60EFFECTS OF ALCOHOL AND DRUG ABUSE TRAINING ON ATTITUDE TOWARDS ALCOHOL SCREENING AND BRIEF INTERVENTION AMONG NURSES AT EMBU LEVEL FIVE HOSPITAL

BY

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DECLARATION

This project is my original work and has not been presented for a degree in any other university.

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This project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

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ABSTRACT

Harmful use of alcohol is associated with high morbidity and mortality as recorded in many study findings. The World Health Organization) reports that there are over three million deaths associated to alcohol harm, this being higher than those associated with HIV, Tuberculosis and violence combined(WHO, 2014). Kenya has continued to experience aversive consequences of harmful use of alcohol (National Authority for the Campaign against Alcohol and Drug Abuse, (NACADA), 2014). This being the case, harmful use of alcohol is a public health problem which calls for a public health intervention.

Primary and secondary prevention are effective public health strategies used in intervention in a myriad of health problems. Screening and brief intervention are both primary and secondary preventive measures used in early identification of harmful and hazardous drinking and intervention. These can be conducted in various settings including health care facilities. Studies have shown that primary health care workers hold a position of vantage as far as conducting health interventions is concerned.

Nurses, being found in almost every department in the hospital can conduct routine screening and brief intervention for those whose drinking is found to be risky. Researchers have however found that in as much as it is recommended that clinicians, parts of whom are nurses have a responsibility to perform screening and brief interventions, the uptake has been slow. Many barriers including attitude towards the procedure may be responsible for the slow uptake.

The purpose of this study was to examine the effects of training in alcohol and drug abuse on attitudes to screening and brief interventions among nurses at Embu level five hospital.

The specific objectives were to:

1. Determine the extent to which nurses at Embu level five hospital have undergone training on alcohol and drug abuse interventions at various levels.

2. Determine the attitudes of nurses at Embu level five hospital towards alcohol screening and brief interventions.
3. Identify the relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital.
4. Determine the relationship between socio-demographic characteristics of nurses at Embu level five hospital and their attitudes towards alcohol screening and brief intervention?

This was a descriptive cross sectional study conducted at Embu level five hospital. The target population were nurses working at Embu level-five hospital .A combination of simple random and purposive sampling were used. Qualitative and quantitative data was collected and analyzed using the statistical package for social sciences (SPSS), descriptive and inferential statistics will be calculated. Data was stored and presented in various forms. Ethical considerations were observed by obtaining various permits as required. Results were discussed, conclusion and recommendations made and presented to the department. They were to be shared with various stakeholders. They may be used to improve the practice of screening and brief interventions.

CHAPTER ONE
BACKGROUND TO THE STUDY

1.0 Introduction

The World Health Organization (WHO), 2014 reports about 3.3 million alcohol-related deaths in the world every year (5.9%), surpassing those deaths related to HIV, tuberculosis and violence (2.8%, 1.7%, and 0.9% respectively) combined. WHO further says one in every twenty deaths has some relationship with alcohol use (WHO, 2014). In May 2014, there were over one hundred deaths, one hundred and thirty hospitalizations and several disabilities that resulted from ingestion of illicit brews in five counties in Kenya (NACADA, 2014).Further alcohol is linked to over two hundred diseases. The WHO, World Health Assembly (WHA) and United Nations Global strategy on alcohol harm reduction all suggest many interventions including a public health response. (WHO, 2011). Among the public health actions recommended by the WHO way back in 1981 are screening, brief intervention, and referral to treatment. (American Public Health Association (APHA), 2008).

Little research has been done on screening and brief interventions in health care settings. (NICE, 2010). Internationally standardized tools, as well as brief intervention guidelines, are available for use in different settings dating forty years back (APHA,2008). There is, however, no documented evidence of their use in Kenyan health care facilities. There seldom are reports of health education, screening, assessment, brief interventions in health care facilities in as much as this is clearly stipulated in the National alcohol policy (2012).

Primary health care workers who include nurses have a critical role in early identification of the harmful and hazardous use of alcohol as Wutzke .S. et al.(2004) reported. They attribute this role legitimacy to the natural rapport and numerous contacts nurses have with patients. These findings were also supported by Bridgeman K. et al.(2012) who after a randomized control study in the United Kingdom concluded that there was a significant reduction in alcohol consumption after screening and brief intervention conducted by

nurses. Following this study Surgeons and Nurse's professional bodies agreed that screening and brief intervention should be incorporated into routine clinical practice. A positional paper of the royal colleges of Nurses and surgeons support this position. The same is supported by National Institute of Health and Care Excellence (NICE) guidelines, (2010), which say that alcohol screening and brief intervention should be an integral part of health workers routine practice. Anderson, Gual &Colom (2004) says that health workers have a duty to identify the harmful use of alcohol and provide timely interventions. However, Anderson and colleagues report that health workers are often unwilling to provide alcohol screening and brief interventions. Among reasons cited was lack of training. (Anderson P. et al, 2004). Other reasons mentioned were inadequate time, lack of compatibility with their routine roles, fear of displeasing patients and a general feeling that those dependent on alcohol may not respond to interventions. For nurses to be able to offer these services, training is crucial. This can be done as part of the core curriculum, postgraduate training, short courses as part of continuous medical education or on the job training. The majority of training curricula have scanty or no components preparing health workers for interventions in alcohol-related harm to health (Kenya Medical Training College (KMTC), 2015).

1.2 Statement of the Problem

In spite of the documented high alcohol-related morbidity and mortality, there is little record of public health interventions other than education. There is little or no documentation of early identification and intervention for alcohol harm in primary health care settings. Seale, Shellenberger, John, Okosun,& Barton,(2005) in a study found that even though approximately 40% of patients visiting health care engage in the harmful use of alcohol, only 13% of these report receiving advice from health workers implying that alcohol screening and brief intervention is underutilized in primary health care settings. Many studies support the integration of screening and brief intervention in routine practice. Reproductive health services for Scotland highlights nurses as key players in screening and brief intervention in health care settings. Reasons for underutilization include lack of training. This not only results in knowledge and skills gaps but attitude challenges as well. Babor, Higgns J, Higgins.S.P, Gassman & Goud,(2013) reported that physicians felt inadequate to deal with problem drinking. Similar observations were made

in nurse education. Nurses can be trained during their professional training or as they undertake postgraduate studies. In service training for professional development is also an opportunity to train for competencies in alcohol screening and brief intervention. A study done in Massachusetts involving medical students, resident doctors, and other faculty showed an increase in screening and brief intervention rates following training. Through training, nurses acquire knowledge and awareness of research evidence, existing policies, safe drinking limits, and nature of alcohol-related harm and interventions. Training would also impart skills in screening, screening, brief intervention, assessment, referral to treatment and rehabilitation. Nurses if trained also are able to reflect on their own attitude towards alcohol interventions and become aware of the benefits of alcohol screening and brief intervention.

1.3 Purpose of the Study

The purpose of this study was to determine if there was a relationship between training in alcohol and drug abuse and attitude towards screening and brief interventions among nurses at Embu level five hospitals.

1.4 Objectives of the study

The specific objectives of the study were to:

1. Determine the relationship between alcohol and drug abuse training and practice of screening and brief intervention among nurses at Embu Level five hospital.
2. Determine the attitudes of nurses at Embu level five hospital towards alcohol screening and brief interventions.
3. Identify the relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital.
4. Determine the relationship between socio-demographic characteristics of nurses at Embu level five hospital and their attitudes towards alcohol screening and brief intervention?

1.5 Research questions

1. Is there a significant relationship between alcohol and drug abuse training and the practice of screening and brief interventions among nurses at embu level five hospital?
2. What are the attitudes of nurses at Embu level-five hospital towards alcohol screening and brief interventions?
3. Is there a relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol screening and brief intervention among nurses at Embu level-five hospital?
4. What is the relationship between socio-demographic characteristics of nurses at Embu level five hospital and their attitudes towards alcohol screening and brief intervention?

1.6 Research Hypotheses

The following are the null hypothesis of the study:

1. There is no significant relationship between alcohol and drug abuse training and the practice of screening and brief intervention among nurses at Embu level five hospital.
2. There is no relationship between nurses training in alcohol and drug abuse and their attitude towards alcohol screening and brief intervention among nurses at Embu level five hospital.
3. There is no relationship between nurses' socio-demographic characteristics and attitude towards alcohol screening and brief interventions among nurses at Embu level-five hospital.

1.7 Significance of the study

Alcohol-related harm is of public health importance globally with serious negative effects in Kenya (WHO, 2011, 2014, NACADA, 2012). International policy, national law, and policy clearly spell out the role of the health sector in dealing with the public health challenge that harmful alcohol use poses. Results of this study will help shed light on the competence and attitude gaps among nurses at Embu level five hospital. The findings of

this study will offer and explanation of the low uptake of screening and brief intervention in primary health care setting. It will help bridge the gap between training and practice by not only attributing poor uptake to attitude but also instituting measures that address the nurses' attitudes. The Ministry of health and county governments will use the findings of this study for training policy formulation, implementation, and preparation of guidelines for primary health care practice as well as prioritize human resource development. It will inform development and review of training curricula by universities, medical training colleges, and other tertiary institutions. It will also provide an opportunity for further studies to explain the current status of implementation of SBI in health care.

1.8 Justification

Alcohol use is associated with a wide range of health problems (WHO, 2011). Many people may not be aware of safe levels, patterns of use and the harm alcohol poses to their health. Moreover, few people if any will go to the health care facility to consult for an alcohol-related problem. However, people often visit a health facility for other health problems. Nurses in primary care have the responsibility and are best placed to identify the harmful use of alcohol through screening. They also can offer brief interventions to clients (Michael Fleming, 2005). Screening, brief intervention, and referral to treatment was introduced way back in 1981(Association of Faculties of Medicine of Canada (AFMC), 2011), and have been supported in global fora, yet the uptake is not as expected. The uptake is, however, slow. Heather (2012) concurs with this and says that clinicians do not offer SBI as expected. Michael Fleming (2005) agrees with this and adds that only 13% of clinicians use standardized screening tools. According to a study done in the United Kingdom by Johnson, Jackson, Guillaume & Goyder, (2010), attitude towards screening and brief intervention has emerged as one of the barriers. These attitudes have a relationship with training. In this study, nurses were afraid of giving incorrect information, they had a perceived lack of confidence, were not sure of guidelines and had no faith in formal screening tools. They also said that alcohol being a sensitive topic may upset their clients. This study will establish if there is a relationship between training and attitudes held by nurses towards screening and brief intervention. It will establish if the attitudes held by nurses are due to lack of training or they can be attributed to other causes.

1.9 Scope and delimitations of the Study

The attitude of nurses towards SBI in primary care depends on many factors. These include perceived self-efficacy, complexity, compatibility with current roles and benefits to the patient. The majority of these are addressed in training. Others are time, availability of tools, guidelines, policy, and dissemination of information as well as structural support. Training includes the pre-service training, in-service or postgraduate training and short courses undertaken as continuous professional development while in practice and not any other the content of interest in this study is alcohol and drug abuse prevention, referral to treatment and rehabilitation with special focus on alcohol screening and brief intervention. This study examined the relationship between nurses' training in alcohol and drug abuse interventions and their attitudes towards alcohol screening and brief interventions.. The study was done at Embu level five hospital and no other facilities.

1.10 Assumptions of the study

The study assumed that training influences the attitude of nurses towards alcohol screening and brief interventions. Training in college, in-service, seminars and on the job training is expected to equip professionals with the necessary knowledge, skills, and attitudes for the practice of SBI. Therefore, nurses' training was being viewed as having an effect on the attitude of nurses towards alcohol screening and brief interventions.

1.11 Operational Definition of Terms

Alcohol Dependence A cluster of behavioral, cognitive and physiological factors which include an uncontrollable desire for and use of alcohol irrespective of aversive consequences. (NICE Guidelines, 2011).

Alcohol use disorder A problematic pattern of alcohol use leading to clinically significant impairment or distress within a twelve month period (NICE,2010, APA, 2013).

Alcohol A product known as ethyl- alcohol obtained by fermentation or distillation and is psychoactive (APHA,2008).

Alcoholic beverage	A liquid that contains ethyl alcohol and is intended for drinking.
Alcohol-related harm	Physical or mental harm whose cause is entirely or partially alcohol consumption. (WHO,2014).
Binge drinking	More than 3 drinks for women and more than 4 drinks for men per drinking occasion. (APHA,2008).
Brief intervention	Counseling sessions lasting 5-10 minutes whose goal is to increase the person's awareness of his/her alcohol consumption and its consequences and increase motivation to change(WHO), 2003).
Competencies	Behaviors, skills, knowledge and attitudes that lead to effective practices (NHS Education for Scotland, 2010).
Drug	Any chemical agent that is capable of altering the biochemical or physiological processes of tissues or organisms.
Extended brief intervention	A motivation based intervention whose goal is to help people understand their behavior and identifying positive reasons to change. Uses motivational interviewing (WHO,2003).
Frames	Acronym summarizing the components of Brief Intervention (WHO, 2003)
Harm reduction	Reducing the negative consequences of risk behaviors rather than eliminating the behavior itself (WHO, 2014).
Harmful use of alcohol	Alcohol consumption hat is detrimental to the health of the consumer. It can also be patterns of drinking that are associated with increased risk of adverse health outcomes. (WHO, 2014).
Hazardous drinking	A pattern of consumption of alcohol which increases an individual's risk of harm (NICE, 2010) .

Intoxication	A transient condition following the administration of alcohol or a substance which results in impaired perception, cognition, consciousness, emotions or behavior (NICE,2010).
Low-risk drinking	Drinking within recommended guidelines (APHA, 2008).
Motivational interviewing	A directive client-centered interaction whose goal is to help people explore and resolve their ambivalence about substance use and go through the stages of change to modifying their consumption.(WHO,2003).
Non-communicable diseases	The diseases that cannot be transmitted from one person to another by direct or indirect contact (WHO, 2014).
Pre-primary prevention	Actions to minimize future hazards to health in order to inhibit factors known to increase the risk of disease. Wellbeing is always the outcome (AFMC, 2011).
Primary prevention	Prevents onset of specific diseases through risk reduction strategies such as behavior change, reducing risk exposures and increasing resistance to the effects of exposure(AFMC, 2011).
Primordial prevention	Actions to minimize future hazards to health in order to inhibit factors known to increase the risk of disease. (AFMC, 2011).
Referral	Linkage to a more specialized facility or where one can access services he/she needs and are not available at the referring unit or facility (AFMC, 2011).
Screening	Identifying people who may be at risk of or who have an alcohol use disorder even though they are not seeking treatment for an alcohol-related condition. (AFMC, 2011).
Secondary Prevention	Procedures that detect and treat pre-clinical stages of the disease and stop disease progression (AFMC, 2011).

Standard drink	Measures the amount of pure alcohol in an alcoholic beverage(APHA, 2008).
Tertiary prevention	Actions that aim at halting the disease or injury process and averting chronicity. It assists the person to obtain optimal health and rehabilitation is part of i(AFMC, 2011).
Treatment	A program designed to reduce alcohol consumption or any related problems which might involve psycho-social and medical solutions. (APHA,2008).
Training	Learning provided to improve performance, to enable a learner to master a method of providing a service(Nadler 1984).

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter presents a review of related literature, theoretical framework and conceptual framework. The review of literature is done thematically under the following themes: Background; Extent of training on alcohol and drug abuse interventions; Attitudes of nurses towards alcohol screening and brief interventions and; Effect of nurses training in alcohol and drug abuse and their attitudes towards alcohol screening and brief intervention.

2.1 Background

The Global status report on alcohol and health of 2014 reports that 3.3 million deaths annually are caused by alcohol-related problems and alcohol accounts for 5.9% of all deaths worldwide. According to NACADA (2012), about 5.8% of Kenyans (15-64 years old) were abusing alcohol while another 5.5% were dependent on alcohol use. This translates to 1,160,000 abusers and 1,100,000 being dependent on alcohol. In May 2014, it was reported that over one hundred people died of alcohol-related problems. A higher number was admitted to hospitals in different parts of the country (NACADA, 2014). As of May 2015, 2.6 million Kenyans were reported as being in need of intervention. An article in the standard digital of May 2014 (Mbaka, Messo& Gichuki, 2014) reported that one in twenty deaths in Kenya were as a result of the harmful use of alcohol, a figure that compares with the global mortality of 5.9%.

Alcohol, being a psychoactive substance has the ability to produce negative consequences (Health Services Executive (HSE), 2011). This harm is due to patterns that harm health and others in society (NICE, 2011). The health problems may be physical or mental. NICE (2010) describes alcohol-related harm as physical or mental harm caused wholly or partly by alcohol. Alcohol-related harm occurs as a result of several factors namely: amount of alcohol, the pattern of consumption and quality of alcohol consumed. For harm prevention, awareness of recommended levels is required. A man is allowed two standard drinks per day; a woman is safe consuming one standard drink per day. A

standard drink is one that contains 1.5 ounces of liquor or 12 ounces of beer or 5 ounces of wine (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2010).

More than 14 drinks in a week and 4 drinks on one occasion for a man is harmful drinking. More than 7 drinks in a week and 3 drinks on one occasion for a woman and the elderly (65+) is harmful drinking (American Public Health Association (APHA), 2008). It is associated with physical, mental as well as social consequences (National Institute of Health Care Excellence (NICE), 2010). The burden of disease and death associated with the harmful use of alcohol has risen to significantly alarming levels globally, being among the top five risk factors for morbidity, disability, and mortality (WHA, 2011). Harmful use of alcohol has been linked to etiology of over 200 diseases as well as 60 types of cancers (International Agency for Research, 2012, Ornstein et al, 2013, Mineka. S, 2013). Alcohol use disorders (AUD) as classified in the diagnostic statistical manual of mental illness volume 5(DSM-5) and International classification of diseases volume 10(ICD-10) are among a wide range of mental health problems. Several forums have declared the harmful use of alcohol a public health issue including the United Nations Office on Drugs and Crime (UNODC), the world health organization (WHO) and the world health assembly (WHA). All have linked alcohol use to a wide range of non-communicable diseases (Anderson P. et.al.2011).

The alcoholic drinks control act of 2010 was recently amended to declare alcoholism an illness and alcohol abuse a public health issue in the country. a presidential declaration of war on second generation alcohol. These actions, unfortunately, are a response to the visible negative effects on the socioeconomic front and the overt alcohol use disorders. The covert disaster in relation to cancers, mental illness, infectious diseases and a wide range of non-communicable diseases (NCDs) is yet to receive the attention it deserves. The Naivasha Declaration on non-communicable diseases (2011) observed the link between alcohol and the etiology of non-communicable diseases in Kenya and called for public health intervention. Harmful use of alcohol therefore clearly spells a public health problem of great significance which calls for a public health solution.

During the 60th World Health Assembly resolved that the alcohol-related burden could be alleviated if more attention was paid to prevention and treatment (WHO, 2007). In 2010,

the WHO further recommended that offering brief advice for hazardous drinking. While many strides have been made, harmful use of alcohol remains a low priority public health area (WHO, 2014). Health services have a duty to respond to alcohol-related harm in society (Kaner et al, 2009). The Global Strategy to Reduce Harmful Use of Alcohol outlined several areas in which health services could play a role in tackling alcohol harm. These include capacity building for delivery of prevention and treatment, supporting initiatives for screening and brief intervention for hazardous alcohol consumption in different settings especially primary health care settings (WHO, 2014). Section 67 of The Alcoholic Drinks Control Act of 2010 directs that dissemination of information and education on the use of alcohol shall form part of health services and that the government shall provide training for health care providers in order to equip them with skills for information dissemination and education (National Council for Law Reporting (NCLR), 2010).

According to the Association of Faculties of Medicine of Canada (AFMC), 2013, many cases of disease arise from those not in the high-risk group, a factor of numbers. There are also more cases arising from the average risk group than the high risk, again due to numbers. More emphasis is being placed on prevention, screening and early intervention (Strobbe, 2014). These shifts focus to primary care clinicians who lay a significant role in improving the health of individuals and entire communities. Routine visits to health care facilities provide an opportunity for screening and brief intervention. According to Strobbe, the US Preventive Task Force (USPSTF) found that behavioral counseling interventions reduce initiation of drug use among adolescents and school going children.

A comprehensive public health approach, screening, and brief intervention seek to reduce alcohol-related harm through early identification, provision of tailored advice and support for those whose hazardous consumption of alcohol puts them at risk (Tom et al, 2011, SAMHSA, 2011). Tom et al (2011) define an intervention as early if it aims at reducing harm, is available, accessible, can identify those at risk and is tailored to the needs of the client.SBI has a focus on the entire continuum of substance use in which individuals do not meet the criteria of AUD. (Technical Assistance Publication (TAP) 23).Screening and brief intervention would help detect this unreached population (Mendes, 2010). This

argument is supported by APHA (2008) who say that such people do not know that they have a problem let alone knowing they need to seek help. National Centre on Addiction and Substance Abuse (NCASAA). Karl Peltzer and colleagues (2008) add that 20% of persons whose alcohol consumption poses a risk attend health facilities twice as much as those without.

Brief intervention (BI) facilitates self-awareness and motivation for change among individuals whose alcohol consumption poses a threat to their health. SBI can be done in any medical setting as an opportunistic intervention. It is a counseling approach which raises the client's awareness and employs motivational interviewing (MI) strategy to encourage behavior change. Screening means identifying people who are not seeking treatment for alcohol problems but may according to the professional have an alcohol use disorder (NICE, 2010). It is a quick assessment of the severity of substance use and guides the choice of intervention. The goal of is early detection before a condition manifests clinically. AFMC describes health problems as the iceberg disease metaphor. The assertion is that for every person who presents with a disease that has already manifested, there are much more. Screening helps in early identification (AFMC, 2008).

Screening involves administration of a test in order to categorize people into high or low-risk groups. It also helps identify the kind of care or intervention required based on the level of risk (SAMHSA, 2011). Patients may be referred for brief intervention or further diagnosis and treatment. One is able to determine if the individual is misusing alcohol in terms of quantities and frequency and also determine if the individual is experiencing harm from alcohol (APHA, 2008). It has the advantage of being cheaper compared to physiological tests (NICE 24, 2010). It takes a short while (5-10mins) and can be repeated at intervals to determine any changes in the patient's behavior.

Screening can take place in many settings such as the outpatient department, maternal, child and family health clinics, inpatient departments, accident and emergency departments. A self-administered questionnaire can be filled as patients wait to be seen. They can also respond while in the clinician's room. It can also be effectively performed by different health workers (SBIRT fact sheet, 2014). Consultation at primary health care facilities provide several opportunities including new patient registration, as art f

routine intervention, during prescription of medication and in response to problems linked to harmful use of alcohol (Parry C, et al, 2011).

Different tools can be used. They differ in that some target specific populations, content and the number of questions asked. They also differ in duration of administration and scoring, commonly used tools include:

CAGE (Cut down, annoyed, guilty, eye opener)
AUDIT (alcohol use disorders identification test)
ASSIST (alcohol., smoking and substance involvement screening test)
TACE (Tolerance, annoyed, cut down, eye opener)
TWEAK (Tolerance, worried, eye opener, amnesia, cut down)
MAST (Michigan alcohol screening test)
CRAFFT (Car, relax, alone, friends, forget, trouble).

Brief intervention the backbone of SBI. The aim is to educate the patient and increase their motivation to reduce their alcohol consumption. It not only addresses immediate thoughts and behavior but also long term challenges and helps patients with severe disorders access long term care (SAMHSA, 2011). These are counseling sessions lasting 5 to 15 minutes (may go up to 60 minutes) whose purpose is to provide insight to the individual regarding his/alcohol use and the consequences. It involves a timed conversation between a primary health care provider and an at risk client whose aim is to raise awareness regarding personal risk and encourage change. The number of sessions range from 1-4 (up to 12), although this may vary depending on severity, existence of other medical conditions and the patient's attitude to SBI.

A major challenge of brief intervention and brief treatment is time constraints, but the overall benefit is much greater. Nurses and general practitioners in the UK, Denmark and Canada reported time constrains, heavier workloads and work stress with routine SBI. Screening can be performed by other health care providers and not just clinicians, with minimal training. This leaves more time for clinicians to deal with other patients and referrals. Harmful use of alcohol is also a sensitive subject and clients are likely to be rude and defensive. Studies in Germany, Sweden and UK showed that primary care

providers often did not discuss their patients' alcohol consumption and in some cases, advice was not provided even for those with overt hazardous drinking.

Mark Harris (2008) says that primary health care plays a critical role in assessment and management of patients at high risk of some diseases. Interventions in primary health care include assessment of risk and readiness to change, motivation to change as well as referral for more specialized interventions. Overall, health checks provide an opportunity for prevention and promote behavior change. On average, an individual will visit a health facility at least once a year. This provides an opportunity for screening and brief intervention before serious complications occur. Both screening and brief interventions can be conducted by primary health care providers who are not specialists in alcohol use disorders. It utilizes motivational strategies depending on the client's readiness to change. The client gets objective feedback immediately and in a nonjudgmental manner. Michael F. Fleming (2005) emphasizes that primary care clinicians are in a unique position to recognize patients at risk of developing alcohol harm and to intervene.

Primary health care workers who include nurses have a critical role in early identification of harmful and hazardous use of alcohol as Wutzke. S. et al. (2004) reported. The relationship patients have with the primary care providers, characterized by empathy and non-judgmental attitude is advantageous in that they expect to receive prevention advice from the providers. This kind of relationship is ideal for continuum of intervention and supports the clients and patients to resolve challenges associated with hazardous drinking. Sue Henry-Edwards and colleagues (2003) assert that patients expect that clinicians will be concerned about all their health issues, and asking about alcohol is part of the care they expect.

Nurses in primary care are best placed to integrate SBIRT in their routine practice, the result being improved health of patients, families and communities. Wutzke and colleagues (2004) attribute this role legitimacy to the natural rapport and numerous contacts nurses have with patients. Many of the problem clients and patients consult for may be associated with alcohol use; this means that screening and brief intervention form part of the package of care (National Centre of Education and Training on Addiction (NCETA), 2004). These findings were also supported by Bridgeman K. et al.(2012) who

after a randomized control study in the United Kingdom concluded that there was a significant reduction in alcohol consumption after screening and brief intervention conducted by nurses. Following this study, a positional paper of the royal colleges of Surgeons and Nurses professional bodies in England agreed that screening and brief intervention should be incorporated into routine clinical practice.

The same is supported by NICE guidelines (2010) which say that alcohol screening and brief intervention should be an integral part of health workers routine practice. Anderson P. et al. (2004) says that health workers have a duty to identify harmful use of alcohol and provide timely interventions. Strobbes (2014) found out that despite the evidence that SBIRT can be cost effective and efficacious; clinicians have not wholly adopted this practice in their routine service provision. Heather et al (2004) found that majority of general practitioners did not ask their patients about alcohol issues. 2/3^{rds} only inquired some of the times and majority had only managed 1-6 patients in a year. They concluded that over 98% of the cases were missed altogether. Michael Fleming (2005) concurring, cites a study in which 94 percent of primary care physicians failed to diagnose and alcohol problem, only 13 percent of 88 percent who asked patients about alcohol consumption used a screening tool and only 19.9 percent considered themselves very prepared to identify alcohol harm. Majority of patients in this study (54.8%) said that physicians did not know how to detect alcohol harm. Asked about brief interventions, most of the physicians referred patients to Alcoholics Anonymous (AA). 53% of the patients reported that their physicians did nothing about their alcohol problems and 74.1 % of patients who sought treatment said that their physicians were not involved in their decision to seek treatment.

2.2 The Extent of nurse training in alcohol and drugs use interventions

Lack of skills presents a major barrier to SBI. Acquisition of knowledge and skill is likely to improve the practice. Interventionist training and communication skills are essential in order to develop a trusting relationship with patients and clients, who in turn develop trust in the primary care staff (SAMHSA). A study in Finland cited in the NICE 24 guidelines found that there was need to train practitioners in SBI. Another study cited in the same document also found that General practitioners with qualifications in addiction

medicine were more likely to identify alcohol related harm more than those who had not received such training. Strobbes (2014) argues that primary care professionals continue to receive limited education on substance use disorders and related conditions. Heather et al (2004) found this to be the case among practitioners in the United Kingdom (UK). This is so in Kenya whereby most treatment centers are managed by people in recovery and those offering primary health care services have not been trained except sporadic sensitizations. Training curricula for clinicians and primary health care providers has little if any content of SBI (KMTC, 2015). Conducting continuous medical education seminars may help bridge the gap in SBI skills. This can be followed up with supportive supervision where clinicians are helped to bridge the competence gaps. In addition to lack of training, there are no guidelines to guide SBI in primary health care practice. This means that there is no standardized practice and this may result in failure to offer the services or offering poor quality of services. These challenges compare to those by Agerwala and colleagues (2012) who cited time, lack of training, poor reimbursement, lack of faculty mentors and lack of referral sources as challenges affecting integration of SPIRT into primary care.

2.3 Nurse Attitudes towards screening and brief interventions

According to Technical Assistant Publications(TAP) 33, nurses find the shift from physical illness to risky drinking challenging and are reluctant to add other procedures to their already full hands, all this in the face of perceived lack of time. A systematic review conducted in the United Kingdom involving 47studies M. Johnson and colleagues (2010) found attitude to be among the barriers to nurses' practice of screening and brief intervention. They observed that nurses did not view screening and brief intervention as part of their role, therefore referring patients. They had a perception of lack of confidence and knowledge rendering them afraid of giving wrong advice. Nurses reported confusion over current guidelines. They also felt that drinking was too sensitive a topic and would upset their patients and clients. They feared aggression from such patients. Nurses expressed a general lack of faith in formal screening tools and preferred using personal judgment.

According to Everett Roger (1995) in his theory of diffusion of Innovation, the process of adoption of innovation follows five stages namely knowledge, persuasion, decision, implementation and confirmation. The persuasion stage is largely a function of attitude towards the innovation. Innovators perception of the innovation influences their practice or choice to adopt it. An innovation perceived as being beneficial to the patient is likely to be adopted with ease than one perceived to have no benefits (TAP 33). Nurses doubt the usefulness of screening and brief intervention compared to personal judgment. If an innovation is seen to be compatible with their current roles and needs, it is likely to be adopted. M. Johnson et al.(2010) found that nurses tended to refer patients to other health workers as they felt that it was not their role. They also reported perceived challenges in the shift involved, from physical illness to problem drinking. Perceived complexity may be a barrier to adoption of the innovation. In the systematic review cited here, nurses were confused by guidelines and experienced a lack of confidence and knowledge to perform screening and brief intervention. Knowledge in this theory is key in determining persuasion.

2.4 Effect of nurse training on alcohol and drug abuse on their attitude towards SBI

Nurses, like all health workers need to be equipped with the relevant competencies through training to overcome obstacles in practice (NCASAA, 2012). Training is key in influencing attitude and its change. SAHMSA (2013) recommends that training incorporates content addressing importance of screening and brief intervention. This may in turn influence the way they view the innovation, whether of bears a relative advantage or not. They are likely to appreciate the efficacy of the intervention. K. Allana and colleagues (2014) observed that despite screening and brief intervention being highly cost effective, it was one of the least practice interventions. One reason for the low implementation was lack of training. B. Thomas et al. (2004) noted that training of health workers was significant in the implementation of screening and brief intervention. According to Babor and colleagues (2004), there lacks training guidelines, faculty role models and awareness of benefits of SBI. Limitations may be attributable to attitudes which moralize chronic alcohol use. SAHMSA (2013) proposed that training includes content on efficacy of SBI. This would influence nurses' perception of relative

advantage. Training on implementation procedures of screening and brief intervention that increases their self-efficacy, thereby diffusing the perception of lack of confidence and knowledge of screening and brief intervention. Role of nurse would be emphasized during the training, thus eliminating the practice of referring to other primary care professionals. Actual standardized tools and brief intervention techniques should be used during training. This would eliminate the confusion nurses experience as they use primary care guidelines (SAHMSA, 2013). Some nurses in a UK study cited training as an incentive for primary care providers to conduct SBI.

A Mexican study by Gryczynski et al.(2011) in Mexico found that practitioners performing SBI required 80 hours of training and preferred a skills-based team training. Babor T. et al. (2004) noted the existence of behavioral and attitudinal challenges in introducing SBI to primary health care practice. They also observed that medical training curricula devoted few resources and time to alcohol related problems. The result is that health care providers feel ill equipped to conduct interventions. In this study, physicians, medical workers and students reported higher confidence, more knowledge, lower degree of perceived obstacles and attitude change following training. The same study reports that more patients were screened after the health teams were trained.

Screening utilizes validated standardized tools. BI utilizes various models of motivational interviewing. Both these require training. NCASAA cites provider attitudes, lack of knowledge, skills and confidence as barriers to SBI in primary health care. They also say that general training has only modest effects on implementers and advocate for more intensified training such as coaching on job and ongoing assessment. Ongoing assessment ensures that the adoption of SBI as an innovation is maintained and confirmed, as per the diffusion of innovation theory.

Karl P et, al. (2008) emphasizes on the need for competencies in identifying risky use as well as offering prevention. They also cite lack of training materials as a barrier. A study conducted among nurses in Vhembe, South Africa showed that where nurses were exposed to training and implemented SBI on trial and error basis, there was success. They also found role plays, demonstrations and return demonstrations useful in training, bringing out the attribute of trialability, a feature that favors adoptability of SBI as an

innovation. Perceptions of low complexity and high compatibility with the practitioner's roles also influenced the uptake or adoptability of SBI. Mark (2008) recognizes inadequate training as a barrier to implementation of SBI. Good et al (2006, 2007) agrees with this. They identified lack of confidence as barriers for SBI.

Nurses' training should incorporate the affective domain which deals with attitudes. These influence implementation of SBI. An Australian research group found that general practitioners may not conduct screening and brief intervention as asking about alcohol may be a sensitive subject and that they are under time pressure. (Tom Love et al, 2011).Heather and colleagues found the health workers' negative attitude towards people who consume alcohol to be a barrier to screening and brief intervention in addition to the fear of offending patients. The negative attitude can be overcome by providing information backed by scientific evidence of effectiveness and efficacy. Nurses like other health workers may also have doubts about the efficacy of SBI. It may be interpreted as disruption of routine. Lack of confidence and their own alcohol consumption behavior may negatively influence the practice of SBI. They may view it as other professionals' role and also consider it time consuming and this time would be used to offer other services. The clinicians especially in Kenya are already extremely overworked and SBI may be considered extra workload.

Nurses need to know that their clients expect them to be concerned about their alcohol problems since most health care services are provided in general practice settings, interventions against alcohol harm are best if integrated into routine health care. This has been successfully tried in Australia where it was demonstrated that screening and brief interventions are effective, cost effective and can be incorporated into general practice by clinicians. (Tom Love et al, 2011).

In summary, alcohol has existed for many centuries and not much harm was being reported then. However, the patterns of consumption have changed giving rise to alcohol related harm. The process of manufacturing and sale has drastically changed over time. While alcohol is a licit drug its use requires moderation so as to benefit from low-risk drinking and avoid the aversive consequences of hazardous drinking. There are gender differences in terms of the amount of alcohol allowed due to the difference in absorption

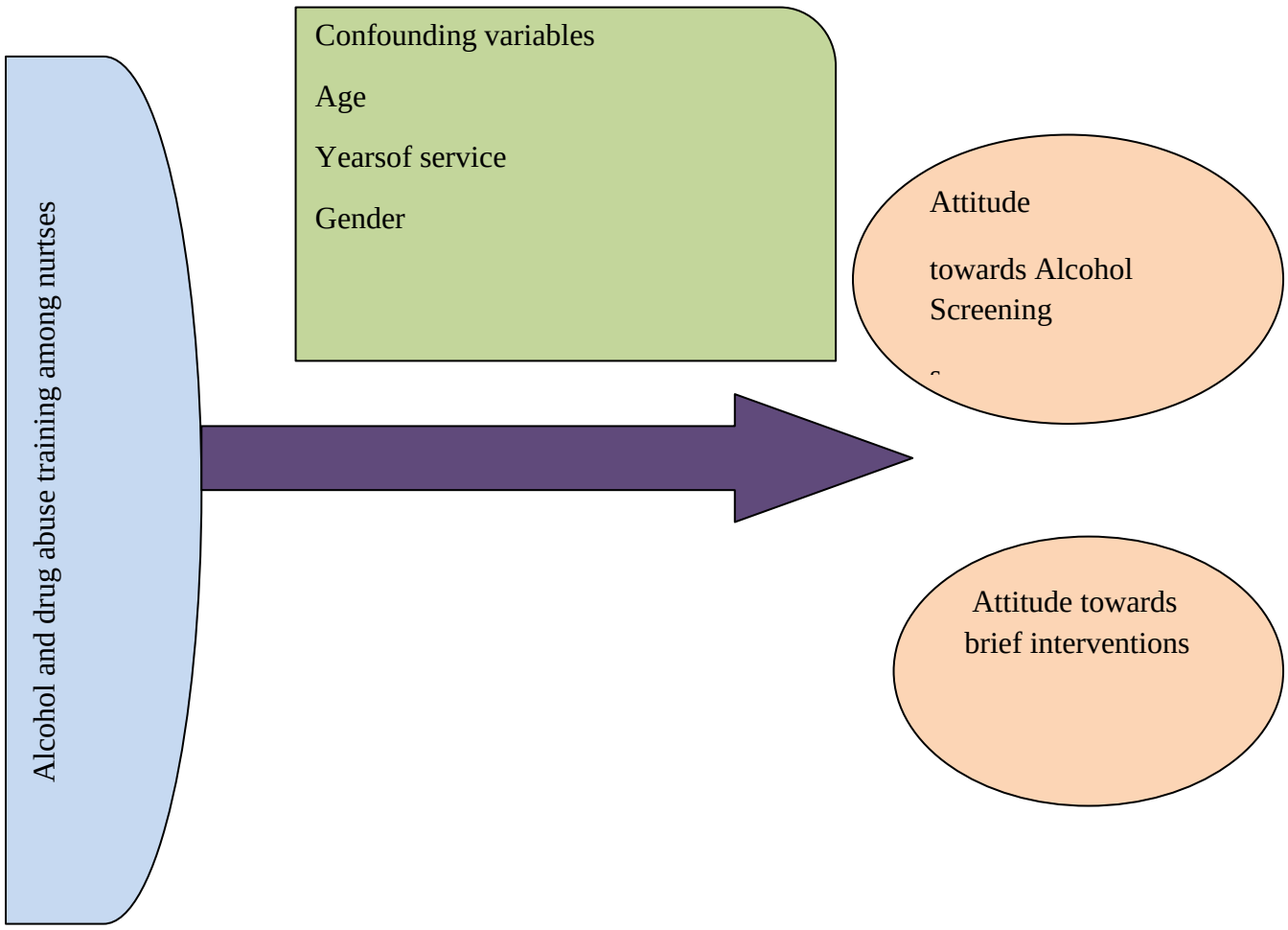
and metabolism. Alcohol is associated with a wide spectrum of alcohol use disorders, mental illness, infectious diseases and non-communicable diseases as well as a wide range of cancers. Given the magnitude of impact on health, a public health approach is required in tackling the global crisis. Health promotion uses health education to provide primary prevention whereas screening, brief intervention and referral to treatment are secondary prevention (APHA, 2008).

There is need to provide primary and secondary prevention interventions in order to help people realize their individual risk and decide to change. There is also need for linkage to treatment and rehabilitation for those in who harm has already occurred. Screening, brief intervention, and referral to treatment have been shown to be effective in getting people see the need for change. These secondary preventive interventions can be provided at different service delivery points in health care facilities by primary care workers. Nurses have an opportunistic advantage as they are always interacting with clients. They have therefore developed a relationship which allows them to engage with patients and clients even on sensitive matters such as alcohol consumption. It is, therefore, possible for them to integrate SBIRT into routine care. They, however, face challenges such as negative provider attitude which may be associated with lack of training.

There is a need to examine training curricula to see if alcohol and drug abuse interventions are captured in the training curricula and short courses provided for continuous professional development for those already in service to seal the knowledge gaps. Laws and policy have already made provision for this kind of interventions; it remains the responsibility of the ministry and health departments to incorporate SBI in their routine care.

2.5 Conceptual Framework

Figure 1: Conceptual Framework



2.6 Theoretical Framework

The study is based on the diffusion of innovation theory by Everett Rogers (1995). This theory was developed by Everett M. Rogers in 1995 and has been reviewed by James W. Dearing in 2009. Robert W. Sanson (2004) applied the diffusion of innovations theory in reviewing the clinical change. The diffusion of innovation theory is used in various fields including public health. It deals with how people adopt innovation which may be an idea, practice, project or technology which is perceived as new by individuals or other units of adoption. Key components of the theory are innovation, communication, time and social system. Diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system. An innovation is an idea, practice or object which is perceived as new. The innovation may either be adopted or rejected. Adoption refers to the decision of full use of an innovation as the best course of action. Rejection is the decision not to adopt an innovation. SBI is the innovation, in this case, communication on the same may occur at various levels and between peers and influences adoption. The social system, in this case, is clinicians in primary practice and other players in primary health care.

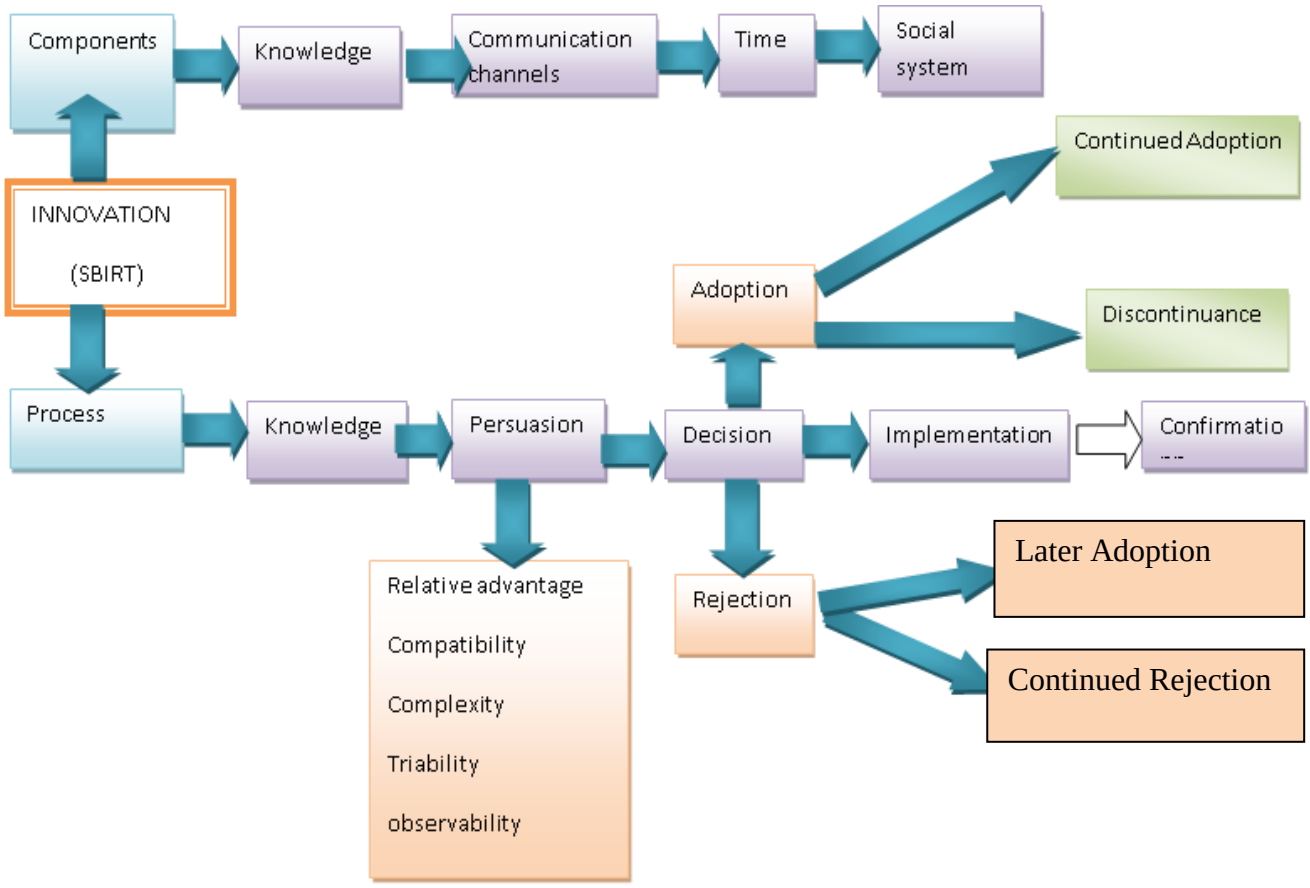


Figure 2: Theoretical Framework/Conceptual Model of Diffusion of Innovation Theory

Modified Version of Everett Rogers Diffusion of Innovation Theory.

Source: Everett M. Rogers (1995). Reviewed by James W. Dearing (2009).

The concept of innovation- decision process is an important aspect of the diffusion of innovations theory. The process consists of five stages namely: knowledge, persuasion, decision, implementation and confirmation. Awareness creation provides knowledge of both the harm and the innovation, in this case, is important. Clinicians need to recognize their role in alcohol harm and consequently disease prevention according to the public health model. Knowledge of how to perform SBI is foundational to skill development and adoption of the innovation. The persuasion stage mainly deals with the attitude of the would-be adopter towards the innovation. A person forms a favorable or unfavorable attitude towards the innovation, Personal and societal beliefs, the feelings, subjective

evaluations of peers and trusted are all social reinforces. Attitudes of clinicians towards SBI may be as a result of the perceived characteristics of the innovation. These are:

Relative advantage. This means whether the innovation is perceived as being beneficial or not. If clinicians perceive SBI as beneficial or not in relation to preventing alcohol harm will determine their attitude and decision to adopt it or not.

Compatibility. This means if the innovation in question can be practiced within their current roles. Ideally, SBI being part of people's general well-being should be part of routine health care. However, clinicians may perceive this as being some other health workers job. This forms attitudes and influences the practice.

Complexity. SBI as an innovation is simple and easy to learn with little training. However, clinicians may perceive it as a complex task and decline to practice. If they, however, perceive it as simple rather than complex, they are likely to adopt it.

Trialability. Whether SBI can be tried in an observation setting such as demonstrations and role plays influences persuasion.

Observability. This means the presence of observable results of the innovation. Empirical data showing efficacy and effectiveness of SBI at the local, national, regional and global levels would influence adoptability of SBI by clinicians.

The decision stage is marked by the choice to adopt or reject the innovation. This will be influenced by the first two stages characterized by knowledge and persuasion- a function of attitude. The implementation stage follows during which an individual or adopting unit puts an innovation into practice. Uncertainty is still a threat. Uncertainty may result from perceived consequences such as more workload and more time consuming, both of which are likely consequences of implementation of SBIRT in primary health care. Support is important, support, in this case, being a structural issue which may influence implementation.

Confirmation is the stage whereby the innovation-decision has already been made. Attitude plays an important role in this stage. One seeks supportive messages to confirm the decision to adopt. In the absence of supportive messages, discontinuance is possible. It can be attributable to the feeling that the innovation does not meet the needs of the individual. Discontinuance may also occur as a result waiting too long or positive results

to be realized. Knowledge especially evidence of effectiveness and empirical data may shape attitudes, resulting in confirmation. Another important feature of this theory are rate of adoption.

Johnson and colleagues (2010) categorized barriers and facilitators to implementation into organizational and staff factors. Organizational factors include context of delivery, categories of the practitioner, incentives, managerial support, workloads, training opportunities, lack of guidelines and tools. Staff factors include attitude to health promotion activities, inability to see SBIRT as their responsibility, perceived knowledge gaps, uncertainty about allowed levels of alcohol, difficulties in discussing alcohol matters with clients.

CHAPTER THREE
METHODOLOGY

3. 0 Introduction

This chapter discusses the research study design to be adopted, sampling method to be used, study area and target population, research instruments, data collection procedure, data analysis as well as presentation and ethical considerations are also outlined.

3.1 Research Design

This was a descriptive cross-sectional survey whose aim is to examine relationships between nurse training in alcohol and drug abuse and their attitudes towards alcohol screening and brief intervention in primary health care practice in Embu level five hospital. The study aimed at collecting information from nurses at Embu level five hospital, interview key informants as well as examine various nurse training curricula for the presence of content on alcohol harm, screening, and brief interventions.

3.2 Sampling Design

A blend of simple random and purposive sampling methods were used. Purposive was used to determine the choice of hospital for the study and the key informants respondents. This was based on the knowledge of the counties that were most affected by the alcohol-related disaster of May 2014 as well as social dynamics in some of the areas. Purposive sampling has an advantage of reaching part of the population rich in required information required to adequately analyze the issue in question (Kombo. D. K&Trompo D. L. A, 2014). Nurses form a large proportion of primary health care clinicians who interact with patients and clients frequenting health care facilities. They, therefore, are likely to give a true picture of screening and brief intervention procedures as carried out in primary health care. Nurses' roles are similar across various levels of health care delivery. The sample was therefore considered to be representative (Kothari, 2014). This technique unfortunately always carries an element of bias and the sampling error cannot be estimated. The study however, made every effort to remain impartial. The method was preferred because of the time and money saving advantage.

3.3 Sample size determination

The sample size was determined using fisher et al 1998

$$\text{Sample size (n)} = \frac{Z^2pq}{d^2}$$

n- Desired sample size

p =Proportion in target population: since p is not known, I will use a standardized estimate of 0.5

q = (1-p) standardized – 1.0-p =0.5

Z =Standard normal deviation usually at1.96

d= The degree of accuracy required = 0.05

In this case 95% confidence level has 5% error or 0.05 errors

Therefore 0.05 is the level of significance

$$(n) = \frac{Z^2pq}{d^2}$$

$$= \frac{(1.96)^2 \times 0.5 \times 0.5}{0.05^2}$$

$$= \frac{0.9604}{0.0025}$$

$$= 384.16$$

The target population is less than 10,000; therefore the researcher calculated the final sample by using the adjusted formula i.e.

$nf = \frac{n}{1+(\frac{n}{N})}$, where n is the estimated population size, nf is desired sample size when the population is less than 10,000.

n= 384

N = Estimated population

Population of nurses at Embu level five hospital= 219.

However, a good number of these nurses were on night off duty, study leave, and annual leave so that at any one given time, only one hundred nurses are available. This made the accessible population come down to 100.

$$nf = \frac{384}{1+(\frac{384}{100})} = 80$$

**** Figures are actual numbers at June 2017 as provided by the Head of Nursing services, Embu County Hospital. They compare fairly with those from Ministry of Health, State Service Delivery, (2014)***

3.4 Study Area

The study was conducted in Embu Level-Five hospital. Purposive sampling was used to determine the study area based on reports of alcohol-related morbidity and mortality based on the reports of May 2014. Eastern Kenya has had its share of public demonstrations following socio-economic harm associated with harmful alcohol use. The hospital was also accessible by road.

3.5 Target population

The target population for this study was nurses in Embu level five hospitals.

Number of nurses =219

Accessible population= 100

3.6 Sampling procedure

With simple random sampling, any nurse available had an equal chance of being selected to respond to the questionnaire.

3.7 Research instruments

Data was collected using the following tools:

1. Self-administered questionnaire

This had been constructed by the researcher since she did not access any standardized tool online or otherwise. This predetermined questions which were uniform for all nurses involved in this study. It comprised of predominantly closed-ended questions and a number of open-ended questions. The former are easy to handle, simple and more easily analyze as compared to the latter. Open-ended questions are advantageous in terms of getting responses in the respondents own words and yield qualitative data. (Kothari; Garg, 2014).

2. Use of a structured checklist.

A set of questions were used to guide a focused discussion with the head of the hospital and /or the person in charge of training continuous medical education in the hospital. The aim was to identify any shortcourses lectures in the area of alcohol and drug related issues (Kothari; Garg, 2014).

3. Examination of training curricula for medical doctors, nurses and clinical officers.

The researcher used a checklist to identify any alcohol and drug abuse content in the nurse training curricula at Kenya Medical training College. The researcher was looking for information on alcohol and drug abuse, relate harm, interventions such as screening, brief intervention, medical treatment and referral to treatment and rehabiltation.The choice of Kenya Medical Training College trains about 80% of middle-level health care professionals found in public service. Nurses are part of this proportion of health care professionals.

3.8 Validity and Reliability

The data collection tool was pretested using a group of nurses who had attended a training at the Kenya Medical Training College. A Cronbach's alpha was calculated to ascertain the internal consistency of the tool. Cronbach's alpha is the most common measure of internal consistency ("reliability"). It is most commonly used when there are multiple Likert questions in a survey/questionnaire that form a scale and you wish to determine if the scale is reliable.

Reliability Statistics			
		Cronbach's Alpha	N of Items
Screening	Screening	.938	12

Brief Intervention	Service Delivery Points	.909	8
	What is done	.828	9
	Who Conducts	.753	8

We can see that Cronbach's alpha for screening is 0.938, for brief intervention (service delivery points (0.909), what is done (0.828) and finally who conducts (0.753) which all indicates a high level of internal consistency. Similarly the cadre, gender, age, highest level of education, religion, marital status and years of service were considered as the socio- demographic characteristics with varied responses in regards to each socio demographic.On the training we considered the training on alcohol and drug abuse during college/Undergraduate/ post graduate studies, inclusion of brief interventions. Similarly training during practice in the past, duration of the training, how long ago and the frequency of the trainings were taken into considerations. Finally the tool on screening and brief interventions as stated above in the Cronbach alpha with high internal consistencies

3.9 Data collection procedures

The study enlisted the help of the hospital administration to get a buy-in from the unit in-charges for data collection. Each too was serialized. Each of the unit in-charge then introduced the researcher to the staff. The researcher then administered the questionnaire, at times waiting for the respondent to fill and some were collected later at an agreed upon time. The study also examined various nurses' curricula from the Kenya Medical Training College for content in alcohol and drug use. An interview schedule was also administered to the officer in-charge of health promotion and continuous medical education.

3.10 Data analysis

Data collected was analyzed using SPSS version 23 and presented in tables, pie charts, graphs and narratives. Descriptive statistics such as frequencies, medians and range were calculated. Inferential statistics such as means, correlations, regressions and ANOVA were performed. The results were discussed, conclusions drawn and recommendations made. The results will later be shared with major stakeholders in the health ministry and Embu County.

3.11 Ethical considerations

Authority to conduct research was sought from NACOSTI, the county government of Embu and KMTC to conduct research in the county. Respondents consent was sought and only those who were willing were enlisted in the study. Those unwilling were not coerced to participate. Questionnaires were coded to protect the identity of the respondents. The identity of respondents was not disclosed and was treated with utmost confidentiality. Information obtained was not linked to specific identities.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents findings and analyses of results within the framework of the set study objectives. It presents various descriptive statistics showing participant characteristics (age, gender, employment status, income level and highest level of education). Results of regression analysis have been presented to show relationship between dependent and independent variables.

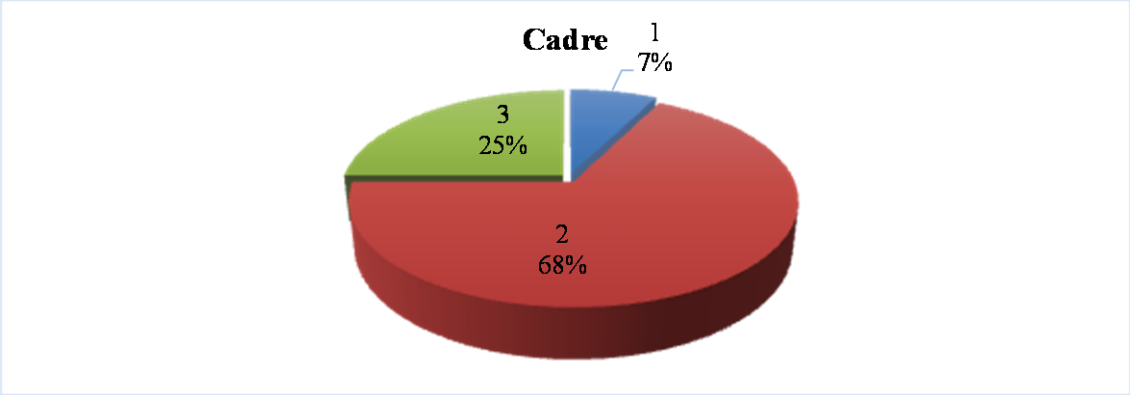
4.2 Response rate

A total of 81 respondents (about 80% response rate) were successfully reached during the interviews stage of the research.

4.3 Demographics

The respondents were asked to state their cadre, gender, age, highest level of education, religion, marital status and years. Results are shown.

4.3.1 Nursing cadres



Others- BSN, BSCHEM, Nephrology Nurse, KRNN, BSN intern and KRN/M

Figure 3:Nursing cadres

A majority of respondents (68%) were registered community health nurses followed by others (BSN, BSCHEM, Nephrology Nurse, KRNN, BSN intern and KRN/M) at 25% and enrolled community nurses were minority respondents representing 7 %.

4.3.2 Gender of the respondents

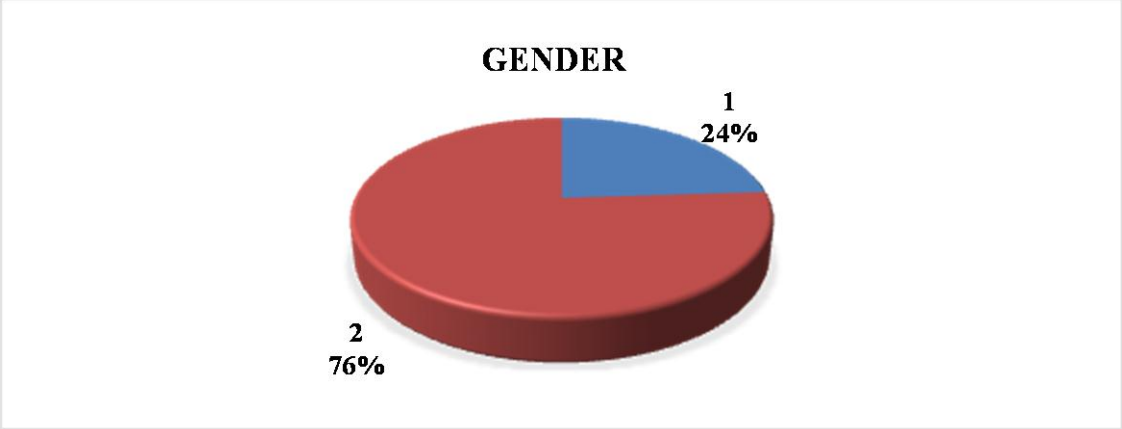


Figure 4: A figure on Gender of the respondents

Male respondents constituted 24% while female were 76% of the respondents. This shows that the females were predominant.

4.3.3 Age of the respondents

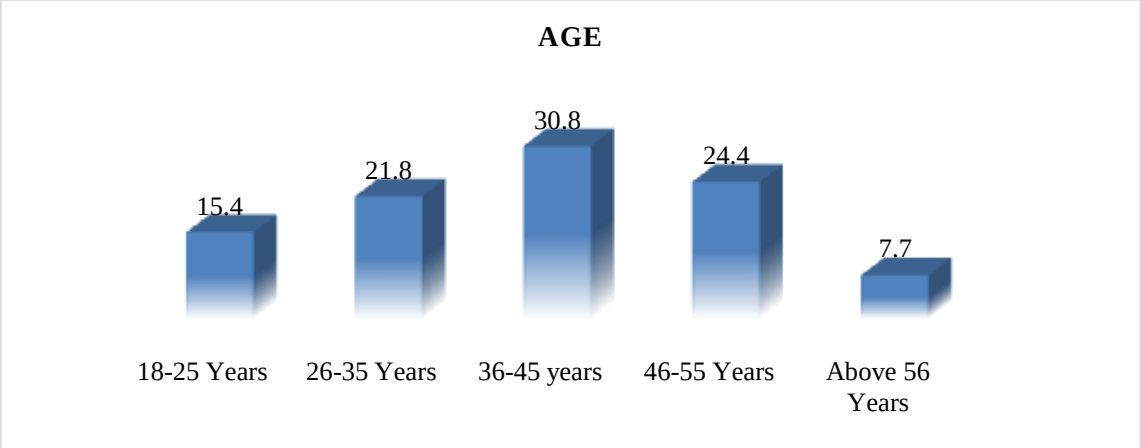


Figure 5: A Figure on age of the respondents

A greater majority of respondents (30.8%) were in the age group 36– 45 followed by the 46-55 years age group at 24.4% and over 56 years of age were minority respondents representing 7.7 %.

4.3.4 Highest Level of education attained

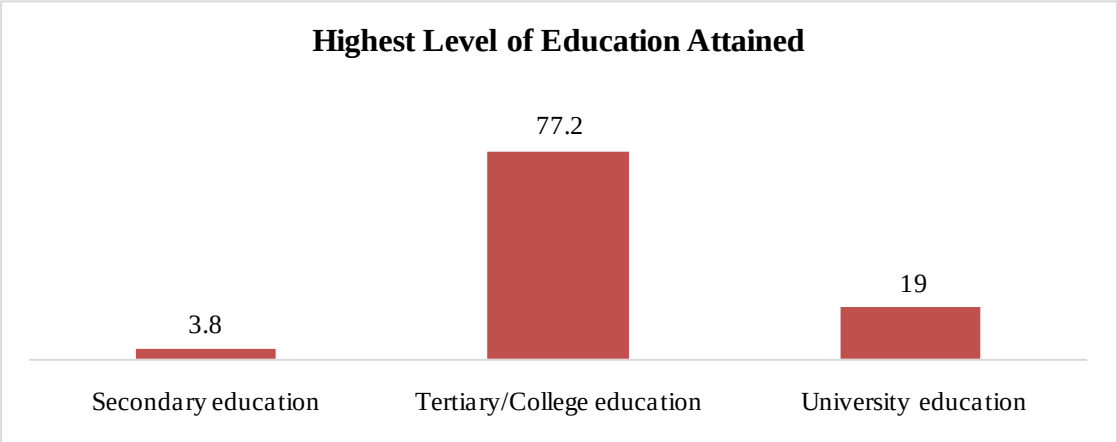


Figure 6: A figure on highest Level of education attained

The distribution of respondent's by education level shows that majority of respondents 77.2% had tertiary education, followed by those with university education (19%) and those with secondary education were 3.8%.

4.3.5 Religion of the respondents.

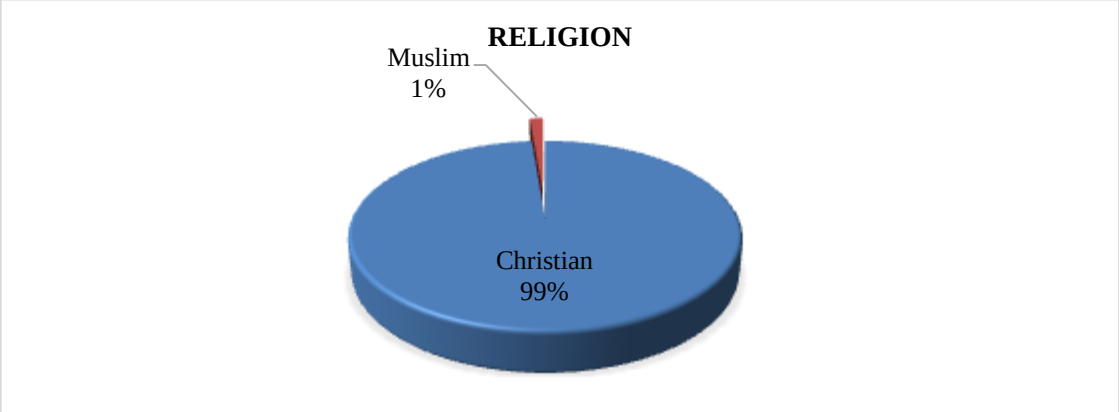


Figure 7: A figure on the Religion of the respondents.

The religion of the nurses indicates that 99% of the respondents were Christians with 1% being Muslims.

4.3.6 Marital Status of the respondents

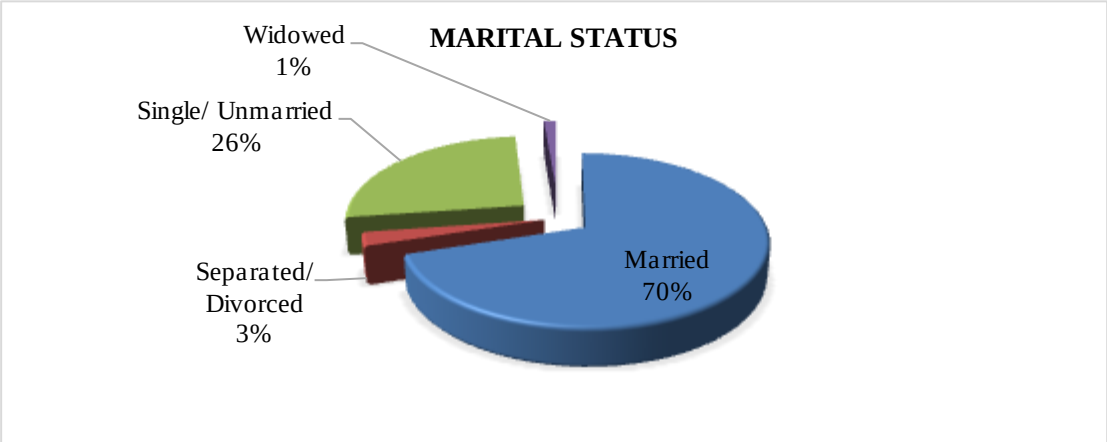


Figure 8: A figure on Marital Status of the respondents

On marital status, 70% of the respondents were married, 26 % single/ unmarried, 3% were separated/Divorced and 1% were widowed indicating that most of the nurses were married.

4.3.7 Years of service

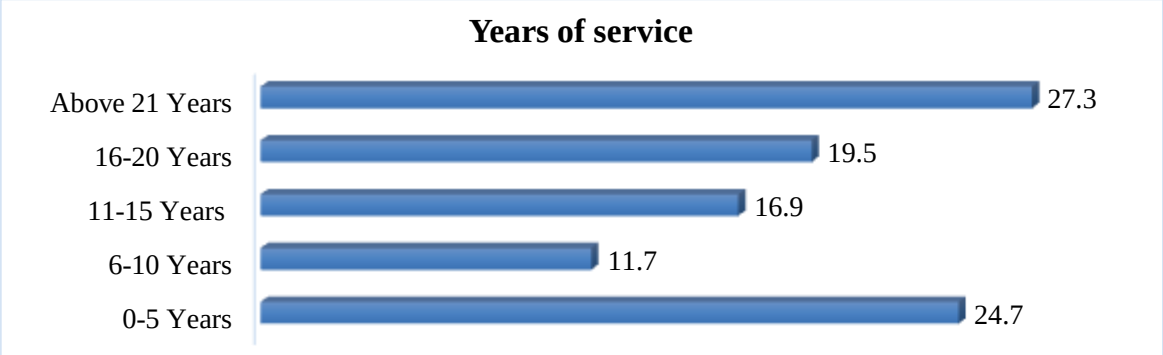


Figure 9: A figure on Years of service

Finally the years of service, 27.3% of the respondents had worked for more than 21 years, 24.7 % worked for below 5 years, 19.5% worked for between 16 to 20 years, 16.9% worked for between 11 to 15 years and finally 11.7% worked for between 6 to 10 years indicating that most of the nurses had worked for above 21 years.

4.4 Background information

4.4.1 Trainings during studies

During the undergraduate/college studies were the nurses trained on alcohol and drug abuse as part of their coursework and apparently most of them underwent the same as shown below:

Table 1: A table on training on alcohol and drug abuse during undergraduate and college studies

Did you receive any training on alcohol and drug abuse during undergraduate/college studies?		
	Frequency (n)	Percent (%)
Yes	48	61.5
No	30	38.5
Total	78	100.0

Apparently, most of the nurses 61.5% (n=48) received a training on alcohol and drug abuse during undergraduate/college studies with 38.5 %(n=30) not undergoing the training on the same.

Of the nurses that received training on alcohol and drug abuse during undergraduate/college studies, was an alcohol screening and brief intervention included as part of the training? The response was as shown below:

Table 2: A table on the training on alcohol screening and brief interventions

If yes, did it include alcohol screening and brief interventions?		
	Frequency (n)	Percent (%)
Yes	19	35.8
No	34	64.2
Total	53	100.0

The nurses 35.8% (n=19) those who received a training on alcohol and drug abuse during undergraduate/college studies it include alcohol screening and brief interventions, whereas most of the nurses 64.2 %(n=34) those who received a training on alcohol and

drug abuse during undergraduate/college studies did not include alcohol screening and brief interventions.

4.4.2 Trainings at work (practicing nursing)

During the practice of nursing currently or in the past, have the nurses been trained on alcohol and drug abuse as part of their refresher trainings. The response was as shown below:

Figure 10: A figure on training on alcohol and drug abuse during practice in the past

75% of the nurses during their practice in the past have not received any training with only 25% undergoing trainings on alcohol and drug abuse as a refresher course during their work areas.

These trainings include; Alcohol & drug training by NACADA, Certified addictive professional intervention, addiction training level I, II, III, alcohol and drug abuse, Alcohol problems and special problems, common drugs abused and misused, counselling on drug misuse-detoxification, methadone treatment, In psychological training (counselling), Management of substance abuse (Alcohol and drug), Substance abuse, Trained by elementary doctors on alcohol, Treatment II and III, Relapse and Withdrawal symptoms presentation by day top, Effects of Alcohol/drug abuse, How to avoid indulgence in alcohol/drug abuse.

Most of the trainings on alcohol and drug abuse as part of their refresher trainings went for 1 week and 2 weeks respectively (42%) with only 17.7% going on for only 1 month.

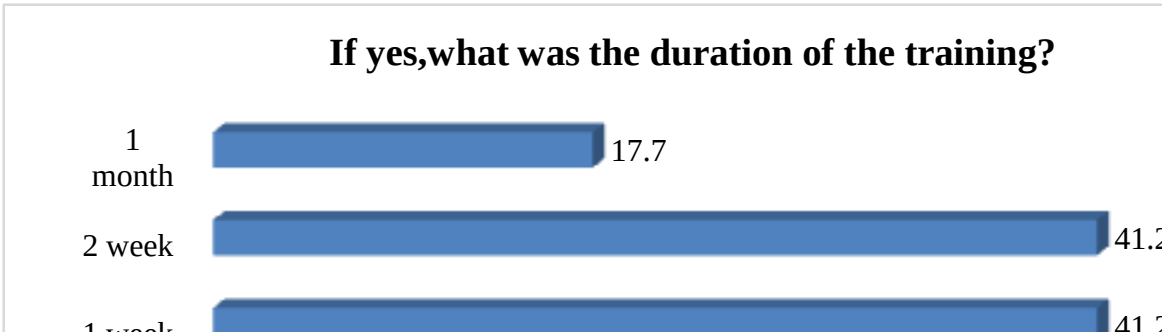


Figure 11: A figure on the duration of the training

Of the nurses that received training on alcohol and drug abuse during the practice as refresher trainings, was an alcohol screening and brief intervention included as part of the training? The response was as shown below:

Table 3: A table on training on screening and brief interventions during practice in the past

Did the training include screening and brief interventions?		
	Frequency (n)	Percent (%)
Yes	9	30.0
No	21	70.0
Total	30	100.0

The nurses 30% (n=9) of those who received a training on alcohol and drug abuse during working places it include alcohol screening and brief interventions, whereas most of the nurses 70 %(n=21) those who received a training on alcohol and drug abuse during working areas did not include alcohol screening and brief interventions.

4.4.3 Helpfulness of training in alcohol and drug abuse intervention

The extent at which the training in alcohol and drug abuse intervention would help to improve the practice in alcohol screening and brief intervention among the nurses is as shown below:

Table 4: A table on training in alcohol and drug abuse intervention if it would help to improve the practice in alcohol screening and brief intervention

Training in alcohol and drug abuse (ADA)		
	Frequency (n)	Percent (%)
To a very low extent	1	1.6
To a low extent	3	4.7
To a moderate extent	14	21.9
To a very large extent	46	71.9
Total	64	100.0

71.9% of the nurses agreed that the trainings would help them to a very large extent, 21.9% to a moderate extent, 4.7% to a low extent and 1.6% to a very low extent. This implies that most agreed that it would help them to a very large extent.

Among the measures to improve practice in interventions are; Community psychiatry and alcohol counselling centers and rehabilitation, Continued medical education, Frequent update and training on the same ,Have more rehabilitation centers for referring clients in every county, identifying the groups at risk and taking necessary measures, Provision of resources to carry out health education and empowering the affected in change of lifestyle, Rehabilitation and counselling as well as training then in the appropriate centers for rehabilitation, Rehabilitation wards in all the hospitals and even Visit rehabilitation centers, handouts on alcohol and drugs abuse

4.5 Screening

Screening is a process involving the identification of people who may be at risk of or who have an alcohol use disorder even though they are not seeking treatment for an alcohol-related condition. However for the nurses in Embu level 5 hospital had a understanding of screening as; A kind of test done to check on the progress of the people trying to quit alcoholism, A strategy used to identify the possible presence of sign and symptoms of alcohol, Checking or identifying persons who are at risk of alcohol & drug abuse, client/patient is addicted to alcohol abuse or any behaviour related to alcohol, Find out the effects of alcohol on and individual whether he/she social chance or dependence, It means to check the degree of alcohol concentration in an individual blood, to take

blood sample from a client alcoholic person to know the amount of alcohol in the blood and even routine testing to determine whether there is alcohol abuse or dependence.

In all these definitions by the nurses, they all revolved on the process involving the identification of people who may be at risk of or who have an alcohol use disorder even though they are not seeking treatment for an alcohol-related condition.

In a hospital setting, there should be various tools that are used to identify these people who may be at this risk. In Embu level five hospital we sought to find whether they have a standardized tool that is used for screening and the response was as shown below:

Table 5: A table on the awareness of any standardized alcohol screening tool

Are you aware of any standardized alcohol screening tool?		
	Frequency (n)	Percent (%)
Yes	25	34.2
No	48	65.8
Total	73	100.0

34.2% are aware of the standardized tools that are used by the nurses with a large proportion of the nurses (65.8%) not being aware of any standardized alcohol screening tool.

Of the smallest fraction that said yes, the standardized alcohol screening tool that they are aware are; Alcohol blow just like the one used by traffic police, Blood level (alcohol blood level) in the system, CAGE (Cut down Angry, guilty, eye, opener) questionnaire, ASI (Alcohol Screening Index), Lab tests- the laboratory testing of blood sugars when alcohol intake is suspected and even MAST (Michigan Alcohol screening test).

4.5.1 Extent of the useful measures on screening in Embu level 5 Hospital

Table 6: A table on the extent of the useful measures on screening in Embu level 5 Hospital

Screening descriptive Statistics				
	N	Mean	Std. Deviation	Skewness
Asking about the number of standard drinks one takes in a sitting (In a day).	73	4.10	1.169	-.996
Asking about the brand of alcohol one takes.	76	3.92	1.262	-.910
Asking how often one takes alcohol in a week.	76	4.38	.923	-1.886
Asking if one feels the need to cut down on their alcohol intake.	76	4.18	1.042	-1.180
Asking if one feels annoyed after being criticized for their alcohol intake.	75	4.12	1.013	-1.128
Asking if one needs to take alcohol first thing in the morning.	78	4.06	1.262	-1.356
Asking if one needs to take alcohol to be able to work.	79	4.23	1.176	-1.477
Asking if one got into trouble with police or law due to drinking.	78	3.92	1.160	-.821
Asking if one has in the past sustained injuries after drinking.	77	3.96	1.129	-.879
Asking if one is unable to stop drinking after starting	78	4.17	1.074	-1.310
Asking if one was unable to go to work after drinking.	77	4.22	1.047	-1.378
Asking if close friends or family members have been concerned about the individuals drinking.	79	4.34	.946	-1.394

All the measures on screening had negative coefficients of Skewness indicating that the data is skewed to the left (negatively skewed).

Asking about the number of standard drinks one takes in a sitting (In a day) has a mean of 4.10 and standard deviation of 1.169, Asking about the brand of alcohol one takes has a mean of 3.92 and standard deviation of 1.262, Asking how often one takes alcohol in a week has a mean of 4.38 and standard deviation of 0.923, Asking if one feels the need to cut down on their alcohol intake has a mean of 4.18 and standard deviation of 1.042, Asking if one feels annoyed after being criticized for their alcohol intake has a mean of 4.12 and standard deviation of 1.013, Asking if one needs to take alcohol first thing in the morning has a mean of 4.06 and standard deviation of 1.262, Asking if one needs to take alcohol to be able to work has a mean of 4.23 and standard deviation of 1.176, Asking if one got into trouble with police or law due to drinking has a mean of 3.92 and standard deviation of 1.160, Asking if one has in the past sustained injuries after drinking has a mean of 3.96 and standard deviation of 1.129, Asking if one is unable to stop drinking after starting has a mean of 4.17 and standard deviation of 1.074, Asking if one was unable to go to work after drinking has a mean of 4.22 and standard deviation of 1.047 and Asking if close friends or family members have been concerned about the individuals drinking has a mean of 4.34 and standard deviation of 0.946. All means corresponds to 4 in the Likert scale implying that the nurses agreed to a moderate extent on screening on alcohol and drug abuse.

4.6 Brief intervention

According to the nurses, brief intervention is a short term way of solving something or solving a problem, Actions taken to help the person to stop using alcohol, Analyzing the root cause of alcohol consumption and taking the necessary measures to curb the practice, Formulating resources of helping those who have indulged in the habit, Give a short education on counselling on the effects of alcohol on the patient and where he can find help, immediate treatment for alcoholism, It's the way you try to handle the clients in order to help him or her understand the effects of alcohol/drugs, Measures taken to help the alcoholics deal with the alcoholism initially, Taking appropriate action once you

encounter an individual with alcohol issues or/is alcoholic and even means health educating the community about alcoholism and substance abuse

However in summary, Brief interventions are Counseling sessions lasting 5-10 minutes whose goal is to increase the person's awareness of his/her alcohol consumption and its consequences and increase motivation to change

Therefore to what extent are the measures on brief intervention. The extent of agreements are as shown below:

Table 7: Measures on brief interventions

Descriptive Statistics on the measures on brief interventions				
	N	Mean	Std. Deviation	Skewness
Giving health education to a group of patients/clients?	78	4.24	.969	-1.214
Giving health education to individuals patients/clients.	78	4.41	.844	-1.704
Giving health education in routine consultation.	78	4.24	.914	-1.241
Giving special focus to special groups considered high risk.	76	4.59	.715	-1.906
Telling patients about harmful use of alcohol if their illness is associated with harmful use of alcohol.	78	4.55	.800	-2.279
Using specific tools to screen for harmful use of alcohol.	78	4.10	1.027	-1.023
Giving them reading material with messages on alcohol harm.	78	3.96	1.012	-.693
Referring them to specialists for screening.	78	3.86	1.316	-.820

On the distribution of the responses, all the measures to help individuals to modify drinking behaviour had negative coefficients of Skewness indicating that the responses are skewed to the left (negatively skewed)

Giving health education to a group of patients/clients has a mean of 4.24 and standard deviation of 0.969, giving health education to individual patients/clients has a mean of 4.41 and standard deviation of 0.844, giving health education in routine consultation has a mean of 4.24 and standard deviation of 0.914, Using specific tools to screen for

harmful use of alcohol has a mean of 4.10 and standard deviation of 1.027, Giving them reading material with messages on alcohol harm has a mean of 3.96 and standard deviation of 1.316 and even referring them to specialists for screening where all the means corresponds to 4 in the Likert scale implying that the nurses agreed to a moderate extent on the measures to help individuals to modify drinking behavior

Whereas, giving special focus to special groups considered high risk has a mean of 4.59 and standard deviation of 0.715 and Telling patients about harmful use of alcohol if their illness is associated with harmful use of alcohol has a mean of 4.55 and standard deviation of 0.800 which corresponds to 5 in the Likert scale implying that the nurses agreed to a large extent on the measures on brief interventions.

4.7 Alcohol brief intervention

4.7.1 Brief intervention Service delivery points (SDP) in Embu Level 5 Hospital

Among the nurses, these are the areas that they agreed or disagreed that the brief interventions and alcohol screening may be done.

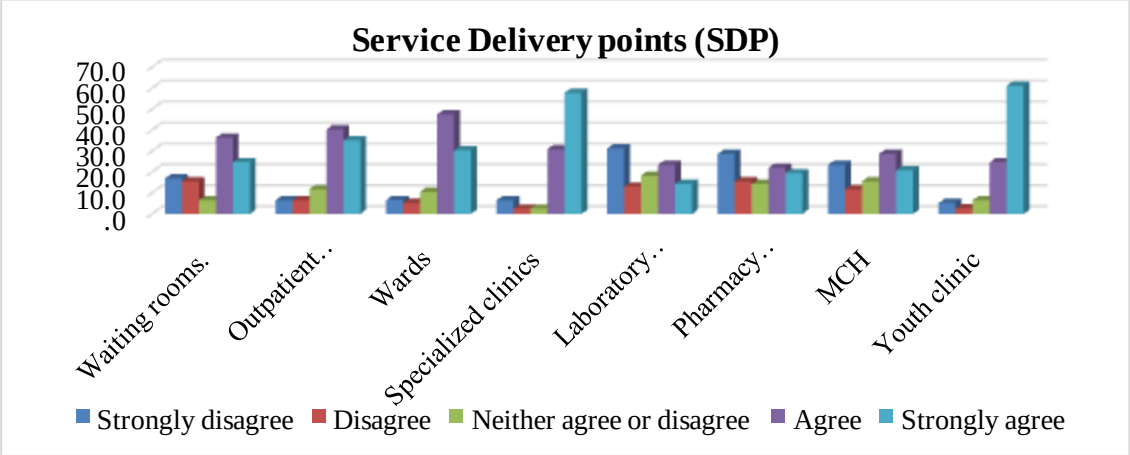


Figure 12: Service delivery points

As the service delivery points (SDP), Most of the nurses (36.4%) agreed that the waiting rooms to be used as service delivery point, with outpatients department (40.3%) of the nurses agreed on it, (MCH 28.6%) similarly agreed and then 47.4% of the nurses agreed on the wards as the service delivery points.

For the specialized clinics (57.7%), and the youth clinics (61%), the nurses strongly agreed as the service delivery points

But among the majority, 31.2% of the nurses and 28.6% of the nurses strongly disagreed on using the laboratory waiting area and pharmacy waiting area respectively as service delivery points (SDP).

4.7.2 Services offered to the brief intervention

Table 8: offered to the brief intervention

Descriptive Statistics service offered to patients				
	N	Mean	Std. Deviation	Skewness
Brief advice	77	3.51	1.210	-.611
Assessment.	77	3.94	1.004	-1.067
Counselling.	77	4.40	.907	-1.983
Health education.	78	4.37	.870	-1.540
Motivational interviewing.	77	4.01	1.164	-1.362
Medical treatment.	77	4.17	.992	-1.262
Referral to treatment.	76	4.30	.880	-1.122
Follow up	77	5.19	5.811	8.491
Referral to support group	75	4.27	1.057	-1.476

On the brief advice has a mean 3.51 and standard deviation of 1.210, assessment has a mean 3.94 and standard deviation of 1.004, counselling has a mean 4.40 and standard deviation of 0.907, health education has a mean 4.37 and standard deviation of 0.870, motivational interviewing has a mean 4.01 and standard deviation of 1.164, medical treatment has a mean 4.17 and standard deviation of 0.992, referral to treatment has a mean 4.30 and standard deviation of 0.880, follow up has a mean 5.19 and standard deviation of 5.811 and finally referral to support group has a mean 4.27 and standard

deviation of 1.057 corresponding to 4 in a Likert scale indicating that the nurses agreed that the services mentioned should be provided to the patients.

4.8 The relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital

Chi-square test of independence also known as Pearson's chi-square test or test of association discovers if there is a relationship between attitudes towards alcohol screening and brief intervention among nurses (dependent variable) and nurses training in alcohol and drug abuse (independent variables).Multiple Regression analysis is done in order to establish a relationship and even predict the attitudes towards alcohol screening and brief intervention among nurses (dependent variable) based on one or more independent variables (nurses training in alcohol and drug abuse).

4.8.1 Training and Attitude towards screening

We are to establish the relationship between attitudes towards alcohol screening among nurses (dependent variable) based on one or more independent variables (nurses training in alcohol and drug abuse both during studies and while working).

Table 9: Chi-square test of association between nurses training in alcohol and drug abuse during undergraduate/college studies and their attitudes towards alcohol screening among nurses at Embu level five hospital

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.542	2	.763

We can see that the chi square test X^2=0.542, df=2, p=0.763 which tells us that there is no statistically significant association between nurses training in alcohol and drug abuse during undergraduate/college studies and their attitudes towards alcohol screening among nurses at Embu level five hospital. This means that both the nurse trained in alcohol and drug abuse during undergraduate/college studies had no difference in the attitudes towards alcohol screening among nurses at Embu level five hospital.

Table 10: A table on Chi-square test of association between nurses training in alcohol and drug abuse during practice and their attitudes towards alcohol screening among nurses at Embu level five hospital.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.667	2	.264

We can see that the chi square test X^2=2.667, df=2, p=0.264 which tells us that there is no statistically significant association between nurses training in alcohol and drug abuse during practice in the past and their attitudes towards alcohol screening among nurses at Embu level five hospital. This means that both the nurse trained in alcohol and drug abuse during past practice had no difference in the attitudes towards alcohol screening among nurses at Embu level five hospital.

Table 11: Regression model summary between nurses training in alcohol and drug abuse during practice and their attitudes towards alcohol screening among nurses at Embu level five hospital.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.087	.008	-.020	.643

a) Predictors: (Constant), Training on alcohol and drug abuse during practice ; Training on alcohol and drug abuse during undergraduate/college studies

The correlation R=0.087 indicates that there is a weak positive relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol screening among nurses at Embu level five hospital. The (R^2) was 0.008 which means that 0.8% of the variations in the attitudes towards alcohol screening can be explained by changes on

trainings and 99.2% of variation in attitudes towards alcohol screening can be explained by other factors that are not within the control of the research.

Table 12: Regression between nurses training in alcohol and drug abuse during practice in the past and their attitudes towards alcohol screening among nurses at Embu level five hospital.

Regression Coefficients					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.492	.337		7.394	.000
Training during undergraduate	-.074	.159	-.056	-.463	.645
Training during practice	.120	.177	.082	.678	.500

Using the standardized coefficients, training on alcohol and drug abuse during practice was found to have a greater contribution on attitudes towards alcohol screening among nurses at Embu level five hospital (β=0.082, t =0.678, p=0.500) and thus, training on alcohol and drug abuse during practice was a significant forecaster of attitudes towards alcohol screening among nurses at Embu level five hospital but training on alcohol and drug abuse during undergraduate/ college studies contributes the least (β= -0.056 t=-0.463, p= 0.645). In summary, it was established that none of the trainings regardless of the timings was found to be statistically significant in influencing attitudes towards alcohol screening among nurses at Embu level five hospital.

Using the unstandardized coefficients, the relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol screening among nurses at Embu level five hospital is as shown below.

As the training on alcohol and drug abuse during undergraduate/ college studies increased, there was more probable decrease in the favorable attitudes towards alcohol screening among nurses at Embu level five hospital (β= -0.074, p= 0.645).

Increasing training on alcohol and drug abuse during practice was associated with an increased favorable attitudes towards alcohol screening among nurses at Embu level five hospital (β= 0.120, p= 0.500).

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.227	2	.113	.274	.761
	Residual	29.773	72	.414		
	Total	30.000	74			

Table 13: ANOVA between nurses training in alcohol and drug abuse during practice and their attitudes towards alcohol screening among nurses at Embu level five hospital.

This is the table shows the output of the ANOVA analysis and whether there is a significant difference statistically between the group means in regards to attitudes towards alcohol screening among nurses at Embu level five hospital. We can see that the significance value (p) is (F (2, 72) = 0.274, p = 0.761). Which is more than 0.05. And, therefore, there is no statistical significant difference in the means on attitudes towards alcohol screening among nurses at Embu level five hospital between the different training times at 95% confidence interval

4.8.2 Training and Attitude towards brief intervention

We are to establish the relationship between attitudes towards alcohol brief intervention among nurses (dependent variable) based on one or more independent variables (nurses training in alcohol and drug abuse both during studies and while working)

Table 14: Chi-square test of association between nurses training in alcohol and drug abuse during undergraduate/college studies and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)

Pearson Chi-Square	3.749	2	.153

We can see that the chi square test X^2=3.749, df=2, p = 0.153 which tells us that there is no statistically significant association between nurses training in alcohol and drug abuse during undergraduate/college studies and their attitudes towards alcohol brief intervention. This means that the training nurses received during undergraduate training is of little value to their attitudes towards screening and brief intervention.

Table 15: Chi-square test of association between nurses training in alcohol and drug abuse during practice and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.830	2	.401

We can see that the chi square test X^2=1.830, df=2, p=0.401 which tells us that there is no statistical significant association between nurses training in alcohol and drug abuse during practice in the past and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital. This means that both the nurse trained in alcohol and drug abuse during past practice had no difference in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital

Table 16: A table on regression model summary between nurses training in alcohol and drug abuse during practice in the past and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.166[a]	0.028	0	0.551

a) Predictors: (Constant), Training on alcohol and drug abuse during practice in the past; Training on alcohol and drug abuse during undergraduate/college studies

The correlation R=0.166 indicating that there is a weak relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital. The (R^2) was 0.028 which means that 2.8% of the variations in the attitudes towards alcohol brief intervention can be explained by changes on trainings and 97.2% of variation in attitudes towards alcohol brief intervention can be explained by other factors that are not within the control of the research.

Table 17: A table on regression between nurses training in alcohol and drug abuse during practice in the past and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Regression Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.312	0.289		8.006	0.000
Training on alcohol and drug abuse during undergraduate/college studies?	-0.088	0.136	-0.078	-0.647	0.520
Training on alcohol and drug abuse during practice in the past?	0.212	0.151	0.168	1.396	0.167

a. Dependent Variable: Brief interventions

Using the standardized coefficients, training on alcohol and drug abuse during undergraduate/college studies was found to have the greatest contribution on attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β=0.168, t =1.396, p=0.167) whereas the least contribution is brought in by training on alcohol and drug abuse during practice, contributing the least (β= -0.078 t=-0.647, p= 0.520). However, it was established that none of the trainings regardless of the timing was found to be statistically significant in influencing attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Using the unstandardized coefficients, the relationship between nurses training in alcohol and drug abuse and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital is as shown below.

As the training on alcohol and drug abuse during undergraduate/ college studies were increased, there was a more probable decrease in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= -0.088, p= 0.520).

Whereas, increasing training on alcohol and drug abuse during practice was associated with an increased favorable attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= 0.212, p= 0.167).

Table 18: ANOVA between nurses training in alcohol and drug abuse during practice in the past and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.618	2	0.309	1.018	.366[a]
	Residual	21.862	72	0.304		
	Total	22.48	74			

a. Predictors: (Constant), Training on alcohol and drug abuse during practice in the past; Training on alcohol and drug abuse during undergraduate/college studies

b. Dependent Variable: Brief interventions

This table shows the output of the ANOVA and whether there was a statistically significant difference between the group means in regards to attitudes towards alcohol brief intervention among nurses at Embu level five hospital. We can see that the significance value (p) is (F (2, 72) = 1.018, p = 0.366). Which is more than 0.05 and, therefore, there is no statistically significant difference in the means on attitudes towards alcohol brief intervention among nurses at Embu level five hospital at different training times at 95% confidence interval.

4.9 The relationship between socio-demographic characteristics of nurses at Embu level five hospital and their attitudes towards alcohol screening and brief intervention?

Chi-square test of independence also known as Pearson's chi-square test or test of association discovers if there is a relationship between attitudes towards alcohol screening and brief intervention among nurses (dependent variable) on nurses socio-demographic characteristics (independent variables). Multiple Regression analysis is done in order to establish a relationship and even predict the attitudes towards alcohol screening and brief intervention among nurses (dependent variable) based on one or more independent variables (socio-demographic characteristics).

4.9.1 Socio-demographics and Attitude towards screening among nurses

We are to establish the relationship between attitudes towards alcohol screening among nurses (dependent variable) based on one or more independent variables (nurses socio-demographics characteristics).

Table 19: The relationship between socio-demographic characteristics of nurses at Embu level five hospital and their attitudes towards alcohol screening.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.350	.122	.038	.637

The correlation R=0.350 indicates that there was a moderate relationship between nurses socio demographic characteristics and their attitudes towards alcohol screening among nurses at Embu level five hospital. The (R^2) was 0.122 which means that 12.1% of the variations in the attitudes towards alcohol screening can be explained by changes on socio demographic characteristics and 83.9% of variation in attitudes towards alcohol screening can be explained by other factors that are not within the control of the research.

Table 20: The regression between nurse's socio-demographic characteristics and their attitudes towards alcohol screening among nurses at Embu level five hospital.

Regression Coefficients[a]				
	Unstandardized Coefficients	Standardized	t	Sig.

	Coefficients				
	B	Std. Error	Beta		
(Constant)	0.582	1.165		0.499	0.619
Gender	0.434	0.198	0.285	2.199	0.032
Age	0.004	0.154	0.008	0.027	0.979
Highest level attained	0.223	0.197	0.159	1.132	0.262
Religion	-0.012	0.342	-0.005	-0.036	0.971
Marital status	0.038	0.094	0.054	0.399	0.691
Years of service	0.082	0.121	0.197	0.679	0.5

a. Dependent Variable: Attitude towards screening

Using the standardized coefficients, years of service was found to have the greatest influence on attitude (β=0.461, t =1.627, p=0.109) and thus, years of service is a significant forecaster of attitudes towards alcohol screening among nurses at Embu level five hospital. The next largest contribution is made by gender (β=0.348, t=2.75, p= 0.008), then marital status (β=0.088, t=0.664, p= 0.509), highest education level (β=0.069, t=0.503, p= 0.617) and finally religion (β=0.012, t=0.099, p= 0.921). Age contributes the least (β= -0.432 t=-1.532, p= 0.131. In summary, it was established that years of service was found to be statistically significant in influencing attitudes towards alcohol screening among nurses at Embu level five hospital.

As the females were increased, there was a more probable increase in the attitudes towards alcohol screening among nurses at Embu level five hospital (β= 0.434, p= 0.032). Since the p value (0.032) is less than 0.05, we reject the null hypothesis and conclude that gender has an influence on the attitudes towards alcohol screening among nurses at Embu level five hospital. Increasing the age was associated with increased attitudes towards alcohol screening among nurses at Embu level five hospital (β= 0.004, p= 0.979). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that age has no influence on the attitudes towards alcohol screening among nurses at Embu level five hospital. Education level of the respondents on attitudes towards alcohol screening among nurses at Embu level five hospital has a positive

regression coefficients (β= 0.223, p= 0.262) indicating a positive relationship between education level of respondents and attitudes towards alcohol screening among nurses at Embu level five hospital meaning for every increase in the education level of the respondents, there is an increase in the attitudes towards alcohol screening among nurses at Embu level five hospital. Since the p value (0.262) is greater than 0.05, thus we do not reject the null hypothesis and conclude that education level has no influence on the attitudes towards alcohol screening among nurses at Embu level five hospital.

As the Christians were increased, there was a decrease in the attitudes towards alcohol screening among nurses at Embu level five hospital (β= -0.012, p= 0.971). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that religion has no influence on the attitudes towards alcohol screening among nurses at Embu level five hospital. Similarly, increase in the married people was associated with an increment in the attitudes towards alcohol screening among nurses at Embu level five hospital (β= 0.038, p= 0.691). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that marital status has no influence on the attitudes towards alcohol screening among nurses at Embu level five hospital.

Finally, increase in the years of service was associated with an increment in the attitudes towards alcohol screening among nurses at Embu level five hospital (β= 0.082, p= 0.500). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that years of service has no influence on the attitudes towards alcohol screening among nurses at Embu level five hospital.

Table 21: ANOVAb analysis

ANOVAb						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.507	6	.584	1.442	.213
	Residual	25.131	62	.405		
	Total	28.638	68			

This table shows the output of the ANOVA analysis and whether there is a statistically significant difference between the group means in regards to attitudes towards alcohol screening among nurses at Embu level five hospital. We can see that the significance value (p) is (F (6, 62) = 1.442, p = 0.213),which is more than 0.05 therefore, there is no statistically significant difference in the means on attitudes towards alcohol screening among nurses at Embu level five hospital between the different demographic information at 95% confidence interval

4.9.2 Socio-demographics and Attitude towards brief intervention

We are to establish the relationship between attitudes towards alcohol brief intervention among nurses (dependent variable) based on one or more independent variables (nurses socio-demographics characteristics)

Table 22: Socio-demographics and Attitude towards brief intervention

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.402	.161	.080	.536

The correlation R=0.402 indicates that there is a moderate relationship between nurses socio demographic characteristics and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital. The (R^2) was 0.161 which means that 16.1% of the variations in the attitudes towards alcohol brief intervention can be explained by changes on socio demographic characteristics and 83.9% of variation in attitudes towards alcohol brief intervention can be explained by other factors that are not within the control of the research.

Table 23: The regression between nurse's socio-demographic characteristics and their attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Regression Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

(Constant)	1.301	0.98		1.327	0.189
Gender	0.457	0.166	0.348	2.75	0.008
Age	-0.198	0.129	-0.432	-1.532	0.131
Highest level attained	0.083	0.166	0.069	0.503	0.617
Religion	0.029	0.288	0.012	0.099	0.921
Marital status	0.053	0.079	0.088	0.664	0.509
Years of service	0.166	0.102	0.461	1.627	0.109

a. Dependent Variable: Brief interventions

Using the standardized coefficients, years of service is found to have the greatest influence on burnout levels (β=0.461, t =1.627, p=0.109) , years of service is a significant forecaster of attitudes towards alcohol brief intervention among nurses at Embu level five hospital. The next largest contribution is made by gender (β=0.348, t=2.75, p= 0.008), then marital status (β=0.088, t=0.664, p= 0.509), highest education level (β=0.069, t=0.503, p= 0.617) and finally religion (β=0.012, t=0.099, p= 0.921). Age contributes the least (β= -0.432 t=-1.532, p= 0.131. In summary, it was established that years of service was found to be statistically significant in influencing attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Using the unstandardized coefficients, the relationship between demographic information on burnout levels is as shown below.

As the females were increased, there is more probable increase in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= 1.301, p= 0.008). Since the p value (0.008) is less than 0.05, thus we reject the null hypothesis and conclude that gender has an influence on the attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Increasing the age was associated with a decreased attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= -0.198, p= 0.131). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that age has no influence on the attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Education level of the respondents on attitudes towards alcohol brief intervention among nurses at Embu level five hospital has a positive regression coefficients (β= 0.083, p= 0.617) indicating a positive relationship between education level of respondents on attitudes towards alcohol brief intervention among nurses at Embu level five hospital meaning every increase in the education level of the respondents, there is an increase in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital. Since the p value (0.617) is greater than 0.05, thus we do not reject the null hypothesis and conclude that education level has no influence on the attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

As the Christians were increased, there is more probable increase in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= 0.029, p= 0.921). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that religion has no influence on the attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Similarly, increase in the married people was associated with an increment in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= 0.053, p= 0.509). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that marital status has no influence on the attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Finally, increase in the years of service was associated with an increment in the attitudes towards alcohol brief intervention among nurses at Embu level five hospital (β= 0.166, p= 0.109). Since the p value is greater than 0.05, thus we do not reject the null hypothesis and conclude that years of service has no influence on the attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

Table 24: attitudes towards brief intervention

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.426	6	.571	1.990	.081
	Residual	17.791	62	.287		

Total	21.217	68	

a. Predictors: (Constant), 7.Years of service; 5.Religion; 2.Gender; Marital status; Highest level attained; Age;

b. Dependent Variable: Attitudes towards brief intervention

This table shows the output of the ANOVA analysis and whether there is a statistically significant difference between the group means in regards to attitudes towards alcohol brief intervention among nurses at Embu level five hospital. We can see that the significance value (p) is (F (6, 62) = 1.990, p = 0.081), which is more than 0.05. And, therefore, there is no statistical significant difference in the means on attitudes towards alcohol brief intervention among nurses at Embu level five hospital between the different demographic information at 95% confidence interval.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter describes the summary of the major findings, the relations to other research studies, suggestions for future research, limitations, conclusion and even recommendations of the studies

5.2 Summary

The purpose of this study was to determine if the effect of training in alcohol and drug abuse and attitude towards screening and brief interventions among nurses at Embu level five hospitals. In spite of the documented high alcohol-related morbidity and mortality, there is little record of public health interventions other than education. There is little or no documentation of early identification and intervention for alcohol harm in primary health care settings implying that alcohol screening and brief intervention is underutilized in primary health care settings. Also, if nurses are trained, the will be able to reflect on their own attitude towards alcohol interventions and become aware of the benefits of alcohol screening and brief intervention.

5.3 Major Findings

The demographics characteristics shows that most of the respondents are nurses in Embu level five are females. Similarly the age of the nurses, the majority of the nurses have ages ranging from 36 to 45 years of age. To add to that they had attained the highest level of education of tertiary/ college education. Christianity was the dominant religion and most were married. Most nurses had worked for more than 21 years.

When it comes to the trainings, the majority of the nurses had undergone training on alcohol and drug abuse during undergraduate/college studies with only a fraction of them receiving training on alcohol screening and brief interventions. Similarly, a small fraction of the nurses during their practice in the past have received any training on alcohol and drug abuse with a least number of them including training on alcohol screening and brief interventions

On screening, very few nurses were aware of the standardized alcohol screening tools used for screening on the patients. Similarly, most numbers of the nurses agreed to a moderate extent on the screening on alcohol and drug abuse which is also similar to brief intervention where most of the nurses agreed to a moderate extent on the brief intervention on alcohol and drug abuse.

About the service delivery points (SDP), most of the nurses (36.4%) agreed that the waiting rooms, outpatients department (40.3%), MCH (28.6%) to be used as service delivery point. For the specialized clinics (57.7%), and the youth clinics (61%), the nurses strongly agreed that they would be ideal for screening and brief intervention.

But among the majority, 31.2% of the nurses and 28.6% of the nurses strongly disagreed on using the laboratory waiting area and pharmacy waiting area respectively. This may be due to the fact that there are rarely nurses deployed in these departments. However, studies show that screening and brief intervention can be conducted anywhere in health facilities including offices and waiting bays.

On the brief advice, assessment, counselling, health education, motivational interviewing, medical treatment, referral to treatment, follow up and finally referral to support group indicates that the nurses agreed that the services would be beneficial if offered to the patients. The nurses have an idea of possible interventions that may work for a person with risky drinking.

As the training on alcohol and drug abuse during undergraduate/ college studies were increased, there was a decrease in the favorable attitudes towards alcohol screening among nurses at Embu level five hospital. As the training on alcohol and drug abuse during practice increased, there was an increase in favorable attitudes towards alcohol screening. This can be explained by the fact that there was little or no content on screening and brief intervention. This was confirmed by the curricular examined where only two curricula had alcohol and drug abuse content. The increase in the favorable attitude with training due to practice may be due to the fact the continuous medical education is determined as per the prevailing needs.

Similarly, as the training on alcohol and drug abuse during undergraduate/ college studies was increased, there was a decrease in the attitudes towards alcohol brief intervention

but, increasing training on alcohol and drug abuse during practice was associated with increased attitudes towards alcohol brief intervention. This is due to the absence of content.

As the females increased, there was an increase in the attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital Also increasing the age was associated with an increase in favorable attitudes towards alcohol screening among nurses whereas a decreased attitudes towards alcohol brief intervention among nurses at Embu level five hospital.

In addition, as education level of the respondents increase, there is an increase in the attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital. This can be attributed to the fact that the higher the education the more knowledgeable the individual is and therefore likely to appreciate alcohol harm and possible interventions. On religion, the higher the number of Christians the more the decrease in the favorable attitudes towards alcohol screening as well as decrease in the favorable attitudes towards alcohol brief intervention. Similarly, increase in the number of married people was associated with an increment in the attitudes towards alcohol screening and brief intervention. Finally, increase in the years of service was associated with an increment in the attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital

5.4 Similar findings and in relation to the study findings

Screening can take place in many settings such as the outpatient department, maternal, child and family health clinics, inpatient departments, accident and emergency departments. A self-administered questionnaire can be filled as patients wait to be seen. They can also respond while in the clinician's room. It can also be effectively performed by different health workers (SBIRT fact sheet, 2014). Which is in conformation with the study as most of them did not care where the screening was to be done. There is limited training on alcohol and drug abuse screening and briefing which is in support of a study by Strobbes (2014) who argues that primary care professionals continue to receive limited education on substance use disorders and related conditions. Similar to that of M. Johnson and colleagues (2010) found attitude to be among the barriers to nurses' practice

of screening and brief intervention. They observed that nurses did not view screening and brief intervention as part of their role, therefore referring patients.

One reason for the low implementation was lack of training. B. Thomas et al (2004) noted that training of health workers was significant in the implementation of screening and brief as in our study. There are gender differences in terms of the amount of alcohol allowed due to the difference in absorption and metabolism. Alcohol is associated with a wide spectrum of alcohol use disorders, mental illness, infectious diseases and non-communicable diseases as well as a wide range of cancers. Given the magnitude of impact on health, a public health approach is required in tackling the global crisis. Health promotion uses health education to provide primary prevention whereas screening, brief intervention and referral to treatment are secondary prevention (APHA, 2008). Like the effect of males and females in the study above.

5.5 Importance of the findings

Alcohol-related harm is of public health importance globally with serious negative effects in Kenya (WHO, 2011, 2014, NACADA, 2012). Therefore, results of this study will help shed light on the competence and attitude gaps among nurses at Embu level five hospital. The findings of this study will offer and explanation of the low uptake of screening and brief intervention in primary health care setting and will help bridge the gap between training and practice by not only attributing poor uptake to attitude but also instituting measures that address the nurses' attitudes.

The Ministry of health and county governments will use the findings of this study for training policy formulation, implementation, and preparation of guidelines for primary health care practice as well as prioritize human resource development. To add to that, It will inform development and review of training curricula by universities, medical training colleges, and other tertiary institutions. Finally, it will also provide an opportunity for further studies to explain the current status of implementation of SBI in health care.

5.6 Suggestions for further research

The study respondents were nurses working in Embu level five hospital. A follow up study can be conducted in other counties that can be used to generalize for Kenya.

Similarly, the study focused on the nurses alone, therefore the study should extend to other cadres within the hospitals. Further studies on factors influencing the practice of screening and brief intervention in primary health care are recommended.

5.7 Conclusion

The nurses have majority working for more than 21 years at Embu level five hospital.

Majority of the nurses were female, married, Christians, having a tertiary/college level of education and finally between 36 to 45 years of age.

Majority of the nurses had undergone training on alcohol and drug abuse during undergraduate/college studies with only a fraction of them receiving training on alcohol screening and brief interventions.

Similarly, a small fraction of the nurses during their practice in the past have received any training on alcohol and drug abuse with a least number of them including training on alcohol screening and brief interventions.

Nurses agreed to a moderate extent on the screening and brief intervention on alcohol and drug abuse.

As the service delivery points (SDP), the nurses agreed with the waiting rooms, outpatients department, specialized clinics and the youth clinics could be used but disagreed using laboratory waiting area and pharmacy waiting area.

The nurses agreed that the services on brief interventions would be beneficial.

As the training on alcohol and drug abuse during undergraduate/ college studies were increased, there is more probable decrease in the favorable attitudes towards alcohol screening and brief interventions among nurses at Embu level five hospital.

Increasing training on alcohol and drug abuse during practice in the past was associated with increased favorable attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital.

As the females, education level, marital status, and years of service were increased, there is more probable increase in the attitudes towards alcohol screening and brief intervention among nurses at Embu level five hospital.

5.8 Recommendation

There is a need to review training curricula to include alcohol and drug abuse interventions with an emphasis to screening and brief intervention for early identification and intervention. Since in-service training seems to have more impact on the attitudes, there is need to conduct continuous medical education sessions within the hospital.

Strengthen implementation of the Laws and policy which have already made provision for this kind of interventions as it remains the responsibility of the ministry and health departments to incorporate SBI in their routine care.

5.9 Challenges

The biggest challenge was the competing interests among nurses. At times, the hospital got too busy so that it was difficult to complete the questionnaire. I surmounted this by agreeing with the would be respondents what timing was appropriate having three contact persons in the hospital helped a lot. The permits took a little longer than anticipated and some processes at the county level were long.

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APPENDICES

APPENDIX I

DATA COLLECTION TOOL 1

SURVEY ON EFFECTS OF ALCOHOL AND DRUG ABUSE TRAINING ON ATTITUDE TOWARDS ALCOHOL SCREENING AND BRIEF INTERVENTION AMONG NURSES AT EMBU LEVEL FIVE HOSPITAL

INFORMED CONSENT

Hallo, my name is Mwangi Grace Muthoni, I am from Nairobi University carrying out a study on "effects of alcohol and drug abuse training on attitude towards screening and brief intervention among nurses at Embu level five hospital". You are among those randomly selected for this exercise. I would like to ask you some few questions. This interview usually takes 5 to 10 minutes to complete. Whatever information you provide will be kept confidential and used for academic purpose only.

GEOGRAPHICAL INFORMATION

Instructions: Please tick or fill Gaps where appropriate

QUESTION	**RESPONSE**
SERIAL NUMBER	
DATE OF INTERVIEW [DD/MM/YYYY]	
DEPARTMENT	☐ Inpatient ☐ Outpatient
SUB- DEPARTMENTS	**Outpatient** ☐Casualty & Emergency ☐Filter Clinics ☐Maternal & Child Health ☐Medical Outpatient ☐Surgical Outpatient

	☐Obstetrics/Gynaecology ☐Ear Nose & Throat ☐Eye Clinic ☐Psychiatry ☐Others (Specify)..... **Inpatient** ☐Medical Wards ☐Surgical Wards ☐Gnaecology Wards ☐Maternity ☐Others (Specify).....

SECTION A: DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

	QUESTION	**RESPONSE**
1	Cadre	☐Enrolled community nurse ☐Registered Community Health Nurse ☐Others (Specify)…….
2	Gender	☐Male ☐Female
3	Age	☐18 – 25 Years ☐26-35 Years ☐36-45 Years ☐46-55 Years ☐Above 56 years
4	Highest level of education attained	☐No formal education ☐Primary education ☐Secondary education ☐Tertiary/college education ☐University Education ☐Others (Specify)…….
5	Religion	☐Christian ☐Hindu ☐Muslim ☐Others (Specify)…….
6	Marital Status	☐Married ☐Separated/ Divorced

		☐Single/ Unmarried ☐Widowed ☐Others (Specify)…….
7	Years of service	☐0 – 5 Years ☐6- 10 Years ☐11-15 Years ☐16-20 Years ☐Above 21 years

SECTION B

Respond Yes or No		YES	NO
8.	Did you receive any training on alcohol and drug abuse during your undergraduate/college studies?		
9.	If yes, did it include alcohol screening and brief interventions?		
10.	Do you have any post graduate education?		
11.	Did you receive any training on alcohol and drug abuse in during your post graduate studies?		

12. Have you received any training on alcohol and drug abuse during practice in the past?

☐Yes ☐ No

a) If Yes, which training was it?

a).....
.
b).....
.
c).....
.
d).....
.

b) If yes, what was the duration of training?

☐I week ☐ 2 week ☐ 3 weeks ☐1 month ☐ any other

13 How long ago did you receive the training?

☐A month ago ☐ 3 months ago ☐ 6 months ago ☐12 months ago ☐ any other.....

a) What is the frequency of the training on alcohol and drug abuse during practice?

☐ Weekly ☐ Monthly ☐ Quarterly ☐ Semi-annually
☐ Annually

☐ Any other.....

14. Did the training include screening and brief interventions?

☐ Yes ☐ No

15. To what extent do you think training in alcohol and drug abuse interventions would help improve your practice in alcohol screening and brief intervention? 1=To no extent 2=To a very low extent 3=To a low extent 4=To a moderate extent and 5=To a very large extent

	1	2	3	4	5
Training in alcohol and drug abuse (ADA)					

16. What other measures do you think would improve your practice in interventions against alcohol harm?

……
……

SECTION C:

A. SCREENING

17. What do you understand by screening

……
……
……
……

18. Are you aware of any standardized screening tool?

☐ Yes ☐ No

19. If yes, mention any

……

……

20. To what extent do you think the following measures are useful in identifying harmful use of alcohol? 1=No extent 2=To a very low extent 3=Low extent 4=Moderate extent 5=A large extent

Tick as you feel appropriate	1	2	3	4	5
a) Asking about the number of standard drinks one takes in a sitting (In a day)					
b) Asking about the brand of alcohol one takes					
c) Asking how often one takes alcohol in a week					
d) Asking if one feels the need to cut down on their alcohol intake					
e) Asking if one feels annoyed after being criticized for their alcohol intake					
f) Asking if one needs to take alcohol first thing in the morning					
g) Asking if one needs to take alcohol to be able to work					
h) Asking if one got into trouble with police or law due to drinking					
i) Asking if one has in the past sustained injuries after drinking					
j) Asking if one is unable to stop drinking after starting					
k) Asking if one was unable to go to work after drinking					
l) Asking if close friends or family members have been concerned about the individuals drinking.					

B. BRIEF INTERVENTION

21. What do you understand by brief intervention?

……

……

22. To what extent do you think the following measures would help an individual modify his/her drinking behavior? No extent 2.To a very low extent 3.Low extent 4.Moderate extent 5.A large extent

	1	2	3	4	5
a) Giving health education to a group of patients/clients					
b) Giving health education to individual patients/Clients					
c) Giving health education in routine consultation					
d) Giving special focus to special groups considered high risk					
e) Telling patients about harmful use of alcohol if their illness is associated with harmful use of alcohol					
f) Using specific tools to screen for harmful use of alcohol					
g) Giving them reading material with messages on alcohol harm					
h) Referring them to specialists for screening					

C: SCREENING AND BRIEF INTERV ENTION

23. To what extent do you agree that screening and brief intervention may be done at the following service delivery points (SDP) in the health facility?1= Strongly disagree 2=Disagree 3=Neither agree nor disagree 4=Agree 5=Strongly agree

SDP	1	2	3	4	5
Waiting rooms					
Outpatient department					
Wards					
Specialized clinics					
Laboratory waiting area					
Pharmacy waiting area					
MCH					
Youth clinic					

24. A person identified as having risky drinking behavior may benefit from the following interventions 1=Strongly disagree 2=Disagree 3=Neither agree nor disagree 4=Agree 5=Strongly agree

Type of intervention/response	1	2	3	4	5
Brief advice					
Assessment					
Counseling					
Health education					
Motivational interviewing					
Medical treatment					
Referral to treatment					
Follow up					
Referral to support group					

D: WHO SHOULD CONDUCT SCREENING AND BRIEF INTERVENTION

25. The following cadres of primary health care staff should conduct interventions against harmful use of alcohol 1=Strongly disagree 2=Disagree 3=Neither agree nor disagree 4.=Agree 5=Strongly agree

Cadre /Response	1	2	3	4	5
Doctors					

Clinical officers						
Nurses						
Laboratory technologists						
Pharmacists & pharmaceutical technologists						
Nutritionists						
Records clerks						
Counselors						
Receptionists						

26. Which interventions should the above primary health care workers provide?**(*You can tick more than one intervention for any one of the cadres as you find appropriate)***

CADRE/ INTERVENTION	Screening	Brief intervention	Follow up& monitoring	Administering screening tools	Referrals
Doctors					
Clinical officers					
Nurses					
Laboratory technologists					
Pharmacists & pharmaceutical technologists					
Nutritionists					
Records clerks					
Counselors					
Receptionists					

SECTION D

27. To what extent do you feel at ease asking patients and clients about their alcohol consumption?

☐No confidence
☐Very little confidence
☐Moderate degree of confidence
☐Quite a lot of confidence.

28. I rarely ask patients/clients about their alcohol behavior because

√ Appropriately	Yes	No
It is not my role		
It is embarrassing		
I find nothing wrong with alcohol consumption		
It is disrespectful		
Patients may be reluctant to return to the health facility		
I would not know what to do about it		
Only addiction specialists are expected to ask		
I also drink alcohol		

29. To what extent do you agree with the following statements? 1=strongly disagree 2=Disagree 3= Neither agree nor disagree 4=Agree 5=Strongly agree

Screening for harmful use of alcohol using screening tools is :	**1**	**2**	**3**	**4**	**5**
Difficult to perform					
Not compatible with my routine duties/practice					
Not practical in my current duty station/department					
Is beneficial to clients/patients					
Can be practiced as a trial in health facilities					
Has documented benefits					
Is possible with some training					
Should only be done by addiction professionals					
Is the role of the doctor					
Is the role of the nurse					
Is the role of clinical officers					
Is the role of counselors					
Is the role of social workers					
Brief Interventions in people with risky consumption of alcohol is :	**1**	**2**	**3**	**4**	**5**
Difficult to perform					
Not compatible with my routine duties/practice					
Not practical in my current duty station/department					
Is beneficial to clients/patients					
Can be practiced as a trial in health facilities					
Has documented benefits					
Is possible with some training					
Should only be done by addiction professionals					
Is the role of the doctor					
Is the role of the nurse					
Is the role of clinical officers					
Is the role of counselors					
Is the role of social workers					

COMMENTS

……
……
……
……
……
……

APPENDIX II

DATA COLLECTION TOOL 3

Observation Check List

This shall entail going through the Nurses training curricula to identify alcohol and drug abuse interventions content.

Place a √ where content is present and **X** where absent

Curriculum	CURRICULUM CONTENT						
	Safe drinking levels	Harmful /hazardous drinking	Alcohol harm	Screening	Brief intervention	Medical treatment	Referral to treatment
Enrolled community nursing							
Kenya Registered community health nursing							
Post basic nursing curricula							
Critical care nursing							
Palliative care							
Psychiatry							
Nurse Anaesthesia							
nephrology							
Perioperative nursing							

APPENDIX III

DATA COLLECTION TOOL 3

KEY INFORMANT INTERVIEW FOR HOSPITAL IN CHARGE OF CONTINOUS MEDICAL EDUCATION

	YES	NO
Is there continuous medical education sessions conducted in the hospital?		
If yes, which are the common topics addressed?		
Ate there topics targeting nurses?		
Are there topics on alcohol and drug abuse?		
If yes, what is are the contents?		
Are there practical demonstrations of screening and brief interventions in the hospital?		
Are there guidelines for alcohol and drug abuse management at the hospital?		
If yes, researcher should confirm their availability and accessibility.		
Do they include alcohol screening and brief interventions		

APENDIX IV
CONSENT FORM

I Mwangi Grace Muthoni hereby request you to assist me by responding to the attached questionnaire. This research entitled effects of alcohol and drug abuse training on attitudes towards alcohol screening and brief intervention among nurses at Embu level-five hospital. You have been selected to participate on the grounds of being a nurse and working at Embu level-five hospital. The research is purely for academic purposes for the award of a Masters' degree in Psychology (Health).

You are not required to write your name or any symbol that may be linked to your identity. Responses will remain anonymous and information treated with utmost confidentiality. If you do not wish to participate in this research, you are free to decline. Responding to this question will take about five minutes of your time.

Thank you for participating.

APENDIX V

LIST OF ABBREVIATIONS

AA	Alcoholics anonymous
AFMC	Association of Faculties of Medicine of Canada
APHA	American Public Health Association
ASI	Alcohol Screening Index
ASSIST	Alcohol, smoking and substance involvement screening test
AUDIT	Alcohol use disorders identification test
BI	Brief intervention
BSN	Bachelor of Science Nursing
CRAFFT	Car, relax, alone, friends, forget, trouble.
DSM-5	Diagnostic statistical Manual of mental illness volume 5
HSE	Health Services Executive
KECN	Kenya Enrolled community Nurse
KMTC	Kenya Medical Training College
KRCHN	Kenya Registered Community Health Nurse
KRN/M	Kenya Registered Nurse/ Midwife
MAST	Michigan alcohol screening test
MI	Motivational Interviewing
CAGE	Cut down, annoyed, guilty, eye opener
NACADA	National Authority for the Campaign against Alcohol and Drug
NACOSTI	National commission for science technology and innovation
NCASAA	National Centre on Addiction and Substance Abuse
NCDs	Non Communicable Diseases

NCETA National Centre of Education and Training on Addiction

NCLR National Council for Law Reporting

NICE National Institute of health and care excellence

SAMHSA

SBI Screening and Brief Intervention

TACE Tolerance, annoyed, cut down, eye opener

TAP Technical Assistance Publication

TWEAK Tolerance, worried, eye opener, amnesia, cut down

USPSTF United States Preventative Task Force

WHA World Health Assembly

WHO World Health Organization

UNIVERSITY OF NAIROBI

FACULTY OF ARTS
DEPARTMENT OF PSYCHOLOGY

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P.O. BOX 30197
NAIROBI
KENYA

September 23, 2016

EMBU COUNTY GOVERNMENT
CHIEF OFFICES OF HEALTH

RE: MWANGI GRACE MUTHONI – C50/70626/2013

Mwangi Grace Muthoni is a student in the Department of Psychology studying Health Psychology Masters programme at the University of Nairobi. She is doing a project on ***"Effects of alcohol and drug Abuse training on attitudes towards alcohol screening and brief interventions among Nurses at Embu Level 5 Hospital".*** The requirement of this course is that the student must conduct research project in the field and write a thesis.

In order to fulfill this requirement, I am introducing to you the above named student for you to kindly grant him permission to collect data for his Masters Degree project.

Thank you very much for accepting our students in your setting. If you have any questions, you may address them to Dr. Luke Odiemo, Chair, Department of Psychology, UoN. He may be contacted on Tel.020-3318262 Ext.28439.

Yours Sincerely,

DEPARTMENT OF PSYCHOLOGY
Date.....
UNIVERSITY OF NAIROBI

Dr. Luke Odiemo
Chairman,
Department of Psychology

EMBU COUNTY GOVERNMENT

OFFICE OF COUNTY DIRECTOR OF HEALTH

Mobile: +254 771 204 003/+254 707 192 924 Tel: 254 68 30686/30656
Address: P. O. Box 36 – 60100 Embu Town House Email: Info@embu.go.ke Web:www.embu.go.ke

Our Ref No: EBU/COH/58/Vol. I/ Date: 24th October 2016

The Medical Superintendent
Embu Level 5 Hospital

RE. RESEARCH AUTHORIZATION
FOR: MWANGI GRACE MUTHONI

The above named person is a student at University of Nairobi department of Psychology pursuing her masters programme in health psychology.

She has been authorized to carry out research on "*effects of alcohol and drug Abuse training on attitudes towards alcohol screening and brief interventions among Nurses at Embu Level 5 Hospital*".

Kindly accord her necessary support.

COUNTY DIRECTOR OF HEALTH
EMBU COUNTY
P O Box 273, EMBU
Fax: 068 - 319791
Tel: 068 - 31883 / 31081
Email: cdh embu@gmail.com

DR. S.M KANIARU
AG. COUNTY DIRECTOR OF HEALTH
EMBU COUNTY

THIS IS TO CERTIFY THAT:
MS. GRACE MUTHONI MWANGI
of UNIVERSITY OF NAIROBI, 20902-202 NAIROBI,has been permitted to conduct research in *Embu County*

on the topic: *EFFECT OF ALCOHOL AND DRUG ABUSE TRAINING ON ATTITUDE TOWARDS ALCOHOL SCREENING AND BRIEF INTERVENTION AMONG NURSES AT EMBU LEVEL FIVE HOSPITAL*

for the period ending:
7th November,2017

Permit No : NACOSTI/P/16/38726/14463
Date Of Issue : 7th November,2016
Fee Recieved :ksh 1000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation