FACTORS ASSOCIATED WITH NON ADHERENCE TO REGULATIONS ON ALCOHOL SALE IN THIKA MUNICIPALITY, KIAMBU COUNTY

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Factors Associated with Non Adherence to Regulations on Alcohol Sale in Thika Municipality, Kiambu County

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

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This thesis has been submitted for examination with our approval as the University supervisors.

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DEDICATION

This work is dedicated to my parents John Gitau Machia and Jane Njambi Gitau who have always been there for me and imparted in me the value of education early in life. I am grateful to them for their moral and financial support and their prayers to help me accomplish this task.

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ABBREVIATIONS AND ACRONYMS

AIED	Alcohol and Injury in Emergency Department
CI	Confidence Interval
CPHR	Centre for Public Health Research
CRC	Centre Review Committee
ERC	Ethical Review Committee
Gok	Government of Kenya
GoSA	Government of South Australia
ITROMID	Institute of Tropical Medicine and Infections Disease
JKUAT	Jomo Kenyatta University of Agricultural and Technology
KEBS	Kenya Bureau of Standards
KEMRI	Kenya Medical Research Institute
KHDS	Kenya Health and Demographic Survey
KSH	Kenya shilling
MDG	Millennium Development Goal
NACADA	Nation Authority for the Campaign against Alcohol and Drugs Abuse
NCD	Non Communicable Diseases
NCL	National Council for Law
PI	Principal Investigator
SSC	Scientific Steering Committee
WHO	World Health Organization

ABSTRACT

Excessive alcohol use leads to alcohol abuse which has serious health and social effects making its prevention and control a public health priority. The former Central province is the second highest consumer of legal alcohol at 9.2%. The mushrooming of alcohol outlets in Thika Municipality is posing a health risk to the public. About 17.0% of urban dwellers are current users of various types of alcoholic drinks compared to 11.8% of rural dwellers. The main objective of the study was to determine factors associated with non-adherence of existing alcohol regulations and policies on alcohol sale in Thika Municipality Kiambu County. The study design was a mixed method approach where convergent parallel mixed method approach was applied in which both quantitative and qualitative data were collected concurrently. The main method of data collection included questionnaire and key informant interviews. Epi-info version 3.5 was used to determine the proportions of alcohol outlets operators adhering to alcohol regulations while the qualitative methods were employed to explore informant's experiences and adherence of the alcohol regulations when operating alcohol outlets.89 alcohol outlets operators participated in the study. Inferential analysis was conducted while data from key informant interviews was analyzed thematically. Out of the 89 outlet operators enrolled in the study. Association between marital status and non adherence of the Act was significant (p=0.003). 5.6% were aware of when the Alcohol Act was implemented and 70.8% were not aware on when the Alcohol Control Act came into existence. 62.9% of the operators found not to adhere to the Alcohol Control Act of 2010. 57.3% were not aware of measures to control illicit brew. From the key informant interviews the respondents interviewed confirmed that operators were not aware of the Act and it was difficult to implement thus subjecting the consumers into alcohol abuse. They also confirmed that with lack of employment, many women engaged in alcohol operations which also contributed to the breakdown of their families given the mode of operations. Many cases of deaths, accidents and uncontrollable health issues were highlighted also. This study concludes that the likelihood of alcohol brewing as a source of income is rampant in the region and there is a possibility of complete future dependence if the

problem is not addressed. The study recommends increase Alcohol Control Act awareness among alcohol outlets operators, review of the Alcohol Control Act of 2010 to ensure tough measures and penalties are adapted to anyone who fails to adhere to the Act, formation of a special enforcement unit.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

The lethal and harmful use of alcohol is locally and internationally increasing as a major risk factor for non-communicable diseases, infectious diseases and injury, disability and mortality caused by accidents, violence and crime. The unsafe use of alcohol leads to over three million or the equivalent of 5.9 per cent of global deaths (7.6 per cent for men and 4.0 per cent for women (WHO, 2012; 2013). Apart from such health consequences, excessive alcohol consumption has also been linked with various negative social and economic outcomes (Jernigan, 2001). Its economic impacts manifest at both the macro and micro level as countries incur the financial costs of responding to the negative health and social consequences and households struggle to cope as breadwinners, mostly males, divert scarce family resources towards alcohol. Developing countries and their populations suffer the most from such consequences. Globally, 320 000 young people aged 15-29 years die annually many of them being from Africa. These cases are from alcohol-related cases, resulting in 9% of all deaths in that age group. While adverse health outcomes from long-term chronic alcohol use may not cause death or disability until later in life, acute health consequences of alcohol use, including intentional and unintentional injuries, are far more common among younger people (WHO, 2011; 2014)

The unrecorded alcohol in Kenya constitutes traditional and illegal beverages such as, *chang'aa* that are poorly monitored for quality and strength and often contain impurities and adulterants. For instance *kumi kumi* is illicit liquor made from sorghum, maize or millet but contains methanol and is adulterated with car battery acid and formalin (WHO, 2004)

In Kenya only 15% of alcohol consumption is recorded and based on this measure Kenyans aged 15 years and above on average consume 1.74 liters of pure alcohol

annually (WHO, 2004). This is a moderate level compared to some other African countries like Zimbabwe (5.08 litres) Tanzania (5.29 litres) and Botswana (5.38 litres). On the other hand, based on unrecorded alcohol the per capita consumption (15+) from 1995 was 5.0 litres, which compares with levels found in the high range African countries such as Swaziland (4.1 litres), Rwanda (4.3 litres), Burundi (4.7 litres), Seychelles (5.2 litres), Zimbabwe (9.0 litres) and Uganda (10.7 litres) (WHO, 2004).

Community studies (NACADA, 2007, 2009a, b) indicate significant alcohol consumption in Kenya. The NACADA (2007) countrywide survey indicated usage of alcohol among persons aged 15-65 years (n = 3,356) to be 14.2% with male consumption being 22.9% and female consumption being 5.9%. Other rates of consumption were: rural - 13.0%, urban - 17.7%; legal/packaged alcohol – 9.1%, traditional liquor – 5.5% and *chang'aa* – 3.8%. Disaggregating by province, the lowest use was found in North Eastern (0 %) and Western province (6.8%) while the other six provinces were comparable with a range of 13% - 19% (Rift Valley - 12.5%, Eastern – 14.8%, Nyanza – 17.0%, Central – 17.7%, Coast – 18.6% and Nairobi – 18.6%). The NACADA (2007) survey also looked at lifetime usage with the results showing 39% usage among 15 – 65 year olds (53.2% male and 25.8% female; 38.8% rural and 40.2% urban) and 8% among children aged 10 – 14 years (8.6% males, 7.1% females; 8.6% rural and 5.6% urban). The NACADA (2007) study further revealed that 2.4% of the children (10- 14 years old) had consumed *chang'aa* while 15% of 15-65 year olds had consumed the same highly potent illicit spirit. In terms of impact, the survey showed that 5% of alcohol users had sought medical treatment for alcohol related ailments.

Considering consumption of alcoholic beverages, Nairobi had the highest usage of packaged/legal alcohol (15.7%) followed by Central (9.2%). For *chang'aa*, Nairobi had the highest usage (7.2%) followed closely by Western (7.1%) (NACADA, 2012). This shows that there is an urgent need to prevent and control alcohol abuse in Kenya which can only be achieved if the set policies and regulations are enforced. Legalization of homemade brew (chang'aa) should be addressed so as to improve the quality.

1.2 Alcohol regulation in the Kenyan context

The Government of Kenya has appointed the National Agency for the Control of Drugs and Alcohol (NACADA) in an attempt to fill a vacuum that exists in advocacy against alcohol abuse. The organization is charged with the responsibility of coordinating activities of individuals and organizations in a campaign against drug abuse. Due to the high prevalence of alcohol abuse in the country, the government enacted the Alcohol Control Act in 2010. The Alcohol Control Act 2010 controls and regulates the production, manufacture, sale, labeling, promotion, sponsorship and consumption of alcoholic drinks. The Act seeks to protect the health of individuals; protect the consumers of alcoholic drinks from misleading and deceptive inducements; protect the health of persons under the age of 18 years; inform and educate the public on the health effects of alcohol abuse; adopt and implement measures to eliminate illicit trade in alcohol, like smuggling; promote and provide for treatment and rehabilitation programmes; and promote research and dissemination of relevant information. Therefore, the legislation seeks, among other things, to mitigate the negative health, social and economic impact, resulting from the excessive consumption and adulteration of alcoholic drinks. The Act also seeks to legalize the production and consumption of *chang'aa* by repealing the *chang'aa* Prohibition Act 2010. It provides for the legalizing of *chang'aa* and its manufacture to conform to prescribed standards as a way of protecting consumers (NACADA, 2012).

Some of the key provisions include prohibition of the sale of alcoholic drinks to persons under the age of 18 years; prohibition of sale of alcoholic drinks in sachets or in a container less than 250 ml and provision of mandatory warning labels on information and potential health hazard as well as a statement as to the constituents of the alcoholic drink. Such health warnings and messages include: "excessive alcohol consumption is harmful to your health", "excessive alcohol consumption can cause liver cirrhosis (liver disease)" and "alcohol not for sale to persons under the age of 18 years".

1.3 Statement of the problem

NACADA, 2007; 2014 community studies indicate significant alcohol consumption in Kenya. The country wide survey indicated a current usage of alcohol disaggregating by province; the lowest was found in North Eastern (0%) and western province (6.8%),while the highest were Central, Coast and Nairobi provinces at 17.7%,18.6% and 18.6% respectively (NACADA, 2007; 2014).

Alcoholism in Central Kenya Counties is a disaster mainly in Kiambu County, even after enactment of the Alcoholic Control Act (2010) which was meant to reduce and control alcohol consumption. Corruption has led to non regulation of where and when to open the alcohol outlets despite the public health implications to the residents. Mushrooming of alcohol outlets within the vicinity of primary and secondary schools is contrary to the Alcoholic Control Act 2010. Availability and easy accessibility of alcohol outlets in Thika municipality poses a great health risk such as alcohol abuse, alcohol dependence, accidents, low productivity, social problems, breaking of families and liver cirrhosis among others to the general public.

Alcoholism in Kiambu County is therefore a public health concern. This is because with increased lack of adherence to the Act many families are affected and continue to suffer. The effects are such as family breakdown, unemployment, irresponsible parenting among others. The main addicts are men whereby the alcohol has become a daily routine and it is no longer used as a leisure or recreation, this has led to alcohol dependence, violence, accidents, breaking families and school dropout. Having bars operating in the estates and in the residential areas has increased the number of consumers. Especially with the recent operation against drinking and driving, many people prefer to drink in their home area. This has made it easier for youth and teens to access alcohol. Alcohol contributes to short-term effects including loss of work productivity through absenteeism, lateness or leaving early, feeling sick at work, having problems with job tasks, accidents, and damage to co-worker and customer relations (Roman *et al.*, 1993; Gordis *et al.*, 1999; Randerson *et al.*, 2007).

1.4 Justification of the study

Alcohol consumption in Kenya possesses a bigger threat since only 15% of alcohol consumption is recorded. On average many Kenyans aged 15 years and above consume 1.74 liters of pure alcohol annually (WHO, 2004). In Thika municipality the Alcoholic Control Act 2010 is not adhered to by the alcohol outlets operators and this has undermined the set goals and objectives of the Act. This study ensured all factors associated with non-adherence to Alcohol Control Act are adopted. The study ensured that all recommendations that were made from the study will aid in protecting the general public against alcoholism and other risk activities associated with alcoholism.

This research on assessing the influence of the alcohol regulations and related policies in Kiambu County came in the background of the public and government concern over the increasing alcohol abuse. The County is second in alcohol consumption rate (NACADA, 2010).The purpose of this study was to investigate factors associated with the failure to follow the set alcohol regulation and policies in Thika municipality Kiambu County. The ultimate goal was to identify the gaps in enforcing the set alcohol regulation and policies. These factors that lead to non adherence were to Act as the guideline in the formulation of policies that would be addressing the alcohol sale in Kiambu County. Formulation of policies based on the findings of this research would be more effective since it will be formulated from the real issues on the ground. The findings of this study are a source of statistic to the Ministry of Health, to aid policy formulation and be enacted thus protecting the public health of the County.

This study is of great importance to the County government of Kiambu given the findings on the ground about adherence of these regulations, the loopholes in these regulations and the awareness of the operators on these regulations. It is also expected that the Ministry of public health would benefit from these findings since alcoholism is a major challenge to the ministry. Given the high level of lack of awareness on the Act the study presumes that NACADA will use these research findings as a measure on their performance in spreading and campaigning against alcohol abuse in Kiambu County.

1.5 Objectives

1.5.1 General objective

To determine factors associated with non-adherence of the existing alcohol regulations Act on alcohol sale by alcohol outlets operators in Thika Municipality, Kiambu County.

1.5.2 Specific objectives

1. To determine the adherence of alcohol regulations by the alcohol outlets operators in Thika Municipality, Kiambu County.
2. To determine awareness of Alcohol Control Act 2010 among alcohol outlets operators in Thika Municipality, Kiambu County.
3. To explore factors associated with non-adherence of regulations by the alcohol outlets operators in Thika Municipality, Kiambu County.

1.6 Conceptual Framework

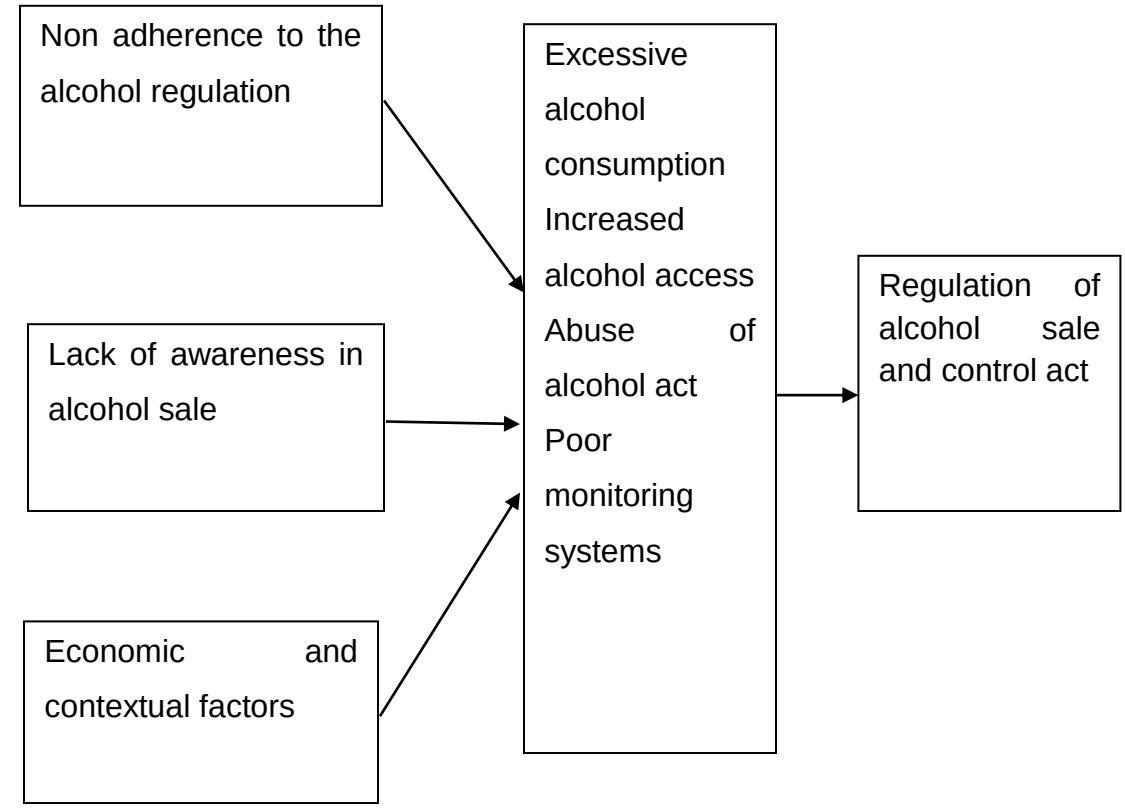

Figure 1.1: Conceptual framework indicating factors relating to lack of Alcohol Control

Act 2010 adherence

The illustration above shows the relationship between the dependent and independent variables. It shows the distal and proximate factors as dependent factors that affect regulation of alcohol sale and the Alcohol Control Act of 2010. These factors include non-adherence to the alcohol regulations like excessive alcohol sale and consumption, sale of alcohol to minors, lack of awareness of alcohol sale and ineffectiveness of economic and contextual factors such as poor monitoring systems and corruption.

Studies done by NACADA (2009) showed that alcohol abuse ends up depriving the family essentials of life hence die in poverty. Thus failure to adhere to the alcohol regulations and the act it becomes a burden to the society. The proximate factors highlight clearly how regulation of alcohol sale and the control Act of 2010 is not effective. With lack of monitoring, increased alcohol access, lack of adherence to the act and excessive consumption of alcohol, it is clear that all the parties involved continue to abuse the regulation of Alcohol Control Act 2010.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In 2012, there were an estimated 627,000 deaths occasioned by malaria, 1.3 million by tuberculosis and 1.6 million deaths by Aids related illnesses (including TB) worldwide. The World Health Organization report on alcohol indicates that alcohol abuse has killed over three million or the equivalent of 5.9 per cent of global deaths (7.6 per cent for men and 4.0 per cent for women) (WHO, 2012)

Globally, alcohol misuse is the fifth leading risk factor for premature death and disability; among people between the ages of 15 years and 49 years. In the age group 20–39 years, approximately 25 percent of the total deaths are alcohol attributable (WHO, 2015).

Worldwide per capita consumption of alcoholic beverage in 2005 equaled 6.13 liters of pure alcohol consumed by every person aged 15 years and above with 55% of the population taking alcohol. The widespread use of alcohol is fuelled by ease of its production process that is, a plain process of fermentation achieved by yeast acting on sugar and multiple daily usage for recreation, curative and religious purposes (Basangwa *et al*., 2006).

Alcohol contributes to over 200 diseases and injury-related health conditions, most notably alcohol dependence, liver cirrhosis, cancers, and injuries (WHO, 2014).

Africans have been making and imbibing alcoholic beverages from a wide array of fruits, grains and other natural substances for as far back as the historical record goes, and continue to do so ranging from palm-wine in coastal West and East Africa, to banana beer in the Great Lakes region, in Ethiopia and maize/sorghum beer across Southern Africa. Fermented drinks have typically been a source of vital nutrients, but at

the same time they have inscribed social hierarchies, based on a combination of political precedence, gender and generation. While alcoholic drinks have often been made by women, it is senior men who typically defined who could drink, how much and in what contexts. During the era of the slave trade, the importation of distilled alcohol (rum, but especially gin) further reinforced the linkage between distinction and access to alcohol, and also became integral to religious practice. At the same time, abstention from alcohol became an important marker of identity amongst Muslim reformers seeking to create an alternative conception of community. In the Senegambia, for example, conversion was typically signified by a renunciation of palm-wine. (The British Institute in Eastern Africa, 2002)

The moral associations of alcohol have become more pronounced over the course of the twentieth century. The extension of colonial rule to the continent was partly justified in terms of a commitment to drive out the noxious trade in 'spirituous liquors'. It is ironic; therefore, that colonial regimes, especially in British West Africa, came to depend heavily on the revenues derived from imports of Dutch gin and other distilled products made in Europe. (The 1890 Brussels Convention)

In South Africa, profits from municipal beer-halls, selling a version of manufactured beer that mimicked what rural Africans drank, underwrote the costs of implementing segregation and later apartheid. However, Black South Africans were debarred from purchasing bottled beer, wine or spirits until 1962. Coloureds in the Cape, who provided a captive source of farm labour and the largest market for wine, were specifically exempted. In this way, alcohol became a marker of racial hierarchy, as it did in the settler colonies. With the growth of distilleries and breweries across Africa during the mid-twentieth century, the influx of private capital (often in the shape of European brewing interests like Heineken), state revenue imperatives and changing consumer preferences became more fully intertwined. Bottled beer became the marker of urban sociability, pushed on by increasingly sophisticated advertising imagery. After independence, governments (and states in federal Nigeria) invested in breweries - creating an exception to the rule that state enterprises generally ran at a loss. However,

those who wished to mark their elite status would tend to opt for particular imported whisky brands. (Deborah *et al.*, 2002).

In the present, the debate about alcohol has assumed new forms. It has been claimed that some African countries like Uganda have excessively high levels of alcohol consumption. But this seems to reflect inconsistencies in the statistics rather than a significant problem In general, African alcohol consumption per capita is low by international standards, although it might represent a considerable proportion of household income. With the prolific expansion of African cities, and the growth of a more affluent middle class, consumption patterns are also changing. This is reflected in the increased consumption of wine in the oil-producing states such as Angola, which now provides the largest market for Alentejo wines outside the European Union. Even in South Africa, blacks who have historically preferred bottled beer, have begun to alter their drinking patterns. This is generally in the direction of wine and spirits. However, the emerging pattern is partially offset by other factors. On the one hand, the push of South African Breweries (SAB) across the continent, accompanied by the global restructuring of the brewing industry, is leading to ever-more assertive attempts to defend the market for beer. On the other hand, the growth of the Pentecostal movement has seen a revival of the fortunes of temperance across Africa. More than ever, therefore, alcohol finds itself at the intersection of debates about money, morality, and consumption (Africa studies Centre, 2002)

2.2 Kenyan status on alcohol abuse

Alcohol and drug abuse have remained the major social problems in Kenya. This has led to very many serious public health ramifications involving consumers at a young and tender age. National Authority for Campaign against Alcohol and Drugs Abuse in Kenya estimates that half of all alcohol and drug abusers are between 15 and 29 years of age (NACADA, 2011). Kenya is one such country that is experiencing these negative repercussions from alcohol abuse.

The World Health Organization says about 2.5 million people die annually, and many more succumb to illness and injury, as a result of harmful alcohol use (WHO, 2011). Nationally 13% of the population currently consumes alcohol, and that illicit brews and second generation Alcohol including *chang'aa* is consumed by over 15% of 15–64 year olds (NACADA, 2009). With many people engaging in the Alcohol sale there is increase in the number of alcoholic drinks selling outlets especially in urban residential areas, in or near learning institutions, in supermarkets and convenience stores, and in rural villages (NACADA 2007), easy accessibility to and excessive consumption of alcohol even by persons under 18 years; Increase in adulterated alcoholic drinks and illicit brews leading to deaths and injury; aggressive marketing, promotion of alcoholic drinks especially with messages targeting young people and sponsorship of events for persons below the age of 18 years by the alcoholic drinks industry (NACADA, 2010)

2.3 Non adherence of alcohol regulations

The consumption of alcohol is not a new concept; it's a problem all over the world. In the United States of America, the per capita consumption of alcohol in 1993 has been estimated at 1.9 gallons, roughly equivalent to 2/3 of an ounce of alcohol per day (Palmer, as cited in Stephen, 1997). A study conducted in the United Kingdom and Scandinavia found that 75% of the males drunk compared to 56% of the female who drank. In 1975, the expenditure on alcoholic beverages for the United Kingdom was established at 13.1 million pounds per 100,000 of the population (Riley & Marden, 1988).

Several factors associated with lack of adherence of the alcohol regulation Act are identified, these have been seen and studies on them indicating many factors in place. Alcohol use has been linked to a number of NCDs such as liver cirrhosis and different types of cancers. Most deaths attributed to alcohol, around a third are caused by associated cardiovascular diseases and diabetes. Alcohol related accidents such as car

crashes were the second highest killer accounting for 17.1 per cent of all alcohol related deaths globally. Alcohol abuse also makes people more susceptible to infectious diseases like tuberculosis, HIV and pneumonia. WHO collaborative study on alcohol, 2007 states that 1/3 of the disease burden are caused by alcohol consumption. About 16.6% of urban dwellers are current users of alcoholic drinks compared to 11.4% of rural. Approximately 2.3 million people die each year from the harmful use of alcohol (WH0, 2011).

A study conducted by Drug Abuse Warning Network, public health surveillance on the emergency department (ED) visits in the United States of America, revealed that during the third and the fourth quarters of 2003, an estimate of 627,923 drug-related ED visits nationwide was recorded. Overall, drug-related ED visits averaged 1.7 drugs per visit, including illicit drugs and inhalants, alcohol, prescription and over-the-counter (OTC) pharmaceuticals, dietary supplements and non- pharmaceutical inhalants (UN, 1992).

Studies indicate that alcohol intoxication is the most common cause of alcohol-related problems, leading to injuries and premature deaths. In Australia alcohol intoxication is responsible for 30% of road accidents, 44% of fire injuries, 34% of falls and drowning, 16% of child abuse cases, 12% of suicides, 10% of industrial accidents and 67% of the years of life lost from drinking (GoSA, 2010) over a 25% of all drug-caused deaths and five percent (5%) of deaths from all causes (Health Department of Western Australia, 1998). Alcohol also leads to criminal behavior – in Australia over 70% of prisoners convicted of violent assaults have drunk alcohol before committing the offence and more than 40% of domestic violence incidents involve alcohol (Basangwa *et al.*, 2006).

Furthering lower or non-alcoholic beverage consumption, by making soft drinks cheaper than the cheapest alcoholic drink also remains a way of failure to adhere to Alcohol Act. Taxation (and accordingly price level) is an effective measure and should be high enough to keep levels of harm as low as possible, while not encouraging an increase in illegal home production and smuggling. Real prices should also be increased, as a minimum at par with inflation, and in countries where smuggling and tax evasion is an

issue; duty-paid stamps might be useful. Controlling time, place and media for advertising and sponsorship efforts is relevant as part of a comprehensive policy, and not only on the level of the content of the advertisement (which is difficult to uphold). Especially marketing and promotion targeted at and appealing to young people should be controlled. Alcohol is the most abused substance causing a major public health burden in many parts of the world (Ndetei, 2006).

The UNDCP report (2001) indicates that in Africa, like any continent in the world, alcohol is so far the most abused drug, causing the most harm to families and communities. It notes that, traditional brew is adulterated to spread the fermentation process and increase its potency. *Cannabis sativa* (bhang) is the most common abused illegal drug traditionally produced in Africa whereas *khat* production and use is traditional in the highlands of East Africa. The use and abuse of *cannabis* and *khat* is common in regions where they are grown. Acuda 1982 reviewed the first time research studies on substance abuse problems in Kenya. The author noted that formerly, the psychoactive substances that were commonly abused in Kenya were alcohol and *khat*, but over the years there have been an upsurge in use and abuse of a variety of other substances like tobacco, *cannabis sativa*, and volatile substances. He also found out that among the youth, between 50% to 60% drunk alcohol regularly. The practice was said to be more widespread in urban and peri-urban areas than in rural areas. Regarding gender, more boys than girls were involved in the behavior (Acuda, 1982)

In Kenya, the consumption of alcohol dates back to prehistoric times but the abuse was not as pronounced as it is today. Alcohol was consumed during special occasions like weddings, initiation ceremonies and meetings of elders. There were regulations as to who could drink and the age factor was also taken into consideration. For example, women, young men and children were not allowed to drink (Odek-Ogunde *et al.,* 1999).

2.4 Awareness of Alcohol Act

The Alcohol Control Act, 2010, was assented to on 13th August, 2010. The Act controls and regulates the production, manufacture, sale, labeling, promotion, sponsorship and consumption of alcoholic drinks. The Act seeks to protect the health of individuals; protect the consumers of alcoholic drinks from misleading and deceptive inducements; protect the health of persons under the age of 18 years; inform and educate the public on the health effects of alcohol abuse; adopt and implement measures to eliminate illicit trade in alcohol, like smuggling; promote and provide for treatment and rehabilitation programmes; and promote research and dissemination of relevant information. The Act seeks to legalize the production and consumption of *chang'aa* by repealing the *chang'aa* Prohibition Act. It provides for the legalizing of *chang'aa* and its manufacture to conform to prescribed standards as a way of protecting consumers (NCLR, 2012).

Since the policy provides clear guidelines to curb alcohol abuse, the policy then could be roughly defined as being measures put in place to control the supply and affect the demand for alcoholic beverages in a population, including education and treatment programs, alcohol control and harm-reduction strategies (Babor, 2002). The implementation of public policies seeking to address the links between alcohol consumption, health and social welfare would thus be considered as alcohol policies, bearing in mind the main purpose of alcohol policies in the first place: to serve the interests of public health and social well-being through their impact on health and social determinants, such as drinking patterns, the drinking environment, and the health services available to treat problem drinkers .This definition is thus born out of a recognition of the fact that alcohol related problems are the result of a complex interplay between individual use of alcoholic beverages and the surrounding cultural, economic, physical environment, political and social contexts (Babor *et al.*, 2003).

Globally, alcohol misuse is the fifth leading risk factor for premature death and disability; it is the first among people between the ages of 15 and 49 years. In the age group 20–39 years, approximately 25 percent of the total deaths are alcohol attributable

(WHO, 2015). Alcohol contributes to over 200 diseases and injury-related health conditions, most notably alcohol dependence, liver cirrhosis, cancers, and injuries, in 2012, 5.1 percent of the burden of disease and injury worldwide (139 million disability-adjusted life-years) was attributable to alcohol consumption (WHO, 2014).

Alcohol is the most commonly abused substance in the country and poses the greatest harm to Kenyans as evidenced by the numerous calamities associated with excessive consumption of alcohol. Among the different types of alcoholic drinks, traditional liquor is the most easily accessible type of alcohol followed by wines and spirits and lastly *chang'aa* (traditional home made brew). It is estimated that 30% of Kenyans aged 15-65years have consumed alcohol in their life; 13.3% of Kenyans consume alcohol totaling to at least 4 million people (NACADA, 2010).

Traditional liquor is still more likely to have been consumed by rural children than urban children. More children in rural areas are likely to have consumed *chang'aa* than those in urban areas. It is thus important to regulate alcohol consumption since none regulation could lead to alcohol abuse, alcohol dependence which have been linked to a number of health problems such as NCDs, accidents, injuries, spread of HIV and AIDS and other social problems .Alcohol abuse and dependence is a public health concern since the health of the consumer is compromised and becomes susceptible to infection compared to an individual who abstains from alcohol abuse (NACADA, 2012).Alcohol abuse contributes to short-term effects including loss of work productivity through absenteeism, lateness or leaving early, feeling sick at work, having problems with job tasks, accidents, and damage to co-worker and customer relations (Blum *et al.,* 1993; Gordis *et al.,* 1999; Randerson *et al.,* 2007).

2.5 Adherence to Alcohol Control Act 2010

Alcohol abuse has also led to so many deaths in Kenya. In 2010 alone, the cases of large number of people dying out of drinking poisonous illicit liquor occurred in Shauri Moyo in Nairobi County. Other most conspicuous cases include the use of *kumi kumi* in

November 2000 which resulted to 140 deaths and loss of sight among users in poor Nairobi neighborhood (*Mukuru kwa Njenga* and *Mukuru Kaiyaba*) (Mureithi, 2002; WHO, 2004). Besides North Eastern and Central regions where current usage of alcoholic drinks is less than 10%, in all other provinces at least 10% of the residents are current alcohol consumers. From a survey of one of the provinces, 74% of the respondents indicated that second generation alcohols (alcohols produced by local small scale manufacturers) were highly available, accessible and affordable. It is noted that in so many countries there are cases of alcohol being sold to underage and failing to adhere to the Acts in place thus ignoring some key provisions. The provisions include prohibition of the sale of alcoholic drinks to persons under the age of 18 years; prohibition of sale of alcoholic drinks in sachets or in a container less than 250 ml; and provision of mandatory warning labels on information and potential health hazard as well as a statement as to the constituents of the alcoholic drink. (NACADA, 2011).

The publication of a seminal monograph entitled Alcohol Control Policies in Public Health Perspective (Bruun *et al.*, 1975) highlighted the fact that alcohol problems could be prevented and that national governments and international agencies and organizations should take a firm role in shaping effective and rational alcohol policies. Here, Bruun (1975) and his colleagues defined alcohol control policies as all relevant strategies initiated by the state to influence alcoholic beverage availability, excluding the following: attitude change, health education and informal social control. In the monograph Alcohol Policy and the Public Good Edwards and his colleagues took a more inclusive view of alcohol policy, seeing it as a public health response dictated in part by national and historical influences. As a result, alcohol policy, in this case, included policy responses such as alcohol taxation, legislative restrictions on alcoholic beverage availability, age restrictions on alcoholic beverage purchasing, alcohol education and media information campaigns, measures affecting drinking within specific contexts and measures targeted at specific alcohol-related problems like driving while drunk (Edwards *et al.*, 1994).

It has also been found that alcohol policy is rarely dictated by scientific evidence, despite major advances in the understanding of drinking patterns, alcohol-related problems, and policy interventions. Though a gap exists between the research and subsequent translation into policy action, it is worth noting that research can provide policy-makers with concrete evidence as to which policies are most likely to achieve their desired goals. Whether alcohol policies result from science alone or some combination of other factors, it is important that their outcome be subjected to scientific scrutiny. It is only by doing so that one can determine whether policies are successful in attaining a desired outcome and deserving of replication, whether modifications may be needed to improve the success of a policy, or whether policies should be discarded (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 1993).

Restricting the days, times, density and places of sales limits the possibilities of consumers to buy and consume alcoholic beverages and may reduce both overall and heavy consumption. Curbing the number of alcoholic beverage outlets and regulating their location (for example, near schools, religious place of worship or workplaces) has demonstrated that geographical density does have a significant effect on alcoholic beverage sales (Edwards *et al.,* 1994).

Although it is still not known how the density of alcoholic beverage outlets affects individual drinkers, it does appear that physical availability impacts on consumption through its influence on perceived availability and on the total costs of obtaining alcoholic beverages e.g. travel time (Toomey *et al.,* 1999).

Research has also shown that the geographical placement of outlets and concentration of outlets in certain areas is associated with increased rates of alcohol-related problems, e.g. violence and drink driving (Lipton *et al.,* 2002).

Earlier, different kinds of sales restrictions were quite common in many countries, but there has been a tendency lately to loosen these restrictions .The different types of sales restrictions, whether national or local in scope, should be regarded as an integral part of

a comprehensive alcohol policy, and have the potential to decrease harm by effectively targeting certain population groups or specific alcohol-related problems. Sales restrictions are not effective unless they are enforced. The link between the two variables, sales restrictions and enforcement was indicated by the statistically significant association. Overall, according to the present data, 48 countries have many of the sales restrictions, i.e. half or more of the attributes measured compared to 66 countries that have either few or no restrictions. However, among all the countries that do have restrictions of some kind, 35% regard their enforcement as either being carried out rarely or not at all. In other words, it seems that the situation leaves room for much improvement through governmental or local action. (Drummond *et al.*, 2000).

There is fairly strong empirical support for laws that raise the drinking age requirements, as they reduce alcohol consumption and problems among young people (Grube *et al.*, 2001). However, potential benefits from drinking age laws are maximized if the laws are enforced through frequent and consistent checking by sales assistants and bar staff for the age of customers, both off- and on-premise. Evidence exists that even a moderate increase in enforcement can significantly reduce the sale of alcoholic beverages to under-age youth .However, questions around the enforcement of the existing age limits could not be addressed in this survey. It is recognized that having a legal age limit for buying alcoholic beverages does not necessarily mean that young people under the limit cannot purchase or consume alcoholic beverages. Furthermore, it can be assumed that the private selling (or giving) of alcoholic beverages by parents or older friends to those under-aged exists to some degree in many countries, often as part of the local culture and norms. In summary, a large majority of the responding countries have age requirements for the sale of alcoholic beverages, mostly 17/18 years. Having an age limit of 16 years or younger is almost exclusively an European phenomenon. No age limit on the off-premise purchase of beer, and therefore legal access for children and adolescents, is generally found in some countries in Western and Central Africa, and in Eastern and South-eastern Europe, as well as in three Asian countries. In some cultures,

however, access for children may be effectively limited by custom or social control, without a need for legal restrictions (Wagenaar, *et al.,* 2000).

Price and taxation of alcoholic beverages are commercial products subject to the same economic principles as other consumer products. Retail prices of alcoholic beverages are composed of the wholesale price plus profit and other costs. In addition, taxes specific to alcoholic beverages are often added. One of the factors explaining price differences is the rate of alcohol taxes. Production costs per litre of pure alcohol are higher for making wine and beer than distilled spirits. That is one of the reasons for the usually higher tax on spirits. Another reason is that, in some countries, the official policy of the pricing system is to steer people towards a particular type of low-alcohol or non-alcoholic beverage, in order to substantially reduce risky or high blood alcohol levels, i.e. discourage spirits drinking and encourage beverages with lower alcohol content (Holder *et al.,* 1998).

One example can be found in Switzerland, which has a special tax on spirits. Overall, the evidence, although not conclusive at this stage, suggests that furthering beverages of lower alcohol content can be an effective strategy to reduce the level of alcohol consumed and the associated harm (Babor *et al.,* 2002).

In many countries, alcohol is an important source for raising government revenue and, therefore, an established target of taxation. In the former Soviet Union, for example, excise taxes on alcoholic beverages and state profits (derived from the alcohol and wine industry and imports) accounted for between 12% and 14% of all state revenue for more than 60 years (National Research Council, 1997). Laws around taxation are also fairly easy to adopt and to enforce, especially in countries with good government control of the market. Many countries lose substantial amounts of tax revenue because of difficulties in controlling the production, import and sale of alcoholic beverages. Ineffective enforcement of a taxation policy generates large black markets for illegally produced or smuggled alcohol products, which evade all taxation. The effect of price changes on alcohol consumption has been extensively investigated in Australia, New Zealand,

Europe and North America. The robust finding is that if alcoholic beverage prices go up, consumption goes down, and if prices go down, consumption goes up (Edwards *et al.*, 1994). Some data supporting this come also from developing societies (Mauritius & Room, 2002).

Taxation and pricing, therefore, can be an effective public health instrument for reducing overall alcohol consumption and alcohol-related harm. Only quite rarely, however, are the precise objectives of alcohol control explicitly stated in the laws embodying such policies (Österberg & Simpura, 1999). The real price (and not just the nominal price) of alcoholic beverages needs to rise, at or beyond the rate of inflation, if pricing is to be used as a strategy to contain alcohol consumption .The nominal price is the absolute or current price reflecting the effects of general price inflation, while real price is measured in terms of purchasing power and not affected by general price inflation. One of the restraining influences in tax and price policy stems from inflation control. In contrast to general sales taxes which are set on a percentage basis, alcohol tax, in most countries, is based on fixed excise duties that have to be adjusted by separate and politically visible decisions. Thus, usually, excise tax levels are not frequently adjusted, even if inflation automatically reduces their value (Rehn *et al.*, 2001).

Alcohol-free environments indicate that the two overall aims of restricting alcohol consumption in different settings are to ensure a safe public environment for leisure-time and sporting events, and to minimize or avoid injuries and loss of productivity in offices and workplaces. The designation of specific environments as alcohol-free can thus be viewed from the perspective of physical safety and social order. In the public sphere, the threat of aggressiveness and disorderly behaviour, and of physical or mental harm, has led to a variety of interventions aimed at drunken people in public areas (Rehn *et al.*, 2001). The research evidence for this field of preventive action is scattered but accumulating, and one of the areas identified is the potential of local government regulations to prevent alcohol-related harm in public places (Conway *et al.*, 1999). Work-related accidents and absenteeism put significant financial burden on societies. The development of formal or informal comprehensive workplace health programmes,

which include alcohol and other drug use, can contribute to a healthier and more productive workforce. Research done in Austria showed that 68% of workplaces had a negative attitude towards alcohol consumption, enforcing total abstinence during working hours (compared to 24% with a neutral attitude and 8% with positive) and that the people who worked there drank less alcohol than those in the more "alcohol-friendly" workplaces (Federal Ministry of Labour, 1999).

2.6 Social economic effects of non-adherence

2.6.1 Family Breakups

Everyone has choices in life about whether or not to use potentially addictive substances. Some people, however, may have a genetically based tendency or a predisposition that creates an addictive personality. Addiction to alcohol has been found to have both genetic and environmental causes. According to a study by (Roosa *et al.,* 1988) children of problem-drinking parents were more at risk of depression, low self-esteem, and heavy drinking than their peers in the general high school population. Parenting practices, particularly support and control, have been linked to development of adolescent drinking, delinquency, and other problem behaviors. The study confirmed that parental support and monitoring are important predictors of adolescent outcomes even after taking into account critical demographic/family factors, including socioeconomic indicators, age, gender, and race of the adolescent, family structure, and family history of alcohol abuse. Children who are raised in families where one or both parents are alcoholics have a greater chance of becoming addicted to alcohol themselves at some time in their life.

Today in the United States alone there are an estimated 28 million children who have alcoholic parents. This figure is staggering when it is considered that at least 11 million of those children are under the age of 18. The predisposition towards alcoholism seems to be more prevalent in male children of alcoholic

parents (Hingson *et al.*, 2009). Not only are children influenced by parents use of alcohol, another huge risk factor is the attitudes of the parents towards using alcohol. If parents are extremely permissive when it comes to the idea of their children using alcohol during their adolescent years, those children have a greater chance of becoming addicted either as teenagers or adults.

According to (NACADA, 2007) there is a strong link between alcohol/drug abuse by families and the break-down in family values. In the indigenous society, drunkenness was frowned upon. In today's setting, binge drinking is becoming an acceptable pastime with parents freeing the children from restrictions that once governed alcohol consumption. According to the same report, children as young as 10 years are not only consuming alcohol, but are suffering the attendant consequences. Stories of children barely in their teens undergoing rehabilitation due to alcohol problems are a cause of concern (NACADA, 2007). The problems certainly reflect a bigger problem and they are a direct product of how children are socialized in relation to alcohol and drug use.

2.6.2 Economic productivity.

In 2010, alcohol misuse problems cost the United States $249.0 billion (Sacks *et al.*, 2010). With lack of adherence it is reported that three-quarters of the total cost of alcohol misuse is related to binge drinking. Alcohol-related violence as a result of persistent drinking is a visible problem in many high-income countries like the United Kingdom, where it is recorded (WHO, 2010) However, the problem is also found in many developing countries where liquor is often brewed illegally, sales are unregulated, non-adherence of the sellers and violence statistics are not collected. Without proper surveillance it is impossible to know the true extent of the problem.

With the lack of clear regulation many people find themselves drinking thus affecting productivity in many developing nations. With the increased binge drinking there is reduced manpower hence less efficiency in productivity is achieved. Many families end

up in poverty due to no measures to regulate the drinking. With the addiction many young people and fathers spend much time in the pubs and places where alcohol is sold till late hours, hence they fail to work and provide for their families.

2.6.3 Fertility and diseases

The prevalence of Fetal Alcohol Syndrome (FAS) in the United States was estimated by the Institute of Medicine in 1996 to be between 0.5 and 3.0 cases per 1,000.31. More recent reports from specific U.S. sites report the prevalence of FAS to be 2 to 7 cases per 1,000,31and the prevalence of Fetal Alcohol Spectrum Disorders (FASD) to be as high as 20 to 50 cases per 1,000. Globally, alcohol misuse is the fifth leading risk factor for premature death and disability; among people between the ages of 15 and 49, it is the first (Lim *et al*, 2012). In the age group 20–39 years, approximately 25 percent of the total deaths are alcohol attributable (WHO, 2015). In 2012, 3.3 million deaths, or 5.9 percent of all global deaths (7.6 percent for men and 4.0 percent for women), were attributable to alcohol consumption (WHO, 2014). Alcohol contributes to over 200 diseases and injury-related health conditions, most notably alcohol dependence, liver cirrhosis, cancers, and injuries. In 2012, 5.1 percent of the burden of disease and injury worldwide (139 million disability-adjusted life-years) was attributable to alcohol consumption (WHO, 2014).

2.7 Alcohol Control Act 2010

2.7.1 Part V – Sale

Disorderly conduct: Any person found by a police officer to be drunk and incapable or drunk and disorderly in or near a street, road, licensed premises, shop, hotel or other public place may be arrested without warrant and brought without unreasonable delay before a Magistrate. (2) Any person convicted of being drunk and incapable or drunk and disorderly in or near a place referred to in subsection (1) shall be liable to a fine not exceeding five hundred shillings or

to imprisonment for a term not exceeding three months or to both. Legal Notice No. 4 of 2010 Alcoholic Drinks Control 25. (3) Any person convicted under subsection (2) on more than three occasions in any period of twelve months shall— (a) be ordered by the convicting Magistrate to undergo at his own cost, such rehabilitation programme as may be appropriate in a public health institution; (b) be forthwith reported by the convicting Magistrate to the District Committee, which shall inform such licensees as he deems desirable of such convictions, and thereupon, and until a period of twelve months has passed without any further such conviction in respect of that person, any licensee so informed who knowingly sells or supplies alcoholic drinks to or for delivery to that person commits an offence, and it shall furthermore be an offence for that person to be in possession of any alcoholic drink. (4) Any licensee who sells an alcoholic drink to a person already in a state of intoxication or by any means encourages or incites him to consume an alcoholic drink commits an offence.

Breach of license: Any person who sells an alcoholic drink or offers or exposes it for sale or who bottles an alcoholic drink except under and in accordance with, and on such premises as may be specified in a license issued in that behalf under this Act commits an offence and is liable— (a) for a first offence, to a fine not exceeding fifty thousand shillings or to imprisonment for a term not exceeding nine months, or to both; (b) for a second or subsequent offence, to a fine not exceeding one hundred thousand shillings or to imprisonment for a term not exceeding one year or to both, and in addition to any penalty imposed under paragraph (a) or (b), the court may order, the forfeiture of all alcoholic drinks found in the possession, custody or control of the person convicted, together with the vessels containing the alcoholic drink.

Sale to authorized officer: Any person who knowingly sells, supplies or offers an alcoholic drink to an authorized officer or to a police officer in uniform or who harbours or suffers to remain on licensed premises any such police officer except for the purpose of keeping or restoring order or otherwise in the

execution of his duty, commits an offence and is liable to a fine not exceeding fifty thousand shillings or to imprisonment for a term not exceeding three months or to both.

Non-disclosure of conviction any person who is required by any provision of this Act to disclose any conviction and fails to do so when making any application commits an offence.

Sale without license : If any person purchases any alcoholic drink from a licensee whose license does not cover the sale of that alcoholic drink for consumption on the premises, and drinks the alcoholic drink on the premises where it is sold, or in any premises No. 4 of 2010 Alcoholic Drinks Control [Issue 1] adjoining or near to those premises, if belonging to the seller of the alcoholic drink or under his control or used by his permission, or on any highway adjoining or near any such premises, and it is proved to the court that the drinking of the alcoholic drink was with the privacy or consent of the licensee who sold the alcoholic drink, the licensee commits an offence. (2) If a licensee whose license does not cover the sale of alcoholic drink to be consumed on his premises himself takes or carries, or employs or suffers any other person to take or carry, any alcoholic drinks out of or from his premises for the purpose of being sold on his account, or for his benefit or profit, and of being drunk or consumed in any place (whether enclosed or not, and whether or not a public thoroughfare) other than the licensed premises, with intent to evade the conditions of the license, the licensee commits an offence, and, if the place is any house, tent, shed or other building belonging to the licensee or hired, used or occupied by him, the licensee shall be deemed, unless the contrary is proved, to have intended to evade the conditions of the license.

Sale of adulterated alcoholic drinks: No person shall keep for sale, offer for sale or sell— (a) any alcoholic drink which has been in any way adulterated, or diluted by any person; (b) any non-alcoholic drink which has been in any way

adulterated with alcohol, or which contains any of the substances prohibited by the Minister under section 68. Any person who contravenes the provisions of this section commits an offence and shall be liable to a fine not exceeding ten million Kenya shillings or to imprisonment for a term not exceeding ten years, or to both. On the conviction of a licensee of an offence under subsection (2), the court may, in addition to any other penalty it may lawfully impose, if it finds that the drink in respect of which the offence was committed was adulterated by a substance or substances which rendered the drink unfit for human consumption, and unless the licensee proves to the satisfaction of the court that he took all reasonable precautions against such adulteration and that such adulteration took place without his knowledge or consent, order that his license be forfeited, and no license shall thereafter be granted or transferred to him.

Proof of sale: In any proceeding under this Act relating to the sale or consumption of an alcoholic drink, such sale or consumption shall be deemed to be proved if the court is satisfied that a transaction in the nature of a sale took place, whether or not any money has been shown to have passed, or as the case may be, if the court is satisfied that any consumption was about to take place. (2) Evidence of consumption or intended consumption of an alcoholic drink, on licensed premises by some person other than the licensee or a member of his family or his employee or agent shall be prima facie evidence that the alcoholic drink was sold by or on behalf of the licensee to the person consuming or about to consume the alcoholic drink. Legal Notice No. 4 of 2010 Alcoholic Drinks Control 27 [Issue 1]

Burden of proof: (1) the onus of proving that a person is licensed under this Act shall lie on that person. (2) The fact that a person is not licensed under this Act to sell alcoholic drinks has a signboard or notice upon or near his premises fitted with a bar or other place containing bottles, casks or vessels so displayed as to induce a reasonable belief that alcoholic drink is sold or served therein, or having alcoholic drink concealed, or more alcoholic drink than is reasonably

required for the person residing therein, shall be deemed to be *prima facie* evidence of the unlawful sale of alcoholic drink by that person. (3) In any proceedings under this Act, where a person is charged with selling alcoholic drink without a license or without an appropriate license, such alcoholic drink being in a bottle and appearing to be unopened and labelled by its bottler, the contents of such bottle shall be deemed, unless the contrary is proved, to be alcoholic drink of the description specified on the label thereof.

Endorsement of conviction on license: Every licensee who is convicted of an offence under this Act shall produce his license to the court convicting him, and the court shall endorse every such conviction on the license and the relevant administrative officer of the court shall inform the relevant District Committee.

Forfeiture of license upon conviction If in any proceedings before a court it appears that a licensee (a) whether he was present in the licensed premises or not, has permitted an unlicensed person to be the owner or part owner of the business of the licensed premises or to have a substantial interest in that business, except with the consent of the District Committee; or (b) is convicted of an offence under this Act and a previous conviction within the preceding twelve months of the same or any other offence under this Act or three such previous convictions within the preceding five years is or are proved; or (c) is twice convicted within twelve months of selling, offering or keeping for sale any adulterated alcoholic drink, then the court may, in addition to any other penalty which it may lawfully impose, order that his license be forfeited, and that no license shall be issued or transferred to him for such period as the court may order (NCLR, 2012).

CHAPTER THREE

MATERIAL AND METHODS

3.1 Study site

This study was conducted in Thika Municipality, Kiambu County in June 2015. Thika is an industrial town in Kiambu County, lying on the A2 road 40 kilometers north east of Nairobi, near the confluence of the Thika and Chania Rivers. GPS coordinates Latitude: -1° 02' 60.00" S Longitude: 37° 04' 60.00" E. Thika has a population of 139,853 and is growing rapidly (KDHS, 2014). Its elevation is approximately 1,631 meters above sea level. Although Kiambu Town is expected to be the new county headquarters, Thika remains the main commercial centre. The town is famous as the prime pineapple-growing region in Kenya. Thika is known as a centre for light industry, especially in food and horticulture processing. However, the decline of the textile industry has hit local firms such as Kenya Textile Mills (KTM), which was a cotton-to-fabric manufacturer that competed against Egyptian and Chinese manufacturers. Nevertheless, recent growth has been accentuated by the growth of the service sector, especially in education and finance. Thika town is turning from the well known industrial town to a town of higher institutions of learning that include : Amboseli Institute, Excel Institute of Professionals, Gretsa University, International Centre of Technology, Jomo Kenyatta University of Agriculture and Technology, Mount Kenya University, Thika Institute of Business Studies, Thika School of Health Sciences, Kenya Medical Training Centre Thika, Reward Institute, Kilimambogo Teachers Training College, Success Professionals Institute, Thika College of Banking, Thika Institute of Science and Technology and Thika Technical Institute.

3.2 Study design

The study design was a mixed method approach where convergent parallel mixed method approach was applied in which both quantitative and qualitative data were collected concurrently. There are six types of mixed methods which are: Convergent Parallel, Explanatory Sequential, Embedded, Transformative and Multiphase (Creswell *et al.,* 2011). The qualitative in-depth interviews (IDIs) were also employed to explore informants' experiences and adherence of the alcohol regulations when operating alcohol outlets.

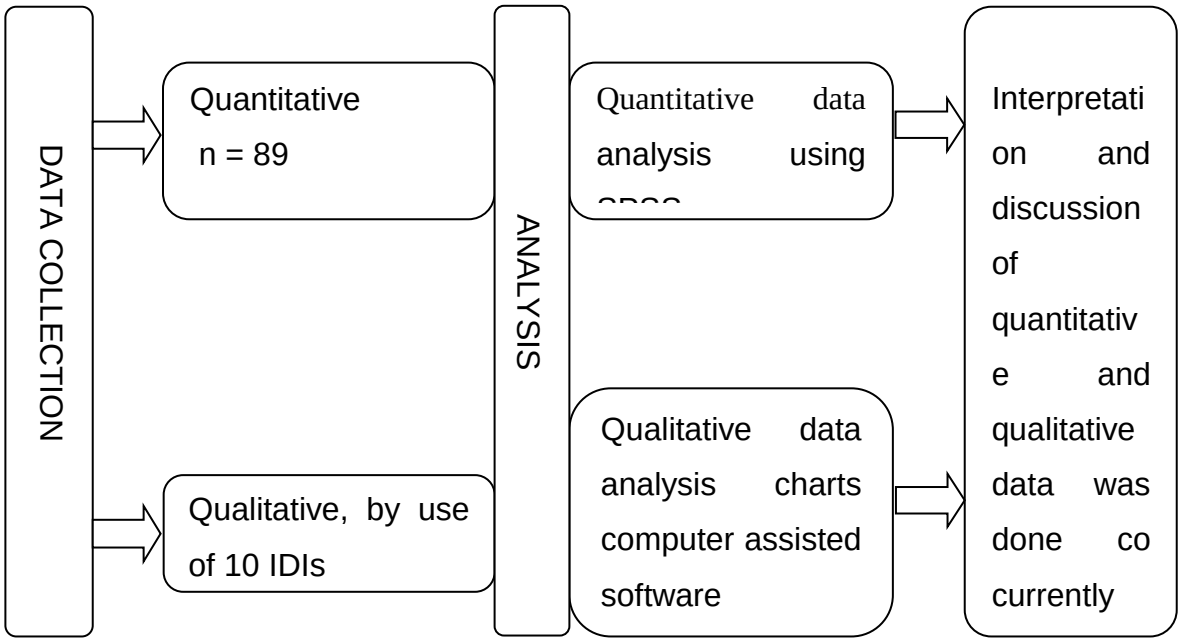

Figure3.1: collection, analysis and interpretation of qualitative & quantitative data.

3.2 Quantitative study

The study design was a mixed method study which used quantitative and qualitative techniques. The quantitative study comprised alcohol out lets operators in Thika Municipality. A random sampling technique was employed. The intended sample size was 89 which was calculated from the Thika municipality alcohol outlets register, code-02 March 2014. (See section 3.4)

3.3 Study population

Alcohol out-let operators in Thika Municipality, Kiambu County. This was the ideal group since they are the ones who sell alcohol and alcoholic drinks to the consumer. Among the key informants identified to be part of the study included out-lets managers and supervisors, those operating the outlets and the area security personnel.

3.3.1 Inclusion criteria

Over 18 years old retail alcohol out-lets operators.

Retail alcohol out-lets operators who consented.

Alcohol operators working in general retail alcoholic drink licensed alcohol outlets.

Retail Alcohol out-let operators who were willing and available took part in the study.

3.3.2 Exclusion criteria

- Retail alcohol out-lets operators who refused to consent.

3.4 Sample size determination

The sample size was determined using the following formula:

Statistical Fisher's exact probability test (Fisher et al, 1998).

$$n=Z^2pq/d^2$$

Where

n=is the sample size

Z^2=is the standard normal deviation (1.96) at the required confidence interval. (95%).

P=is the proportion in the target population estimated to have measured character. (50%). (Since no such related studies have been done in Thika focusing on alcohol sale.)

q=1-p (0.5).

d=level of statistical significance at 95% confidence interval. (0.05)

Therefore the sample size calculation is:

$$n=1.96^2*[0.5*(1-0.5)]/0.05^2$$

$$=1.96^2*100$$

=384.16

Approximately = 384 outlets

But since my study population was less than 10,000 the final sample was:

f =n/ [1+n/N] (Fisher *et al*, 1998).

Where nf is the desired sample size since the population was less than 10,000.

n is the sample size when population is more than 10,000.

N is the estimation of the population size.

There were 267 alcohol outlets in Thika municipality (Thika sub county administrator's office) out of which there were 115 general retail alcoholic outlets hence the population size was 115 out of which the sample size was calculated as stated below

nf=384/[1+(384/115)]

where nf was 89

3.5 Sampling procedure

There were 267 alcohol outlets licensed with different operating licenses as follows:

- General retail alcoholic drink 115
- Licensed to manufacture or produce an alcoholic drink 18
- Alcohol outlets licensed to import or export an alcoholic drink 2
- Temporary licensed alcoholic drink outlets 10
- Liquor {wines and spirits} licensed outlets 96
- Proprieties and distributors 5
- Licensed alcohol wholesalers 21

This study focused on general retail alcoholic outlets, since according to NACADA (2009) central survey categorized general retail alcohol outlets among the non adherence of alcohol regulations. To avoid bias when selecting the alcohol outlets the PI used statistical random tables as follows:

The following were the steps the PI followed since the method of sampling was simple random sampling, there were six steps: (a) defining the population; (b) choosing the sample size; (c) listing the population; (d) assigning numbers to the units; (e) finding random numbers; and (f) selecting the sample.

- There were 115 general retail alcoholic drinks in Thika Municipality, Kiambu County.
- The sample size was 89 as calculated above.
- Each general retail alcohol outlet was assigned a number starting with 001 to 115.
- Using the random tables, the PI randomly selected a row and column.
- From the column the PI picked 89 alcohol outlets, any value that was found to be above 115 or repeated was to be dropped and since the PI had located a number (from 001 to 115) to each of the retail alcohol outlets, selected and identified the alcohol outlets location using the Thika sub county license register .

3.6 Data collection

The study used both quantitative and qualitative methods of data collection and analysis. A pretest of the questionnaire was carried out in June 2014 at Gatundu town in Kiambu County. Gatundu town was selected since it is near and facing the same problem of retail alcohol out-lets operators not adhering to Alcohol Control Act 2010. The questionnaires were examined for clarity, ambiguity, time taken to fill it out and analyzability. Following the pilot study, the questionnaires were adjusted accordingly before embarking on the definitive study.

A research assistant was recruited to assist the principle investigator in the data collection process. The research assistant was trained on interviewing techniques (including ethical considerations) prior to data collection; the training was also comprehensive so as to maintain the quality of the study, confidentiality, competence, understanding alcohol outlet operators and the importance of consenting before the interview. He was consistently monitored by the principle investigator during data collection period.

Sampled outlets, introduction to the respondents and acknowledged their participation in a research study to establish awareness of alcoholic Act among alcohol outlet operators and determine factors associated with non-adherence of the existing alcohol regulations on alcohol sale among alcohol outlets operators. When the participant agreed to participate he/she was instructed that completing the questionnaire was voluntary and that he/she would not be identified by participating in the study.

The PI informed the participants about the study, objectives, risks and benefits. Once informed consent was obtained and they signed the consent form, then they were allowed to continue to fill in the study questionnaire. The research was conducted immediately after the alcohol outlet was opened to avoid interferences from the customers.

The principal investigator was personally involved in conducting the Key Informant Interviews. The KIIs were used to explain the experience at a personal level. The interviewees were sought out purposively and thus it was done by explaining to them who was involved in the process therefore establishing credibility for the interview. The PI also explained the importance of their cooperation since the information required was useful to the region and would benefit the nation at large. Those who agreed to participate in the study were given an informed consent and permission to record the interviews was obtained. An interview guide was used in the discussion. The discussion was held in private places such as their offices and stores for ease of recording and

confidentiality. The themes tested included alcohol control Act awareness, factors leading to non adherence and consequences from the abuse of the Act.

The principle investigator ensured he obtained all the information required and in some occasion he asked the key informants if they had anything that was not covered of which many talked about social challenges being faced from the alcohol consumption. Socio-demographic data on gender, age, marital status, level of education, period served as an alcohol outlet operator was recorded. Participants were given the chance to discuss the given themes thoroughly and emerging ideas were followed up with further questions.

3.7 Data collection procedures

Data was collected using two main methods namely, questionnaire and Key Informant Interviews. The questionnaire was used to capture data on factors associated with non adherence of alcohol regulations, the awareness of Alcohol Control Act 2010 among the alcohol outlets operators and whether the operators adhered to the regulations. The questionnaire was administered in English and Kiswahili. Key Informant Interviews were conducted to explore factors associated with non-adherence of regulations by the alcohol outlets operators. It was conducted among the management (managers, supervisor, foreman or the in charge of the retail outlets). Ten interviews were conducted using a guide on how the Alcohol Control Act 2010 was being put into practice by the outlet operators and factors associated with non adherence of the 2010 Act. The researcher moderated the interviews while a field assistant took notes and tape-recorded as the same time, as backup.

3.8 Data management and analysis

The completed questionnaires were checked daily to ensure each question had been filled out correctly and that there were no gaps. The questionnaires were then numbered and coded for ease of handling.

Data was then entered, checked and cleaned and then analyzed using SPSS version 16. Univariate analysis was performed in order to obtain descriptive statistics. Proportions, means and standard deviations were determined during the analysis. The results were presented in form of figures, tables and charts. Bivariate analysis was also performed in order to examine association factors between the independent variables and non adherence of the alcoholic Act. Measures of association were considered statistically significant when p value was found to be equal to or less than 0.05.

Data from qualitative methods were analyzed using thematic analysis procedure. Key Informative Interview data was transcribed and translated for coding and analysis. Some of the themes included, awareness of the alcohol control act, factors leading to non adherence of the Act, ways to mitigate the problem and challenges faced in fighting the problem of non adherence. The data were used to compliment and elaborate quantitative findings and clarify relevant aspects of how the alcohol control Act was regulated.

3.9Ethical Consideration

The following procedures were carried out to ensure that no harm comes to the participants of this study as a result of their participation.

Approval :The proposal for this study was reviewed and approved by KEMRI Scientific Steering Committee (SSC) and Ethical Review Committee for scientific and ethical approvals Committee before collection of data.

Informed Consent: All participants were informed of the purpose of the study and what it involved of them through the Informed Consent Form that was affixed to the questionnaire. In this form, participants were given the option to opt out of completing the questionnaire.

Confidentiality: The investigator undertook to treat the information provided during the study with utmost confidentiality. Social demographic identifiers of the participants were captured, and only a code that is supplied by the participant was used as an identifier thus no names of the individual or the alcohol outlets, location (street) of alcohol outlet were used.

Sensitization with County government officials was conducted before embarking on the study through the Ministry of Public Health and NACADA representative.

CHAPTER FOUR

RESULTS

4.1 Socio-demographic characteristics

A total of eighty nine 89 outlet operators were enrolled in the study. The mean age of the outlet operators was 33 years which was 37.1% of the total population and the range was between 18 – 70 years. Out of 89 outlet operators, 75.4% were female leaving only 24.7% as the male operators in the region. This shows there is a high number of female who are involved in the sale of alcohol.

Most of the respondent 51.7% were single parents, 24.7% were married with children and 15.7% were divorced while 7.9% were widows.

Regarding the level of education, it was found that 52.8% of the respondents had attained secondary education, 30.3% had attained primary education. (15.7%) had attained college level and1.1% of respondent attained tertiary education.

Concerning the period of operation, 52.8% had been in operation for more than 6 years. 37.1% for between 4 – 6 years while10.1% had only been in operation for the last 3 years.

Table 4.1: Socio- demographic characteristics of the outlets operators

Characteristic		No. N = 89	percentage (%)
Socio-demography			
Age	18-30	7	7.9
	31-40	25	28.1
	41-50	33	37.1
	Above 50	24	27.0
Gender			
	Female	67	75.3
	Male	22	24.7
Marital status			
	Married	22	24.7
	Single	46	51.7
	Divorced	14	15.7
	Widow/widower	7	7.9
Education level			
	Primary level	27	30.3
	Secondary level	47	52.8
	College level	14	15.7
	Tertiary level	1	1.1
Duration as an outlet operator			
	1-3 years	9	10.1
	4-6 years	33	37.1
	Above 6 years	47	52.8
Total		**89**	**100.0**

4.2 Time respondent opens the alcohol outlet on weekdays

Table 4.2 shows that majority of the respondents (53.8%) open their outlets between 1-2 pm. 23.6% open between 4-5 pm, 20.2% open between 7 – midday and 3% could not be able to explain the time they open on weekdays.

Table 4.2: Time respondent opens the alcohol outlet on weekdays

	Frequency	Percent	legal time
7 am –12 noon	18	20.2	5pm
1 pm - 2 pm	47	52.8	5pm
4 pm - 5 pm	21	23.6	5pm
Do not open (daytime)	3	3.4	5pm
Total	89	100	

Table 4.3 shows that during weekdays 59.6% closed their outlets between 11-midnight, 12.4% close between 9-10 pm and 28.1% of the respondents failed to give the time they close.

Table 4.3: Time respondent closes the alcohol outlet on weekdays

	Frequency	Percent	legal time
9 - 10pm	11	12.4	11 pm
11 – Midnight	53	59.6	11 pm
Do not close (at night)	25	28.1	11 pm
Total	89	100.0	

Table 4.4 shows that during weekends 50.6% of the correspondent opened between 1-2pm a time which is against the stipulated time in the act. 34.8% opened between 4-5 and 14.6% opened between 7-10 am.

Table 4.4: Time respondent opens alcohol outlet on weekend

	Frequency	%	legal time
7-10 am	13	14.6	11 pm
1-2pm	45	50.6	11 pm
4-5 pm	31	34.8	11 pm
Total	89	100.0	

Looking at the closure time, the closing did not vary much since only 42.7% of the respondents close at morning hours meaning they run overnight selling alcohol. 34.8% do not close the outlet, 13.5% also fail to close due to the clients demand and 9% of the respondent close at midnight on weekend.

Table 4.5: Time respondent closes alcohol outlet on weekend

	Frequency	%	legal time
11-midnight	8	9.0	11 pm
Do not close	31	34.8	11 pm
Morning hours	38	42.7	11 pm
Clients demand	12	13.5	11 pm
Total	89	100.0	

Table 4.6 shows that 52.8% of the respondents do not ask for identification card, 36 % of the respondent asks for identification cards while 11.2% stated that it was not part of the requirement. This shows that many operators are not concerned with who comes to drink the brew thus they are only interested with the money.

Table 4.6: Request of identification card from client

		Frequency	Percentage
	Yes	32	36.0
	No	47	52.8
	Not part of requirement	10	11.2
Total	89		100.0

Only 38.2% respondents do have a family fun day while the remaining percentages of 61.8 do not have a family fun day.

For those who went for family fun day, 38.2% of the alcohol outlets operators sold alcohol during family fan day while 61.8 % did not sell.

Table 4.7: Whether families have Family fan day events

	Frequency	Percent
Yes	34	38.2
No	55	61.8
Total	**89**	**100.0**

It was found that 52.8% of the outlets were situated in areas that were 300 meters from schools. While 33.7% had situated their outlet not near a school.13.5% could not tell if their outlet was near a school or not.

Table 4.8: School about 300 meters from the alcohol outlet

	Frequency	Percent
Yes	32	36.0
No	39	43.8
Don't know	18	20.2
Total	89	100.0

Majority of the respondents (62.9%) reported not to adhere to the Alcohol Control Act of 2010 thus being left with only 37.1% who adhere to the control Act. This is shown from the figure below

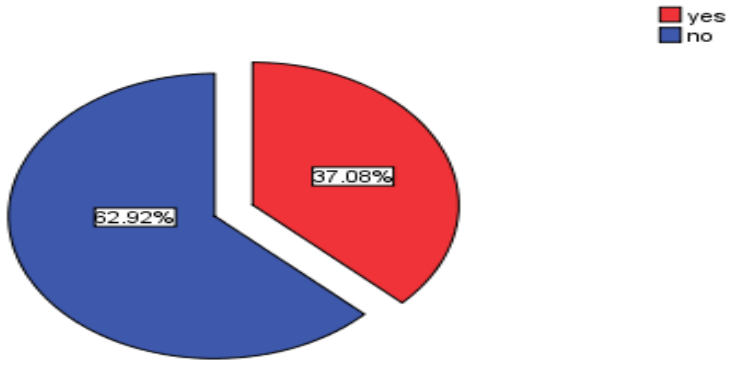

Figure 4.1: Alcohol outlets operators who adhere to the Alcohol Control Act 2010

There were no significant differences between adherence of the alcohol control Act and age and education of the alcohol outlet operators since they presented a higher P Value of 0.185 and 0.588 respectively.

4.3 Adherence of Alcoholic Act 2010

Table 4.9: Association between adherence to the alcohol consumption and socio-demographic characteristics

Variable	Those who adhere to alcohol control act N =89	P Value
Gender		
Male	22 (24.7%)	0.0001
Female	67 (75.3%)	
Age		
18-30	7 (7.9%)	0.185
31-40	25 (28.1%)	
41-50	33 (37.1%)	
Above 50	24 (27.0%)	
Marital Status		
Married	22(24.7%)	0.0030
Single	46(51.7%)	
Divorced	14(15.7%)	
Widow/Widower	7(7.9%)	
Education		
Primary Level	27(30.3%)	0.588
Secondary Level	47(52.8%)	
College Level	14(15.7%)	
Tertiary Level	1(1.1%)	

However, there was a significant difference between adherence of alcohol Act and the gender of the operator and the marital status of the operator. About 75.2% of the respondents who were female operated the alcohol outlet (p value=0.001) whereas 51.7% of the respondents were single parents (p=0.003) showing that the female and single mothers were operating the outlets.

Looking at the association between education and the alcohol outlet operators, there was no significance differences. However this may change in the few years to come if the problem is not addressed as one of the middle aged mother stated that the operation of alcohol outlets was becoming the only thing one could engage in despite of his/her level of education to sustain them. 52.8% of the respondents had attained high school level yet they were operating the outlets. 15.7% of the respondent despite having a college certificate had no option rather to engage into the outlet operation.

Regarding the age the operators started the business it was found that there is an association between the age of the respondent and the outlet operators. Majority of the operators were between the ages of 41-50 years.

47.2% reported to sell 50 ml of alcohol, 12.4% reported to sell alcohol in amount that was less than 500 ml, 12.4% also sold the alcohol in amount that the client could afford while 28.1% could not tell the least amount of alcohol they sold.

Table 4.10: Least amount of alcohol the respondent sells

	Frequency	**Percent**
Less than 500 ml	11	12.4
50 ml (a tot)	42	47.2
Do not know	25	28.1
Clients affordability	11	12.4
Total	89	100.0

Regarding excessive consumption of alcohol warning signs inside the outlet on the alcohol effects, the study found out that 31.5% said they have the signs in their outlets while 57.3%said they did not have the signs on the alcohol effects. 11.2% said he had never seen the signs on the warning of the alcohol effects.

Table 4.11: Display of warning signs in the alcohol outlet on the alcohol effects among consumers

	Frequency	Percent
Yes	51	57.3
No	28	31.5
Never seen	10	11.2
Total	89	100.0

64% of the operators reported not to have ever explained to clients the harmful effects of excess alcohol drinking while only 36% reported to have explained to the clients the harmful effects of excessive alcohol consumption.

Table 4.12: Explanation of harmful effects of excess alcohol consumption

	Frequency	Percent
Yes	32	36.0
No	57	64.0
Total	89	100.0

42.7% of the operators reported that they were aware of the measures in place to eliminate illicit brew while 57.3% reported that they were not aware of the measures in place to eliminate illicit brew.

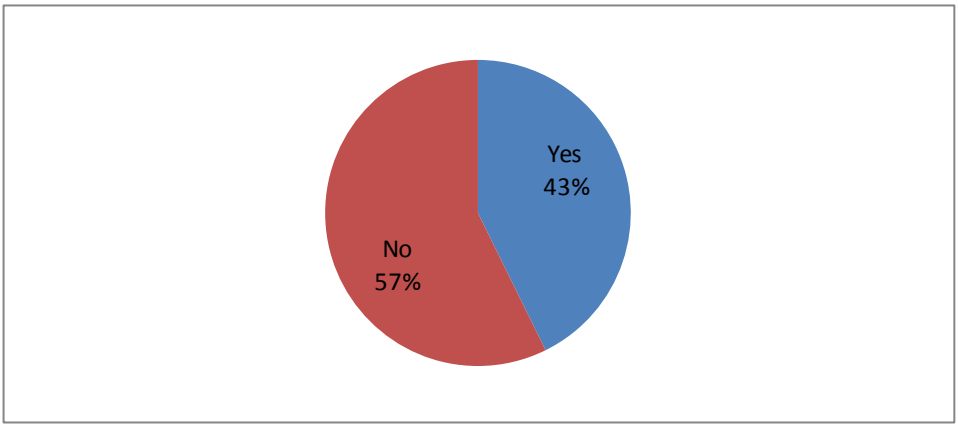

Figure 4.2: operators aware of measures to eliminate illicit brew

It was reported that 50.6% of the alcohol outlet operators sold alcohol without using the machine while 49.4% were using the automated vending machine.

Table 4.13: Sale of alcohol using automatic vending machine

	Frequency	Percent
Yes	44	49.4
No	45	50.6
Total	89	100.0

61.8% defined alcohol to be fit for consumption by checking at the KEBS mark only, 36% defined it using the diamond trade mark only while only 2.2% defined it using both KEBS and diamond trade mark.

Table 4.14: Key features used to define quality for consumption of alcohol

	Frequency	Percent
KEBS mark only	55	61.8
Diamond trade mark only	32	36.0
Both KEBS and diamond trade mark	2	2.2
Total	89	100.0

4.4 Operators aware of Alcohol Control Act

This study found out that 69.7% of the operators did not know about alcohol control Act of 2010, a few of the respondents were aware of the Act, this shows that 6.7% reported to know the control Act as the law governing alcohol production, 15.7% reported that it is an alcohol drink 7.9% reported not to know anything at all concerning the control Act.

From the key informed interviews, it was found out that 3 managers agreed that it was a challenge adhering to the alcohol control Act as per the regulations, due to the demand of their clients.

Figure 4.3: Operators aware of Alcohol Control Act

It was found out that 70.8% were not aware when the alcohol Act was implemented, 6.7%said that the Act was not yet implemented, only 5.6% of the operators reported were aware of when the alcohol Act was implemented, 7.9% found out that the Act was implemented in November 2000 and 9.0% reported it was implemented in November 2001.

Table 4.15: Alcohol 2010 Act implementation

	Frequency	Percent
November 2010	5	5.6
November 2000	7	7.9
November 2001	8	9.0
Not yet implemented	6	6.7
I do not know	63	70.8
Total	89	100.0

68.5%of the operators were aware of a fine of less than Ksh.1,000 was being charged, 23.6% said they knew the fine charged was between Ksh. 1,000-5,000, 6.7% were found that the fine charged was above Ksh. 5,000 while 1.1% were not aware of the fine charged

Table 4.16: Fine attracted by being drunkard and disorderly

	Frequency	Percent
Less than 1000	61	68.5
1000-5000	21	23.6
Above 5000	6	6.7
Do not know	1	1.1
Total	89	100.0

The study found out that 41.6% stated categorically that there was nothing like selling alcohol to already intoxicated person and 36% reported that they were not aware if selling alcohol to already intoxicated person was wrong, 19.1% said that selling of alcohol to an intoxicated person was not wrong and 3.4% were the ones in favor of it being wrong.

Table 4.17: Alcohol sell to already intoxicated person

	Frequency	Percent
Yes	3	3.4
No	17	19.1
Do not know	32	36.0
There is nothing like that	37	41.6
Total	89	100.0

42.7% reported that the fine charged on selling of alcohol contrary on alcohol Act of 2010 was charged less than Ksh1, 000, 51.7% said one was charged between Ksh2, 000-5, 000 and 5.6% reported a fine of between Ksh.5, 000- 10, 000.

Table 4.18: Fine charged on abuse of alcohol Act of 2010

	Frequency	Percent
Less than Ksh.1, 000	38	42.7
Ksh.2, 000-5,000	46	51.7
Ksh.5, 000-10,000	5	5.6
Total	89	100.0

67.4% reported not to be aware if 10 million Ksh. fine was charged while 32.6% reported that indeed it was true adulterating a drink could attract a fine of 10 million Ksh.

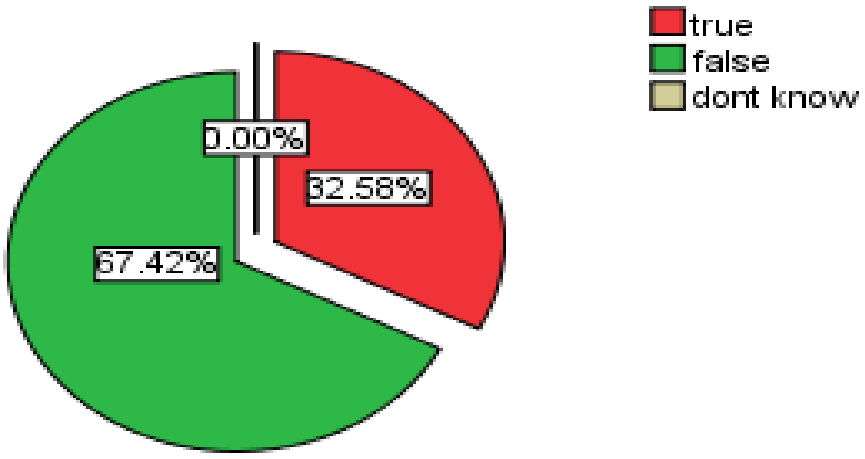

Figure 4.4: Selling of adulterated drink.

Among the 89 respondents who operated the outlet, 49.4% reported to be aware that selling alcohol to under 18 years old would attract a fine of Ksh.150, 000 plus 3 months imprisonment, while 16.9% said the offence could attract a fine of Ksh.500, 000 while 33.7% reported that it was not an offence to sell alcohol to a minor.

Table 4.19: Fine charged on selling alcohol to a minor

	Frequency	Percent
Ksh.150, 000 + 3 months imprisonment	44	49.4
Ksh.500, 000 fine	15	16.9
Not an offence	30	33.7
Total	89	100.0

The following results were reported where 69.7% reported that they it was wrong for a consumer not to take alcohol while 30.3% said it was fine for a client not to take alcohol.41.6% said they had ever been arrested for failing to follow the law while a majority number of 58.4% said they had never been arrested. Due to lack of awareness and knowledge law enforcement officers are bribed during the opening and closing hours. Only a figure of 31.4% reported that there was a time the district committee did not renew their license due to lack of cleanliness in their outlet while 68.5% said there was no time their license was not renewed. 66.3% reported to open their outlets before the stipulated time while 70.8% reported to close past stipulated time.

4.5 Alcohol Control Act 2010 awareness and knowledge

Table 4.20: Alcohol Control Act awareness and knowledge among outlets operators

Statement on Alcohol Awareness among outlets operators	Yes	No
Is it an offence not to take alcohol	62(69.7%)	27(30.3%)
Ever been arrested for failing to follow the law	37(41.6%)	52(58.4%)
Is there any time the district committee failed to renew your operational license	28(31.4%)	61(68.5%)
Do you open earlier before the stipulated time	59(66.3%)	30(33.7%)
Do you close past stipulated time?(11.00 pm)	63(70.8%)	26(29.2%)
Do you check the expiry date before selling the alcohol	38(42.7%)	51(57.3%)
Selling of adulterated alcoholic drinks	38(42.7%)	51(57.3%)
Have you ever sold alcohol to under age clients	57(64.0%)	32(36.0%)
Do you lock your clients inside and sell them before or after stipulated time	58 (65.2%)	31 (34.8%)

28.1% reported that their premises were always inspected by the County council officers before their license was renewed, while 7.8% reported that it was the public health officers who inspected their premises and a majority of 64% indicated that their premises were not inspected before their licenses were renewed.

Table 4.21 Alcohol Outlets inspection before renewal of license among operators

	Frequency	Percent
County council officers	25	28.1
Public health officer	7	7.8
None	57	64.0
Total	89	100.0

52.8% reported to be always harassed by the police, 28.1% said County council officers also do harass them severally, 3.4% stated that both police and County council officer could enter their premises and harass them and 15.7% reported not to be harassed at all.

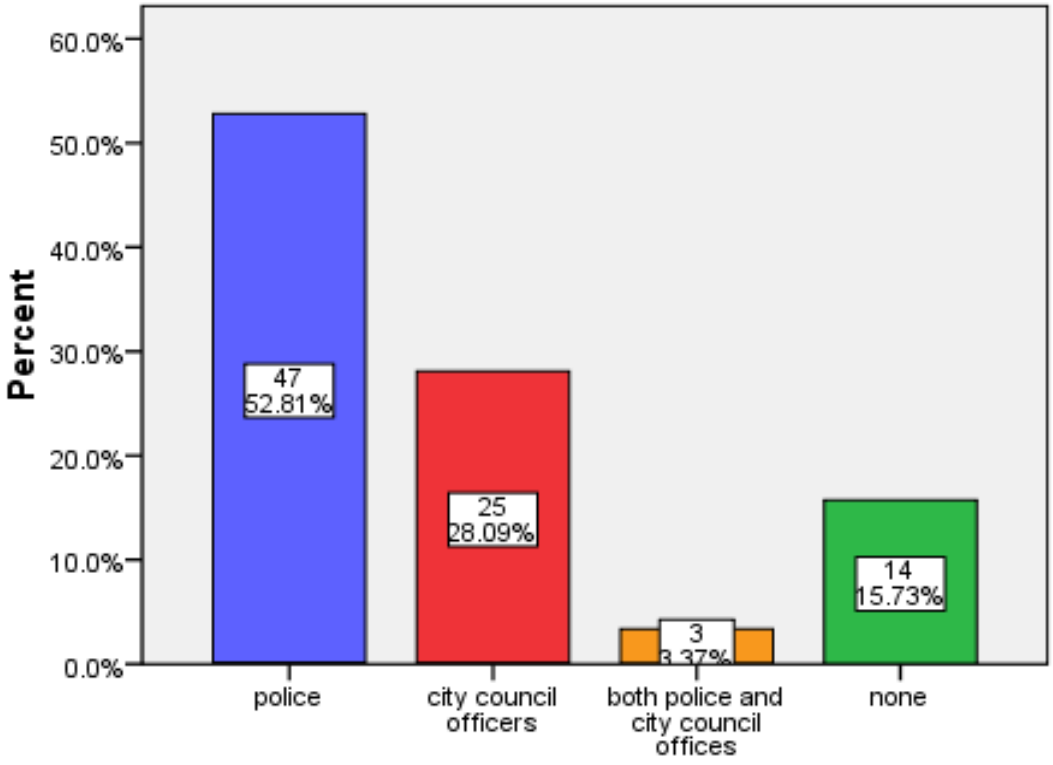

Figure 4.5: Source of harassment (bribes, intimidations, threats)

Table 4.22 shows a significant relationship between genders and adherence of the Alcohol control Act, (P< 0.001). It is also clear that there was a relationship between the lack of adherence to the act and the marital status (P <0.003).

The period of operation also shows an association to the adherence to the Act (P<0.001). The increase of the outlets in the region shows that the outlets were registering high number of clients. (95% CI 2.902 – 3.340; P <0.001).

4.6 Multivariate analysis of factors associated with non- adherence of the Act

4.6.1 Socio-demographic characteristic as predictors of non-adherence to the Alcohol Control Act among alcohol outlet operators

Table 4.22: Multivariate analysis for socio-demographic characteristics as predictors of non- adherence to the Alcohol Control Act

	Adherence to the Act	AOR	95% Confidence Interval		P Value
			Lower Bound	Upper Bound	
Age	Yes	0.161	2.559	3.199	0.185
	No	0.124	2.558	3.049	
Gender	Yes	0.074	1.216	1.511	0.001
	No	0.057	1.065	1.292	
Marital Status	Yes	0.148	1.919	2.505	0.003
	No	0.113	1.757	2.207	
Operation Period	Yes	0.110	2.902	3.340	0.001
	No	0.085	3.439	3.775	
Education Level	Yes	1.123	1.664	2.154	0.588
	No	0.095	1.669	2.045	

4.7 Qualitative Results

Adherence to the Act: when asked if they do adhere to the Alcohol Control Act 2010, majority of them responded that it was so hard to adhere to the act given the daily harassment, bribery and lack of efficiency from the police department.

Awareness of the Act: Many of the respondents who had been in operation for more than 6 years stated that they were not aware of the Alcohol control Act since it was in place given much had not changed since the time they had been

in operation, they cited that bribery was the main order of the day and it was a way to settle the problem easily.

Factors to curb those who did not adhere to the Act: When interviewing the police they stated that they had factors in place to monitor and get those who did not adhere to the Act. They said the factors are very clear and defined to ensure anyone who breaks the law was prosecuted. Despite of the County council officers and police stating they had factors to curb the menace, majority of the respondents who operated the outlets said they knew how the law operates and they had to get their way out easily through offering bribes to those sent to investigate.

Table 4.23: Qualitative results

Theme	Sub Theme	Main Response
Adherence	Action	Abuse of the act such as selling alcohol to the minor, offering bribe and poor hygiene in the outlets Bribery offering to the government officials
	Efficiency	Poor management of the outlets. Not following the law as stipulated.
Awareness	Knowledge	Not aware of when the Act was implemented Lack of enough information on the defined time of opening and closing of the outlet
	Perception	Poor insight on what is required to them Taking the Act as something not important
Factors to control the	Monitoring	Ensuring that the operators abide to the stipulated law. Enforcing the law

Act abuse	Organize	Ensuring the outlets are organized in an efficient way. Ensuring availability of the facilities to the sellers

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Alcohol taking prevalence

Alcohol is the most abused substance in the country and poses the greatest harm to Kenyans as evidenced by the numerous challenges faced by those selling the drink. The study found 51.7% of those selling the drink were single parents had attained secondary school level of education. A significant figure from the qualitative data also revealed that many of those who were operating the outlet had attained secondary level some of them being secondary dropouts. This corresponds to the study done by NACADA across the country showing 55% of alcohol operators are single parents (NACADA, 2008). The study also found 52.8% of the operators opened their outlets between 7 am –midday and closed between 11 pm– Midnight. This is against the Alcohol Control Act (2010) which states that the time to open and close the outlets is to be between 5 – 11 pm. The difference in this time implies that there is still high demand of alcohol and sellers have no choice but to go against the rules. With the favorable drinking time there remain high chances of moving from use to abuse. The operators stated that it is a choice of any client to consume alcohol. With the operators not caring for their clients their interests was only the profit received. 68.7% of the operators were aware of the fine charged if behaved disorderly in public.

Similar studies conducted in Uganda shows a high prevalence of alcohol consumption. It shows the level of consumption as 53% in the Northern Uganda and 59% in the other areas (WHO, 2007).

5.2 Adherence of alcohol regulations Act by operators

The Alcoholic Control Act, 2010 controls and regulates the production, manufacture, sale, labeling, promotion, sponsorship and consumption of alcoholic drinks. The Act ensures that it controls the health of individuals, consumers, children under age, adopt

and implement measures to eliminate illicit brew. In this study 62.9% of the outlet operators reported not to adhere to the alcohol Act. This is a threat to the residents of Thika and should be a wakeup call to the management to ensure strict measures are put in place. This shows that despite being implemented in 2010 the Act is not being adhered to. A similar study done by NALEP reveals that 59% of the operators in the rural areas did not adhere to the Act (NALEP, 2011). With majority failing to adhere to the regulatory Act, the study reported that most of the measures in the Act were not being taken into account, starting from the time and closing of the outlets both during weekdays and weekends was different from the time laid out in the Act. The study reveals that during weekend majority of the outlets close in morning hours i.e. they do not close at ll.00 pm.

With the study indicating that 52.8% of the outlet operators did not obtain an identification card from the client before selling the alcohol, with the same number of the outlets being situated 300 meters from learning institutions, it's clear that there is a high chance of alcohol being sold to the underage children which is an offence in the Act. Thus the study found 64.0% of the outlet operators had sold the drink to the underage children. It is so sad that the operators did sell alcohol to minors and then avoid the law. This shows how the administrations are not doing enough to fight this menace. According to WHO (2011) alcohol abuse among underage and more especially the school going children is high with 36.5% students admitting they frequently consume alcohol. Thika municipality has been a den of criminal gangs which consisted children; these children after abusing alcohol are likely to engage into the criminal behavior hence causing threats to the citizens. According to the study done in Australia, 70% of prisoners convicted of violent assaults had drunk alcohol before committing the offence and more than 40% of domestic violence incidents involved alcohol (Basangwa *et al*., 2006).

It is also clear from the study that almost all the measures have not been effected, given the lack of adherence of the Act. Many operators confessed that they were not aware of the Alcohol Control Act 2010. Of those interviewed 70.8% said they were not aware of when the Act was implemented. This indicates that many were not aware of all the

requirements they need to put into place. This is also evidenced in the study done by National campaign against drug abuse (NACADA, 2012).

The implication is that with the current trend and with the Act not being implemented the challenges will continue to affect the people in Kiambu County, but most specifically within Thika municipality and the consumers are at high risk of developing continued alcohol related disorders and also family breakdown challenges. Another study in USA showed that moderate and hazardous alcohol use was associated with poor adherence to the Acts put in place (Chander *et al*., 2006).

Looking at the significant differences between adherence of Alcohol Control Act and social demographic characteristics, only gender and marital status showed a significant difference while the rest showed that there was no significance difference. This shows that with gender there was high number of females and those who were single engaging in the alcohol outlet operators. The implications of this shows that with the current life challenges and rampant cases of excessive alcohol consumptions many families will continue to break and thus women remaining with the responsibilities of bringing up children.

5.3 Awareness of Alcoholic Act among alcohol operators in Thika Municipality

The study found 69.7% of the operators not to be aware of the Alcohol Control Act 2010, this is alarming and the government should ensure it creates awareness and educate people on the Alcohol Control Act. This shows that since the implementation of the act, only 6.7% were aware of the act and when it was implemented. With lack of knowledge on the Act, the operators in Thika municipality conducted their business as usual with many conducting in fear of police and health officers. Majority stated that they had only heard of the Act from friends but they could not tell what the Act entails. The study also found that 47.2% of the outlet operators sold the alcohol in the 50 ml sachets. This is against the Alcohol Control Act which only allows one to sell alcohol in the 250 ml containers (NACADA, 2012). It also found 64% outlet operators had any posters in the outlet while 57.3% reported not to be aware of the measures in place to eliminate illicit brew thus acting contrary to the Alcohol Control Act 2010 which states

that mandatory warning labels on information and potential health hazard as well as statement as to the constituents of the alcoholic drink are to be placed in every alcohol selling point. Such health warnings and messages include: “excessive alcohol consumption is harmful to your health”, “excessive alcohol consumption can cause liver cirrhosis (liver disease)” and “alcohol not for sale to persons under the age of 18 year” (NACADA, 2010).

There is clear need to inform and educate the outlet operators and any individual responsible in production, supply and sale of alcoholic drinks, thus being able to understand the negative effect of alcohol not just to the consumers but also to them as operators. The measures taken by both NACADA and the government to fight the illegal brew and ensure the Act and conditions are followed has not had any effect to these operators as per the study .This shows either the operators are ignorant of the Act or do not listen to the message. This is shown in the Kenyan gazette supplement number 17 (Bills No. 5), (2014)

A study done by Brown shows excessive alcoholic drinking accounts for substantial cognitive impairment, disorder and dysfunction many of them irreversible (Brown and Tapert, 2004). Barlow points out that alcohol is a threat to family life and to harmonious interpersonal relations which deprives one sense of belonging and societal values (Barlow, 2000). With failure and ignorance to understand the regulatory act there is need of measures to be put in place to ensure that the Act is adhered to the letter.

5.4 Factors associated to non-adherence of regulation

The study found several factors associated to the non adherence of the Alcohol Control Act. It is clear from the study that factors like, high demand of alcohol, bribe given to the officers who go for inspection and lack of enough information concerning the Act among others led to operators not to adhere to the regulation. A study done in Nigeria showed that being female, single and having a higher educational status was significantly associated with non-adherence to Alcohol Control Act (Uzochukwu *et al.*, 2009).With many being unemployed and the outlet being their only source of livelihood they had to get involved in sales without adhering to the Act so as to meet their daily

needs. The study found out that the operators were driven by ignorance of the Act, hence majority of the operators locked up their customers inside the outlets until they were done with their drinks. Many operators said the money they got was used for family upkeep and school fees for their children. It was also found that 51.7% of the operators were single, majority being women. This implies that with lack of employment, many women are likely to continue engaging in the business. This has been confirmed by a study showing estimates of alcohol consumption by McKean and Cossey (2005) in East Africa which indicates that Uganda has the highest per capita consumption (19.5 litres) of absolute alcohol in the world, which is attributed to homemade alcohol made by women.

The study found 69.7% of the operators claimed that it was wrong for an individual not to consume alcohol, thus showing how much they were not informed on the dangers of alcohol consumption. This is contrary to the Act which states that reduction in alcohol consumption leads to a better responsible society. Also 64.0% of the operators said they had sold alcohol to underage giving a reason that they bought the drink at relatively high amount than the normal price. With this behavior it shows that the fight prohibiting selling of alcohol to persons under the age of 18 years can only be achieved if enforcement is put in place. This is similar to the study done by both NACADA and ministry of education indicating that more than 50% of school going children had consumed alcohol among other drugs (Kenya gazette, 2012; NACADA, 2015).

64% of the outlets were not inspected by the officers; this was because they had to bribe the officers for them not to inspect their outlets since many of them did not meet the set standards. This implies that the fight against alcohol abuse has to employ new measures starting from the inspectors, police, and the alcohol outlet operators, if all of them take responsibility, everybody will adhere to the Act. It is clear from the study that many operators do close the outlet whenever there is any inspection and if they are ambushed especially by the police they still end up bribing them though after being arrested.

In the qualitative study almost all the supervisors acclaimed that operating the outlets was becoming difficult day by day due to the daily harassment by the police and public health officers. One said

"We are forced to close the outlet whenever we speculate that both police and public health officers are around, or else we have to bribe them to get ourselves out which has become a common" KII, male, 33 years)

Another operator said;

"Wao tunawapatia yao ya macho alafu kazi inaendelea" (We offer a bribe then, work as usual) (KII, male, 29 years)

Arrests are made whenever they get the school going children in the outlets, though the supervisors claimed that it was so hard to control selling of alcohol to the underage since at some point they bought the drinks at a high price than the normal clients. This is similar to a study conducted in India on too much drinking of alcohol by under 18 years (WHO, 2012).

The County Government of Kiambu needs not to relent in consistency monitoring of all the outlets in Thika municipality and across the whole County. The monitoring should roll across the country. Strict measures to ensure the Act is adhered to should be maintained. Information should also be circulated to all manufacturers and sellers of the alcoholic drink since the study found out that many operators sited lack of information as another factor that made them not to adhere to the Act.

This shows that there is alcohol demand in the region and no one follows the law. As one of the respondent stated that,

"This is our job, we have to open earlier to get money for school fees, rent and for food and no one can stop us since we are doing that way every day" (KII, female, 41 years)

Also another operator reiterated that,

"Sisi tunajua sheria lakini kazi lazima tufanye ndio tupate unga"

(We know the law but we must provide for our families)(KII, female, 38 years)

The reasons given for them to open before and past stipulated time were the high demand of alcohol, the need to get money, pressure from the clients and lack of employment. Only 42.7% reported that they do check the expiry date on the alcohol bottle before selling them while a majority of 57.3% reported not to check. 42.7%

reported to sell adulterated drink and non-alcoholic drinks while 57.3% reported not to sell any altered drink or non-alcoholic drink.

Those who sold the adulterated drink highlighted high demand of alcohol by the clients. While those who did not adulterate the drink said it was against the alcoholic Act 2010. This is similar to a study done in USA (Arata *et al*, 2003)

The police stated that they face a lot of challenges from the outlet operators who don't adhere to the Act since many of the operators lack knowledge and awareness of the Act. They claimed that the outlets were opened and closed at odd hours far from the stated time in the Act, Some respondent said,

> *"These people are soon going to face it rough since we have been so relaxed on them, they mess everyday instead of following the law, they even allow school children in their outlets which is against the law" (KII, male, 35years)*

The interviewed public health officer was clear and tough on the way the outlets were operating. He stated that many had not renewed their license and also were operating in unhygienic conditions. He also said the outlet had become a den of crimes. Asked the number of those who had renewed their licenses he said that of the 89 outlet operators only 31 had renewed their license this year which gives a percentage of 34.8% while last year only 41 had renewed resulting to 46.1%.

The officers reiterated that

> *"Many do close during the time of inspection and license renewal then open later" (KII, female, 28 years)*

The officers then said

> **"***Plans are underway to close all the outlets which will not have renewed their license and fail to meet the set standards" (KII, male, 38 years)*

Though the police stated they were doing all it takes to ensure the law is adhered to it was clear from the operators that some of them contributed towards not adhering to the law. Some were quick to note that:

"Kushikwa tunashikwa kukiwa na msako lakini ukiwa na watu wako huko juu, utaachaliwa" (We are arrested during police operation but we gain freedom depending on whom we know) (KII, female, 40 years)

The supervisors also noted that they sold different types of alcohol which were on high demand by the customers. They said their seniors were in charge of the type and quality of alcohol produced within the area. Some of the supervisors interviewed said;

"Mkubwa wangu huleta pombe ambayo inahitajika na wateja wengina ambayo inayoleta faida kubwa. Si kuleta pombe hapa na hainunuliwi"

(My boss stocks quality alcohol, alcohol on high demand and the most profitable.)

(KII, female supervisor, 37 years)

One of the three managers interviewed said it was his wish to ensure he adheres to the act and he was doing all he can in order to meet the regulations. *"I have talked to my supervisors and operators on how we can adhere to the regulations and we are trying to find a solution on this given the nurture of the job".*

The other two managers stated they would wish to follow the rules but due to the demand of the clients it did not allow them. The same response was found in 3 out of the four supervisors interviewed.

How do you ensure the quality products are supplied?

*"By checking and marking the supplied products, being available the time of supply and ensuring there was no alteration of the drinks at any time."*This was the response of the supervisors.

5.5 Conclusions

There is high abuse of the Alcohol Control Act 2010. It is clear from the findings that there is no adherence of the Alcohol Control Act 2010.

Most of the outlet operators were not aware of the alcohol control regulatory Act developed in 2010 by NACADA. Most of operators were not aware when the alcohol Act 2010was implemented, there is need for the government and NACADA to review the Act and ensure the extent and level of dissemination to all alcoholic operators. There is also need for campaign to promote information and awareness on the alcohol Act, its challenges and effects acquired from the sale and consumption of alcohol. In line with the primary prevention of alcohol sale and abuse with better information on alcohol, there is room for more information on alcohol abuse and its negative effects.

Factors associated with non adherence of the Act include: lack of awareness on what the Act state, ignorance of the law, brides, lack of enforcement will, rouge businessmen who want to make profits by selling alcohol to less than 18 years old and lack of frequent inspections of the outlets.

5.6 Recommendations

In view of the study findings, the following recommendations are made:

1. There is need for increase of awareness on adherence to the Alcohol Control Act 2010.
2. Review of Alcoholic Control Act 2010 policy with the stringent measures on abuse of key provisions.
3. Enforcement of the Alcohol Control Act 2010 should be enhanced.
4. Digitalize the outlet to ensure the advanced monitoring and inspection of the outlets and bars.
5. The research office of NACADA should be allocated more funds so as to support research of this capacity in the country, this in return will aid NACADA in making decisions that are research based hence being effective.
6. NACADA body to introduce a compulsory awareness test to all alcohol outlets operators before they are allowed to start operations since according to this study there is no awareness of Alcoholic Control Act 2010.

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APPENDICES

Appendix 1: Consent Form

TITLE OF THE STUDY: FACTORS ASSOCIATED WITH NON ADHERENCE OF THE ALCOHOL REGULATIONS ON ALCOHOL SALE IN THIKA MUNICIPALITY, KIAMBU COUNTY

KEY INFORMANT INTERVIEWS

TITLE OF THE STUDY: FACTORS ASSOCIATED WITH NON ADHERENCE OF THE ALCOHOL REGULATIONS ON ALCOHOL SALE BY ALCOHOL OUTLET OPERATORS IN THIKAMUNICIPALITY, KIAMBU COUNTY

Principle investigator (PI): Paul W. Gitau, a student at JKUAT-ITROMID of registration number TM 310-1154/2013.

I want to thank for taking the time to meet with me today.

My name is PAUL W. GITAU and I would like to talk to you about your experiences in factors associated with non adherence to alcohol regulation specifically, as the main component of my overall program evaluation as we define factors associated with non adherence of alcohol regulations in Thika municipality, Kiambu County in order to capture major factors that will be used in ensuring adherence of alcohol regulations.

The interview should take less than half an hour. I will be taping the session because I don't want to miss any of your comments. Although I will be taking notes during the session, I can't possibly write fast enough to get it all down, because we are on tape please be sure to speak up so that we don't miss your comments.

All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not indentify you as the respondent. Remember you don't have to talk about anything you don't want to and you may end the interview at anytime.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

Interviewee signature.....

Date .....

Questions

i. What are the factors that leads to non adherence of alcohol regulation? Please list
ii. Which of these factors would you consider to be the major factor? Please explain
iii. To what extent does adhering to alcohol regulations improve or hinder your business from achieving maximum profits? Please explain
iv. Which of the alcohol regulations do you adhere to mainly? Please elaborate
v. What would you like done differently if the county government of Kiambu decides to review these regulations? Please explain why
vi. What regulations would you recommend be sustained or improved? Please provide a justification for your response
vii. What regulations should be discontinued? Explain why?
viii. What are the barriers, if any, that you encounter when adhering to these regulations?
ix. How do you overcome the barriers?
x. Is there anything more you would like to add regarding alcohol regulation laws?

I will be analyzing the information you and others gave me and submitting a draft report to the organization in one month. I'll be happy to send you a copy to review at that time, if you are interested.

Thank you for your time

For any inquires in the event of any research related questions, comments or complains, the following persons will be available for contact: The secretary KEMRI Ethics Review Committee Tel; (+254)(020) 2722541,2713349 P.O. Box 54840-00200 Nairobi or Principle Investigator 0711 826 771, P.O. Box 6482-01000-Thika.

Informed Consent Form

CONSENT EXPLANATION FORM

TITLE OF THE STUDY: FACTORS ASSOCIATED WITH NON ADHERENCE OF THE ALCOHOL REGULATIONS ON ALCOHOL SALE BY ALCOHOL OUTLET OPERATORS IN THIKAMUNICIPALITY, KIAMBU COUNTY

Principle investigator (PI): Paul W. Gitau, a student at JKUAT-ITROMID of registration number TM 310-1154/2013.

Dear madam/sir.

The following information is provided to help you understand the study being taken and to request you to allow the researcher to interview you and get some information using a questionnaire.

Introduction

This study involves exploring awareness of alcoholic act among alcohol outlets operators and determining factors associated with non adherence to alcohol sale regulations in this municipality {Thika}, Kiambu County. It will be of great impact to the general public, authorities; public health officers in that it will provide the real situation in the field regard the association of the existing alcohol regulations on alcohol sale. Recommendations will be made regarding the outcome of the study. The study has no negative effects on your business since no name will be revealed in this study.

Participant information.

Your participation in the study is entirely voluntary.

Withdrawal from the study is allowed at any time though your cooperation is highly appreciated.

Procedure.

If you agree, you will be provided with a questionnaire for you to fill to the best of your knowledge. For all the questions in the questionnaire there is no right or wrong answer.

Your name and the name of your business {alcohol outlet} shall not be used in the data. The information will be used for research purposes and will be only be accessible to research team.

I will be taping the session because I don't want to miss any of your comments. Although I will be taking notes during the session, I can't possibly write fast enough to get it all down, because we are on tape please be sure to speak up so that we don't miss your comments.

Confidentiality

The records of this study will be kept under key and lock. Anything you tell us will remain confidential. You are assured that the information you are going to provide will not be reported to the authorities not matter what since this research is governed by privacy and confidentiality In any sort of report of the study, we will not include any information that will make it possible to identify you. We are not asking for your name, address, or phone number. Your name and other identifying information will not be kept with this survey. The surveys will be kept in a locked file; only the researchers for this study will have access to the records

Risks and benefits

There is no risk in participating in the study, only that you will take a few minutes when answering the questionnaire.

The benefits of the study include proper understanding of the alcohol regulation and related policies.

By signing this form I don't give up any rights that I have as a research participant.

Participant name.....signature.....date.....

Staff conducting the study .....signature .....date.....

For any inquires in the event of any research related questions, comments or complains, the following persons will be available for contact: The secretary KEMRI Ethics Review

Committee Tel; (+254)(020) 2722541,2713349 P.O. Box 54840-00200Nairobi or Principle Investigator 0711 826 771, P.O. Box 6482-01000Thika.

Appendix 2: Questionnaire

TITLE OF THE STUDY: FACTORS ASSOCIATED WITH NON ADHERENCE OF THE ALCOHOL REGULATIONS ON ALCOHOL SALE BY ALCOHOL OUTLET OPERTORS IN THIKA MUNICIPALITY, KIAMBU COUNTY

Principle investigator (PI): Paul W. Gitau, a student at JKUAT-ITROMID of registration number TM 310-1154/2013.

A. Social demographic identifiers

1. Participant identification number (.....)
2. Location/area/street (.....)
3. Age (.....)
4. Gender (.....)
5. State for how long you worked as a alcohol out let operator. (.....)
6. Highest education level. (.....)
7. Residence area. (.....)

B. Themes

8. What time do you open on week days?

(1)1.00 pm (2) 4.00 pm (3) In the morning hours (7 am to mid day)
(4) 5.00 pm (5) Don't open on week days.

9. What time do you close on week days?

(1)11.00 pm (2) Past midnight (3) The business don't close
(4) 9.00 pm (5) We close when our customers are satisfied.

10. What time do you open on weekends?

(1)10.00 am (2) Depends with the customers demand (3) 2.00 pm (4) 5.00 pm (5) If others state (.....)

11. (i) What time do you close on weekends?

(1)We don't close (2) In the morning hours (3) 11.00 pm (4) It depends with the customer demands (5) We close the doors but still sell alcohol indoors.

(ii) Which factors make you close the time you close?

(.....)

12. (i) What time do you stop selling alcohol either on weekend or week days?

(1)11.00 pm (2) 9.00 pm (3) Past midnight (4) When you have no more customers to serve (5) If other time, state (.....)

(ii)Which factors leads to you stopping selling alcohol?

(.....)

13. (i) Do you ask for identification card before selling alcohol to the consumer?

(1)No (2) Yes (3) It's no part of requirement when selling alcohol to the consumer.

(ii) If no who does it?

(1) I don't know (2) Bouncers or the security (3) If others state who

(.....)

(iii)If no, what are the main factors that lead you not to do so?

(.....)

14. (i) Do you have family fan day?

(1)Yes (2) No

(ii)If yes? Do you sell alcohol to the parents who bring their children during family fan day?

(1)Yes (2) No (3) It depends with the presence of the police (4) Others state (.....)

(iii)If you sell alcohol during family fan day what are the factors that leads you to doing so?

(.....)

15. Is there any school that is 300 meters away from here?

(1)Yes (2) No (3) I don't know (4) Yes more than one

16. What is the least amount or quantity of alcohol do you sell?

(1) Less than 500 ml (b) 50 ml (a tot) (3) I don't know (4) It depends with the customer's buying power. (5)If others state the amount (.....)

17. (i) Is there any warning in this alcohol outlet that warns consumers on harmful effects of excess alcohol consumption?

(1)Yes (2) No (3) I have never seen one

(ii)If yes what does it state?

(.....
....)

18. Have you ever at any time explained to your customers the harmful effects of excess alcohol consumers?

(1)No (2) Yes

19. (i) Is there any measurement to eliminate illicit trade?

(1)No (2) Yes (3) I don't know

(ii)If yes, which measures are these?

(.....
....)

20. Do you sell alcohol using automatic vending machine?

(1)Yes (2) No (3) I don't know (4) Once in a while.

21. What are the key features you use to define a quality and fit alcohol for consumption?

(1)I use none (2) KEBS mark only (3) Diamond trade mark only (4) Both diamond trademark and KEBS mark only.

22. Do you at any time sell alcohol with a label indicating for export only?

(1)Yes (2) No (3) I don't know

C. Awareness

23. What is Alcoholic control act?

(1)I don't know (2) A law that govern alcohol production, sale and consumption (3) Is an alcoholic drink (4)None of the above.

24. When was alcoholic control act 2010implemented?

(1)November 2010 (2) November 2000 (3) November 2001

(4) Notyet implemented (5) I don't know

25. What fine does drunkenness and being disorderly in public attracts?

(1)Ksh.5, 000 (2) Ksh. 500 (3) I doesn't know (4) Ksh. 1,000 (5) If others state (.....)

26. Is selling more alcohol to an already intoxicated person or encouraging them to consume more against the alcoholic act 2010?

(1)Yes (2) No (3) I don't understand (4) There is nothing like that

27. Selling alcohol contrary to thealcoholic act 2010 attracts a fine of how much?

(1) Ksh. 3 million (2) Ksh. 3,000 (3) I don't know

28. Selling an alterated drink or a non alcoholic drink which is adultered with alcohol is outlawed and attracts a fine of 10million.

(1)True (2) False (3) I doesn't know (4) Both false and true.

29. Selling of alcohol to an under 18 years old attracts which fine?

(1) 150,000and three months imprisonment (2) It is not an offence (3) I don't know.

30. Is it wrong or foolish to refuse taking alcohol?

(1)True (2) False (3) I don't know

31. (i) Have you ever been arrested by the police for failure to observe this law?

(1)Yes (2) No

(ii)If yes?What was the offence and how much were you fined?

(.....)

32. Who of the following persons inspects your premise before your license is renewed?

(1)City council officers (2) Public health officers (3) District committee (4) All 1, 2, 3 (5)None. (6) I don't know.

33. (i) Is there any time the district committee failedto renew your operational license?

(1)No (2) Yes (3) I don't know

(ii) If yes? What was the main reason?

(.....)

34. (i) Do you open earlier before the stipulated time?

(1) Yes (2) No

(ii) If yes, what are the factors that make you open earlier than the stipulated time by the law?

(.....

.....

35. (i) Do you close past stipulated time?(11.00 pm)

(1)Yes (2) No

(ii) If yes, what are the factors that make you close at late hours than the stipulated time?

(.....)

36. Do you always check the expiry date of alcohol before you sell it to the final consumer?

(1)Yes (2) No

37. (i)Who harass you when you are operating this business?

(1)Police (2) City council officers (3) Both police and city councils officers (4) None (5) If others state.....

(ii)If police, city councils or both state the reasons they harass you.

(.....)

38. (i) Do you sell any altered alcoholic or non alcoholic drink ?

(1) Yes (2) no

(ii) If yes, what are the major factors that lead you to altering of the drinks?

(.....)

(iii) If no, what are the major factors that hinder you from altering the drinks?

(.....)

39. Have you ever sold alcohol to under age customer?

(i) If yes, what were the major factors that made you sell alcohol to the customer.

(.....)

(ii) If no, state the major factors that hindered you from selling alcohol to the customer.

(.....)

40. Do you lock your customers inside the outlet and sell alcohol either before or past the stipulated time?

(i) If yes, what are the main factors that lead you to doing this?

(.....)

(ii) If no, state the major factors that hindered you from doing it.

(.....)

FOMU YA MASWALI KWA KISWAHILI

KICHWA: SABABU ZINAZO HUSHISHWA NA KUTOFUATA SHERIA ZA UUZAJI POMBE KWENYE THIKA MUNICIPAA KAUNTI YA KIAMBU

Jina la mchunguzi: Paul W. Gitau, mwanafunzi katika chuo kikuu cha JKUAT-ITROMID namba ya usajili TM 310-1154/2013.

1. Nambari ya mshiriki (.....)
2. Kata/mtaa/barabara (.....)
3. Umri (.....)
4. Jinsia (.....)
5. Kwa muda gani umefanya kazi kama muuzaji pombe. (.....)
6. Kiwango cha juu cha elimu. (.....)
7. Mahali unapoishi. (.....)

MADA

8. Je, wafungua hii biashara saa ngapi katika siku za wiki ?

(1) Saa saba mchana (2) Saa kumi jioni (3) Wakati wa asubuhi(kutoka saa moja hadi saa sita mchana) (4) Saa kumi na moja jioni (5) Sifungui biashara katika siku za wiki.

9. Je, unafunga hii biashara saa ngapi katika siku za wiki?

(1)Saa tano usiku (2) Kupita saa sita usiku (3) Huwa sifungi

(4) Saa tatu usiku (5) Nafunga biashara wakati wateja wametosheka na kulewa.

10. Je, wafungua hii biashara saa ngapi wikendi?

(1)Saa nne asubuhi (2) Ya tegemea mahitaji ya wateja. (3) Saa nane

mchana. (4) Saa kumi na moja jioni (5) Wakati mwingine andika

(.....)

11.Je, wafunga hii biashara saa ngapi wikendi?

(1)Huwa hatufungi (2) Masaa ya asubuhi (3) Saa tano usiku

(4) Ina tegemea mahitaji ya wateja (5) Huwa twafunga milango na kuuza

pombe tukiwa tume funga milango saa tano ikifika.

(ii)Je, ni sababu zipi zinazo kufanya ufunge hii biashara saa ambazo wewe hufunga?

(.....)

12.(i) Je, ni saa ngapi ambapo unawacha kuuza pombe ikiwa siku za wiki ama wikendi?

(1)Saa tano usiku (2) Saa tatu usiku (3) Kupita saa sita usiku (4) Wakati wateja wameisha (5)Kama kuna wakati mwingine eleza

(.....)

(ii)Je, ni sababu zipi zinazo kufanya wewe kuwacha kuuza pombe ikiwa siku za wiki ama wikendi?

(.....)

13. (i) Je,wewe huwa una agiza kitambulisho kutoka kwa mteja wako kabla kumuuzia pombe?

(1)La (2) Ndio (3) Sio sheria eti lazima ni agize kitambulisho

(ii) Kama la, nani huagiza kitambulisho?

(1) Mimi sijui (2) Walinzi (3) Kama kuna wengine eleza

(.....)

(iii) Kama la, ni sababu zipi zinazo kuzuia kuitisha kitambulisho?

(.....)

14. (i) Je, kwenye hii biashara, mnayo siku ambayo wazazi na watoto wao huja kujivijali(family fan day)?

(1)Ndio (2) La

(ii)Kama ndio?Je nyinyi huwa mwauza pombe miongoni mwa watoto kwa wazazi wao?

(1)Ndio (2) La (3) Yategemea kuwepo kwa polisi

(4) Kama kuna mengine eleza (.....)

(iii)Kama wauza pombe siku ya familia ni sababu zipi zinazo kuelekaza kufanya hivyo?

(.....)

15. Kuna shule ambayo iko hatua mia tatu kutoka mahali hapa?

(1)Ndio (2)La (3) Sijui (4) Ndio kuna shule nyingi zaidi ya moja.

16. Je, ni kiwango kipi kidogo cha pombe mnacho uza hapa?

(1) Chini ya 500 ml (2)50 ml (a tot) (3) Sijui

(4) Yategemea na nguvu za mteja kununua. (5)Kama kuna kiwango kingine

andika (.....)

17. (i) Je,kuna onyo kwenye hii biashara ambalo lina watahadharisha wateja kuhusu unywaji wa pombe kupindukia ?

(1)Ndio (2) La (3) Sijawahi ona moja.

(ii)Kama ndio onyo lipo,je onyo la sema nini?

(.....
....)

18. Je,kuna wakati wowote ule ushawahi waeleza wateja wako kuhusu madhara ya kutumia pombe?

(1)La (2) Ndio

19. (i) Je kuna mikakati yoyote ya kuzuia biashara haramu kuto fanyiwa kwenye hii biashara?

(1)La (2) Ndio (3) Sijui

(ii)Kama ndio ni mikakati ipi hiyo?andika

(.....
.....

.....)

20. Je mwauza pombe mkitumia automatic vending machine?

(1)Ndio (2) La (3) Sijui (4) Mara kwa mara.

21. Je una tumia alama gani ili kujua kua pombe unayoiuza ni salama na haitadhuru afya ya mteja?

(1)Si tumii alama yoyote (2) Alama KEBS. (3) Diamond trade mark pekee (4) Alama za diamond trademark na KEBS.

22. Je,unauza pombe ambayo iko na alama ya kuuzwa nje ya nchi (for export only)?

(1) Ndio (2)La (3) Sijui

C. kuelewa kwa sheria

23. Alcoholic control act ni nini?

(1)Sijui (2) Ni sheria inayo angalia utengenezaji,uuzaji na ukunywaji wa pombe. (3) Ni aina ya pombe (4) Hamna jibu.

24. Ni wakati upi ambapo alcoholic control act 2010 ilianza kazi?

(1) Novemba 2010 (2) Novemba 2000 (3) Novemba 2001

(4) Bado haija tekelezwa (5) Si fahamu.

25.Ni faini ya pesa ngapi ambayo sheria hutoza mlevi kwa kuwa msumbufu kwa umma ?

(1) Shilingi 5,000 (2) Shilingi 500 (3) Sifahamu

(4)Shilingi 1,000

(5)kama kuna zingine andika(.....)

26. Je,ni hatia kwa muuzaji pombe kuuzia mteja ambaye ni mlevi pombe ama kumpa motisha aedelee kunywa?

(1) Ndio (2) La (3) Si elewi (4) Hakuna sheria kama hiyo.

27. Uuzaji wa pombe kinyume cha sheria(alcoholic act 2010) ,muuzaji hutoswa faini ya pesa ngapi?

(1)Milioni tatu. (2)Elfu tatu (3) Sijui.

28.Uuzaji wa pombe ambayo imeongezwa bidhaa zinginezo ni hatia inayo mfanya muuzaji kutoswa milioni kumi kama faini .

(1)Ndio (2) La (3) Sielewi (4) Ni kweli na pia uwongo.

29. uuzaji wa pombe kwa mteja asiye timu miaka kumi na minane,ina fanya muuzaji kutozwa faini ya pesa ngapi?

(1) 150,000 na miezi tatu jela. (2) Sio kinyume na sheria. (3) Sijui.

30. Ni kosa ama upumbavu kutokunywa pombe?

(1)Kweli (2) La (3) Sijui

31. (i) Je, ushawahi shikwa na polisi kwa kuvuja sheria ya uuzaji wa pombe?

(1)Ndio (2) La

(ii)Kama ndio, ni kosa lipi ulilokuwa umefanya na ulitoswa faini ya pesa ngapi?

(.....)

32. Nani kati ya hawa,ndiye anaye ikagua biashara hii yenu kabla awapatie liseni ya kufanya hii biashara?

(1)Maafisa wa jiji (2) Maafisa wa afya (3) Kamitii ya wilaya (4) 1, 2, 3

(5) Hamna yeyote (6) Sijui.

33. (i) Je, kuna wakati wowote ule ambapo kamitii ya wilaya ilikataa kuwapa liseni?

(1) La (2) Ndio (3) Mimi sijui

(ii) Kama ndio, Sababu kuu iliwa ipi?

(.....)

34. (i) Je kuna wakati wewe hufungua biashara kabla ya wakati uliotengwa na sheria?

(1) ndio (2) la

(ii) Kama ndio , ni nini kinacho changia wewe kufungua ?eleza hapa.

(.....

35. (i) Je, wewe hupitisha masaa ya kufunga biashara?(saa tano usiku)

(1) Ndio (2) La

(ii) Kama ndio , ni nini kinacho changia wewe kupitisha masaa ya kufunga ?eleza hapa

(.....)

36. Je wewe unapo uza pombe kwa wateja wako, huwa una angalia tarehe inayo haribika?

(1)Ndio (2) La.

37. (i) Je ni nani anaye wanyanyasa wakati mnapo endelea na hii biashara ya uuzaji pombe?

(1)Askari (2) Maafisa wa jiji (3) Askari na maafisa wa jiji (4) Hakuna (5) Kama kuna wengine, eleza hapa

(.....

.....)

(ii)Kama ni askari ama maafisa wa jiji, eleza sababu zinazo wafanya wa wanyanyase.

(.....
.....
.....
.....)

38. e wauza pombe yeyote ambayo umechanganya na vileo vingine?

(i)Kama ndio ndio ni sababu zipi zilizo kuelekeza kufanya hivyo?

(.....)

(ii)Kama la , ni sababu zipi zilizo kukataza kufanya hivyo?

(.....)

39.Je, ushawahi uzia pombe mteja ambaye hajatimiza miaka kumi na nane?

(i)Kama ndio ni sababu zipi zilizo kuelekeza kufanya hivyo?

(.....)

(ii)Kama la , ni sababu zipi zilizo kukataza kufanya hivyo?

(.....)

40. Je kuna wakati unafungia wateja ndani na unawauzia pombe kabla ya saa kufika ama baada ya saa iliyokubalika ki sheria kuisha?

(i) Kama ndio,ni sababu zipi zinazo kuelekeza kufanya hivyo?

(.....)

(ii)Kama la ni sababu zipi zinazo kukataza kufanya hivyo?

(.....)