would have excluded individuals who had oral manifestations of systemic disorders.

Moafa et al., (2022) conducted a research to explore the effects of khat and shamma (smokeless tobacco-ST) on the oral mucosa. This study was done in a retrospective manner. 52 of the 64 individuals who were diagnosed with squamous cell carcinoma of the head and neck had used either synthetic cannabinoids or both ST and khat at some point in their lives. Of these 52 individuals, 38 had oral cancer, and 16 of them used ST alone, while another 16 used khat and ST together. Laryngeal and pharyngeal malignancies occurred in 14 of the remaining 52 patients of the disease. The typical length of usage (median) for stimulants

and khat, respectively, was 15 and 12 years. It was not stated that each behavior was used often, nor was the social environment in which it was used. It was hypothesized that there might be synergistic effects of khat 40 and tobacco on the oral mucosa, with one substance acting as a possible starter of oral cancer and the other as a potential promoter of the disease. Recent research by Moafa et al., which supports these results, may be found here (2022). Mortazavi et al., (2019) reported that mucosal burns (MB) accounted for 31 percent of shamma chewers and oral leukplakia (OL) homogenous or non homogenous for 27 percent of shamma chewers in a non probability sampling of 200 shamma chewers (199 male and one female) in eight villages in Yemen for the purpose of assessing oral lesion associated with shamma chewing. Homogenous and non-homogenous OL were found in the ventral, lateral, dorsal, and base of the tongue, which contributed for 24 percent. The buccal vestibule and mucosa accounted for 39 percent of the total. In contrast, MB was found to be most prevalent at the floor of the mouth, accounting for 32 percent of all cases, followed by the buccal vestibule and the mucosa vestibule, each accounting for 31 percent of all cases.

Chong et al., (2020) conducted a research that looked backwards and found that 28 individuals who resided in border regions of Yemen and Saudi Arabia had been diagnosed with head and neck cancer. It was determined that these observations had a histopathological basis. Ten of these patients, eight of whom had oral cancer, admitted to engaging in the habit of routinely chewing khat. The number of males to females was three to five. Patients reported taking khat for lengthy periods of time (up to 25 years), yet the lesion locations of their oral malignancies were quite diverse, and some of them had no interaction with khat bolus at all. This may lead one to the conclusion that khat was used in conjunction with ST (shamma). In a different retrospective research conducted by Etana (2018), it was discovered that of the 36 Yemeni patients who were diagnosed with head and neck cancer, 30 of them were regular consumers of khat, with their ages ranging anywhere

from 18 to 80 years. The patients were all male. Oral cancer was found in 17 khat chewers who were also users of other substances (ten in total) and smokers of tobacco (five in total). The diagnosis was made via the use of histology. There were 36 instances of cancer, and the socio-economic level of those patients was poor. There was no measurement of someone's poor socioeconomic position reported. The findings, on the other hand, were inconclusive because it had not been determined whether cancer was caused by khat chewing in conjunction with tobacco smoking or ST use or whether it could occur in the absence of any form of tobacco use or other risk factors such as dental, nutritional, or alcohol abuse. This was supported by a report of sites of oral cancer connected with the placement location of ST (shamma), such as the floor of the mouth and the lower lip. According to the published research, khat bolus is often put on one of the buccal sulcus of the mouth, and the buccal vestibule mucosa as well as the lateral side of the tongue are in touch with the khat (Mortazavi et al., 2019).

Between the years 1996 and 2000, 1491 cases of malignancy affecting various parts of the body were reported to Al-Thawra Hospital in Yemen. This hospital, which is located in Yemen and gets the majority of referrals in the nation, is one of the largest hospitals in the country. There were a total of 128 instances of head and neck cancers, of which squamous cell carcinoma accounted for 65 percent of the diagnoses. Seventy-three percent of these 128 cases were diagnosed as oral cancer (Bakhadher et al., 2018). With the exception of the statistics on tumors of the blood system, Regassa and Regassa (2021), using the records from 2004 for the same hospital, recently revealed that mouth cancer was the most common kind of body cancer (18 percent of 649) in both men (17.2 percent of 348) and females (19.6 percent of 301). The most common form of oral cancer was squamous cell carcinoma, sometimes known as SCC (84 percent). The most frequent places reported were in the tongue (42 percent), the muco-buccal area (20 percent), the gingiva (23 percent), and other

areas (15 percent), such as the lip. This finding was consistent across both men and females (10 percent). For 92 (77 percent) of the patients who were diagnosed with oral cancer, information was obtainable on their behaviors of chewing (both khat and ST) and smoking tobacco. It was hypothesized that smoking khat and taking ST had a role in the etiology of the frequency of SCC. On the other hand, other information that should have been given, such as the patients' socioeconomic standing and the Yemeni province in which they lived, was omitted. It is important to note that the specificity of oral lesion location, such as the dorsum, lateral, or ventral site of the tongue, has obscured the relationship between oral lesion caused by khat, shamma eating, or both.

In a case-control study (age, gender, and ethnicity) carried out by Alkhulaidi et al., (2021) among a random sample of 102 Jewish Yemeni, the cases consisted of 47 male khat chewers, of which 32 were tobacco smokers and khat chewers and 15 were non-smoking khat chewers. The controls consisted of 47 male khat chewers who did not smoke tobacco. The two groups of chewers had a combined total of 24 years of chewing experience on average. There was not a significant difference between the two groups in terms of the total number of days (3.5 vs. 3.33) or hours spent chewing (4.12 vs. 3.5). On the other hand, white lesions were seen in 12 out of 15 people who did not smoke while chewing and in 27 out of 32 people who did smoke while chewing. The 55 control subjects who did not chew khat consisted of 25 smokers and 30 people who did not smoke. When comparison to non-smokers, smokers were shown to have a higher prevalence of white lesions (5 out of 25 vs. 4 out of 30). Overall, 83 percent of those who chewed khat were found to have a white lesion, compared to 16 percent of people who did not consume khat (p 0.001). Chewers of khat were found to have a white lesion in the muco-buccal fold at the second molar in their mouths. Chewers were found to smoke more cigarettes than non-chewers, with a mean of 29.5 cigarettes a day compared to 23.3 cigarettes for non-chewers. It was determined that

this difference was statistically significant (P 0.03). According to the findings of a study that used bivariate analysis, there was not a significant difference between smoker chewers and non-smoker chewers in terms of the incidence of white lesion. This suggested that smoking is not a factor that should be taken into consideration. Chewers of khat were found to have 43 homogeneous white lesions out of a total of 48, whereas they had five of seven non-homogenous white lesions. It was shown in the research that non-homogeneous white lesions have a reputation for being aggressive in other parts of the world (Mortazavi et al (2019). The internal validity of the study was undermined due to the fact that the malignancy report was based on clinical appearance rather than being validated with further histopathological testing, despite the fact that this study has a design that is considered to be of good quality when compared to the studies that have been reported above. In addition, the criteria for making a diagnosis of oral mucosal illnesses were not included in the paper.

Alemu et al., (2020) investigated 70 oral biopsies of Yemenis. Group one (G1) was comprised of forty chewers, and biopsies were collected from the chewing side of their mouths. There were 17 tobacco smokers and 23 non-tobacco smokers in this group (muco-buccal). Group two (G2) consisted of 20 chewers, and biopsies were collected from non-chewing sides of their mouths. There were 11 tobacco smokers and 9 non-tobacco smokers in this group. Biopsies were obtained from the oral cavity of ten people who did not chew tobacco and who were not smokers to make up Group three (G3). According to the results, eating khat is related with histological alterations in the oral mucosa at the side of the mouth where chewing occurs, however these changes did not exhibit any signs of malignancy.

Growing data has surfaced in recent years suggesting that khat may have separate genotoxic effects on human cells, perhaps leading to carcinogenesis (Mohamed et al., 2022). In a case-control research comparing khat chewers to those who do not chew khat, Mortazavi et al. (2019) revealed the genetic damage produced by khat on the oral mucosa of khat chewers.

This damage was seen in khat chewers. There was claimed to be a dosage response connection, and this was 44 times more powerful when combined with the use of cigarettes and alcohol. Based on the findings of the research, it seems that khat may be associated with oral cancers. On the other hand, Adane et al., (2021) found that a standardized extract of khat (catha edulis) promoted cell death in many human leukemia cell lines in vitro, while only having a minimal harmful effect on peripheral blood mononuclear cells. Based on these findings, khat has the potential to be employed as a therapy for cancer.

Studies suggest that the white lesion occurred in the site (muco-buccal) where khat is chewed, which might be due to the mechanical friction of khat chewing over a long period of time (Chong et al., 2015). In light of these reports, these studies suggest that the white lesion occurred in the site (muco-buccal) (2020). This should also be supported by evidence that khat has cytotoxic effects on the cells that line the oral mucosa (Kassie et al., 2001; Lukandu et al., 2008). In a similar vein, the pattern of khat chewing (frequency of days, length of chewing hours and years), in conjunction with other risk factors, has been linked to the development of a white lesion.

It is important to note that the findings of the previously mentioned research on the effects of khat chewing on the development of hyperkeratosis and dysplasia should be read with caution because of the following factors: a) There is a lack of validity to these results in the studies that documented khat chewing and the development of white lesion at the place where khat is chewed. In other words, research has shown that those who chew shama have an increased risk of developing a white lesion in the same area where the khat is applied. b) Inadequacy in the designs of the investigations, namely the sample selection. c) The absence of any controls for other risk variables, such as the presence of pesticides in khat or the intake of alcohol, which is one of the elements that determines oral cancer. d) The connection between chewing often and either the social setting or the health consequence

has not been investigated. On the one hand, this is because the connection has not been researched.

In the existing body of research, there has not been found any evidence that chewing khat is linked to dental caries. It is possible that the combination effect of xerostomia caused by opiates and the high sugar contents of oral methadone solutions used to manage withdrawal from the drug contributes to the high incidence of caries in heroin users. This phenomenon is observed in high rates among those who use heroin (Maalim, 2018). There have been reports of people who chew khat using sugared methanol or sugar cubes to mask the flavor of the khat (Mortazavi et al., 2019). Additionally, there have been reports of people who chew khat using soft beverages (Moafa et al., 2022), both of which are risk factors for dental caries. It has not yet been determined how the xerostomic impact of khat, which is caused by cathinone, which is its primary component, interacts with the ingestion of sugar in the development of dental caries in chewers.

Chewing khat may be linked to difficulties with the temporomandibular joint (TMJ), according to research published in medical journals. According to Alemu et al., (2020), a driver who had been drinking and eating khat at the time of the accident had a shattered jaw. Pain in the temporal region of the jaw joint (TMJ) that was experienced when chewing was described by Hill and Gibson (1987) in 40 percent of the 121 chewers who were surveyed. Alkhulaidi et al. described the reconstruction of the temporo-mandibular joint for seven habitual khat chewers who suffered from chronic subluxation and dislocation (2021). Chewers were found to all have signs of dental occlusal attrition, according to Adane et al., (2021). In conclusion, it has been suggested that khat may alleviate pain (Moafa et al., 2022). Oral pain was reported as a barrier to quitting smokeless tobacco chewing among Bangladeshi women, and this was attributed to the analgesic effects of tobacco (Chong et al., (2020)), which may mask the pain that is symptomatic of dental diseases and their

sequelae. Among Bangladeshi men, oral pain was reported as a barrier to quitting smokeless tobacco chewing. The combined effects of khat as a vasoconstrictive agent that causes ulceration and atrophy of the tissue, as is the case with cocaine users, as well as its function as an analgesic await further investigation amongst khat chewers. [C]ocaine users experience ulceration and atrophy of the tissue.

The effect that consuming khat has on appetite may also inadvertently have an effect on one's weight and their blood glucose levels. According to research published in 2016 by Gezon, ingestion of khat significantly reduces feelings of hunger and induces a sensation of fullness, but it has no effect on the levels of the hormones ghrelin or peptide YY. They came to the conclusion that the anorexigenic effects of khat could be a result of cathinone acting as a mediator between the drug's primary components.

When khat is chewed, more than 90 percent of the alkaloid in the plant is released into saliva, and a significant percentage of this salivary alkaloid is absorbed via the mucosal surface (Gezon, 2016). Because of this, the oral tissues, such as the oral mucosa, are exposed to significant amounts of the contents of khat, which puts them at risk for the possibly negative effects of the substance. Chewers of khat were found to have a decreased risk of dental caries, according to a number of early studies that investigated the effects of khat on oral tissues (Glennon, 2014).

2.2 Theoretical Framework

2.2.1 Social Learning Theory

According to Newman and Newman (1999), the basic principles of the social learning theory are as follows: learning is not only a behavioural activity but a cognitive process in a social setting. This takes place in the framework of a community. Learning may occur both via direct observation of behavior and through direct observation of behaviour results

(vicarious reinforcement). In addition, learning entails observation, extracting information from these observations, and formulating judgments about the execution of the behaviour in question (observational or modelling). As a consequence, reinforcement is one aspect of learning but is not the only factor contributing to learning. In conclusion, the learner is not just actively participating in the knowledge acquisition process. All three factors—cognition, environment, and behaviour—have a reciprocal impact on one another (reciprocal determinism).

As a result, social learning theory interprets the construction of an individual's identity as a learnt reaction to social stimuli. It emphasizes more on the social environment of socialization than the person's mind. This theory postulates that an individual's identity is not the product of the unconscious (as psychoanalytic theorists believe) but rather is the result of modelling oneself in response to the expectations of others. Psychoanalytic theorists believe that the unconscious is the source of an individual's identity. The reinforcement and encouragement we get from the individuals in our environment contribute to developing behaviours and attitudes. Although social learning theorists accept the significance of one's upbringing, they also believe that a person's identity is shaped more by the actions and perspectives of other people than by their own formative experiences (Charmaz et al., 2019).

The realization that most learning occurs as a consequence of seeing and copying other people's behaviours was the impetus for developing the idea of social learning (Kovacevic et al., 2021). Behaviour changes may thus occur without being connected to a particular pattern of positive or negative reinforcement and without extensive chances for practice based on trial and error, but rather simply from the imitation of visible patterns. According to the Social Learning Theory, imitation is emphasized as the mental process through which one can learn certain behaviour and acquire a motivation to perform or resist that behaviour

depending on what is learned. This means that the Social Learning Theory posits that one can learn certain behaviour and acquire a motivation to perform or resist performing that behaviour depending on what is learned about the behaviour (Charmaz et al., 2019). Learning via observation allows individuals of all ages to familiarize themselves with the overarching ideas behind various scenarios and the particular behaviours associated with those scenarios.

According to Kovaevi et al. (2021), parents impact their children's behaviour and social interactions within their households. Because of this particular characteristic, the intake of Khat is deeply ingrained in families. The norms for behaviour in each social environment are created from what has been seen from observing others and what has occurred to them as a result of their behaviour in the past, in addition to what one learns about the demands that are present in the actual circumstance. This hypothesis is essential for comprehending the motivations behind people's participation in khat use and other behaviours related to khat consumption. The vast majority of individuals acquire knowledge both from the context in which they live and their assessment of what constitutes valuable experience. At this point, families and other social settings play a significant role in either exercising the learned behaviours or providing more opportunities for such practice.

Since it emphasizes individuals gaining knowledge via the actions of others, social learning theory could also be applied to this investigation. This helps to explain why people who chew Khat often also use other narcotics, such as alcohol and bhang, during their sessions. To put it more specifically, as kids become older, there is a propensity for them to have a favourable attitude toward the intake of Khat, particularly if they have a role model in their life who drinks Khat. The cultivation of Khat is the primary source of revenue for the county; hence, the residents of this area connect riches with khat production.

The rising prestige associated with Khat, Kovacevic et al. (2021), in turn, serves to reinforce its usage. At this stage, there is widespread usage of Khat among the family members, particularly the senior members, who are looked up to for wisdom and direction. In addition, the eating of Khat in Kenya is a behaviour that is both legal and socially acceptable. Because of this feature, members of the same family would chew Khat regardless of their age or gender, even though historically, chewing Khat was reserved for the elderly after a long day of labour.

2.2.2 Reference Group Theory

Herbert and Singers are the ones who are credited with developing this hypothesis (1968). "Men develop their attitudes to reference groups other than their own," Herbert and Singers (1968) write in their study. According to them, reference groups are the groups that people are part of or desire to remain members of in the future. Members have a point of reference and an opportunity to shape their attitudes via participation in such organizations. The fundamental premises of reference group theory are that an individual's thoughts and actions are influenced by the group to which he or she belongs and that an individual's self-appraisal, as well as the feelings and actions that flow from that location, flow from the individual's position in a particular group within a social hierarchy. These fundamental premises form the basis of reference group theory. This idea is supported by the psychology of groups, which asserts that when people are in the presence of other people, they are more likely to comply with the standards set by the group to feel like they are a part of it (Lyndon and Schupp, 1993). (2015). According to these writers, the selection of a reference group is predicated on a few straightforward assumptions about the members of the group's motivation and the preservation of social patterns that benefit the group members. From their point of view, group members have their own rules and are aware of their boundaries.

It has been determined that Reference Group Theory is applicable to this research because individuals may engage in drinking Khat to conform to the norms of their peer groups or for reasons pertaining to their identities. In addition, as they continue to ingest Khat, users develop a feeling of community and a distinct sense of who they are. They believe that it should be considered a valuable product because of the socioeconomic benefits associated with Khat. As a result, this motivates more people to follow and copy reference groups for the goals of identification and solidarity. Activities involving the drinking of Khat are often done in groups, most frequently in the presence of family members, acquaintances, relatives, and colleagues from the corporate world. If we continue along this line of reasoning, we might conclude that the intake of Khat is a behaviour picked up from individuals or reference groups. Some group members may deviate from the typical pattern of behaviour for no other reason than the fact that they simultaneously belong to other groups.

2.2.3 Symbolic Interaction Theory

The symbolic interaction perspective is a fundamental sociological paradigm that focuses on the symbolic meaning that individuals build and rely upon in the process of social interaction. It is also known as symbolic interactionism, which is a synonym for symbolic interaction viewpoint. George Herbert Mead, an American theorist, is credited with introducing this theory to American Sociology in the 1920s. Although this theory can be traced back to Max Weber's assertion that individuals act according to the interpretation of the meaning of their world, George Weber Mead was the original proponent of this theory. The term "symbolic interactionism" was first articulated by Herbert Bulmer.

According to Charmaz et al. (2019), symbolic interactionists assume that society exists within every socialized individual and that the social interaction that takes place between individuals at the symbolic level is how society manifests itself in its external forms and

structures. Symbolic interactionists also believe that society is a product of socialization. The analysis of society done by symbolic interaction theory takes into account the individual interpretations that individuals give to things, events, and behaviors in the world around them. There is a preponderance of importance placed on individuals' subjective interpretations of the world since it is generally accepted that people are more likely to act in accordance with their own beliefs than with that which is objectively accurate. Therefore, it is believed that society is the product of social construction, which occurs when human interpretation creates a social relationship. The concept of a situation in society is generally agreed upon to be the social ties.

According to Kovacevic et al. (2021), people do not behave or respond in a spontaneous manner but instead thoroughly analyze and even practice what they are going to do before really carrying it out. They take into consideration the other persons who are engaged as well as the circumstance in which they find themselves. The anticipations and responses of other individuals have a significant impact on the actions that each person does. Therefore, human behavior is said to be determined by the social and cultural context in which a person lives, in accordance with the Symbolic Interaction approach. Humans are social creatures, and as such, our behaviors are a reaction to the activities of other people. They imbue the behaviors of other people with symbolic significance, then change those meanings and ultimately interpret them in light of their own circumstances. They may desire to imitate the actions of other individuals so that they might arrive at a consensus on the nature of the world around them and, as a result, present a unified response (Kovaevi et al., 2009). This conclusion is contingent on the interpretation that is reached (2021).

The presumption underlying symbolic interaction theory is that no one is required to behave or think in accordance with the directives of other members of the group. On the other hand, the Symbolic Interaction theory contends that external circumstances do not dictate action

but may impact behavior patterns. This theory is in direct opposition to the Social Action Theory. People are able to build their own orientations to better define and shape their social reality with the assistance of this. This can result in other deviant behaviors that are not in line with the norms of the group, so there is a good chance that non-chewers will end up adopting these values in order to fit in with the social group. On the other hand, they may develop deviant behaviors that are alien to the behaviors that are currently prevalent in the society (De Rosa, 2018).

Actors in interaction circumstances are responsible for the creation, modification, and evolution of meaning, according to the interactionist point of view. Sociologists have to investigate the process of interaction and the interpretation of meanings that form within it in order to comprehend social behaviors. This process leads and directs the behavior of the actors, who in this instance are users of khat. The symbolic interaction theory is crucial to this research because it explains why individuals have the tendency to strive to fit into certain groups that they have a high regard for. People may partake in the intake of khat in this setting because they perceive the cues they get from their role models as encouraging them to do so in order to feel like they belong or connect with others who are already partaking in this behavior. Residents who chew khat and who live in a location in which khat may also be cultivated are under the impression that they are obligated to consume their "green gold," which they consider to be the finest in the whole world. To put it another way, when individuals engage with those who take khat, it pushes them to start consuming khat themselves so that they may better fit in with the culture around them.

This theory is also applicable to this study because it can be used to explain why some of the respondents consumed Khat with other substances such as alcohol and drugs, which is a deviation from the traditional norms regarding the consumption of Khat, which were strictly adhered to in the majority of African traditional Khat chewing societies. However, in order

to understand the behaviors of people who drink khat, it is vital to find the meaning that guides their involvement in khat consuming habits, which in turn have a detrimental influence on the wellness of families.

The explanation that was taken from the ideas that were described earlier was that the use of khat is a collective behavior, and that the socio-economic value of khat in a social milieu where it is freely available for consumption was also a consideration. The socioeconomic factors linked with the use of khat may make it impossible for household heads to provide their family with fundamental necessities like as food, school fees, clothes, as well as the payment of bills and the provision of medical treatment. This may be explained by diverting revenue from khat usage to other activities associated to intake of khat, such as drinking alcohol or smoking cigarettes. These behaviors have detrimental repercussions on the socioeconomic, physical, and psychological well-being of families on all of these fronts.

According to the prior debate, none of the three hypotheses were adequate enough to explain the complexities of the nature of the impact that khat intake has on the health and welfare of families. In a strange twist of logic, it's possible that either hypothesis may be right under certain conditions. Nevertheless, in spite of all of their variations, these theories have an essential quality: they all emphasize the significance of the social context in determining the consequences that khat intake may have on the well-being of families. Therefore, in order to comprehensively evaluate the effects of khat consumption on the social health, physical health, and psychological aspects of the wellbeing of families, the research that was conducted combined the Group reference theory, the Social learning theory, and the Symbolic interaction theory. This assisted in addressing the physical, socio-economic, and psychological factors that are connected to khat intake and the wellness of khat customers' families.

The Group Reference theory investigated the processes of attitude development via the use of reference groups in the context of khat use. In addition to this, the Social Learning Theory included the concept of learning via observation by way of a reaction to stimuli as well as reciprocal determinism. As a result, the Symbolic Interaction theory made its contribution to this research by demonstrating how humans are produced by social surroundings, and how these individuals may either make appropriate use of symbols or depart from them. This is dependent on the meanings and interpretations that they have internalized and linked with certain behaviors.

2.3 Research Gap

A number of researchers, including Ngeranwa (2013), Klein (2004), Gelaw and Haile-Amlak (2017), and others, have arrived at the conclusion that the intake of khat has a detrimental effect on both social and economic life. The further noted that there is a big number of individuals who chew Khat during the whole night, growing progressively hostile, then return home in the morning, beat up their spouses, and go to sleep throughout the day. In addition, it was suggested that many people who use khat secure their daily share at the expense of their fundamental requirements, which is an indication of dependency. However, these previous studies have not revealed the degree of knowledge on khat chewing. As a result, the purpose of the present research is to evaluate the extent to which khat consumption awareness influences the social and economic lives of adolescents in Eastleigh, Nairobi.

Some researchers, such as Yimer and Khan (2015), have come to the conclusion that khat contains numerous essentials; as a result, consumption of khat may have many adverse effects on one's health, including a rise in temperature as well as heart beat, in addition to mydriasis in thirty people who used the drug. The research did not establish a maximum age

for the participants, which is essential when doing research on young people. to have a better understanding of how the use of khat may impact the health of young people.

2.4 Conceptual Framework

The conceptual framework demonstrates the relationship between the independent and dependent variables.

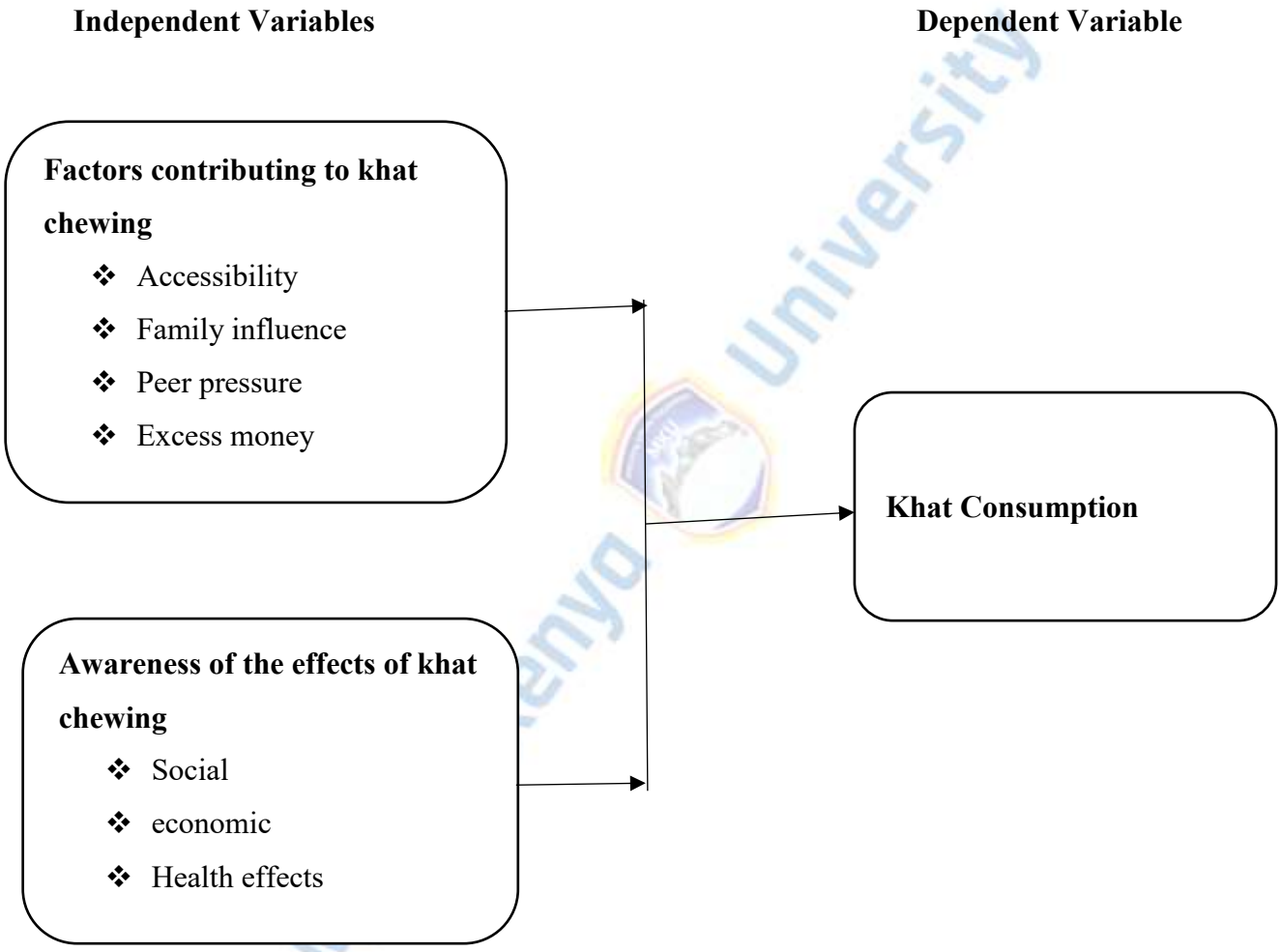

Figure 2.1: ***Conceptual Framework***

Source: Researcher, (2022)

2.5 Summary of literature Review

Several researchers have pointed to the widespread availability of khat all across the world. For example, Kerebih, Soboka, Hibret, and Nyameino (2016) found that the prevalence of khat chewing varied according on factors such as religion, age, gender, economic level, and the region in which a person lived. There is a lack of reliable data on the number of individuals that partake in the use of khat on a global scale; nevertheless, a conservative estimate places this figure somewhere around 10 million. However, in certain countries, such as the United Kingdom and Scandinavian nations, khat is regarded as a substance; it is also regarded as a narcotic, and it is widely available across all of the East African areas.

According to Gelaw and Haile-Amlak, (2017), the consumption of khat has led to the breakdown of the family unit, diverting family and individual pay, bringing about disruption and absence from work, as well as causing food insecurity. These are just two of the many social problems that can be caused by regular use of the drug. In line with this, research has shown that in Somalia, khat is seen as a significant drain on both money and time, as well as a reason for decreased productivity when working at both the household and macro levels (Gezon, 2016). Furthermore, it is seen as the primary reason why some men are unable to provide for their families, which is a significant social issue. When men fail to provide for their families or treat their spouses poorly, it often leads to an increased likelihood that the woman will file for divorce.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the methodology used for the investigation and includes information on the research design, research approach, study location, target population, sample size determination and sampling procedure, inclusion and exclusion criteria, research instrument, data analysis methods, and ethical considerations.

3.2 Research Design

A descriptive survey methodology was used to acquire information and adapt to the current state of the particular topic, which was the use and trading of khat. The descriptive survey design explained "what exists" about the presented variables or conditions. Since the individuals were observed in their natural environments, without any form of modification, the level of realism was increased to its maximum (Casula et al., 2021). This strategy attempted to gather good data pools so that sufficient analysis could be performed and clear conclusions could be drawn. Instrumentation played an extremely important role in the measuring process for these designs.

3.3 Study Location

The area known as Eastleigh may be found on the outskirts of Nairobi in Kenya. It is located on the eastern side of Nairobi, close to the city's major business sector (CBD). Because of its thriving business sector, the town is sometimes referred to as "Little Mogadishu" or "a nation inside a country with its own operating economy." This is because the Somali community makes up a significant portion of the town's population. In Eastleigh, which is located in Nairobi County, Kenya, the researcher carried out the study. The reasons, prevalence, and knowledge of the consequences of khat chewing among young people were the primary focuses of this study. Improve the location of the research.

3.4 Target Population

Participants in this research were required to be between the ages of 18 and 35 and be from the Eastleigh area. The research focused on 200 young people from Section I, 150 young people from Section II, and 100 young people from Section III, which, according to a report by Eastleigh Business Centres, has a much smaller population than the other sections (2014). In addition, the research focused on (2) two people from each Division who are older than 35 years old. As a result, the research sought to recruit a total of 456 individuals to take part.

3.5 Sample Size Determination and Sampling Procedure

3.5.1 Sample Size and Sampling Procedure

There is a scientific method for determining an acceptable sample size from a population that is most likely quite vast but not stated (Sterne et al., 2019). This was the case with the demographic that was being targeted, and as a result, the choice to adopt suggested equations from experts was guided by this fact. This study recommended a 95% confidence in the population percentage, which equates to a 5% significance threshold. In order to establish the needed sample size for Khat customers and merchants as the measurement scales, the researchers used this confidence level. It was determined to apply the formulas developed by Cochran (1953), which stipulate that the standard error be calculated by dividing the significance level by 1.96. Therefore, the resulting value for the standard error was 5.196%.

$$n = \frac{P(100\% - P)}{(SE)^2}$$

The research project was using a proportion of fifty per cent because, all other factors being the same, this would make it possible to have the largest sample size possible – that is the

most beneficial because it would result in a slight approximation of the number of participants required, instead of an underestimate. Consequently

$$n = \frac{50(100 - 50)}{(2.55)^2} = 385$$

This sample comprised Khat customers and merchants and was proportionally spread over the three distinct areas of Eastleigh. Therefore, the sample segment with the most people comprised a larger proportion of the whole.

Table 3.1: ***Sample Size***

Target Population size		**Sample size**
Section I	200	171
Section II	150	128
Section III	100	85
Total	450	384

3.5.2 Sampling Procedure

Since they are the three most important Divisions in Eastleigh, the three Divisions that were chosen to participate in this research were chosen on purpose. As a result, the information that was gathered from them was most likely reflective of the actual situation in the group that was targeted.

The determination of the sample size was accomplished via the use of proportional sampling, which consisted of allocating a certain number of respondents to each division based on the ratio of total participants present in each division. After that, a random sampling approach was used to each Division in order to choose the research participants from the surrounding region until the desired sample size was achieved. For the purpose of the research, two focus group talks were chosen at random from each Division.

3.6 Inclusion and Exclusion Criteria

3.6.1 Inclusion Criteria

Participants were aged between 18 and 35 years, live in the Eastleigh estate of Nairobi, Kenya, and be willing to take part in the research in order to be considered for inclusion.

3.6.2 Exclusion Criteria

There were three categories of young people who were unable to take part in the research project: those that did not provide their permission, those who were unwell, and those who had mental impairments.

3.7 Data Collection Method

Prior to data collection, the researcher obtained the following documents from various institutions: a specialist letter from Kenyatta University, a permit from the National Council of Science, Technology, and Innovation, permission from the County Director of Education, and consent from the participants. As per Kombo and Tromp (2009), authorisation from the necessary authorities is required for the investigator to conduct the study. Well before data collecting day, the researcher also requested permission from the target respondents. Data was gathered via surveys and conversations with principals.

3.8 Research Instruments

Two different approaches of data collection were used for the four different aims. The interviews are called Key Informant Interviews (KII), and the questionnaire is organised. It was expected of the participants that they would reply correctly. In order to obtain information from the Youths participating in the research, questionnaires were employed. The surveys had both open-ended and multiple choice questions to choose from. The responses provided by the closed-ended questions were more organised, which sparked more concrete proposals. The closed-ended questions were used to evaluate how different

traits were rated, and this assisted in reducing the number of responses that were similar to one another, which was helpful in light of the fact that the primary aim was to collect a wide diversity of responses.

The open-ended questions provided extra information, which may or may not have been included in the responses to the closed-ended questions. The surveys were produced and tested with two or three volunteers from the general population in order to generate further enhancements. The surveys were divided up into parts for your convenience. The process of organising was carried out with the specific purpose of ensuring that the information that was to be obtained for the study was accurate and genuine. Using the "drop and pick later" distribution method, the questionnaires were made available to the respondents as part of the study. Two different methods of data collecting were used in order to accomplish the four goals. This is structured questionnaire. It was expected of the participants that they would reply correctly.

Because it allows for the collection of vast quantities of standard information in a short amount of time and in an all-encompassing manner, polling was the technique of information collection that was most often prefered by the young people who were surveyed. The survey, which may be found in Appendix I, was divided into four parts labelled A, B, C, and D. Section A included information on the authors' biographies, whereas Parts B, C, D, and E focused on discussing the most important aspects of the four goals. Under his supervision and that of the senior researcher, the researcher enrolled and placed one research right hand as well as four research assistants. These individuals assisted in the facilitation of data collecting.

3.8.1 Pilot

Before the actual data collection began, the questionnaires that were utilised in this research were put through a preliminary round of testing in the form of a pilot study. The instruments underwent preliminary testing in the Pangani region, where the subjects were given questionnaires to fill out and were located.

3.8.2 Validity of the Research Instrument

Precision and significance of inductions, both of which are determined by the results of the investigation, are the defining characteristics of validity (Mugenda and Mugenda, 1999). At the end of the day, validity refers to the degree to which the results obtained from the analysis of the material accurately reflect the topic that was investigated. According to Borg and Gall's (1989) definition, validity refers to the extent to which a test measures what it promises to measure. The researcher gave the information that was found in the questionnaires to other people in the field to see whether they thought the questions were suitable. This was done so that the validity of the instrument could be ensured. The validity of the questionnaire was improved by eliminating ambiguous items and harmonising the remaining ones.

3.8.3 Reliability of the Research Instrument.

According to Kothari (2004), an instrument is considered to be dependable if it has a history of producing results that are consistent over a certain period of time. The approach of test and retest was used in order to determine whether or not the questionnaires were consistent. According to another definition offered by Pannerselvam (2006), consistency refers to the degree to which a certain instrument continues to provide the same results regardless of how many times they are tested. This both ensures that the findings that were acquired are real and prevents them from being altered.

The Cronbach constant alpha was used to the retest in order to determine the degree to which the variable is measured. When analysing the consistency of multi-item measures, a cut-off of more than 0.7 was considered to be adequate. According to the findings of Best and Kahn (2005), it is sufficient for an instrument to have a reliability coefficient of 0.6 or above. Before reusing the instruments to collect data, the researcher made adjustments to them in case the coefficient that was obtained was lower than 0.6.

3.9 Data Analysis Procedure

Data obtained from the field in its raw frame is difficult to interpret; thus, it is necessary to clean it up, code it, and feed it into the programme so that it can be analysed (Mugenda and Mugenda, 2003). For the purpose of conducting analyses on the data that were collected, the statistical software known as SPSS was used (version 24). The findings were shown in the form of bar charts, pie charts, and graphs respectively.

For the purpose of applying a one-on-one link between the independent factors and the dependent variable, inferential statistics, more specifically the Chi-square test, were used. The conclusion of whether or not to accept the null hypothesis was based on this evidence. If the value of the correlation co-efficient, or r, is more than 0.5, it indicates that there is a substantial association between the research variables. On the other hand, if the value of r is less than 0.5, it indicates that there is not a significant relationship between the variables. In order to conduct an analysis of the qualitative data, the researcher used a technique called content analysis.

3.10 Ethical Consideration

Concerns pertaining to ethics are vital to the successful completion of any study, but notably that of social research (Blaxter, Huges & Tight, 2006). It was made clear to the responders that the information they provided would be used, in a sense, for academic

reasons. They were given the letter of authorisation to do research that had been written by the university.

The researcher demonstrated that he or she upheld the Mount Kenya University research ideals and integrity, as well as met all of the requirements necessary to get a research authorization from NACOSTI. The researcher first sought permission from the participants before interviewing them; in this particular case, the respondent was not compelled to take part in the study against their will.

The researcher ensured that their work adhered to the norms and ethics established by Mount Kenya University, as well as obtained a research authorization from NACOSTI. Before beginning the interviews, the researcher made sure to get permission from the respondents first. However, in this particular scenario, no one was required to take part in the procedure.

Respondents were not required to reveal their identities, which reassured them that the information they provided would remain anonymous. The respondents were advised to keep this information anonymous so that they may freely express their ideas. The computer that was being used was password-protected so that the surveys and the data that was gathered could not be accessed without the appropriate permission.

CHAPTER FOUR
RESEARCH FINDING AND DISCUSSION

4.1 Introduction

This chapter describes the findings and results of the study, as well as the discussion of the findings of the research. The process of minimizing or summarizing a vast quantity of acquired data in order to arrive at data that answers the original premise of the research is known as data analysis (Chandran, 2004). In this chapter, the outcomes of the research are presented in relation to the research questions that served as the foundation for the study.

4.2 Questionnaire Return Rate

Table 4.2: ***Response Rate***

Frequency		**Percentage**
Completed	384	100%
Not completed	0	0%
Total	**384**	**100.0**

The surveys were sent to 384 participants, all of whom responded to the research and filled out the questions. The response rate of one hundred percent was more than enough for drawing conclusions from the research.

4.3 General Information

In the next part, the demographic features of the respondents will be discussed. The factors that were taken into consideration were gender, age, educational level, and religious affiliation.

Table 4.3: ***Demographic Characteristics***

		Percentage
Gender	Male	55%
	Female	45%
Age	Between 18 and 23 years	42.83%
	Between 24 and 29 years	35.71%
	Between 30 and 35 years	21.43%
Education Level	Primary School	16.9%(n=65)
	Secondary	55.8%(n=214)
	Post-Secondary	27.3%(n=105)
Marital Status	Single	20%
	Married	42.86%
	Divorced	17.14%
	Separated	14.29%
	Widowed	5.71%
Religion	Christian	25%
	Muslims	58.33%
	Others	16.67%

According to the results of this investigation, which are summarised in Table 4.3, there were 55% male respondents and 45% female respondents to this enquiry. This suggests that men make up the majority of those who ingest Khat. Regarding their age, the vast majority (42.86%) said that they are between the ages of 18 and 23. This is followed by 35.71 percent of respondents who disclosed that they were between the ages of 24 and 29, and then 21.43 percent of respondents who were between the ages of 30 and 35. According to the data, the ages of the respondents are very well spread throughout the sample. Regarding the respondents' levels of education, the vast majority (55.8%) had completed their high school education, 27.3% had completed their post-secondary education, and 16.9% had just completed their basic education. This suggests that the majority of respondents had some level of education; hence, the information that was acquired was trustworthy. In this instance, respondents' decisions or the activities they participate in are influenced by their level of education. People who have received a proper education are resistant to being readily persuaded to use khat. According to their marital status, the majority of respondents (42.86%) were married, while just 20% were single, 17.14% were divorced, and 5.71% had

lost a spouse to death. The data show that the majority of respondents have families that rely on them, and as a result, they are likely to refrain from chewing khat because of the potential bad effects it may have on their family. The researcher is operating on the presumption that the conclusion they reach will be accurate if they have data from a variety of marriage types to draw from. Regarding their religious affiliation, the population that was sampled revealed that the vast majority of them were Muslims (58.33%), while just 25% were Christians and 16.67% belonged to other faiths. This suggests that the majority of inhabitants are Muslims, and that their use of Miraa has a significant impact on them. For the purpose of presenting all of the data on the socio-demographic features of the research population, you need to have one table. It is adequate to include two or three bar charts in addition to the pie charts.

4.4 Factors that Contribute to Khat Chewing

The first purpose of this research was to investigate the elements that may have a role in the use of khat by young people in Eastleigh, which is located in Nairobi County, Kenya. In order to achieve this purpose, the respondents were presented with a series of structured questions, and their replies are shown in the following table:

4.4.1 Khat Introduction

When the participants were asked to identify the person who had first introduced them to khat, the results were as follows:

Table 4.4: ***Introduction to Khat***

	Frequency	Percent
Neighbour	150	36.06%
Peer	130	33.85%
Family Member	70	18.23%
Miraa vendor	34	8.85%
Total	384	100.0%

According to the data shown in Table 4.4, the vast majority of respondents (36.06%) disclosed that their neighbour was the one who first introduced them to khat, followed by their peer (33.85%), members of their family (18.23%), and miraa merchants (8.85%). This suggests that friends have an influence on one another, and in this instance, those who chewed khat are more likely to urge others to do the same. This is in line with the findings of a research that was carried out in Kisumu by Ofulla and Owuor (2016), who found that family members might encourage their children to experiment with various types of substance abuse. They also came to the conclusion that a sizeable percentage of students learned how to chew khat from members of their families or acquaintances who did so.

4.4.2 Supply

When the participants were asked to identify the individuals who provided them with drugs, they gave the following responses:

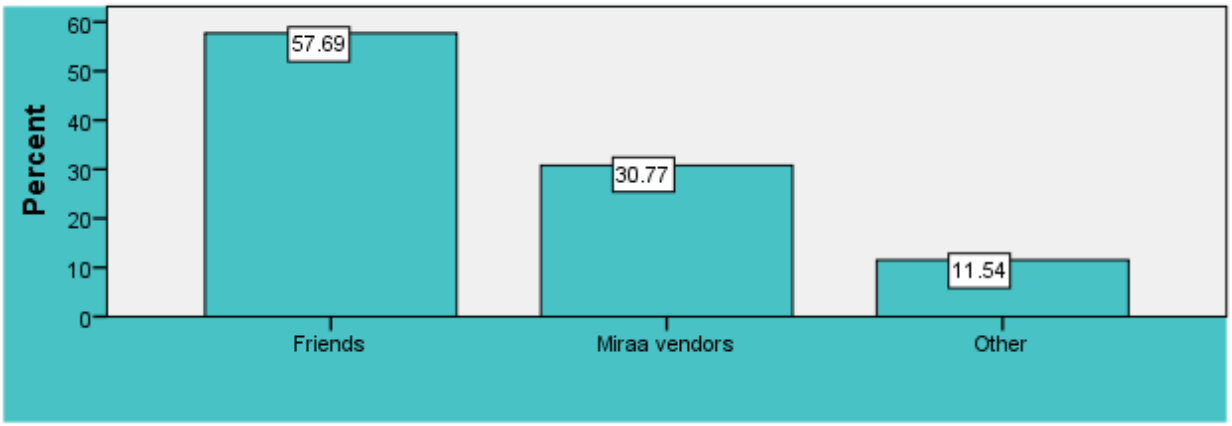

Figure 4.2: ***Supply***

The breakdown of respondents according to their prefered khat provider is shown in Figure 4.2. The majority of respondentss (57.69%) said that their friends were the ones who provided them with khat, followed by miraa merchants (30.77%) and other sources (11.54%). This demonstrates the vital role that friends play in persuading one another to partake in the consumption of khat. Following the distribution of the drug, the dealers began

to make it a practise to provide some to their close associates. The majority of the respondents have the habit of sitting together and talking about subjects that are important to them. During this time, they also use the opportunity to encourage one another to chew miraa. The fact that friends put pressure on one another to use khat is the way via which it is connected with use. This discovery lends credence to the social learning hypothesis, which postulates that behaviours are picked up in social settings via observation and modelling (Newman & Newman, 1999).

4.4.3 Reasons for Chewing

When the participants were asked to specify the reasons why they chew khat, the following responses were received from them:

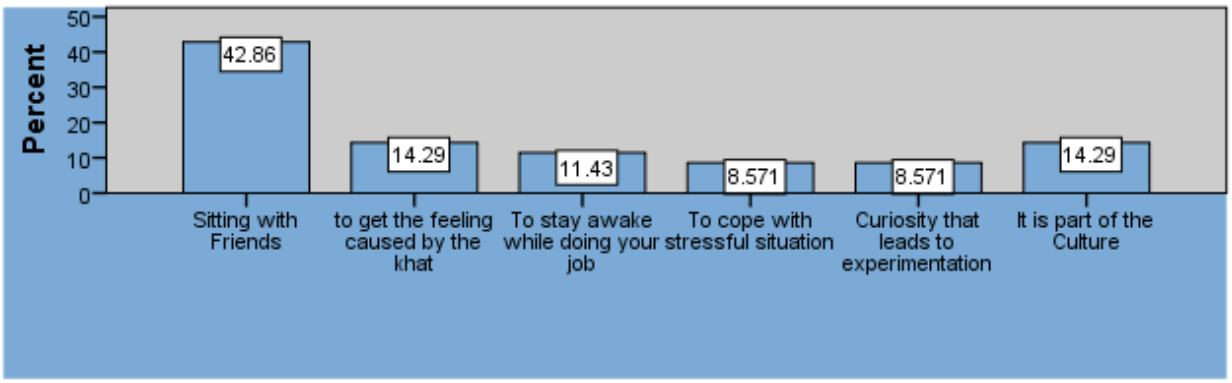

Figure 4.3: ***Reasons for Consumption***

Figure 4.3 demonstrates that the vast majority of the young people who were surveyed admitted to chewing khat for the following reasons: 42.86 percent do so in order to socialise with their peers; 14.29% do so in order to experience the sensation that comes from chewing khat; and 8.571% do so in order to satisfy their natural curiosity and better deal with stressful situations. The majority of people who chew khat do so because they want to be with their friends, who may encourage them to start chewing khat if they don't already. According to the findings of a research that was carried out by Ofulla and Owuor (2016), one of the primary reasons why young people could start using drugs is because of the

influence of their peers. This is due to the fact that young people rely on their peers more than they do on their parents. They are driven to consume drugs by their peers, who also encourage them to participate in activities with other people.

4.4.4 Khat Accessibility

The participants were asked how hard they thought that it would be for them to get every one of the following if they so desired.

Table 4.5: ***Accessibility***

	Very Difficult	Fairly Difficult	Fairly Easy	Very Easy	Don't Know
Alcohol	14.6%	18.8%	29.2%	20.8%	16.7%
Miraa	0.0%	11.8%	35.3%	31.4%	21.6%
Marijuana	7.3%	19.5%	36.6%	26.8%	9.8%
Cigarette	0.0%	9%	30%	34%	27%
Cocaine and others	60%	30%	0.0%	0.0%	10%

According to the results shown in Table 4.5, the vast majority of respondents (29.2%, 35.3%, and 36.6%) believe that it is rather simple to get alcohol, Miraa, and Marijuana correspondingly. The research also shows that 34% of respondents can easily get cigarettes, but 60% report that it is extremely difficult to obtain cocaine and other drugs. According to the data, khat is one of the most widespread drugs in the region, and as a result, the vast majority of the young people who were tested take it. This result is consistent with the conclusion that Andreae and Rhodes (2016) came at, which was that khat is readily accessible owing to abundant supply and the fact that it is inexpensive. Because khat can be cultivated almost anywhere and customers may get it whenever they choose, its consumption is at an extremely high rate.

Table 4.6: ***Factors and Khat Consumption Prevalence***

		low prevalence	Moderate prevalence	High perceived prevalence	Total	Ch-square	df	P-value
Age Group	Friends	0	0	14.8%	14.8%	106.632[a]	4	.000
	Miraa Vendors	0	31.5%	22.1%	54.7%			
	Others	16.8%	0	14.7%	31.5%			
Total		16.8%	31.5%	51.8%	100%			
Introduction to Khat	Neighbors	3.4%	28.9%	44.3%	76.5%	78.198[a]	4	.000
	Peer	13.4%	0	6.7%	20.1%			
	Family Member	0	2.6%	0	2.7%			
	Miraa vendor	0	0	0.7%	0.7%			
Total		16.8%	31.5%	51.8%	100%			
Reasons for Consumption	Relieve stress	16.8%	8.7%	0	25.5%	109.792[a]	4	.000
	Part of culture	0	22.8%	39.6%	62.4%			
	Curiosity	0	0	2.7%	2.7%			
	Stay awake	0	0	9.4%	9.4%			
Total		16.8%	31.5%	51.8%	100%			
Accessibility	Very Difficult	2.7%	11.4%	0	14.1%	72.462[a]	4	.000
	Fairly Difficult	20.1%	14%	9.4%	43.6%			
	Fairly Easy	0	0	42.2%	42.2%			

From Table 4.6, the p-value< (0.05), leading to the conclusion that there is a statistically significant relationship between determinants of Khat consumption and prevalence levels among youths. This study indicates that the respondents' gender and age were associated with stress levels p-value of 0.00. On age group, 14.8% of participants recorded high Miraa prevalence while 0 perceived a low and moderate level; 31.5% of respondents noted that Miraa vendors led to moderate stress. Moreover, on introduction to khat, those got information from neighbors and had a moderate prevalence at 28.9%, peer had 13.4% low prevalence, family members had 2.6% prevalence while Miraa vendors had a prevalence rate of 0.7%. On reason for consumption, relieve stress had low prevalence at 16.8%, 22.8% part of culture, some respondents noted that curiosity had prevalence rate of 2.7% while others stated that stay awake with high prevalence rate of 9.4%. On accessibility, very

difficult to find Miraa had a low prevalence, fairly difficult prevalence rate was 20.1% while fairly easy had high prevalence of 42.2%. The results also revealed that the Chi-square for marital status was 0.000<p-value (0.05) leading to conclusion that there is a statistically significant difference between determinants of Khat consumption and prevalence levels among youths.

4.5 Khat Consumption Prevalence

The second objective of the study was to evaluate the prevalence of khat chewing among youth in Eastleigh, Nairobi County, Kenya. The following sub-sections answered the research questions.

4.5.1 Khat Consumption

The respondents were asked to indicate if they consume khat, the Figure bellow presents the findings;

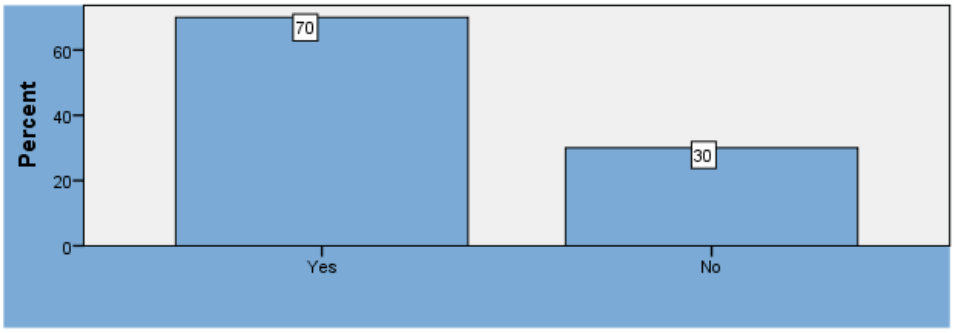

Figure 4.4: ***Khat Consumption***

According to Figure 4.4, the majority (70%) of the overall population studied consumes khat, whilst the other 30% do not, as seen in the figure above. According to the findings, the consumption rate among young people is 70%, which is a very high number. This could have been caused by a variety of factors, including the ease with which young people can obtain khat and the influence of friends and family members, as described in the section that came before this one. These results contrast the conclusions of a study that Ageely, (2009) carried out in Saudi Arabia in 2006. In that research, he came to the conclusion that the

prevalence rate of khat was 21.4%. His research went on to state that the percentage was roughly 24.5% in urban regions, but it was just 20% in rural ones.

4.5.2 Khat Consumption Frequency

The purpose of the research was to establish the regularity of khat use; the following results are presented:

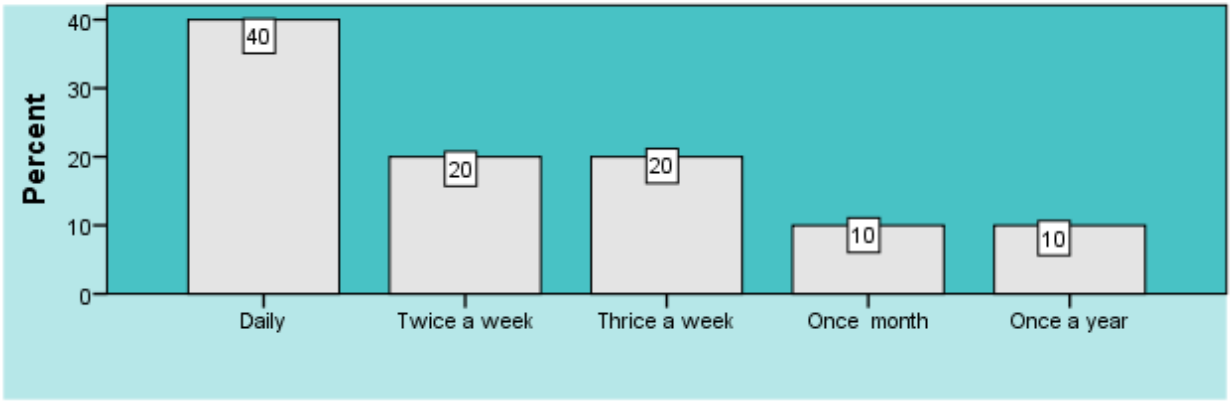

Figure 4.5: ***Khat Consumption Frequency***

The distribution of participants according to the frequency with which they consume khat is shown in Figure 4.5. The majority of respondents (40%) said that they partake in the consumption of khat on a daily basis, while 20% do so twice a week and thrice a week, and 10% do so once a month or once a year. As was shown in section 4.4.3, the frequency of use is deduced from the fact that the primary motivation for khat usage is the desire to socialise with one's peers.

4.5.3 Quantity Consumed

It was requested of the participants that they divulge the quantity of khat that they eat on a regular basis; the results are shown down below.

Table 4.7: *Quantity Consumed*

	Frequency	Percent
Few Twigs	50	13%
One bundle	150	39.1%
Two bundle	84	21.9%
More than two bundle	100	26.04%
Total	384	100.0%

According to Table 4.7, the majority of participants in the research ingest one bundle, while 26.04 percent consume more than two bundles, 21.9% consume two bundles, and 13.0 percent consume just a few twigs. According to the data, young people have developed a high level of khat addiction since the majority of them take more than one bundle every day. Because these people drink khat continuously throughout the day, from sunrise to night, it's possible that they consume more bundles. The data lend credence to the conclusion reached by Mugambi (2016), who found that the majority of young people who use khat typically ingest more than one bundle, while those who are not profoundly committed to the substance could consume just a few twigs every day. According to the findings of Haji (2005), the most common method of consumption among the young people who were surveyed was khat use. These results are consistent with the conclusion reached by Muthui and Muchui (2012), who said that the majority of people who take khat do so by chewing mouthfuls of khat twigs. This finding is also consistent with the conclusion reached by Muthui and Muchui (2012).

4.6 Awareness on Social Economic Life

The purpose of this research was to examine the degree of knowledge among young people in Eastleigh, which is located in Nairobi County, Kenya, about the implications that chewing khat has on social and economic life. The opinions of the respondents were solicited, and the results are shown in the following table:

4.6.1 Effects of Khat Consumption

It was requested of the participants that they discuss the implications of khat use on one's socioeconomic standing.

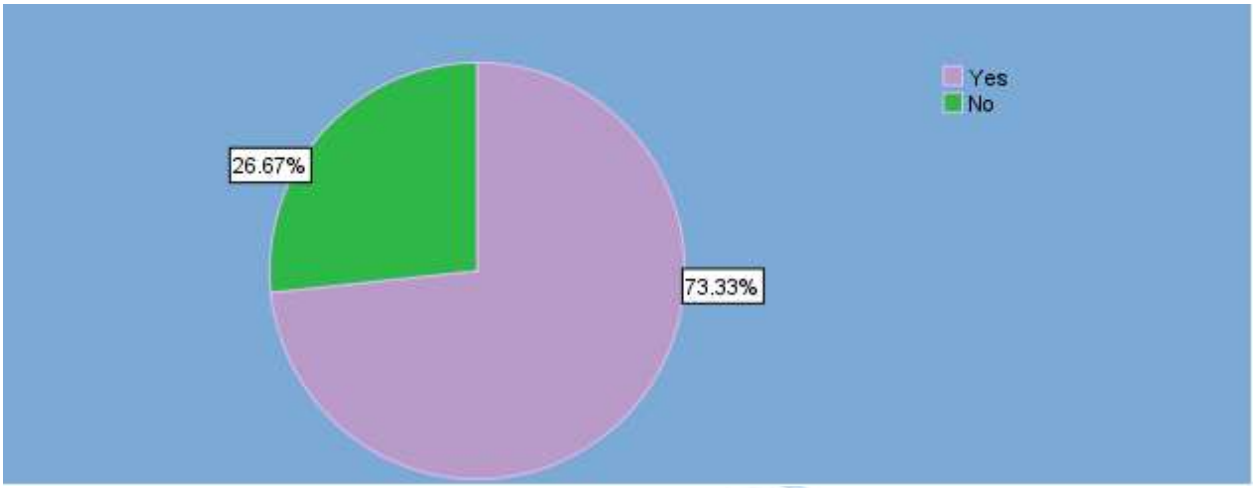

Figure 4.6: ***Effects of Khat Consumption***

As can be seen in Figure 4.6, the vast majority of respondents (73.33%) are aware of the consequences of khat, while just 26.67% are unaware of them. The results indicate that there is a high degree of awareness, which might perhaps be ascribed to the fact that they had a high level of education, as discussed in section 4.3.3. In addition, young people consume more than one bundle of khat every day, which indicates that they are aware of the effect that khat has on their economic lives.

The participants were questioned about the age at which they had their first experience with khat use. The vast majority of them said that they first used khat between the ages of 13 and 18 years old, while they were in high school. The fact that they could afford to buy khat was one factor, while for others, the act was influenced by the behaviour of others around them who were partaking in the activity. These results are consistent with the conclusion that Kebede and Gebremichael, (2005) reached, which said that the high rate of khat usage among students is affected by its availability as well as peer pressure. According to the findings of the research conducted by Andreae and Rhodes (2016), the majority of parents

and guardians offer a significant amount of money to their children, which encourages young people to buy anything they want, including khat in certain cases.

The participants were also asked to indicate how much money they spend on khat consumption and how much money they spend on khat itself. The vast majority of them reported spending more than five hours per day and more than five hundred Kenyan shillings per day on the activity. This demonstrates that their intake of khat has a detrimental effect on the amount of money they spend. Given that the majority of people living in Eastleigh have salaries that fall in the middle class range, spending more than $500 on khat may put a household in a precarious financial position. The young are less productive if they spend more than five hours a day taking khat; some of them indicated that they use it at night, which leads to weariness, which in turn leads to poor productivity.

4.6.2 Khat Consumption

The respondents in the research were asked to identify other people with whom they take khat, and the results are shown in the table below.

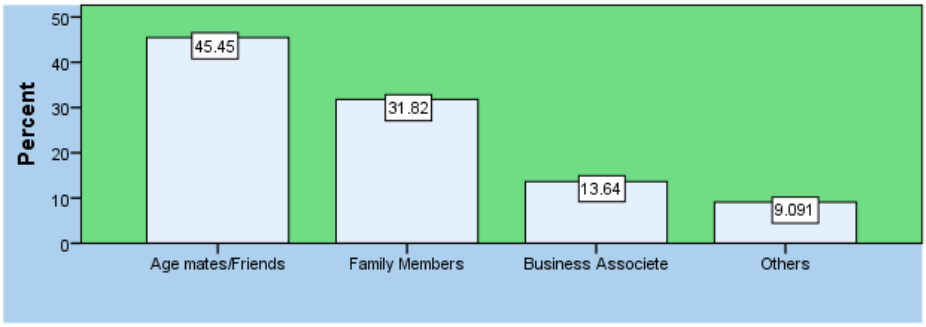

Figure 4.7: ***Consumption***

As seen in the figure to the right, the vast majority of research participants (45.45%) take khat with their age mates or friends, followed by 31.82% of their family members, 13.64% of their work associates, and 9.091% of other people. The majority of respondents disclosed that the reason they drink khat is the same as the reason they indicated in section 4.4.3, which is that they wish to chat to their friends. It was also disclosed by the respondents that

the use of khat with friends has made it difficult for them to provide for their family since they spend the majority of their money on this narcotic. One of the focus group discussions (FGD) endorsed the effect that is related with the usage of khat and linked it with the incapacity to support the family.

> "*Consuming khat makes it difficult for the family to meet its fundamental necessities such as medical needs, housing needs, food needs, and clothing needs....*" (FGD 2018).

According to the opinions of some of the respondents, sharing a bowl of khat with one's circle of friends and family members is a great way to foster engagement and stay abreast of current events in society. This is consistent with the findings of a research that was carried out by Ongeri (2008), who found that the use of khat is deeply ingrained in the majority of homes, where it is common practise for parents to discuss their daily experiences with their sons while doing so. This demonstrates the significance of the intake of khat in the region under investigation since it gives adults of a certain age the chance to impart wisdom to younger generations and, as a result, strengthens the bonds of family.

4.6.3 Consuming Khat with Other Drugs

When the participants were questioned whether or not they combined khat use with the use of any other drugs, the results were as follows:

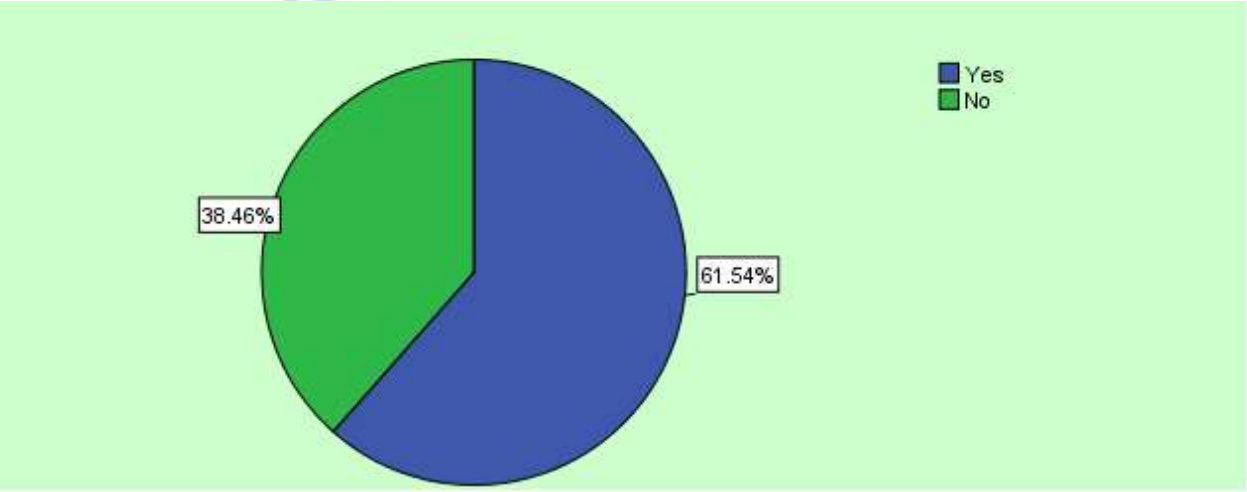

Figure 4.8: ***Consuming Khat with Other Drugs***

Figure 4.8 demonstrates that the majority of people who use khat do so in combination with other substances (61.54 percent), whereas 38.46 percent say they do not. Even though the participants admitted that they were under the effect of other substances when they used other drugs together with khat, the data suggest that young people use both substances. They continue to use the substance even if they are aware of the repercussions that coming into contact with khat may have 4.6.1.

4.6.4 Substance Abuse

The following section displays the responses of young people on the use of khat in combination with other drugs;

Table 4.8: ***Substance Abuse***

	Frequency	Percent
Traditional Brew	150	18.23%
Bhang	130	33.85%
Cigarettes	70	36.06%
Others	34	8.85%
Total	384	100.0%

The research found that 36.06 percent of respondents said they mixed khat with cigarettes, 33.85 percent said they mixed it with bhang, and 18.23 percent said they mixed it with traditional brew. The statistics indicate that a relatively high percentage of young people now engage in drug misuse. The fact that they drink khat together and encourage others to do so as well as take other drugs is likely to blame for this rate. These data also provide credence to the findings of Alem et al. (1999), who discovered that the majority of young people use khat in conjunction with other substances. This is due to the fact that there is easy availability to drugs, as well as the fact that family members who spend the most of their time away from the family using alcohol and drugs are encouraging their usage.

4.7 Awareness of Khat Consumption on Health

The fourth objective of the study was to assess the level of awareness of the effects of khat chewing on health among youth in Eastleigh, Nairobi County, Kenya.

4.7.1 Effects of Khat on Health

Respondents in the research were asked to identify whether or not they are aware of the impact that khat may have on one's health; the results are given below:

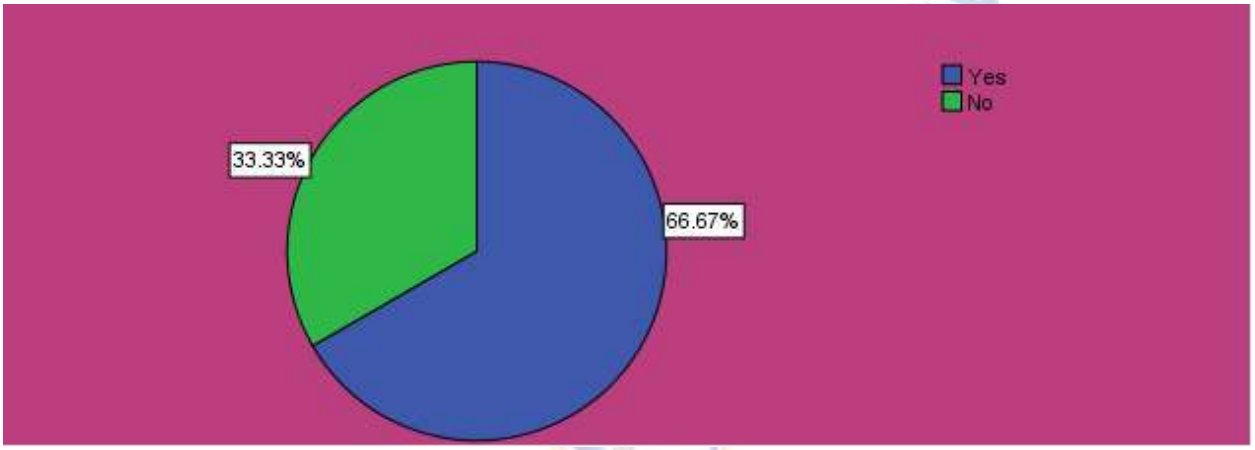

Figure 4.9: ***Effects of Khat on Health***

As shown in Figure 4.9, the majority of respondents (66.67%) were aware of the negative impact that khat usage has on one's health, whereas 33.33 percent of respondents were unaware. Even though the majority of young people are aware of the negative consequences of khat usage, the prevalence rate is still rather high. A lack of attention and problems with fertility were cited as additional side effects of khat use, according to the respondents. Some people admitted that ingesting khat had an effect on the brain; for example, they said that doing so caused them to begin hallucinating after they used it.

The results provide credence to the conclusion reached by Alem et al. (1999), who indicated that the use of khat keeps users awake for an extended amount of time, which in turn affects the users' ability to receive information that is well-coordinated. These results are also corroborated by most FGD, which said that the availability and accessibility of khat play an

essential role in its use, which in turn has detrimental impacts on the social and physical health of those who consume it.

4.7.2 Effects of Khat on the Body

It was questioned of the respondents whether or not ingesting khat had an effect on the teeth and the rest of the body, and the findings are as shown below:

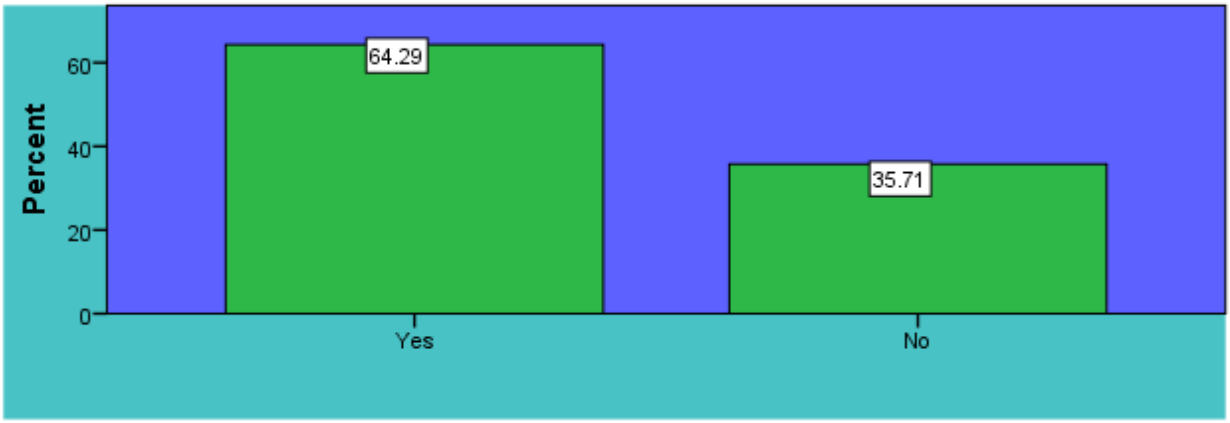

Figure 4.10: ***Effects of Khat on the Body***

The distribution of the respondents according to their level of knowledge about the effects that khat has on the body is shown in Figure 4.10. According to the data, 64.29 percent of respondents are aware that khat has an effect on their bodies, whereas 35.75 percent are unaware of this fact. The vast majority of them indicated that use of khat causes a person to become thin as a result of a lack of appetite. Some of them disclosed that consumption of khat has a bad influence on the activities of the heart and teeth. According to the findings of the FGD, indulging in khat usage results in aches and pains throughout the body that are brought on by a lack of sleep brought on by weariness. These results are in line with the conclusion that was reached by Mugambi, (2016), who found that 39.5% of respondents do not get enough sleep and chew khat. This coincides with the results of Griffiths (1998) and Kalix (1984), who discovered that chewing khat dispels sleep and fosters dialogue, both of which keep the consumer awake. This is also consistent with the findings of Griffiths (1998).

4.8 Inferential Analysis

This section presents a summary of correlation analysis between the independent variables including Level of Awareness and health and youth's health. The results were compared at 95% confidence interval.

Table 4.9: ***Correlation between Level of Awareness and Health***

		Level of Awareness	Health
Level of Awareness	Pearson Correlation	1	.471
	Sig. (2-tailed)		.0089
	N	384	384
Health	Pearson Correlation	.471	1
	Sig. (2-tailed)	.0089	
	N	384	384

According to what can be shown in Table 4.9, there is a moderately strong positive link between the awareness level and the health consequences (0.471). It is possible to draw the conclusion that the two variables do have a significant association when the Sig. (2-tailed) value is lower than the p-value (0.005). This would mean that the null hypothesis could not be accepted. In this particular instance, the p value is 0.0089, which is lower than the critical value of 0.05; this indicates that the null hypothesis is rejected, and the conclusion is drawn that there is a significant relationship between the level of awareness and the effects of khat on the health of young people. This indicates that when young people are made aware of the negative effects that khat may have on their health, they may choose not to chew it or may reduce the amount that they consume. This study lends credence to the conclusions reached by Mugambi (2016), who found that the predictor variable (awareness or education) had a substantial influence on the health effect, as shown by a p-value of 0.001. She arrived to the conclusion that there is a statistically significant association between knowledge of khat usage and the overall wellness of consumers.

Table 4.10: ***Correlation between education level*** **and Social-economical life**

		Education level	Social-economical life
Education level	Pearson Correlation	1	.844**
	Sig. (2-tailed)		.000
	N	378	378
Social-economical life	Pearson Correlation	.844**	1
	Sig. (2-tailed)	.000	
	N	378	378

** Correlation is significant at the 0.01 level (2-tailed).

According to Table 4.10, the correlation between Education level and Social-economical life is 0.844, which indicates a significant positive relationship between the two variables. It is possible to draw the conclusion that the two variables do have a statistically significant association when the Sig. (2-tailed) value is lower than the p-value (0.005). This occurs when the null hypothesis is not accepted when the Sig. The conclusion that there is a significant link between education level and Social-economical life is reached when the null hypothesis is rejected due to the fact that the value of p is lower than 0.005 in this study. The findings are in line with the conclusion that was reached by Haji (1985), Turning (2004), and Sykes et al. (2010). These researchers found that there is a positive relationship between education level and the rate of khat consumption, and that chewing khat leads to poor family relations. The findings of this study are consistent with these findings. The majority of users spend a significant amount of money on khat, and as a result, they neglect their families. Where can I get the findings for goal 4, which concerns the connection between one's degree of awareness and their health?

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

According to the material presented in Chapter four, the procedure by which the variables identified in Chapter three were operationalized into quantifiable indicators that were in the process of data analysis with the intention of satisfying the study objectives was described there. The researcher has reported the overall results of the study in the previous chapter. These data suggested that there was a favourable association between the amount of khat awareness and social economic aspects and health. In this part, a detailed overview of the research's results, conclusions, and suggestions, as well as the last section on additional study areas, is presented.

5.2 Summary of Key Findings

In this sub-section, the results of the research are presented depending on the goals of the investigation. The primary purpose of this study was to investigate the variables that lead to youth khat chewing in Eastleigh, which is located in Nairobi County, Kenya. According to the findings of the survey, 36.06 percent of respondents said that their neighbours or other classmates were the ones who first introduced them to khat. One of the most important factors in determining whether or not young people started using khat was the influence of their friends and family members. In addition, the survey discovered that 57.69% of young people said that their friends were the source of their khat use. In addition, 42.86 percent of young people said that they chew khat in order to socialise with their peers. In addition, the findings of the survey revealed that 36.6% of participants felt that the accessibility of miraa is the cause for its consumption.

The chewing of khat was the second goal of this research, and it was intended to evaluate the prevalence of khat use among young people in Eastleigh, which is located in Nairobi

County, Kenya. According to the findings of the survey, seventy percent of young people had tried khat. This indicates that the prevalence of khat use is high in Eight Leigh. The investigation also revealed that forty percent of young people partake in everyday khat use. In addition to this, 39.1% of young people eat one package on a daily basis.

The third goal of this study was to determine the extent to which young people in Eastleigh, which is located in Nairobi County, Kenya, are aware of the negative consequences that khat chewing has on one's health. According to the findings of the study, even though 66.67% of respondents were aware of the negative consequences that khat usage had on health, they continued to use it. More than sixty percent of the young people surveyed in Eastleigh claimed that they are aware of the effects that khat has on their bodies. The research also discovered that there is a substantial connection between the degrees of knowledge of the consequences that khat chewing has on one's health. [Citation needed] [Citation needed]

The final goal was to determine the extent to which young people in Eastleigh, which is located in Nairobi County, Kenya, are aware of the impact that khat chewing has on their social and economic lives. According to the findings of the survey, 73.33 percent of young people are aware of the consequences of khat, while 61.5 percent of them combine khat use with the use of other substances. More than thirty percent of young people smoke khat with cigarettes, and 33.85 percent do so alongside bhang. In conclusion, the research came to the conclusion that the degree of knowledge has a substantial impact on the social and economic lives of those who take khat.

5.3 Conclusions of the Study

Chewing khat is becoming more common among young people in Eastleigh, and this trend is expected to continue to show substantial growth in the near future. There was a

discernible link between the factors that were within the researcher's control and the result variable. The majority of the young people who were surveyed were motivated to chew khat by their peers and family members. The first stage in developing and putting into practise comprehensive anti-khat use interventions that prevent numerous risk factors among young people in the nation is to have an understanding of the variables that are related with khat use. According to the findings of the study, the researchers came to the conclusion that the accessibility of Khat, the influence of peers, and the passage of time were significant drivers associated with consumption of Khat, which had implications for the health and happiness of the families of people who used Khat.

According to the findings of the survey, males account for the majority of khat consumers. Because the family leaders were regular users of khat, they encouraged other members of the family to partake in the habit via means of contact. They often did it with people their own age or with close pals. The examination of correlations revealed that there was a favourable connection between the degree of knowledge of khat consumers and their social and economic lives as well as their health.

5.4 Recommendations

The purpose of this research was to investigate the prevalence of khat chewing among young people in Eastleigh, Nairobi, Kenya, as well as the variables that contribute to its use and knowledge of its negative consequences. According to the findings of the research, a sizeable proportion of young people partake in khat use, which poses risks to their health. As a result, the research suggested that the government and other relevant stakeholders should educate the general people about the negative impact that khat may have on one's health.

The study recommends that the Nairobi county government, through the Ministry of Agriculture, the Field Extension Officers engage with the individual and families to find alternative economic livelihood strategies that will cut the market supply chain for khat. Since the availability of khat encourages its consumption, the availability of khat also encourages its consumption. In order to bring the rate of khat usage and abuse down, it is imperative that the law of demand and supply be implemented. Indeed, a reduction in supply will, in the long run, lead to a decrease in use of khat as well as the impacts that it has on people and families. Additionally, it will assist the communities in embracing other methods of making a livelihood, which will pave the door for additional socioeconomic progress.

5.5 Suggested Areas for Further Research

1. There is a need for a comparison research between the homes that consume khat and the households that do not use khat in order to assess their consumption patterns and the consequences such consumption patterns have on the socioeconomic welfare of families.
2. In a same vein, a comparative research on the impacts of using Khat in comparison to the effects of other drugs such as bhang, heroine, and alcohol should be carried out in order to evaluate the effects that each substance has on the general well-being of families.
3. There is a need for more research to be carried out in order to establish the social, economic, and environmental elements that are linked with the chewing of khat in other counties of Kenya.

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APPENDICES

Appendix I: Questionnaire

SECTION A: DEMOGRAPHIC CHARACTERISTICS

Respondent's Particulars

1. What is your gender?

   Male [ ]

   Female [ ]

2. What is your age bracket?

   18 to 23 [ ]

   24 to 29 [ ]

   30 to 35 [ ]

3. What is your highest level of formal education?

   Certificate [ ]

   Diploma [ ]

   Master's Degree [ ]

   Other- Specify ……

4. What is your marital status?

   Married [ ]

   Single [ ]

   Widow [ ]

5. What is your religion?

   Christian [ ]

   Muslim [ ]

   Others (please specify)…….

Section B: Khat Consumption Prevalence

1. Do you consume Khat?

   Yes [ ]

No [ ]

2. How often do chew khat?

   Daily [ ]

   Twice a week [ ]

   Thrice a week [ ]

   Once a month [ ]

   Once a year [ ]

3. In each day that you chew khat, how much do you consume (in quantity)?

   Few twigs [ ]

   One bundle [ ]

   Two bundle [ ]

   More than two bundles [ ]

Section C: Factors That Contribute To Khat Chewing Among Youths

1. Who introduced you to Khat (consumer)?

   Neighbor [ ]

   Peer [ ]

   Family Members [ ]

   Miraa vendor [ ]

2. Who supplies khat to you (for consumers)?

   Friends [ ]

   Miraa vendors [ ]

   Other, Specify [ ]

3. In Your opinion, why do people chew khat?

In order to fit in among friends [ ]

In order to get the feeling caused by the khat [ ]

In order to stay awake while doing your job [ ]

To cope with stressful situation [ ]

Curiosity that leads to experimentation[ ]

It is part of the Culture[ ]

Any other reason_____

4. How difficult do you think it would be for you to get each of the following if you wanted? (Tick as appropriate)

	Very Difficult	Fairly Difficult	Fairly Easy	Very Easy	Don't Know
Alcohol					
Miraa					
Marijuana					
Cigarette					
Cocaine					
Heroin					

6. What is your attitude towards taking any of the following drugs? (Tick asappropriate)

	Approve	Disapprove	Strongly Disapprove	Don't Know
Alcohol				
Miraa				
Marijuana				
Cigarette				
Cocaine				
Heroin				

Section C: Awareness of the effects of khat on Social-Economic Status

1. Does khat consumption effect socio-economic status.

(a) Yes
(b) NO

If yes, please explain.

……..
……
……

2. How much do you spend on **Khat** per day? (Consumer)

_____

3. With whom do you consume Khat**?** (Consumer)

Age mates/ Friends	
Family members	
Business associates	
Other, specify	

4. Do you consume other substances together with **Khat**? (Consumer)

Yes [ ]

No [ ]

5. If yes, which of the following substances do you consume?

Traditional brew	
Bhang	
Cigarettes	
Other, specify	

Section D: Awareness of Khat Consumption on Health

1. Do you thing khat chewing have any effects on health?

a) Yes [ ]

b) No [ ]

If yes please explain.

3. Does khat has any harmful effects on the teeth?

a) Yes [ ]

b) No [ ]

4. Do you think khat consumption has any harmful effects on the rest of the body?

a) Yes [ ]

b) No [ ]

If yes, please explain

……

……

5. The following questions ask about *how much* you have experienced certain things in the last few months; tick which of the following is *most suitable* for you (as a **Khat** *consumer). (Social /psychological health effects*)

		Not at all	Not much	Undecided	Much	Very Much
1.	To what extent do you have difficulties in performing your routine activities due to ***Khat*** consumption?					
2.	How much do you worry about not getting enough money to sustain ***Khat***					

	consumption habit?					
3.	Rate the noise in the area where you consume ***Khat***					
4.	How well are your sexual needs fulfilled after consuming ***Khat***?					
5.	Rate your confidence after consuming ***Khat***?					
6..	Rate your dependence on Medication due to ***Khat*** consumption.					
7.	How often do you lack sleep after consuming ***Khat***?					

Appendix II: Key Informant Interviews (KII)

1. Who introduced you to Khat (miraa)?

5. Where do you take miraa?

…….

6. Who supplies miraa to you?

……..

7. In Your opinion, why do people take miraa?

……

8. At what age did you start consuming **Khat**?
   ……
   …….
9. Approximately how many hours do you spend chewing **Khat** per day?
   …….
10. How much do you spend on **Khat** per day?

……
……
……..

11. With whom do you consume Khat**?**

……..

11. Do you consume other substances together with **Khat**?

…….

13. To what extent do you have difficulties in performing your routine activities due to ***Khat*** consumption?

……
…..

14. State the effects of Khat consumption on consumers and families……
……

15. How well are your sexual needs fulfilled after consuming ***Khat?***

……..

16. How often do you lack sleep after consuming ***Khat***?

……

17. Rate your dependence on Medication due to ***Khat*** consumption.

……..

18. What are the health effects of khat consumption?

……

…….

THANKS

APPENDIX III: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. MOHAMED ABDULKADIR JAMA
of MOUNT KENYA UNIVESRITY, N/A-N/A
Mogadishu,has been permitted to
conduct research in *Nairobi County*

on the topic: *FACTORS, AWARENESS OF THE EFFECTS AND PREVALENCE OF KHAT CHEWING AMONG THE YOUTH IN EASTLEIGH, NAIROBI, KENYA*

for the period ending:
5th September,2019

.....
Applicant's
Signature

Permit No : NACOSTI/P/18/77528/23616
Date Of Issue : 5th September,2018
Fee Recieved :Ksh 2000

Director General
National Commission for Science,
Technology & Innovation

NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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Website www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No **NACOSTI/P/18/77528/23616**

Date **5th September, 2018**

Mohamed Abdulkadir Jama
Mount Kenya University
P.O. Box 342 – 01000
THIKA

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Factors, awareness of the effects and prevalence of khat chewing among the youth in Eastleigh, Nairobi, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending 5th **September, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

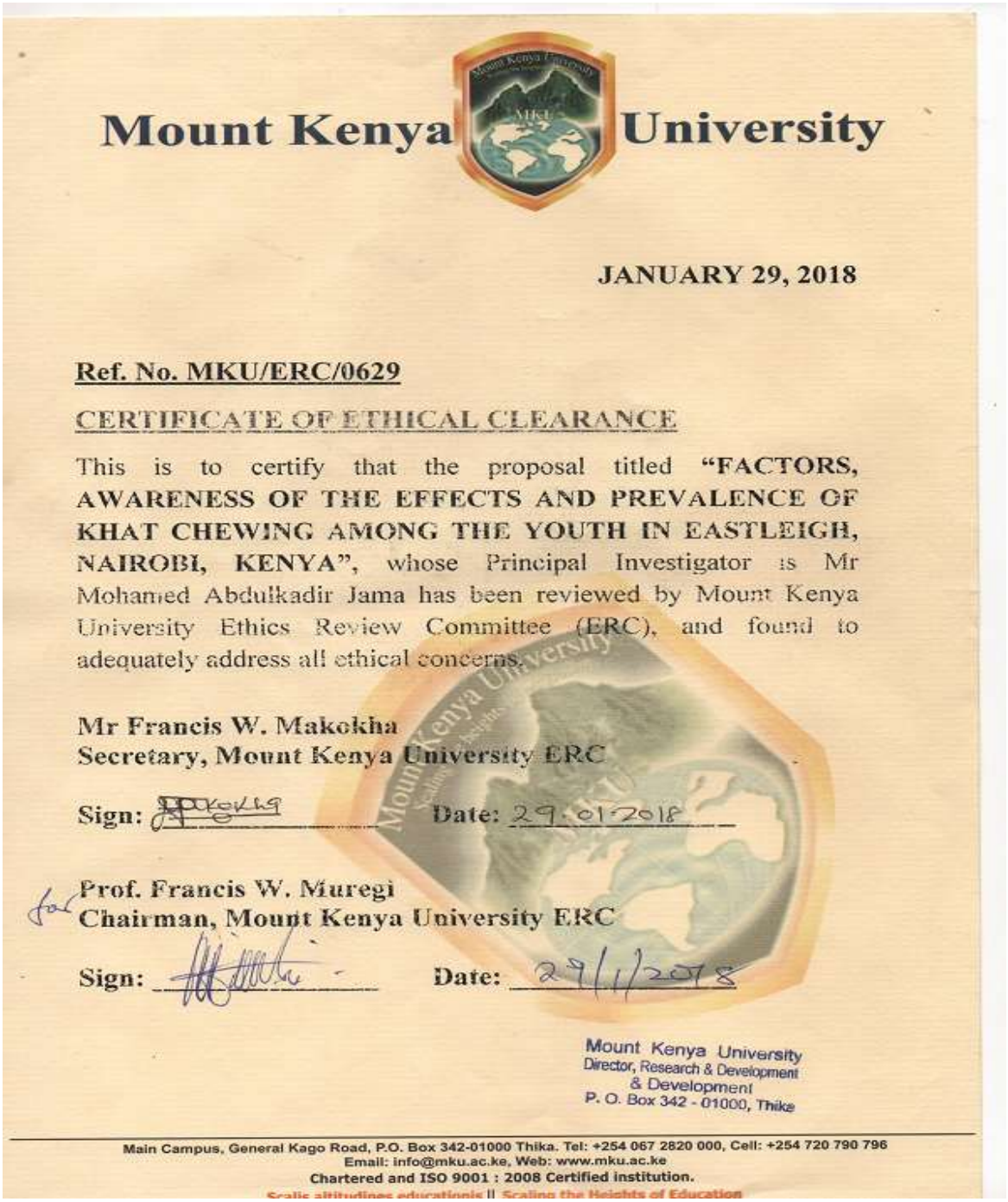
BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

Appendix IV: ERC Clearance Letter



Mount Kenya University

JANUARY 29, 2018

Ref. No. MKU/ERC/0629

CERTIFICATE OF ETHICAL CLEARANCE

This is to certify that the proposal titled **"FACTORS, AWARENESS OF THE EFFECTS AND PREVALENCE OF KHAT CHEWING AMONG THE YOUTH IN EASTLEIGH, NAIROBI, KENYA"**, whose Principal Investigator is Mr Mohamed Abdulkadir Jama has been reviewed by Mount Kenya University Ethics Review Committee (ERC), and found to adequately address all ethical concerns.

Mr Francis W. Makokha
Secretary, Mount Kenya University ERC

Sign: _____ **Date:** 29.01.2018

for **Prof. Francis W. Muregi**
Chairman, Mount Kenya University ERC

Sign: _____ **Date:** 29/1/2018

Mount Kenya University
Director, Research & Development
& Development
P. O. Box 342 - 01000, Thika

Main Campus, General Kago Road, P.O. Box 342-01000 Thika. Tel: +254 067 2820 000, Cell: +254 720 790 796
Email: info@mku.ac.ke, Web: www.mku.ac.ke
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Scalis altitudines educationis || Scaling the Heights of Education

Appendix V: Postgraduate School Introduction Letter

Mount Kenya University

SCHOOL OF POSTGRADUATE STUDIES

MPH/2016/49948

18th June, 2018

The Director, Research Coordination Division
National Commission for Science, Technology & Innovation
Utalii House, 8th & 9th Floor
P.O Box 30623- 00100
NAIROBI

Dear Sir/Madam,

RE: MOHAMED ABDIKADIR JAMA – REGISTRATION NO. MPH/2016/49948

The purpose of this letter is to introduce the above named student who is pursuing **Master of Public Health** in the Department of **Epidemiology and Biostatistics** in the School of **Public Health.**

The title of his research is *"Factors, Awareness of the Effects and Prevalence of Khat Chewing Among the youth in Eastleigh, Nairobi, Kenya."*

He has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data for his research between **June and August, 2018.**

Any assistance accorded to him will be highly appreciated.

Thank you.

Mount Kenya University
Dean, School of Postgraduate Studies
P. O. Box 342 - 01000
THIKA

Dr. Samuel Karenga, PhD
Dean, School of Postgraduate Studies
Enc.

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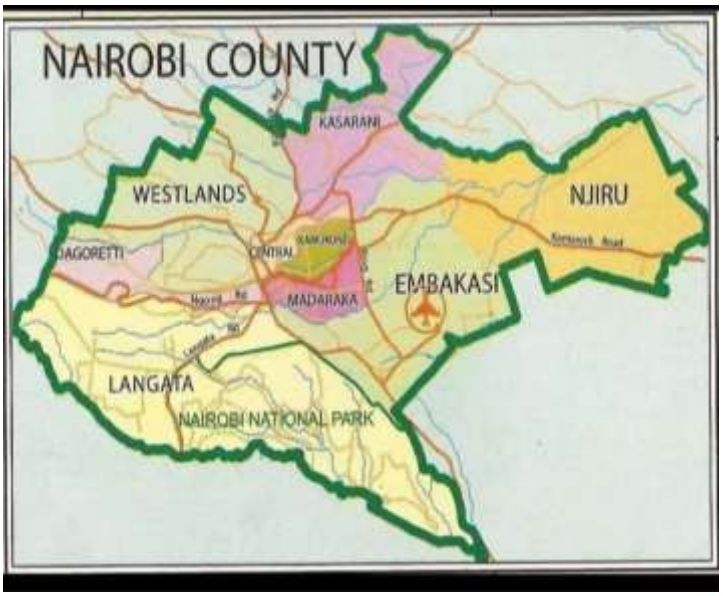
Unlocking Infinite Possibilities

Appendix VI: Maps of the Study Locations



Appendix VII: Plagiarism Report