

**CANNABIS USE AMONG YOUTHS: EXPLORING THE  
DETERMINANTS AND ASSOCIATED FACTORS IN  
KINONDONI MUNICIPALITY- DAR ES SALAAM**

**Alphonse Theotim Kalula,**

**A Dissertation/thesis Submitted in (Partial) Fulfillment of the Requirements  
for the Degree of Master of Science in Mental health of Muhimbili University  
of Health and Allied Sciences (MUHAS).**

**NOVEMBER, 2009**

**CERTIFICATION**

The undersigned certifies that she has read and hereby recommend for acceptance by the Muhimbili University of Health and Allied Sciences a dissertation/thesis entitled: **Exploring the Determinants of Cannabis use Among Youths in Kinondoni Municipal- Dar es Salaam**. In fulfillment of the requirements for the degree of Master of Science in Mental Health of the Muhimbili University of Health and Allied Sciences.

*Sebalda Leshabari*  
.....

Dr. Sebalda Leshabari ( Supervisor)

Date *07/01/2010*  
.....

**DECLARATION AND COPYRIGHT**

I, **Alphonse Kalula**, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature ..... 

This dissertation is copyright material protected under the Berne Convention, the Copyright Act of 1999 and other international and national enactments, in that behalf, on intellectual property. It may not be reproduced by any means, in full or in part, except for short extracts in fair dealing; for research or private study, critical scholarly review or discourse with an acknowledgement, without the written permission of the Directorate of Postgraduate Studies on behalf of both the author and the Muhimbili University of Health and Allied Sciences.

## ACKNOWLEDGEMENT

I would first like to express my sincere gratitude to my supervisor, Dr . Sebalda Leshabari whose advice, constructive criticisms, encouragement and suggestions put this work in this form. I am also indebted to my sponsor, Ministry of Health and Social Welfare, whose scholarship enabled me to accomplish this study.

I am also indebted to all colleagues from School of Nursing of Muhimbili University of Health and Allied Sciences for encouraging me to pursue this course and being ready to take up my responsibilities when I was concentrating with studies.

Special thanks should also go to Ms. Moza Makuburi from the Drug Control Commission, who provided valuable literature for this study. I am also grateful to Dr. Kapinga of Kinondoni municipal for scrutinizing my proposal and for giving me the permission to do this study at Kinondoni municipal. Also special thanks go to the ward executive officer of Magomeni who directed me to the Suna street where I started gathering data from there. Also I am indebted to convey my sincere thanks to Mr Liziwani , who is the street chairperson of Suna street, and the executive officer of that street, Ms. Awetu for her tireless efforts till the end by making the access to respondents in this study possible.

I also extend my sincere appreciation to my fellow Master of Science in Nursing students, for the cooperation they showed, in the course of our study. Their encouragement, advice, and challenges, will always be appreciated.

Finally, many thanks are due to all those unmentioned, who have contributed morally, intellectually, and materially to the success of this study. They provided me with indispensable support and hence deserve immense appreciation. May the Almighty God bless them all.

## **DEDICATION**

This work is dedicated to my family comprised of my beloved wife Witness and my firstborn Theotim with more focus to my late second born child Gaitan A. Kalula. May the almighty God rest his soul in eternal peace AMEN.

**ABSTRACT**

**Objectives:** the aim of this study was to explore the factors associated with initiation of cannabis use; the factors associated with continued use of cannabis as well as exploring different social perceptions towards cannabis use.

**Materials and Methods:** The study employed an explorative qualitative design, using in-depth interviews. Purposive sampling and snowball techniques were used to obtain the study participants. The collected data was subjected to content analysis where by the codes were extracted to make up themes. The study involved a sample of twelve participants whereby eight of them were cannabis users and four were parents.

**Results:** The findings revealed that loss of parents, having peers who smoke cannabis, being raised in broken family as well as choosing a career the child that he/she does not like were among the factors linked to initiation of cannabis use. Furthermore, the study revealed delinquency behavior in school as well as disliking school life, disobedience of religious practices and disobedience to parents when a child is young could be strong indicators for the use of cannabis among youths. Further more the study highlighted issues related to cannabis use like readiness to quit and challenges anticipated, factors associated with continuing use of cannabis as well as general public perceptions towards cannabis use. The study also revealed some factors that are protective, like worries of being cursed, parental guidance, perceived bad effects of cannabis use and being at school.

**Conclusions and recommendations.**

The study concludes that, there are many factors in families and communities that predispose youths to engage in cannabis use. Majority of those factors seem to emanate from within families and at society level.

To prevent occurrence of cannabis use among youths the study recommends that families as well as the society play their role in understanding and utilizing evidence based approaches in controlling this behavior and eradicating the problem in the society. There is a need to conduct further research to elucidate the contribution of each factor as far as the cannabis use is concerned including the occurrence of cannabis use and other illicit drugs within families.

## Table of Contents

CERTIFICATION .....	i
DECLARATION AND COPYRIGHT .....	ii
ACKNOWLEDGEMENT .....	iii
DEDICATION .....	iv
ABSTRACT .....	v
ABBREVIATIONS .....	ix
Operational definitions .....	x
CHAPTER ONE: INTRODUCTION.....	1
Background of the problem.....	1
Problem statement .....	3
OBJECTIVES .....	4
Broad objectives .....	4
Specific objectives.....	4
Rationale of the study .....	4
CHAPTER TWO: .....	5
LITERATURE REVIEW.....	5
Conceptual framework .....	11
CHAPTER THREE: METHODOLOGY .....	13
Study area/setting .....	13
Study design .....	16
Study population. /target population .....	17
Sample .....	17
Sampling technique .....	17

Sampling procedure. ....	17
Methods of data collection. ....	18
Procedures for Conducting the Interview.....	18
Data analysis. ....	19
Ethical considerations and clearance. ....	20
CHAPTER FOUR: RESULTS SECTION .....	21
CHAPTER FIVE: DISCUSSION .....	34
Discussion of the methods .....	34
Discussion of the findings.....	37
LIMITATIONS OF THE STUDY.....	43
CONCLUSION AND RECOMENDATIONS.....	44
Conclusions.....	44
Recommendations.....	44
References; .....	46
APPENDICES. ....	51
APPENDIX A: INTERVIEW GUIDE FOR CANABIS USERS- English version. ....	51
APPENDIX B: INTERVIEW GUIDE FOR PARENTS/GUARDIANS.....	55
APPENDIX C – INFORMED CONSENT (English version) .....	56
APPEDIX D-INFORMED CONSENT (Swahili version) .....	58
APPENDIX E- ETHICAL CLEARANCE LETTER .....	60
APPENDIX F- PERMISSION LETTER TO CONDUCT STUDY. ....	61

### **Table of figures.**

Figure 1: Conceptual framework of cannabis use behavior:.....	1
Figure 2: The map of Kinondoni Municipality.....	16



**ABBREVIATIONS.**

1. MUHAS- Muhimbili University of Health and Allied Sciences.
2. IADC-Inter-ministerial Anti-Drug Commission .
3. MNH-Muhimbili National Hospital.
4. MOHSW- Ministry of Health and Social Welfare.
5. NGO – Non governmental organization.

**Operational definitions.**

1. **Substance abuse:** Overindulgence in and dependence on drug or other chemical leading to effects that are detrimental to the individual's physical and mental health, or to the welfare of others.
2. **Cannabis use:** Use of a drug known as cannabis that is produced in various forms from the dried leaves and flowers of the hemp plant and can be smoked or chewed. Its recreational use is illegal in many countries including Tanzania.
3. **Youth:** The period of human life between childhood and maturity. In this research, youth has been taken from 15-25 years of age.
4. **Delinquent:** Somebody, especially a young person, who has acted antisocially or broken the law.
5. **Risk factor:** An aspect of personal behaviour or lifestyle, an environmental exposure, or an in born or inherited characteristic, which on the basis of epidemiological evidence is known to be associated with health related conditions. , Risk factors can be modifiable or not but the emphasis is placed on modifying and/or prevent risk factors.
6. **Primary prevention:** Specific practices for the prevention of disease physical or mental disorders in susceptible individuals or populations. These strategies include health promotion ( ie health education); protective procedures such as communicable disease control; and monitoring and regulation of environmental pollutants.
7. **Secondary prevention:** Prevention of problems related to a disease, which has already occurred through early diagnosis and prompt treatment/management.
8. **Gateway drugs:** Drugs that act as an intermediary on the pathway of use from less strong to more strong substance of abuse.
9. **Maskani:** Places where youths, in Tanzania meet for taking drugs, including cannabis and other illicit drugs (eg cocaine) and make plans of how to secure more money.
10. **Madrassa:** elementary school for Islamic religion.
11. **Arosto:** withdrawal syndrome experienced when the dose in the body of a drug user is lower than the level that is conditioned by the drug user.
12. **Juzuu:** An elementary Islamic religion book.

- 13. Pusha:** the one who is selling the cannabis and other illicit drugs secretly in streets.
- 14. Addiction:** Continued use of a drug despite social, psychological and physical problems arising from such use..
- 15. Illicit drugs:** Are all those psychoactive drugs that are not allowed by law eg cocaine, cannabis etc.
- 16. Hard drug:** A powerful illegal drug, such as heroin, cocaine and mandrax.
- 17. Licit drugs:** are those psychoactive drugs which are allowed by law for example tobacco and alcohol.

## CHAPTER ONE: INTRODUCTION

### Background of the problem.

Cannabis is commonly regarded by ordinary people as a harmless drug. The prevalence of lifetime and regular use of marijuana (as cannabis is more commonly known) has increased in most developed and developing countries. However, cumulative evidence highlights the risks of dependence and other adverse effects, particularly among people with pre-existing psychiatric disorders (Arsenault, L et al, 2004)

Cannabis produces changes in the brain so that the individual using it may experience sensations or perceptions not based on external stimuli. He/she may hear or see things that are not there. These effects and others depend on the amount taken and the experience and expectations of the individual. The social environment and the immediate setting or circumstances may also influence an individual's response when cannabis is taken (Mbatia and Kilonzo, 1996). An individual may experience the short-term effects even with a single dose. The short-term effects disappear after the passage of several hours. The individual may feel "high" or euphoric for no reason and feel that he/she is in better circumstances than he really is. Physiologic effects include an increase in pulse rate, varying degrees of postural hypotension and reddening of the eyes. He may progress to quiet reflective or sleepy state. When larger dose is taken, a person may have trouble in judging the passage of time and may experience distortion of colour, sound and other sensations leading to experiences of hallucinations. His attention and ability to process information may be markedly affected. Logical thinking and short term memory is impaired as well as physical coordination involving activities such as driving motor vehicles, balance and stability when standing and hand steadiness. This may be accompanied by slight hand tremor and diminished muscle strength, despite the individuals' perception of full strength. Other effects include an increase in appetite or feeling satiated before meals, dry mouth and dry throat (Mbatia and Kilonzo, 1996).

In addition to these short term effects to cannabis use including, loss of energy and drive, leading to apathy; slow and confused thinking and memory impairment, loss of libido which

occurs secondary to a decrease in testosterone production and chromosomal damage leading to bearing of mentally retarded children and other congenital malformations. More over students using cannabis may fall behind on their school performance due to this or due to lack of application caused by apathy and lack of drive (Mbatia and Kilonzo, 1996).

The question of why people use cannabis, and the potential risks associated with this use, has long been a subject of study for policy-makers, the public, and population scientists. Many presumed explanations for cannabis use have emerged, encompassing host, environment, and agent. Risk factors identified include genes, psychological and behavioural problems, the tendency to seek sensations or take risks, and prior use of 'gateway' drugs (Kendler et al, 2005; Boden et al, 2006). Alternative possible explanations have their basis in parental behaviour and other aspects of family and friendship dynamics, and still more are based on wider socio-environmental adversity and material deprivation (Merikangas et al, 1998; Rhee et al, 2003).

Tanzanians have traditionally cultivated and used cannabis for many years. Cannabis is grown locally almost everywhere in the country and remains the most abused illicit drug in the country. However, its use in the past it was restricted to older men and traditional healers but today its use has spread to the young generation. Today however, there is a disturbing trend among youth and school aged children of increased interest in the use of cannabis. Youth may try cannabis under peer pressure (the influence of friends) or just because of curiosity or for the relief of tension, frustration, boredom or depression (Mbatia and Kilonzo, 1996).

The most dangerous effects of cannabis use are the effects on the lungs which are similar, if not worse than those of cigarette smoking. The tar content of cannabis is more than in cigarettes. The individuals may experience chronic bronchitis, frequent chest infections including lung abscesses, emphysema and ultimately lung cancer (Voirin et al, 2006). Cancer results secondary to the high concentration of cancer causing agents. Cannabis smoke contains 70% more benzopyrene and 50% more carcinogenic polyaromatic hydrocarbons than does the smoke from regular cigarettes (Cohen, 1981).

## Problem statement

Cannabis is by far the most widely cultivated, trafficked and abused illicit drug worldwide. Half of all drug seizures worldwide are cannabis seizures. The geographical spread of drug seizures is global encompassing practically every country of the world. About 147 million people, 2.5% of the world population, consume cannabis. In Africa, some early studies have estimated the magnitude of cannabis use to be around 3% (Samuel, 2003; Driss & Nadia, 2008)

In Tanzania about 1% of adults abuse cannabis regularly and in some communities this number is as high as 5% (Kaaya et al, 1992). Most of the users are marginalized people who are also experiencing other socio-economic stresses of rapid socio-technological change.

Many studies have been done focusing on the effects of cannabis use and its association with mental illness and many have focused on quantitative approaches to elucidate statistical significance of the risk factors associated with the initiation and persistent use of cannabis. While there are many studies that have dealt with substance abuse, most have focused on the extent and the type of drug abuse and have ignored the complex nature of its occurrence in communities as well as its underlying causes and how these interplay in Tanzanian youth communities. A majority of published studies on cannabis use have been conducted in developed countries whose cultures and socioeconomic environment differ with the one of developing countries, like Tanzania.

As a result of this lack of literature in developing countries, this study is designed to explore the nature of cannabis use among youth in Tanzania. Ultimately, the study will influence research agendas and inform the public on ways to tackle the problems associated with cannabis use among youth based on evidence.

## OBJECTIVES.

### Broad objectives.

To explore the nature of cannabis use behaviour among youths in Kinondoni Municipal Council of Tanzania.

### Specific objectives.

- i. To explore the factors associated with initiation of cannabis use.
- ii. To understand the factors associated with continued use of cannabis.
- iii. To explore different social perceptions of cannabis use.

### Rationale of the study.

The findings of this study are expected to add to the body of knowledge of determinants of cannabis use among youths that are contextually based to enable the potential and actual stakeholders to make better and more informed decisions in prevention and control of cannabis use.

## CHAPTER TWO:

### LITERATURE REVIEW.

A apprehension of people dealing with cannabis become more frequent and has been involving the younger age groups. Youths are increasingly become involved in abuse and trading of illicit drugs (Mbatia and Kilonzo, 1996).

A household survey (N= 905) in four regions of Tanzania indicated that cannabis and khat (commonly known as Mirungi) are the two major drugs that people have experimented with (3.8% and 3.7% of the informants admitting to have ever tried or used the drugs respectively). The researchers also found that most of the experimenters were males (57%) and the large proportion was between the ages of 21-30 years (Kilonzo, 1992).

Several studies have focused on the co morbidities of cannabis use and psychosis. Surveys of patients with psychotic illnesses from London have found that between 20 and 40% of individuals report lifetime cannabis use (Menezes et al, 1996; Grech et al, 1998; Duke et al, 2001). In speculating the causal association between cannabis and schizophrenia, cannabis use appears to be neither a sufficient nor a necessary cause for schizophrenia. While neither necessary nor sufficient cause, cannabis use acts as a part of the complex constellation of factors leading to mental illnesses including schizophrenia (Arseneault L et al, 2004).

A study done in Belgium, by Kohn and colleagues (2004); revealed that among 744 students in Catholic high schools, 30.2% had tried to smoke cannabis and 50% of them continued to smoke. For the factors associated with cannabis use it was found that, age, income of the family, strong peer group integration [OR 7.7; CI 95% (3.5-17.3)] and drug-consumption habit [for example, tobacco use: OR 7.4; CI 95% (4.8-11.32)] were associated with cannabis experimentation. Age, gender, nationality, average family integration [OR 2.13; CI 95% (1.1-4.1)] and other drugs use as addiction to nicotine [OR 9.5; CI 95% (5.6-16.3)] were associated with the current consumption of the substance.



Another study done in Croatia, which used a questionnaire to assess drug use among urban adolescents, showed a high degree of interconnection among the frequency of consuming tobacco, alcohol, and marijuana. Further more in that study they found that the best predictive factors for consumption of these three substances were a history of high-risk and delinquent behaviour, troubled adjustment to school, domination of hedonistic values, and poor family relations. Knowledge about the consequences of consuming psychoactive substances positively correlated with the frequency of consuming tobacco ( $r=0.213$ ,  $p<0.001$ ), alcohol ( $r=0.226$ ,  $p<0.001$ ), and marijuana ( $r=0.320$ ,  $p<0.001$ ) (Ljubotina et al, 2004). This generated interest to the investigator to further explore this concept.

Another study was done to investigate the role of genetic and environmental factors to adolescent tobacco, alcohol and other substance use in a sample of 327 monozygotic and 174 like-sex dizygotic twin pairs born in Minnesota and aged 17-18 years at time of assessment. The findings revealed that, the heritability for the liabilities to tobacco, alcohol and other drug use was estimated to be 59%, 60% and 33% respectively among males, and 11%, 10% and 11% respectively among females. However, the gender difference was not found to be statistically significant. Estimates of shared environmental effect were substantial and statistically insignificantly higher among females (71%, 68% and 36%, respectively) than among males (18%, 23% and 23%, respectively). There fore that study findings indicate that, adolescent initiation of substance use is influenced principally by environmental factors rather than genetic factors (Han et al, 1999).

Many studies have shown that there is a sequence of drug use from alcohol to cigarette smoking and ultimately leading to cannabis use. This indicates an influence of cigarette use on later use of cannabis. Not only the sequence of use but also the sequence of age as those who are more likely going to be cannabis users start using alcohol at lower ages, then become cigarette smokers and ultimately become the cannabis users which could be the 'gate way' to other hard drug use like cocaine and heroine (Green , 1980; Golub & Johnson, 1994; Chen & Kandel, 1995; Galanti et al, 1998; Tarter et al, 2006).

Additional studies have identified early initiation of cigarette use, deviant behaviour, poor parent-child communication, being offered drugs as well as pro-drug attitudes and intentions as predictive factors of initiation of cannabis use. Race is also a factor as Caucasian adolescents had the most risk factors, followed by Hispanics, Asians, and Blacks. Specific risk factors played more roles that are important for some groups than others depending on culture differences. In the same study, early marijuana use provided the strongest warning signal for all groups except Blacks, while exposure to drug offers increased the risk for all races except Hispanic youth. Poor communication with parents was particularly important for Hispanic and Asian adolescents, whereas doing poorly in school was a key predictor only for Asians. Social influences to use drugs and intentions to use them were the only predictors for Blacks. Although family disruption and limited parental education were associated with an increase in risk for white adolescents, and the opposite was observed in Hispanics and blacks (Ellickson and Morton, 1999).

A cohort study revealed that wide ranges of academic and social difficulties that occur during elementary school years (ages 7-9) predict the use of substances observed at ages 14-15. This study, among others highlights the effects of parental care and early school life on use of cannabis and other psychoactive substances (Hops et al, 1999).

Another study showed that, the initiation of cannabis use was predicted mainly by availability of drugs, peers' drug use, a more 'positive' attitude towards future drug use, and regular previous use of licit drugs like alcohol, tobacco and coffee. In that study cannabis dependence was predicted primarily by parental death before age 15, deprived socio-economic status, and baseline use of other licit drugs (Sydow et al, 2002).

The relationship between the change in level of paternal or maternal influence and the age of the child has also been examined. A study revealed that changes in maternal marital status when the child was aged between five and 14 years was significantly associated with increased risk of cannabis use. This effect increased with an increasing number of marital changes (Mohammad et al, 2006).

Similarly early parental support/bonding predicted less adult use of cannabis also was shown by the 12-year longitudinal study done in US. In the same study, the measurement model was analyzed to demonstrate a differential distribution and cumulative exposure to psychosocial risk and protective influences of adolescent drug use among ethnically diverse adolescent samples. A finding revealed that psychological distress, peer drug use, and adolescent drug use were significantly positively correlated with drug using behavior. In contrast, family, school, law abidance, and guilt were significantly negatively correlated with peer drug use and adolescent drug use. Therefore, this tells how protective school, stable family and other social norms like abiding to law and religious practices are protective against cannabis use (Galaif et al, 2007).

Moreover, another study that was done to examine the effects of sociodemographic, family, and peer relationship as predictors of illicit drug initiation revealed that the risk of initiating illicit drug use increased steadily from ages 12 to 21. High family conflict, low family bonding, and high peers' antisocial activities predicted higher risk of initiation across this developmental period. The effect of family bonding began to decline after age 18, while the effect of peers' antisocial activities began to increase after age of 15 years ( Guo et al, 2002).

In ascertaining the power of the environment in influencing use of cannabis, one study conducted with a sample of individuals from a low-income community in United States (US). The study revealed that residence in disadvantaged neighbourhoods could highly influence youths to be engaged in using of cannabis and other illicit drugs (Sunder et al, 2007). While this may lead us to believe the largest portion of cannabis users are from disadvantaged communities, another study which was also done in US revealed that the proportion of women living in the most advantaged neighbourhoods who reported drug use was more than twice that of women living in the most disadvantaged neighbourhoods (Wu et al, 2008). This calls for further studies to ascertain the influence of neighbourhoods with affluent economic status on the cannabis use and use of other licit and illicit drugs.

The study done to investigate the relationship between adolescent is current alcohol, tobacco, and marijuana use revealed that there is a statistically significant relationship between perceived neighbourhood and current use of tobacco and marijuana, but did not show statistically

significant relationship between perceived neighbourhood and current use of alcohol. Moreover the study revealed that there is a linear trend in participants' increased use of alcohol, then tobacco and ultimately to marijuana (Wilson et al, 2005).

The same issue of neighbourhood in relation to other factors influencing the initiation of marijuana was studied in a prospective study of youths from ages 10 years through to age 22 years and revealed that 22% of the participants did not exhibit the "gateway" sequence. This indicates that many but not all, drug users go through the same pattern of substance use. Among youths who exhibited gateway pattern, only delinquency was more strongly related to marijuana use than other licit drugs. The study also revealed that tendency to deviancy and drug availability in the neighbourhood promotes marijuana use (Tarter et al, 2006).

Another study that investigated the effect of education inequality at the neighbourhood-level revealed that living in a neighbourhood with high education inequality was associated with a greater prevalence of drinking and of smoking marijuana. The statistical analysis of data suggested that there might be a stronger relation between education inequality and marijuana use in neighbourhoods with low mean education than in neighbourhoods with higher mean levels of education (Galea et al, 2007).

A study conducted in Dar es Salaam among drug abusers also found that drug abuse by youths was associated with the following parental characteristics: divorce, separation, and widowhood, frequent change of parental figures, lack of parental understanding, lack of parental awareness of youth behaviour and lack of parental consistent rules (Mndeme, 2004) .

In a study done in the US to elucidate the natural history of drug use including cannabis (n=1160) it was found that none of study participants started using drugs above 29 years of age which is also the age at which most users cease to be cannabis users. This tells the age range at which cannabis use is likely to occur (Chen & Kandel, 1995).

Moza (2006) examined the knowledge of cannabis use among street children in Dar es Salaam. She found that all of the study participants admitted to know that cannabis use is illegal.

Therefore, this poses a challenge to investigate more the factors associated with the use of cannabis, as it seems that a majority of cannabis users know that it is illegal to use cannabis but still more youths engage in that behaviour. This once again was a motivator for this study to be conducted to explore in depth reality.

In Tanzania commonly abused substances include tobacco, alcohol, local brews, sleeping pills (e.g. Valium), petrol (inhaled), cannabis, khat (Mirungi), heroin and to a lesser extent cocaine, Mandrax and ephedrine. It is well known that substance use is an overwhelmingly male phenomenon. Female substance use mainly occurs among socially excluded women (e.g. commercial sex workers). Substance use is mainly a youth phenomenon with an average age of onset at 10 years or younger for substance use with the use of tobacco tending to precede the use of illicit substances (Moza, 2006).

Unfortunately, adolescents often do not see the link between their actions and the long-term consequences. They have a tendency to feel indestructible and immune to the problems that others experience. Using alcohol and tobacco at a young age increases the risk of using other drugs later. Some teens will experiment and stop, or continue to use occasionally, without significant problems. However, others will develop a dependency, moving on to more dangerous drugs and causing significant harm to themselves and possibly others. There is a tendency for adolescents to make heroes of those who use the hardest and the most dangerous drugs. To them what seems most dangerous to adults is often precise, most romantic and attractive to them (Moza, 2006)

For young people in supportive family and social environments, childhood and adolescence are ordinarily times of exploration, experimentation, growth and a healthy search for identity. But for those from "marginalized" environments, where emotional, physical and educational support are missing, childhood and adolescence are too often characterized by vulnerability, abuse and destructive risk-taking. This suggests that the family is an essential institution in moulding up an individual's personality (Cobb, 2001).

The study by Mbatia and Kilonzo (1996) explains that some young people report using drugs as a way to fit in with the right social group or because an older sibling, a friend or even a parent has offered them drugs. Family histories substance abuse behavior including drug abuse, having friends who use drugs or poor parental or social support have compounded vulnerability of youths to drug abuse risks. Thus home, school and pupil's personal characteristics with other factors, which are outside home and school are associated with drug abuse behavior.

### Conceptual framework.

This study is guided by a conceptual framework of delinquency behaviour in society developed by Regoli and Hewitt ,( 2000): which describes the determinants of cannabis use and use of other addictive drugs. Among the key determinants are;

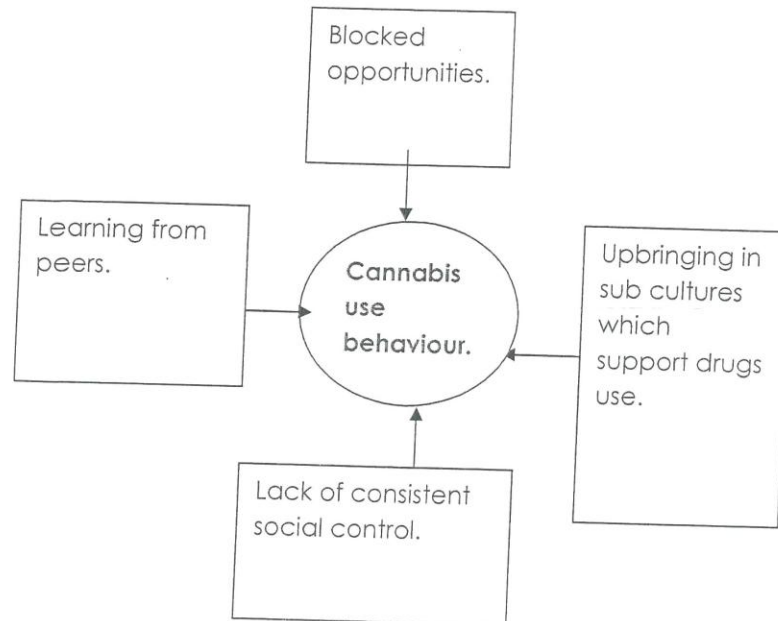
- i. *Blocked opportunities*: this determinant hypothesizes that drug use is the result of a youth's failure to succeed in the legitimate or illegitimate world. Hence, drug use is seen as deriving from failing to "make it" in conventional society as well as failing to achieve success in the criminal world. The person has failed twice and, consequently, retreats into a world of drugs.
- ii. *Learning from peers*: this determinant posits that, behaviour is a reflection of individuals' observations, which leads them to imitate others. Adolescents learn to use drugs from peers much as they learn other forms of social behaviour. Adolescent drug use then is positively reinforced by exposure to drug-using role models, approval of drug use by peers, and the perceived positive or pleasurable effects of the drug itself, to the extent that the individual's drug use is not negatively reinforced by bad effects either of the drug or by anti-drug statements or actions of parents, peers, or authorities.
- iii. *Upbringing in sub cultures that support drugs use*: This determinant argues that, youth begin to use drugs and continue to do so because of their involvement in social groups in which drug use is encouraged. For many adolescent's, membership in one of drug sub-culture many bring involvement in other drug sub-cultures, for example alcohol-using, marijuana-using, cocaine-using, heroin-using, or multiple drug-using sub-cultures. As an adolescent involvement in drug using sub-culture deepens, he or she becomes

increasingly socialized into the values and norms of the group, and drug using behaviour is likely to increase.

- iv. *Lack of consistent social control*: this aspect argue that delinquency and drug abuse are the result of an absence or weakening of the social control mechanisms that result in conformity. It also assumes that people are born amoral, that all youths are potentially delinquent and do the accepted thing only because they are bonded to society. If any of these elements of the social bond are weakened, juveniles becomes more likely to deviate and drug use become more likely.

This conceptual framework is the one that guided this study to investigate how those premises play a role in determining cannabis use behavior in Kinondoni municipal Dar es Salaam.

Figure 1: Conceptual framework of cannabis use behavior:



*Adapted from Regoli and Hewitt, 2000.*

### CHAPTER THREE: METHODOLOGY

#### Study area/setting.

This study was conducted in Kinondoni municipality of Dar es Salaam Tanzania. Dar es Salaam is chosen because it is the country's commercial capital with a cultural diversity due to in/out



migration of people with both urban and suburban context. The Kinondoni municipal was chosen at random among three municipalities in Dar es Salaam city.

### *Back ground information of the area*

Kinondoni Municipal Council forms the southern part of Dar es Salaam. It has an area of 531 square kilometres, includes both rural and urban areas, and is among the three Municipalities of Dar es Salaam. Kinondoni Municipality experiences a modified type of equatorial climate. It is generally hot and humid throughout the year with an average temperature of 29 degrees centigrade. The hottest season is from October to March, while the relatively cool season between March and May. The average annual rainfall is 1,300 millilitres. Humidity is around 90% in the morning and 67% in the afternoon influenced by the southwest Monsoon winds from April to October and Northeast winds between November and March.

### *Location*

Kinondoni Municipal Council is bordered by the Indian Ocean to the North East, Ilala Municipality to the South, Bagamoyo District to the North, Kibaha District to the West and Kisarawe District to the Southwest.

### *Population and Ethnic groups*

According to the 2002 census, the population of the Kinondoni municipality was 1,083,913. The growth rate is influenced by both the birth rate (about 4.1% per annum) and immigrants in and out of the district. Many people especially young people from up country, come to Kinondoni Municipality to look for employment in both public and private sectors. This trend has contributed much to the high growth rate. Average population density is 1,179 people per sq. km.

### *Economic Activities*

The major economic activities in this municipality are industry retail business and services, tourism, agriculture, fisheries and bee-keeping. Agriculture includes animal husbandry which is carried out over about 52,000 hectares of arable land. The main crops are cassava, sweet potatoes, rice, maize and legumes. Cash crops include cashew nuts, coconut, fruits and vegetables. Bee-keeping is carried out in Kawe and Kibamba divisions. The municipal has about 311 modern beehives and 62 traditional ones. There are about 1,701 fishermen with 370 canoes and boats. The three villages of Mbweni, Ununio and Kunduchi depend on fishing as the major source of income and livelihood.

It is estimated that almost 360,000 residents of Kinondoni Municipality are employed in both public and private sectors. Out of these 95% are employed in the private sector and the remaining 5% are employed in the public sector.

A working force of almost 200,000 people is self-employed. Many people are involved in small business, fisheries, livestock keeping and agriculture (including horti-culture). Only about 3% of the working force is engaged in subsistence agriculture in the 14 villages of the municipality. There are no big farms; small plots ranging from  $\frac{1}{2}$  acre to 6 acres, others make small gardens around their houses in which various vegetables and root crops like cassava and sweet potatoes are grown for family food and income-generating surplus.

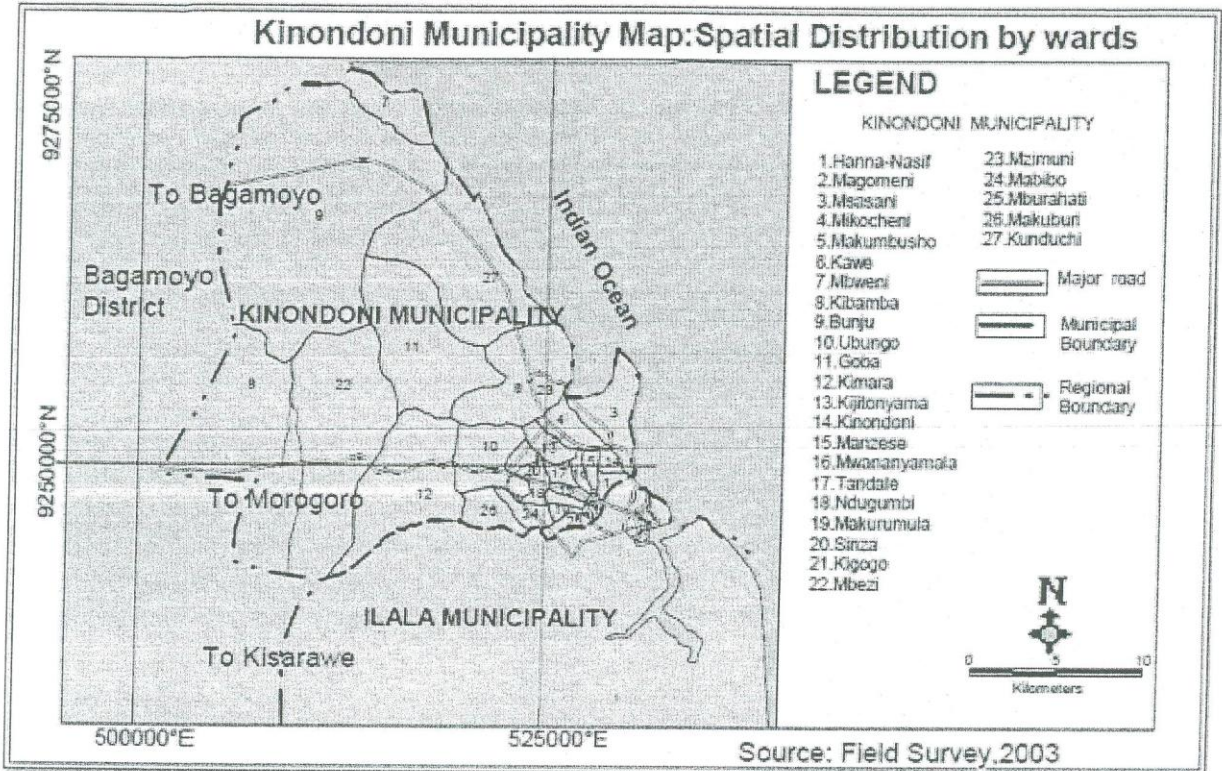


Figure 2: The map of Kinondoni Municipality

### Study design.

In order to be able to meet the stated objectives the study employed a qualitative study approach. The focus of this approach was to comprehend the participants' lived experiences rather than and achieving statistical power and generalizable or replicable findings (Creswell, 1998).

Qualitative approach was adopted in this study for the two reasons:

- First, the theoretical foundation of qualitative research assumes a personal view or way of perceiving and interpreting phenomena.
- Secondly, qualitative methodology was expected to assist gain a deeper understanding of the participants' ideas, opinions and feelings about the nature of cannabis use.

### Study population. /target population.

The target population included all youths who are using cannabis in Kinondoni municipal who are aged between 15 to 25 years.

### Sample.

A sample is a small group of respondents drawn from the population in which the researcher is interested in gaining rich in-depth information and drawing conclusions (Polit and Beck, 2004).

This study involved a sample of 12 participants including eight youths and four parents.

In this study the participants comprised of two categories of people:

- i. Youths aged 15- 25 years , who are experienced with cannabis use.
- ii. Parents whose children are known to be cannabis users.

### Sampling technique.

A purposive sampling method was used in this study.

Purposive sampling is defined as the selection of elements to be included in the sample on the basis of their special characteristics, expertise or experiences related to the purpose of the study to enable one to learn most (Vaus, 2001).

In this study, purposive sampling using a snowball technique whereby, once one study subject was identified, he/she assisted in directing the researcher to other subjects of interest (Salganik & Heckathorn, 2004).

### Sampling procedure.

At Magomeni ward, the ward leader granted permission to the researcher and introduced the researcher to the leader of a non-governmental organization that deals with youths in that ward. That leader of that organization assisted the researcher to locate the first participant to be involved in the study. Thereafter the researcher managed to get other informants purposively through snowball technique.

Practically, once the researcher introduced to a person of interest, he sought for consent from the interviewee then an appointment for interview was made. After each interview, the interviewee was asked to help in identifying other youths with the prerequisite characteristics of being a youth of 15-25 years and experienced in cannabis use.

After reaching saturation with the youths, the eighth participant the researcher asked the participant to assist locating a parent who qualified to be a study participant by having a child who is known to be a cannabis user. There after was used the snowball technique to get four parents until when he managed to get four parents as study participants.

#### **Methods of data collection.**

In this study, individual in-depth interview method of data collection only using semi structured interview guide (see appendix A) was employed as a data collection method due to the sensitive nature of the problem. Data was collected by using the tape recorder. Interviews allow the researcher to enter into the other person's worlds, to understand that person's inner perspectives and the meaning they make from those perspectives. It also gives an opportunity for interviewee to discuss issues that are perceived by him/her as secret or illegal (Vaus, 2001).

#### **Procedures for Conducting the Interview.**

In each interview session, probing questions involving open-ended questions were used. Some of the probe questions were outlined prior to the interview sessions. However, questions were improved during the interview and episodes were used in consecutive interviews thereby making the interviews semi structured and reiterative. Kiswahili language was the principal language used to conduct interview because it is the common language used by the majority of Tanzanians including study participants. The interviews were tape recorded after seeking consent from the interviewees. The data collection was done for one month period from February to March, 2009.

### Data analysis.

The content analysis approach was used as described by Graneheim and Lundman (2004). The content analysis approach argues that, the researcher must be familiar with all the interviews, and then extract major themes obtained from transcribed interviews, followed by application and then put into codes, categories, and themes (Graneheim & Lundman, 2004).

Data analysis for this study began at the commencement of the very first conversation and interview and continued concurrently throughout the data collection period implying continuous clarification, feedback and revisions.

Prior to analyzing the data with coding, the researcher transcribed the interviews verbatim and organized the stored data using software called Opencode Version 3.4.

The data were analyzed in the following way:

- Field notes, memos and transcriptions from the interviews were carefully read sentence by sentence. The researcher read all the material several times to become familiar with its content as presented by the informants.
- Then followed coding in the lines of the transcribed texts using central concept. Several rounds of coding were necessary in order to find ways of eliciting the meaning expressed by the study participant.
- The material was after coding re-read again and surplus, non-relevant material that did not appear to be related to the research topic was removed to make the material more manageable. This took the place in a process in which gradually more information was deleted.
- The first condensed and detailed texts from the field notes and transcripts were read again, the researcher now dealing with the second draft in which all the collected information deemed relevant to the study topic was included and in which all the information was eventually coded.
- There after the researcher went through the text repeatedly to check if any important information was left without coding.
- Then followed the step of organizing/synthesizing/grouping/categorizing the coded material under broader themes. At this point, the researcher worked back and forth moving pieces of detailed notes and lists of concepts to arrive at categories of coded themes covering the relevant meanings on a particular topic that had emerged.

-After all the material had been categorized under appropriate broader headings , the researcher had to move pieces of categorized material into documents where everything was dealing with a particular topic, and the writing process started.

-Thereafter it follows the detailed discussion of the presented issues in light of the literature related to the particular issue under discussion. The final product of this detailed discussion lead to conclusion of the findings and recommendations.

#### **Ethical considerations and clearance.**

The ethical clearance was sought from the research and publication committee of Muhimbili University of Health and Allied Sciences (See appendix E). There after the permission to conduct the study was sought from Kinondoni municipal government authorities (See appendix F).

The extreme sensitivity of the research topic and the personal, conversational nature of the discussion and interviews in this study highlighted many fundamental ethical research issues. Voluntary participation, free right of withdrawal at any time and assurance of anonymity and confidentiality were emphasized throughout the study.

The aim and purpose of the study were explained to all potential study participants (cannabis users and parents). Study participants gave verbal consent to participate in the study. The study opted for oral consent from the cannabis users and parents. This was opted because signing a paper or a contract between the researcher and a participant in accordance to western world gives assurance that ones rights as a study participant are ensured it was not perceived in the same manner in this study.

All participants were assured of anonymity and confidentiality. Information was given to all participants about the purpose of the study, identity of the researcher, and other relevant aspects. The decision to participate or not to participate was highly respected (See appendix C for the consent form).

The aim of the study was explained to potential study participants and the interviewee was asked for consent to participate in the study and recording of the discussions.

## **CHAPTER FOUR: RESULTS SECTION**

In this section, we will present issues related to socio-demographic characteristics of the study participants, potential predictors of cannabis use as well as perceived reasons for imminent cannabis use. In addition, we are going to look at the challenges faced by cannabis users in trying to abstain from using cannabis as well as perceived protective factors against cannabis use and public perception in general as far as cannabis use is concerned.

### *Socio-demographic information of respondents.*

The study participants were 12 in total, including eight youths and four parents. For the part of youths, none of them was married but three of them declared to have long time sexual partners. All of them admitted to have completed standard seven level of education. Among youths six of them were boys and only two were females.

With regard to employment status, none of them happens to have formal employment rather small casual works, which made them to earn living. The two female participants declared to depend on their boyfriends for day-to-day living because they did not have any other source of income. All study participants happen to be residents of Magomeni ward.

On parents' side, there were three mothers and only one father. All mothers happen to be housewives and the father is a retiree of Tanzania Railway Authority.



### ***Potential initiators of cannabis use.***

The interviews suggested that there are some associated factors, which can tell if an individual youth is going to be a cannabis user or not. Some of them are as elaborated below.

#### *Rejection of a child*

Rejection of the child was among the potential initiators of cannabis use as revealed in the study. This aspect was identified by cannabis users as the contribution which parents and guardians play in perpetuating cannabis use among youth as shown in the following quote:

*“My life now is nothing because every body refused to stay with me. My aunts kept on saying that, they will only take care of my younger sisters whom we are sharing a mother because they are having their respective father and told me that, I am not supposed to be staying there anymore.” [A female, 24 years old]*

#### *Delinquency behaviour*

It was revealed in the study that when a child is being delinquent in different settings including school and home, as characterized by the habit of beating friends this could be an indicative sign of the cannabis use behaviour later as shown in the following quotes :

*“I used to quarrel with my friends at school now and then which made my parents to decide sending me back to the village. [a Male, 25 years]*

*“Also the baby becomes so disobedient to the parents, what ever you are telling him, he do not understand, and later on he joins that kind of gang. ; whenever you assign him a task to do he refuses and sometimes he even cheats you many times.[a male parent 63 years old]*

*Lack of interest in school life.*

Lack of interest in general school life shown to be an initiator of cannabis use in future. And on top of lacking interest it was perceived that even if the parent exert force on the child it does not generate interest in the child as parents would wish. This was noted in the following quote :

*“ when I was at school as a pupil I used to like the school life but sometimes I refused to go at school , and if forced by the parents in normally move from home showing that i am going to school but in real sense I do not reach there.” [A male 18 years]*

The same was also reflected in the following quote;

*“Sometimes the child seem to be interested with school life but also join those gangs at school and ultimately loose interest in concentrating with education career, and trying to impose force to make him go to school he don't and as a result he goes to visit those gangs”[A female parent, 51 years old]*

*Disobedience to religious practices.*

Many respondents touched the phenomenon of disobedience in following religious practices in one way or another as a predictor of becoming delinquent and ultimately being the cannabis user. This concept can be viewed in the following quotes ;

*“It is a long time now since the last time I visited the church , as we used to be led by parents, therefore since from the time they died I found my self in different direction. We used to pray at home. In addition, it was necessary to go to the church every Sunday even if you miss the Morning Prayer you have to attend the evening one. But as for now you are just alone you feel tired and don't feel like going to the church; may be if it is during the night prayers following Easter day or Christmas day , but even that I rarely do.” [A female Christian participant, 24 years]*

This was also described by another participant as shown hereunder:

*“For the part of religious issues my parents took me to the madrasa when i was at primary school; there I completed reading ‘juzuu’ , there after life became more difficult so I decided to abandon religious life so that I can concentrate with normal life issues first. Therefore, it is a long time now since the last moment is used to involve myself in religious issues.”* [A male, Muslim participant]

#### *Loss of parent/s*

The loss of parents was perceived to be an initiator of cannabis use among youth some youths while for others it was due to other reasons, like being raised in a single parent, particularly the mother. The issues seem to be complex and predispose youths to cannabis use directly or indirectly as quoted below:

*“When my mother was alive everything was okay, my mother started to die following with my grandmother. I remember their deaths events followed one after another; it was like ninety-four and five when she died. After death of my grandmother, I was told by the aunts who are younger sisters of my mother to vacate from that house which used to be our home”.* [A female, 24years]

#### *Forcing unwanted career to a child*

This aspect was perceived to be among the perpetrators and predictors of delinquency among youth and ultimately being indulging in cannabis use. The one participant as quoted below only mentioned this aspect:

*“I was so interested in proceeding with a secondary education, but my father forced me to adopt the career of doing mechanical works at the garage, as a result we quarrelled with him then I fled from home and joined my friends in the ‘ghetto’. And there at ghetto life went on well as usual and I didn’t like even seeing my father until last year when I heard that he was admitted at Muhimbili Hospital then I met him after seven years of being away”.* [A Male, 25years]

*Lack of employment*

Several respondents mentioned in one way or another that lack of employment as among the initiators of cannabis use. One parent who said that also highlighted this characteristic:

*“Frankly speaking this street has got a lot of cannabis users. For youths of this street, it could be better if they are given jobs to do rather than being loose and idle. As you can see now many youths are roaming in streets aimlessly. The act of being in streets made them smoke more cannabis and they become more empowered to go and do many criminal offenses and they become ready to do any kind of task despite the risk associated with it.”* [A female parent, 44 years]

*Being raised in a broken family*

This was observed to be among the factors playing a role in use of cannabis. One family for example comprised of six children, every child having his own father. This indicates that inconsistent parenting styles may be associated with cannabis use behaviour as quoted below:

*“Our family comprised of six children, I have my elder brother who is having his own father, then I am the second born having my own father and then my young sister who is having his own father. My father used to stay just around this street and he used to have another wife somewhere there who is having the daughter whose name resemble mine as we inherited our late grandmother’s name ”* [a female, 24 years]

*Perceived reasons for imminent cannabis use*

Among the reasons for imminent cannabis use revealed by the study were getting rid of unpleasant feelings as well as having fun and get rid of shyness.

*Get rid of unpleasant feelings and having fun.*

It was discovered that a majority of participants in the study had some needs that make them crave for cannabis like tolerating life's hardships, increasing appetite for food and enabling them to work hard. This was reflected in one quote below:

*"Cannabis makes you feel active. Once you take it you feel strong, happy, you eat a lot and work hard. You can perform any task without exhaustion. But when I don't take cannabis, I feel very uncomfortable". [Male 22 years]*

*Getting rid of shame*

Some of the informants endorsed the aspect of the need to be free from shame as one of the reasons for imminent use of cannabis. Probing more on this, it was realized that the nature of occupation has a relationship with this as described by one informant whose duty was to visit dumping site for trashes (*jalalani*) to pick up whatever valuable thing found there to earn a living.

*"As you know life is very tough it is better that you smoke cannabis so that it makes you feel strong and brave so that you can look for money. As you know our deal is looking for scrapers so you have to go to 'jalalani' and challenging issue is beside there are a lot of passerby people who are looking at you. So following having that you does not feel shy at all, even though people are looking at you, you can just ignore them and keep on digging". [A male, 21 years]*

*Challenges in abstaining from cannabis use and precipitating factors of cannabis use.*

The study revealed many challenges that cannabis users experience in the course of being cannabis users and the challenges they face when trying to stop using cannabis. Some of the challenges are things like readiness to quit, challenges experienced by the cannabis user intending to quit as well as loss of hope. Also among the perpetuating or precipitating factors was existence of places where youths meet and smoke cannabis was identified as among the obstacles towards abstaining from cannabis use.

*Readiness to quit*

The study revealed that some cannabis users are willing to quit, but are so unsure of their abilities to do so. Among the study participants, interviewed majority of the participants indicated the desire to quit from the cannabis use. However, they are very unclear of the way to go to meet that desire as indicated in the quote below:

*“ it is very true that I need to be free from using drugs but I do not know what I can do, and I heard that the government is in a process of constructing a rehabilitation centre for drug abusers in Dodoma. For my opinions, I think it could be better if it was done here in Dar es Salaam so that we can benefit from that. I am saying so because majority of us cannot afford travelling to Dodoma it is too far ”. [Male 25 years]*

*Challenges anticipated in the process of quitting from cannabis use.*

Anticipated challenges were an obstacle towards abstaining from cannabis use especially for those who have been using cannabis to the extent of being dependent on it. Therefore, those challenges in cessation prevent cannabis users from pursuing a course of abstinence due to anticipated side effects.

*“May be let’s say when I wake up in the morning before I have tea, I feel extraordinary stomach ache which we call it ‘arosto’. But immediately after having it the stomach ache stops immediately and I become the same again. Therefore how can I manage to live without it, I think I am going to die.” (Female, 23 years)*

*Loss of hope.*

The study revealed that many cannabis users have given up all hope of having a good life and a successful future. Lack of hope plays a significant role in keeping them from stopping their cannabis use as shown in the following quote.

*“I have lost hope of being the good person in society. Much as I am the first born in our family and I am having three sisters, but as long as I am affected by drugs have withdrawn my self in the tasks of collecting house rent for my father’s house in turn I have delegated that to my sister instead”. [A male, 25 years]*

He also went further and comment on the aspect of giving up hope by saying:

*“Yes that is the way you smoke cannabis, you look for money for food. You are so blind of what is happening; what ever comes ahead of you it is okay.”*

*Visiting places where youths meet for taking drugs (maskani).*

This seems a challenge in attempts to abstain from cannabis use. This is because at those places you can get the drug of choice even if you do not have money to buy cannabis, you are likely to meet many drug abusers who are willing to offer you something you want. Availability of

cannabis is so reliable that if a person tries to stop and starts experiencing unwanted effects, they can easily obtain cannabis to relieve the symptoms as quoted below:

*“Whenever you go there at maskani you rarely miss people, if you are not there, others are there. Actually maskani never dry even during the night unless it is beyond midnight. Even if you wake up at four in the morning, you will find some people out there. I mean even though you do not find the ‘pusha’ you will find the users who has gone there to get some”* (Female, 23 years)

Among the aspects identified by the study participants to be protective factors were worries of being cursed by parents and protection offered by parents at home and teachers at school as elaborated below;

*Worries of being cursed.*

This aspect was raised as a way that made others not engaging in cannabis use behaviour. It was perceived that, some youths do not engage in cannabis use because their parents told them that they would be cursed and become mad when they try to smoke cannabis. This looks as protective opportunity as those who believe in that tends to follow it and ultimately become rescued in that problem. This aspect was seen in the following quote:

*“For the youth to decide to use cannabis it depend on the way parents communicate with their child , some of them tell their children that, if you test smoking cannabis you are going to be cursed and become mad as you will not have blessings from the parents and ancestor.s who died long time ago.”* [A male 25years]



*Parental protection and supportive school life*

The aspect of being raised in families whereby the parents play their role of moulding children seem to be among the protective factors. This phenomenon was observed in the study, as cannabis use was perceived to occur because of loose parental protection. Many respondents admitted that when they were growing up under close parental supervision, they did not engage in that risky behaviour. It was discovered in the study that all respondents seem to start abusing cannabis either when they were at the last year of primary school or after completion of primary school education.

This is more vividly noted by the commencement of cannabis use behaviour following loss of parental influence, as seen in the following quote below:

*“ I used to stay with my parents during the time when I was pursuing my primary school, after completing my primary school education my parents got a transfer to Dodoma, so I was left to stay for my uncle who is the young brother of my father. Parents of mine were so good but since from the time I used to stay with my uncle her wife sometimes denied me food with no justifiable reason so I opted to find other means to get food. This was a beginning of this kind of life I am experiencing”. (A male participant 25years)*

This is augmented by the fact discovered in the study that all respondents seem to start abusing cannabis either when they were at the last year of primary school or after completion of primary school.

*General perceptions in relation to cannabis use.*

The participants indicated some general comments as far as their perceptions of cigarette smoking in relation to cannabis use. The relationship between cigarette use and cannabis use together with behaviour change as a result of cannabis use as well as cost implication as far as cannabis use in relation to other drugs were elaborated as follows;

*Relationship between cigarette use and cannabis use.*

The relationship between tobacco use and cannabis use was also explored in the study and found that, the ones who use cannabis are using it simply as a coolant following cannabis smoking and others tends to mix the two drugs in order to diminish the perceived negative effects of cannabis. One respondent however perceived cigarette to be more hazardous to the lungs than even cannabis as indicated in the following quote below;

*“Cigarette smoking leads to coughs and those who mix tobacco with cannabis are at higher risk of having lung problems compared to the one who only use cannabis alone. In addition, you will see them having cough frequently. That is why I am using cannabis alone and it is safer as nobody at home can think I am using cannabis because people usually think you are cannabis user if you are seen smoking cigarette and you are a lady like me” [Female, 24 years]*

*Behaviour change as a result of cannabis use.*

This was revealed in the study that public perceive the cannabis users to be different in terms of behaviour secondary to cannabis use. This aspect is reflected in the following quotes below;

*“In most cases my relatives become angry as a result of my cannabis using behaviour, but our relationship remains good as i am their child I keep on doing my businesses.”*

He also went on by saying that,

*“ Actually your behaviour do not change so much as long as you are having a task to perform but the money you get from what ever you are doing can not be saved as you need to spend now and then for drugs ; therefore you have to look for more by any means ”*[Male, 24 years]

Another participant commented as follows regarding perceived behaviour change as a result of cannabis use.

*“Every body is individual and unique, one may smoke and refuse to eat meanwhile another person can eat excessively. Another one can decide to quarrel with people and others are so cool and live peacefully. Therefore all in all it depends on individual's mind”*. [Female, 23years]

Another individual commented that;

*“Following cannabis use, your brain becomes dormant you can even forget to clean up your own body”*. [Female, 24years]

One respondent related cannabis to sexual life experience when he related cannabis use with the total loss of interest in friends of the opposite sex as indicated in the following quote:

*“May be there is a behaviour change as before starting using cannabis, I used to be interested with girls and even used to approach them sometimes for sexual act , but after being a cannabis user from the time I was in standard seven, I stopped having any love affairs with women at all. So up to this moment I do not have a girlfriend and I don't even think of getting married in future.”*[Male, 21years]

*Cost implication in cannabis use.*

The study revealed that some cannabis users choose to use that addictive substance because of cost as cannabis is more affordable than other drugs like cocaine. Some participants expressed this as quoted below,

*“Cocaine is so expensive so you need to have more money, so if you do not have such, you will need to use cannabis instead”.* [Male, 25 years]

Another respondent added that

*“Because when you want cannabis it cost two hundred shillings, so by having one thousand you can have five pieces which are enough for the day. However, for the case of cocaine the dose you get for one thousand it just stay for an hour or so and then you need another dose while you do not have money for that. Therefore, you can take anything coming close to you and go to sell it including your own properties. So you need to have another one thousand or two that is why most people prefer cannabis over cocaine.”*  
[Male, 22 years]

## CHAPTER FIVE: DISCUSSION

### Discussion of the methods

As described in the methodology a qualitative approach, using in-depth enquiry was chosen due to the perceived complexity and sensitiveness of the topic to be studied and the fundamental need to acquire contextually grounded knowledge.

During the whole process of data collection, some challenges were observed and one of them is that many informants were less willing to share information openly with the awareness of being tape-recorded. Sometimes it was so difficult to write during the interview, as the discussion required the full attention of the researcher. The content was then as carefully as possible written down afterwards in attempts to cover the main aspects dealt with in the interview.

A particular valuable aspect of this method was the manner in which it facilitated closeness and private talks with the informants. The sensitivity nature of the research topic and the ways in which the informants who were cannabis users lived in society while exhibiting that behaviour were well explored via this methodological approach as it was emotionally rewarding while offering freedom of expression of individuals inner feelings and perceptions.

### *Transcription and analysis.*

The study collected a vast amount of information that required considerable time to be properly transcribed and analysed. The interviews and handwritten notes were compiled concurrently every day after completion of every interview.

The analysis of the data were extremely time consuming as the entire data set as the entire data set was read and re-read over and over again before it was manually coded and categorized. Organizing the large coded dataset into condensed meaning unit and later into categories and meaningful themes was a gigantic process that took long time to complete.

Utilization of the software programme open code to sort and classify different codes made re-organizing the work less difficult. The difference experienced by using the computer programme was that it was much easier to store the text files and to move back and forth between files, hence gaining an overview of how the data was organized and structured. At some point, the data seemed stray from the focus as the enormous amount of data were generated from different people with different experience of cannabis use so the researcher tried to ensure proper systematic analysis of the large amount of data.

*Summing up experiences with the study design*

Despite the challenges encountered both during the data collection and analysis, the overall experience of the methodological approach opted for in the study is very positive and constructive. The study design enhanced understanding of the study phenomenon, and provided the researcher with a unique opportunity to gain a thorough understanding of the study topic than could be gained with a less comprehensive study design like the descriptive quantitative study design. A number of issues which were not expected were learnt during the study which includes the approach to be utilized when studying a behaviour which is declared abnormal in the society; also the approach to be used in studying a behaviour which is illegal and studying people who are known to be so dangerous in the public. The new knowledge was gained through interactions with the study informants by questioning how different social aspects play a role in cannabis use behaviour in society and different public perceptions toward cannabis use and other illicit drugs.

*Credibility of the study findings.*

In this study, the credibility of the study findings is primarily linked to the manner in which the researcher sought to address the study topic in order to make sure that the multiple realities of the subject under study is captured well. The researcher took major efforts to ensure understanding and description of the informants' personal reality. Closeness approach that the researcher took of getting used to every informant before data collection eased the credibility of the process. However, there is no bias free study and awareness of interaction between the informants' perspectives and the researcher's pre-understanding is vital whenever we think of credibility.

Researcher was able to interact much with the study participants. By being social and having the age similar to the target population's age group also increased the credibility, as those participants prefer to share issues with someone whom they could make him a friend.

Despite that, still some of the potential participants declined participating in the study by because they concluded the researcher was from the police. This was solved by the approach of snowballing because following conducting interview with one then he/she proposed and assisted in finding the other colleague for interview. The interview was done at the place where the informant seemed to be free and willing have the discussion with the researcher.

During the interviews, the researcher was actively probing to countercheck the responses and to validate findings from the informal talks. Continuous modification of the interview guide enhanced the relevance and hence the credibility of the findings. The data, which were collected from both sex including male and female also added to the credibility as perceptions and experienced from both sexes, were captured and presented.

*Applicability/transferability of the study findings.*

Much as the study population is not representing all youths in the population due to the target population of the study, the contextual information provided in this study will further allow readers to judge the extent to which the study findings are applicable to other contexts.

As for any qualitative research study, the number of participants in this study is too small to be representative of the population and therefore cannot be subjected to statistical analysis so the transferability is only limited by the nature of the context in which the reader wants to refer.

### Discussion of the findings

The following is the discussion of findings based on the interviews. The researcher did a further review of literature on particular themes and issues emerging from the findings as an attempt to elaborate them.

#### *Potential predictors of initiation of cannabis use.*

There are number of factors which seem to have contributed to initiation of cannabis use among them are a child being rejected, lack of interest in school life, a child exhibiting delinquent behaviour , being forced to choose undesirable career, lack of employment, loss of parents/guardians as well as being raised in broken families.

The findings of the study correlates with many studies like the one by Ellickson and Morton whose study revealed that early initiation of cigarette use as well as deviant behaviour and poor parent-child communication are among the initiation factors of cannabis use among youths (Ellickson & Morton, 1999).

For the aspect of lack of interest on religious practices the study revealed that majority of youths who are using cannabis have minimal adherence to religious practices. Also this concept seem to emanate following commencement of cannabis use, therefore as far as the study is concerned it seem lack of interest to religious practices cannot predict or indicate the occurrence of such a behaviour rather it is the outcome of it. Concisely what I can say is, if targeted emphasis is put on fostering adherence to religious practices among youth, this approach could be of help in prevention of cannabis use among youth as in Tanzanian community almost everybody has some elements of believing in religious issues.

Also the difference in gender was observed in the study as only two females was found to be the study participant among youths who are cannabis users and it was so difficult to get another as it seem that girls do not have any network of cannabis users of the same sex. This is reflected in some studies like the one that was conducted in Ontario province of Canada, which revealed that, males have a higher rate of onset of using most drugs than girls. Also in that study it was found that male drug users were significantly less likely than female users to quit using a drug (DeWit et al 1997).



This suggests that there are structural factors and family related factors, which play a role in initiation of cannabis use among youths. More over in circumstances where orphans are due because of death of their parents, special care should be given to orphans as they comprises of vulnerable group of the population.

*Relationship between cigarette use and cannabis use.*

The findings revealed that the cannabis users in most times do smoke tobacco for reducing the magnitude of the effect of chemical component of the cannabis. Further more the study did not reveal direct relationship between cannabis use and cigarettes smoking and on top to that, some respondents even perceive it to have negative effect so they rather prefer cannabis alone. This is contrary to the findings from other studies among adolescents which reveals that addiction to nicotine determined the current consumption of cannabis (Kohn et al, 2004; Duncan et al, 1998). Much as there seem contradictory opinions still the challenge arise on methodological approaches and tools of collecting data sometimes leads to contradictory findings when assesing selfreported behaviour as reflected by one researcher who investigated the inconsistencies in adolescents' self-reports of initiation of alcohol, tobacco and cannabis (Engels et al, 1997).

The perception which the cannabis users have in respect to cigarette smoking could have devastating effect as to them they usually take it as a coolant; therefore to them they do not perceive it to be having any bad effect. This perception could make them at more risk of different kind of cancer including lung cancer as literature suggests that the cannabis smoke contain the cancer causing agents in content of 70% more benzopyrene and 50% more carcinogenic polyaromatic hydrocarbons than does the smoke from regular cigarettes (Cohen, 1981).

*Challenges encountered in abstaining from cannabis use.*

It seems that many youths, at some point in time, experience the desire to quit cannabis use, but they seem to face many challenges, which put them off. Among the challenges they experience are withdrawal symptoms experienced like feeling drowsy, lethargic and stomach ache. This makes them imagine if they decide to quit they will feel worse. This calls for targeted intervention that can motivate them in moving through that unwanted experience. Therefore, this stands as an opportunity towards assisting youths who are motivated to quit from addictive behaviour to be given opportunity to get help with managing those unpleasant symptoms.

An additional challenge is loss of hope among the cannabis users, as they do not see any degree of hope ahead of them, which creates a big obstacle toward successful cessation. For any intervention to be effective, adequate psychotherapeutic procedures have to be followed to inculcate the element of hope that they can.

The families and the society should play their role in motivating youths who are already using cannabis and other illicit drugs to change their way of living. At this juncture not only those who have indulged themselves in but also those who have never tried in order to prevent them from becoming cannabis users.

The concept of cessation is so complex as some studies suggest that toward the age of twenty nine the likelihood of ceasing using cannabis is large. One study done to assess predictors of cessation of marijuana and come up with the findings that, the most important determinants of cessation are the phenomenology of marijuana use that tends to end at around twenty nine yrs also becoming involved in social roles as well as experiencing depressive symptoms and portraying deviance behavior in the society. Frequent users as well as those who started using early and those who use illicit drugs other than cannabis are more likely to continue the cannabis use. Using cannabis for social reasons accelerates cessation and using it in order to change one's mood tends to decelerate cessation process. In addition, becoming pregnant and a parent are the most important social roles leading to marijuana cessation for women (Chen & Kandel, 1998).

The notion that cannabis use tends to decline or stop around the age of 29 years was not directly observed in the study. However, the youth participants painted a picture that the general public was now aware of the body changes that had taken place as a result of cannabis use. The perception the youth had at a time of interview was different from the one they had when they were still new users of cannabis. Some of the youths expressed the desire to quit but were unaware of what to do to attain that goal. The concept of change in social roles as a predictor of cannabis use cessation need to be explored further.

*Perceived protective factors.*

The study managed to gather many protective factors possessed by youths and the society. Some of protective factors identified to be playing a role in prevention of occurrence of cannabis use behaviour were having good parental care and being a student as well as some beliefs like worries of being cursed. This is in line with other studies that support the role of parental care towards making youth free from any criminalities and unwanted behaviour in the society. (Ljubotina et al, 2004; Ellickson and Morton, 1999). The findings on the role of parents coincides with many studies and seem to show that parents have a paramount important role in moulding youths who are to become adults and parents in future by showing them what is good and bad to learn (Martino S, et al , 2009; Mndeme, 2004).

The concept of parental care was also studied. Some studies on protective factors discovered that having a mother house wife was even more protective than even having a stable family alone where both parents are very busy and only meet with their children at rare intervals (Challier, et al 2000).

From the study findings, it seems that parents do not play their role to the maximum level in rescuing children from the use of illicit drugs and other odd behaviour as interpreted from the relationship of study participants who are cannabis users and their parents. This highlights a need to study the contribution of urban versus rural life since in Tanzanian culture especially in rural settings, a child belongs to the clan and every adult in that clan has a duty to monitor the discipline of all children in that clan.

Another big protective factor discovered is being close to religious practices. This study described that being close to religious practices tends to protect the child from being the user of cannabis. Actually, studies as the one conducted among a predominantly Mexican and Mexican American adolescents, revealed that religiosity protected against lifetime alcohol, cigarette, and marijuana use. When religiosity was controlled the findings showed similar substance use outcomes. Therefore, that interaction effect suggested that may be that effect operates more strongly in some religion than others (Marsiglia et al, 2005).

Concerning the role of school life, the study revealed that cannabis use behaviour started after completion of primary school. This tells that being at school is an opportunity to be safe and protected from using any illicit drug.

Actually more studies are needed to explore the role of education versus age. Possibly the fact could be explained by adolescence age, rather than school level since standard seven coincides with the age of adolescence around 13 years where we expect youth to be interested in testing and learning different types of behaviour.

In general, those protective factors if properly and technically utilized could bring the element of success towards having cannabis free youth community.

#### *General perceptions in relation to cannabis use.*

Some of the respondents noted some changes in their own behaviour as a result of cannabis use. Among the changes mentioned were being lazy, forgetting to wash your own body, reluctance to eat or eating too much and even engaging in criminal activities and deviating from religious beliefs.

However, some respondents pointed out that they experienced no direct behaviour change because of using cannabis. The participants related cannabis use with behaviour change more indirectly as they believe that a behaviour someone portrays usually comes from learning from people you meet with at '*maskani*' but is not associated with chemical component of cannabis.

---

Another important element picked up during the interviews is the element of cost, as youths prefer cannabis to other substances due to the fact of cost difference. They said they would prefer cocaine if they had enough money and currently are using cannabis because of inability to buy adequate doses of cocaine per day. This needs to be investigated more because it shows the likelihood of increased numbers of youth likely to be users of hard drugs like cocaine and heroine if they manage to secure a reliable source. When we reach that point, the society is likely to experience more problems than presently experienced.

Public perceptions in relation to cannabis use vary as some people deny or downplay bad effects of cannabis use. This controversy is also demonstrated by the debate in the United States concerning legalisation of the use of cannabis. As according to American National Organization for the Reform of Marijuana Laws(NORML), “cannabis use for adult recreation, cannabis use for medical use, cannabis as an industrial crop, and (the drug’s) related things are extremely popular and should be taxed and properly regulated” (Daily news newspaper of 2<sup>nd</sup> March, 2009). So this statement, among others, indicates how debatable the use of cannabis is. This reflects the dilemma the general public has since some elites who support its use and others who do not it.

Another opinion, which was noted in America at one point, was from the agents of control for licit drugs (like cigarette and alcohol) were scientists, and health personnels at large. In contrast, the agents that enforce illicit drug laws are the police, prosecutors, courts, and customs officials. This differing approach in prevention of drugs makes the general preventive effect of the criminal law to be activated through the threat of punishment while forgetting an approach of setting educative and moral standards of permitted behavior which is having a life long effect for the public (Erickson, 1993).

The acceptability of drug-use behavior has varied widely across time, culture, and the type of substance. It is evident that the world may become increasingly over dependent on the law and neglect other alternatives of social control that are usually more effective or less costly in reducing the possible harmful effects of drug use. In a nutshell in my opinion, I always believe that the law is a powerful instrument but also dull instrument of controlling social behavior.

**LIMITATIONS OF THE STUDY**

Much as the study was able to meet the intended objectives, it has the following limitations:

First and foremost the inclusion criteria was the limitation because those who use only cannabis are rarely to be found in communities as most combine cannabis and other illicit drugs like cocaine and heroine. Therefore, the investigator could not manage to do laboratory testing to exclude this so he relied on what the respondent say. Therefore, the investigator cannot be certain if those included are the ones who qualify to be the study participants or not; but this limitation is also enlightened by literature that the person who is termed as daily user of cannabis is also synonymous to the multiple drug user (Clayton & Ritter, 1985).

Another limitation of this study was the sample size. Much as in qualitative research, the small sample size is justified, but the size of the sample tends to make this study limited for generalization to the wider population. However, we believe that the results that are based not on one subject but from both individual cannabis users and even parents of the users have a considerable relevance for cannabis use prevention programmes.

Additionally, not only sample size but also the sampling procedure that made the study participants to be recruited from an urban setting only is also the limitation as an opinion of youths coming from urban setting may differ from an opinion of youths from rural settings.

## CONCLUSION AND RECOMENDATIONS

### Conclusions.

The study concludes that there are many factors, which interplay to predispose youths be engage in cannabis use and use of other illicit drugs. Majority of those factors seem to originate within families and at society level. In addition, parental care should be emphasized in all circumstances starting from a religious point of view. In addition, I can conclude that if emphasis is put on having stable families and better parenting the society is likely to have better and morally sound youths.

Additionally society has all potentials of shaping the culture, which will enable children to be brought up in conducive social environments. If all people could take the role of advocating for better nurturing of children in totality by reviving to our African style of caring for children whereby the role of controlling unwanted behavior was vested to the whole community. More over the most vulnerable group of children who are usually also very disadvantaged, like orphans should be given special care by the society rather than abandoning them.

### Recommendations.

The study raised some important issues related to cannabis use among youths which researchers and practitioners might take note. The recommendations involve practice and research as follows:

#### *Recommendations for practice.*

1. To prevent occurrence of cannabis use behavior I can recommend that, families and the society should play their role in understanding and utilizing evidenced based approaches in controlling of cannabis use among youth.
2. Also maximizing potentials available in the society and making use of all available opportunities to eradicate the problem in the society as the study revealed that some

youths are in need of quitting from cannabis use and use of other illicit drugs but the challenge is lack of motivation and appropriate support.

3. There is a need to have more and clearly located drop-in/youth centers with adequately trained psychotherapists/mental health practitioners who can offer motivational talks and supportive counseling to those who are willing to quit the use of cannabis.

***Recommendations for research.***

1. The results of this study bring us to the point of recommending conducting further research on the occurrence of cannabis use within families as the study revealed that a behavior seem to emanate while the child is under parental care.
2. In addition, I would recommend the larger study be conducted in developing country communities, like Tanzania, that will involve rural and urban youths to test the role of every factor identified to be associated with cannabis use.



## References;

- Arseneault, L., Cannon, M., Witton, J., & Murray, R. (2004). Causal association between cannabis and psychosis: examination of the evidence. *The British Journal of Psychiatry*, *184*, 110-117.
- Boden, J., Fergusson, D., & Horwood, L. (2006). Illicit drug use dependence in a New Zealand birth cohort. *Aust NZ Journal of Psychiatry*, *40*, 156-163.
- Challier, B., Chau, N., Predine, R., Choquet, M., & Legras, B. (2000). 'Associations of family environment and individuals factors with tobacco, alcohol, and illicit drug use in adolescents'. *European Journal of Epidemiology*, *16* (1), 33-42.
- Chen, K., & Kandel, D. (1998). Predictors of cessation of Marijuana use: An event history analysis. *Drug and Alcohol Dependence*, *50* (2), 109-121.
- Chen, K., & Kandel, D. (1995). 'The natural history of drug use from adolescence to the mid-thirties in a general population sample'. *American Journal of Public Health*, *85* (1), 41-47.
- Clayton, R., & Ritter, C. (1985). 'The epidemiology of alcohol and drug abuse among adolescents'. *Advances in Alcohol and Substance Abuse*, *4* (3-4), 69-97.
- Cobb, N. (2001). *The child: Infants, Children and Adolescents*. loss angels: Mayfield Publishing Company.
- Cohen, S. (1981). Adverse effects of Marijuana: Selected issues. *Annals of the New York Academy of Science*, *362*, 119-124.
- Cresswell, J. (1998). *Five qualitative traditions of inquiry*. In *Qualitative inquiry and research design. Choosing among five traditions*. London: SAGE Publications.
- Daily, N. (2009, March 2nd). "US states mull weed to ease deficit pain". p. 12.
- DeWit, D., Offord, D., & Wong, M. (1997). Patterns of onset and cessation of drug use over early part of the life course. *Health Education and Behaviour*, *24* (6), 746-758.
- Dorfman, S., & Smith, S. (2002). Preventive mental health and substance abuse programs and services in managed care. *The Journal of Behavioural Health Services and Research*, *27* (3), 233-258.
- Driss, M., & Nadia, K. (2008). How prevalent are mental disorders in developing countries? *Annals of General Psychiatry*, *7* (suppl 1), 31.

- Duke, P., Pantelis, C., & McPhillips, M. (2001). Co-morbid non-alcohol substance misuse among people with schizophrenia: Epidemiological study in central London. *British Journal of Psychiatry*, 173, 509-513.
- Duncan, S., Duncan, T., & Hops, H. (1998). 'Progressions of alcohol, cigarette and Marijuana use in adolescence'. *Journal of Behavioural Medicine*, 21 (4), 375-388.
- Ellickson, P., & Morton, S. (1999). Identifying Adolescents at risk for hard drug use: Racial/ethnic variations. *Journal of Adolescent Health*, 25 (6), 382-395.
- Elly, H. *Drug Trafficking, Abuse and the Law in Tanzania*. University of Dar es salaam: unpublished Thesis,.
- Engels, R., Knibbe, R., & Drop, M. (1997). Inconsistencies in adolescents' self-reports of initiation of alcohol and tobacco use. *Addictive Behaviours*, 22 (5), 613-623.
- Erickson, P. (1993). 'The law, social control and drug policy: Models, factors and processes. *International Journal of Addictions*, 28 (12), 1155-1176.
- Galaif, E., Newcomb, M., Vega, W., & RD, K. (2007). Protective and risk influences of drug use among a multiethnic sample of adolescent boys. *Journal of drug education*, 37 (3), 249-276.
- Galanti, L., Manigart, P., & Dubois, P. (1998). Tobacco smoking and alcohol and drug consumption in a large, young healthy population. *Archives of Environmental Health*, 53 (2), 156-160.
- Galea, S., Ahern, J., Tracy, M., Rudenstine, S., & Vlahov, D. (2007). Education inequality and use of cigarettes, alcohol and marijuana. *Drug and Alcohol Dependence*, 90 (suppl1), s4-15.
- Golub, A., & Johnson, B. (1994). The shifting importance of alcohol and marijuana as gateway substances among serious drug abusers. *Journal of Studies on Alcohol*, 55 (5), 607-614.
- Graneheim, U., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse education today*, 24, 105-112.
- Grech, A., Takei, N., & Murray, R. (1998). Comparison of Cannabis use in psychotic patients and Controls in London and Malta. *schizophrenia research*, 29, 22.
- Green, B. (1980). Sequential use of drugs and alcohol: A reexamination of the stepping stone hypothesis. *American Journal of Drug and Alcohol Abuse*, 7 (1), 83-99.

- Green, L., & Kreuter, M. (1999). *Health Promotion Planning: An Educational and Ecological Approach*, (3rd ed.). Mountain View: Mayfield.
- Han, C., McGue, M., & Iacono, W. (1999). Lifetime tobacco, alcohol and other substance use in adolescent Minnesota twins: Univariate and multivariate behavioural genetic analyses. *Addiction*, *94* (7), 981-993.
- Hops, H., Davis, B., & Lewin, L. (1999). The development of alcohol and other substance use: A gender study of family and peer context. *J Stud Alcohol Suppl*, *13*, 22-31.
- Kaaya, S., Kilonzo, G., Matowo, A., & Semboja, A. (1992). Prevalence of substance abuse among secondary school students in Dar es salaam. *Tanzania Medical Journal*, *7* (1), 21-24.
- Kendler, K., Gardner, C., Jacobson, K., Neale, M., & Prescott, C. (2005). Genetic and Environmental influence on illicit drug use and tobacco use across birth cohorts. *Psychol Med*, *35*, 1-8.
- Kilonzo, G. (January 20-24, 1992). Reduction of demand for dependence producing drugs: Tanzanian experience. *A paper presented at the international conference on drug abuse control in Eastern and Southern Africa*. Arusha International Conference center, ARUSHA.
- Kohn, L., Kittel, F., & Piette, D. (2004). Peer, family integration and other determinants of cannabis use among teenagers. *Int J Adolesc Med Health*, *16* (4), 359-370.
- Ljubotina, D., Galic', J., & Jukic', V. (2004). Prevalence and risk factors of substance use among urban adolescents: questionnaire study. *Croatia medical journal*, *45* (1), 88-98.
- Marsiglia, F., Kulis, S., Nieri, T., & Parsai, M. (2005). God forbid! Substance use among religious and non-religious youth. *American journal of Orthopsychiatry*, *75* (4), 585-598.
- Martino, S., Ellickson, P., & McCaffrey, D. (2009). Multiple trajectories of peer and parental influence and their association with the development of adolescent heavy drinking. *Addictive behaviours*, *34* (8), 693-700.
- Martino, S., Phyllis, E., & Daniel, M. (2009). Multiple trajectories of peer and parental influence and their association with the development of adolescent heavy drinking. *Addictive behaviours*, *34* (8), 693-700.
- Mbatia, J., & Kilonzo, G. (1996). *Drug abuse prevention, a Handbook for educators in Tanzania* (1st ed.). Dar es salaam, Tanzania: Health education unit, Ministry of Health.

- Menezes, P., Johnson, S., & Thornicroft, G. (1996). Drug and alcohol problems among individuals with severe mental illness in south London. *British Journal of Psychiatry*, 168, 612-619.
- Merikangas, K., Stolar, M., & Stevens, D. (1998). Familiar transmission of substance use disorders. *Archives of general psychiatry*, 55, 973-979.
- Mndeme, E. (2004). *Parental Factors Associated with Drug Use among youths Attending the Psychiatric Unit at Muhimbili National Hospital*. Unpublished MMed Thesis: University of Dar es Salaam.
- Mohammad, R., Jake, M., Konrad, J., Abdullah, A., Gail, M., & Rosa, A. (2006). Changes in maternal marital status are associated with young adults' cannabis use: evidence from a 21 year follow-up of a birth cohort. *International Journal of Epidemiology*, 35 (3), 673-679.
- Morse, J., & Richards, L. (2002). *Read me First: For user's to Qualitative Methods*. London: SAGE Publications.
- Moussaoui, D., & Kadri, N. (2008). How prevalent are mental disorders in developing countries? *Annals of general psychiatry*, 7 (1), 31.
- Moza, M. (2006). *Attitude of street children towards drug abuse*. Unpublished thesis: University of Dar es salaam.
- National Drug Control Master Plan of 2002-2006 (2001)*. Tanzania Inter ministerial Drug Control Commission. United republic of Tanzania: Dar es salaam.
- Ndonde, S. (1996). *Adolescent identity and the use of drugs, a case study from Tanzania*. Unpublished PhD thesis: Thesis presented to the University of Manchester UK.
- Polit, D., & Beck, C. (2004). *Nursing research: principles and methods (7th ed.)*. Philadelphia: Lippincott Williams and Wilkins.
- Regoli, R., & Hewitt, J. (2000). *Delinquency in society (4th ed.)*. Boston, USA: Hill co.
- Rhee, S., Hewitt, J., Young, S., Corley, R., Crowley, T., & Stallings, M. (2003). Genetic and environmental influence on substance initiation, use and problem use in adolescents. *Archives of general psychiatry*, 60, 1256-1264.
- Salganik, M., & Heckathorn, D. (2004). Sampling and estimation in Hidden Populations Using Respondent-Driven Sampling. *Sociological Methodology*, 34, 193-239.

- Samuel, A. (2003). The prevalence of Alcohol, Cigarette and marijuana Use among Ghanaian Senior Secondary Students in an Urban Setting. *Journal of ethnicity in substance abuse* , 2 (1).
- Sunder, P., Grady, J., & Wu, Z. (2007). Neighbourhood and individual factors in marijuana and other illicit drug use in a sample of low-income women. *American journal of community psychology* , 40 (3-4), 167-180.
- Tarter, R., Vanyukov, M., Kirisci, L., Reynolds, M., & Clark, D. (2006). Predictors of Marijuana use in adolescents before and after licit drug use: Examination of gateway hypothesis. *American journal of Psychiatry* , 163 (12), 2134-2140.
- Vaus, D. (2001). *Research Design in Social Research*. London: SAGE publications.
- Voirin, N., Berthiller, J., Benhaim-Luzon, V., Baniol, M., Straif, K., Ayoub, W., et al. (2006). Risk of lung cancer and past use of cannabis in Tunisia. *Journal of Thoracic Oncology* , 1 (6), 577-579.
- Von Sydow, K., Lieb, R., Pfister, H., Hofler, M., & Wittchen, H. (2002). What predicts incident use of cannabis and progression to abuse and dependence? A 4year prospective examination of risk factors in a community sample of adolescents and young adults. *drug and alcohol dependence journal* , 68, 49-64.
- WHO. (1994). *Substance use among street children in Mwanza, Tanzania*. Geneva: KULEANA-WHO/PSA Collaborating site.
- WHO. (1986). *Young people's health-a challenge for society: Technical series report*. Technical report series.
- Wilson, N., Syme, S., Boyce, W., Battistich, V., & Selvin, S. (2005). Adolescent alcohol, tobacco and marijuana use: The influence of neighbourhood disorder and hope. *American Journal of Health Promotion* , 20 (1), 11-19.
- Wu, H., Eschbach, K., & Grady, J. (2008). Contextual influences of poly drug use among young, low-income women: Effects of Neighborhood and personal Networks. *American journal on drug addiction* , 17 (2), 135-144.

## APPENDICES:

### APPENDIX A: INTERVIEW GUIDE FOR CANNABIS USERS- English version.

Introduction and greetings.

Time duration for an interview. One hour.

#### 1. Personal information.

**Hint:** build rapport and put the informant at ease.

Discuss on issue of consent form and ethical procedure adhered to.

Document sex, age, religion, occupation, level of education, marital status, tribe, location and place of the interview.

Assign code number to the participants.

Can you please describe the place you were born , your life in short , including your education history

Do you have anybody who supports you or are you and the nature of occupation you are doing including your family structure and the nature of relationships you have in your family.

#### 2. Identification of risk factors.

How can you describe your life when you were at the primary school? In terms of relationship with your friends and teachers. Did you like school life?

Please can you explain to me the frequency and belief towards religious issues? frequent?

Did you live with both parents when you were the child? if not can you describe a bit what happened to make you stay with a single parent or none of them? If your parents were separated, can you describe the phenomenon that led to that?

Can you please tell tell about the life you father and mother used to have when you were young including their level of education and occupation?

Do you smoke cigarette and if so can you describe the pattern of your smoking behavior? If so what started first cigarette of cannabis? In addition, if you are smoking cannabis can you please describe the pattern you take in cannabis use the amount and other issues associated with?

Can you please describe in brief the general behaviour you had before starting using cannabis and after starting using it, is there any difference if so can you please describe it in short?

Among those descriptions of behaviour deference you have described do you associate with cannabis use or not?

**3. Reasons that facilitate initiation of cannabis use.**

Can you tell the reasons that made you start using cannabis? Did you have friends who smoke cigarette and drink alcohol in the past? And did you have siblings and other elders who smoke cigarette and cannabis at the homestead where you were raised? Do you have neighbours who smoke cigarette and/ or cannabis and other substances of abuse.

**4. Perceptions towards cannabis use.**

How can you describe the use of cannabis including their effects and what people say about it? Do you think it is good for you or bad and how do you perceived it to be in your life?

**5. General opinions.**

What opinion do you have on use of cannabis and other illicit drugs? What should be done? If you are given the opportunity to give your advice to the government, what could you say in relation to your knowledge and perception towards it?

**Thank you!**

INTERVIEW GUIDE FOR CANABIS USERS- Swahili version.

**Utangulizi na salamu**

Muda wa majadiliano: **saa moja.**

**1. Maelezo binafsi.**

Angalizo: jenga hali ya kuaminiana na kumuweka msimulizi kuwa huru.

Ongelea kuhusu swala la hati ya kuridhia na taratibu za kimaadili ulizopitia kufika kwake.

Pata maelezo ya jinsia, ajira, dini, umri, kabila, elimu, hali ya ndoa, sehemu ya mahojiano na maelezo mengine yatakayoonekana na umuhimu. Mpe mshiriki namba ya uficho na jina la utani/uongo.

Uliza kuhusu mahusiano yake na familia na wapo wangapi katika familia yao.

**2. Utambuzi wa tabia hatarishi au visababishi.**

Unawezake kuelezea maisha yako ulipokuwa shule ya msingi kuhusiana na mahusiano yako na marafiki; vipi uliyapenda maisha ya shule?

Je vipi msimamo wako kwa upande wa maswala ya dini, huwa unakwenda kusali na mara ngapi kwa kawaida?

Vipi uliishi na wazazi wako wote wakati ukiwa mdogo? kama sio ni sababu gani zilizopelekea hali hiyo kutokea?

Naomba unielezee maisha na mahusiano ya wazazi wako ulipokuwa mtoto ukielezea kiwango chao cha elimu na kazi zao walizokuwa wanafanya.

Vipi huwa unatumia sigara? Kama ndio naomba unieleze uzoefu huo na mahusiano na bangi; kipi kilianza kwanza na unaweza kunielezea ni kiasi gani cha bangi na sigara unatumia kwa siku na vitu vingine vinavyohusiana na bangi.

Naomba pia unieleze tabia kwa ujumla uliyokuwa nayo kabla ya kuanza kutumia bangi na kuna tofauti yoyote unayoinona baada ya kuwa unatumia bangi ukilinganisha na hapo kabla? Na je kama kuna tofauti unaihusisha na bangi au kilevi chochote?



**3. Ainisha sababu zinazosababisha kuanza matumizi ya bangi.**

Naomba unielezee sababu zilizofanya uanze kutumia bangi.

Je ulikuwa na marafiki ambao walikuwa wanakunywa pombe, wanavuta sigara, au bangi kabla?

Na ningependa pia kufahamu kama sehemu uliyokulia kulikuwa na ndugu zako au majirani ambao walikuwa wanatumia vitu kama pombe, sigara na bangi.

**4. Kuangalia mtazamo juu ya matumizi ya bangi.**

Je unawezaje kuelezea juu ya matumizi ya bangi , hasa matokeo yake na watu wengine wanasemaje kuhusu hayo na wewe unasemaje kuhusu maoni yao? Je unadhani ni nzuri kwako au hapana na unaihusisha vipi na mwenendo mzima wa maisha yako?

**5. Maoni kwa ujumla.**

Je una maoni gani kwa ujumla juu ya matumizi ya bangi na madawa ya kulevya kwa ujumla? Unadhani nini kifanyike kama unapewa nafasi ya kuishauri serikali , unaweza kusema nini kuhusiana na ufahamu wako na mtazamo wako juu ya bangi na madawa ya kulevya kwa ujumla.

Mimi niliyokuwa nayo nimemaliza, je una lolote kuongezea kuhusu mazungumzo tuliyoongea

**Asante sana.**

## APPENDIX B: INTERVIEW GUIDE FOR PARENTS/GUARDIANS.

Introduction and greetings.

### 1. Personal information.

**Hint:** discuss on issue of consent form and ethical procedure adhered to.

Document the composition of the group: ie sex, age, religion, occupation, level of education, marital status, tribe, location, place of the interview and other demographic characteristics necessary. Assign code number of the participant

### 2. Identification of risk factors.

*Probe:* can you describe the way a child starts before starting to be involved in addictive behaviour of using things like cigarette, alcohol and cannabis? Do you think that there are indicators that can signify that a certain child is going to be cannabis user?

What do you think make children smoke cannabis? What can you say about friends and other family members' behaviour in relation to cannabis use?

Can you please describe the role of parents and significant family members which they play in relation to cannabis use.

Can you associate religion and the cannabis use behaviour of children? Can you please describe in brief the general behaviour the child had before starting using cannabis and after starting using it, is there any difference if so can you please describe it in short?

### 3. Perceptions towards cannabis use.

How can you describe the use of cannabis including their effects and what people say about it? Do you think it is having any effect in life of young generation and if so how?

### 4. General opinions.

What opinions do you have on use of cannabis and other illicit drugs? What should be done to reduce or eliminate the problem to the public?

APPENDIX C – INFORMED CONSENT (English version)

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES



**INFROMED CONSENT FORM**

--	--	--	--	--	--	--	--	--	--

**ID-NO**

**Consent to participate in a research study**

Greetings! My name is Alphonse Kalula, I am a student undertaking masters of science in mental health, working on this research project with the objective of determining the cannabis use behaviour among youths in Dar es salaam.

We are recruiting subjects who can assist us by being study participants in this study.

If you agree to join the study, you will be required to participate in this study by providing your response via an interview.

All information will recorded and no any data will be linked by name with the participant in any way.

We do not expect that any harm will happen to you because of joining this study except giving your time for the discussion.

Taking part in this study is completely your choice. You are free to choose either to participate in this study or not. You can decide to stop participating in this study any time you wish even if you have already given your consent. Refusal to participate or withdrawal from the study will not involve penalty or loss of any benefits to which you are otherwise entitled.

If you agree to take part in this study there are no direct benefits that you will get from this study but we believe the information you will provide will help in recommending the appropriate strategies in solving problems related with drug use among youth.

We will reimburse you the cost of public transport to the venue of discussion and we do not expect that any additional cost to you will result from participating in this study. if any is evident will be under the responsibility of the researcher.

A small group of scientific experts who are not involved in implementing this study will monitor the results of this study and how we conduct this research.

We do not expect that you will get any physical injury resulting from participating in this study. However if any injury resulting from participating in this study occurs, we will provide you with medical treatment according to current standard of care in Tanzania. There will be no additional compensations to you.

If you ever have questions about this study you should contact the principal investigator Alphonse Kalula at School of Nursing, Muhimbili University of Health and Allied Sciences, P.O. Box 65001, Dar es Salaam. If you ever have questions about your rights as a participant, you call Prof. Eligius Lyamuya , Chairman of the University Research and Publications Committee, P.O. Box 65001, Dar es Salaam. Tel: 2150302-6.

„\_\_\_\_\_ have read the content in this form. My questions have been answered. I agree to participate in this study

Signature of participant\_\_\_\_\_

Signature of witness (if participant can not read)\_\_\_\_\_

Date of signed consent\_\_\_\_\_

## APPEDIX D-INFORMED CONSENT (Swahili version)



*CHUO KIKUU CHA AFYA YA TIBA YA SAYANSI MUHIMBILI*

**FOMU YA UKUBALI**

Namba ya utambulisho

--	--	--	--	--

--	--	--	--	--

**Ukubali kushiriki katika utafiti**

Salaam!

Jina langu ni Alphonse Kalula ni mwanafunzi ninayesomea shahada ya pili ya science ya afya ya akili katika chuo kikuu cha sayansi za afya muhimbili. Katika utafiti huu tukiwa na lengo la kufahamu matumizi ya bangi na sababu zake miongoni mwa vijana hapa dar es salaam.

Tunaandikisha watu ambao watatusaidia katika huu utafiti kwa kuwa washiriki katika huu utafiti.

Kama utakubali kujiunga katika huu utafiti utatakiwa kushiriki kwa kutoa maoni yako ambayo yatarekodiwa wakati wa mazungumzo na hakuna jina la mshiriki litakalohusishwa na mazungumzo hayo.

Hatutegemei kwamba kutakuwa na madhara yoyote kwa wewe kujiunga na utafiti huu isipokuwa kutumia muda wako tu katika majadiliano.

Kushiriki katika utafiti huu ni uchaguzi wako. Una uhuru wa kukubali au kukataa kushiriki katika utafiti huu. Pia unaweza kuacha kushiriki katika utafiti huu muda wowote utakapojisikia hivyo hata kama

umeshakubali kushiriki. Kukataa kushiriki au kuacha kushiriki katika utafiti huu hakutakufanya upate adhabu au ukose kufaidika na yale unayostahili kupata.

Ukikubali kushiriki katika utafiti huu hakuna faida ya moja kwa moja utakayopata lakini tunaamini maelezo utakayoyotoa yatasaidia kupendekeza njia zinazofaa kutatua matatizo ya bangi na madawa ya kulevya kwa vijana.

Tutakurudishia nauli utakayotumia kwenye basi ili kwenda mahali yatakapofanyika majadiliano Hatutegemei kwamba kutakuwa na malipo zaidi kwa wewe kushiriki kwenye utafiti huu kama yatatokea yatakuwa juu ya mtafiti.

Kundi dogo la wataalam wa utafiti ambao hawahusiki katika kutekeleza utafiti huu watasimamia matokeo ya utafiti huu na jinsi utafiti huu utakavyofanyika.

Hatutegemei kwamba utapata madhara yoyote ya kimwili kwa kushiriki katika utafiti huu. Hata hivyo ikiwa kutakuwaa na madhara yoyote yatakatokana na kushiriki katika utafiti huu, tutakupa huduma ya matibabu kulingana na viwango vya huduma za afya vya Tanzania. Hakutakuwa na fidia ya nyongeza kwako.

Kama utakuwa na swali lolote kuhusu utafiti huu unaweza kuwasiliana na mkuu wa utafiti huu ndugu Alphonse Kalula kwenye Shule ya Uuguzi, Chuo Kikuu cha Afya ya Tiba ya Sayansi Muhimbili, S.L.P. 65001, Dar es Salaam. Na ukiwa na swali lolote kuhusu haki zako kama mshiriki, wasiliana na Profesa E. Lyamuya ambaye ni Mwenyekiti wa Kamati ya Utafiti ya Chuo, BOX 65001, Dar es Salaam. Simu: 2150302-6.

Mimi, \_\_\_\_\_ nimesoma maelezo ya fomu hii. Maswali yangu yamejibiwa. Nimekubali kushiriki katika utafiti huu.

Sahihi ya mshiriki \_\_\_\_\_

Sahihi ya shahidi (kama mshiriki hawezi kusoma) \_\_\_\_\_

Sahihi ya mtafiti msaidizi \_\_\_\_\_

Tarehe ya ukubali wa kushiriki \_\_\_\_\_

INDEX E

60

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

DIRECTORATE OF POSTGRADUATE STUDIES

P.O. BOX 65001  
DAR-ES-SALAAM  
TANZANIA  
Telefax: 255-022-2150465  
Telegrams: UNIVMED



E-MAIL: [dpgs@muhas.ac.tz](mailto:dpgs@muhas.ac.tz)  
TEL: (255-022)-2150302-6 Ext. 207  
Direct line: 2151378

Ref. No. MU/PGS/SAEC/Vol. II/222

20<sup>th</sup> January 2008

Mr. Alphonse, Katula,  
MSc. Nursing,  
School of Nursing,  
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE AND FUNDING FOR A STUDY TITLED  
"DETERMINANTS OF CANNABIS USE BEHAVIOR AMONG YOUTHS IN  
KINONDONI MUNICIPAL DAR ES SALAAM: QUALITATIVE STUDY"

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has on behalf of the Senate approved ethical clearance for the above-mentioned study

By way of this letter, ethical clearance is granted to proceed with the planned study.

Liaise with the Bursar's Office to process payments for your research activities.

Prof. S.N. Massawe  
DIRECTOR, POSTGRADUATE STUDIES

- c.c. Vice Chancellor, MUHAS
- c.c. Deputy Vice Chancellor – ARC, MUHAS
- c.c. Dean, School of Nursing, MUHAS

MEDHS  
RC 568  
.C2  
k34  
2009