EFFECTIVENESS OF INTERVENTIONS AGAINST ALCOHOLISM IN THE PUBLIC SECTOR: A CASE OF NATIONAL HEALTH INSURANCE FUND IN NAIROBI COUNTY, KENYA

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DECLARATION

This thesis is my original work and has not been presented for academic credit or any purpose in any other institution.

Signature _____ Date _____

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This thesis has been submitted for examination with approval of the appointed Supervisors.

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DEDICATION

I dedicate this thesis to my family and many friends. Special gratitude to my husband Julius Mokaya, and the children: Mitchelle Nyatichi, Patience Wangoi and Fadhili Joshua for their prayers and encouragement when I almost gave up. Their moral, spiritual and emotional support saw me complete this study.

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ABSTRACT

Alcoholism and alcohol abuse is a common vice in the workplace which has debilitating effects on individuals, families, organizations and societies at large. This study sought to assess the effectiveness of the interventions implemented through employee assistance programs (EAPs) at the National Health Insurance Fund. Specifically, the study assessed the prevalence of alcoholism among NHIF employees, the risk factors, the level of employee awareness of the alcoholism interventions at NHIF, and the effectiveness of the interventions. The study was guided by Cognitive Behavioural Theory and Reality Theory. Descriptive research design was used. The target population was 562 employees from NHIF headquarters and branches from which a sample size of 234 employees were selected using stratified random sampling technique. Additionally, the study interviewed 27 managers and supervisors. Before administration, the questionnaire was pilot tested on 24 respondents at NHIF Eldoret Branch and found to be valid and reliable. Quantitative data was analyzed using descriptive statistics, chi-square, and linear regression technique in SPSS while qualitative data was analyzed thematically. The findings revealed that the prevalence of alcohol abuse was 24.5%. The interventions implemented to mitigate alcoholism and alcohol abuse among NHIF employees were moderately effective. Thematic analysis indicated peer pressure, stress and poor financial management were significantly associated with alcoholism among NHIF employees. Based on the findings, the study recommended that the government collaborates with private organizations and religious institutions to develop more effective intervention measures aimed at mitigating the problem and improving employee performance and dependability. Further research was proposed to determine whether differences exist in the vulnerability of employees to alcoholism in other public institutions.

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ABBREVIATIONS AND ACRONYMS

AIDS:	Acquired Immunodeficiency Syndrome
AOD:	Alcohol and Other Drugs
AUDIT:	Alcohol Use Disorder Identification Tool
EAPs:	Employee Assistance Programs
HED:	Heavy Episodic Drinking
ILO:	International Labor Organization
KPA:	Kenya Ports Authority
MoH:	Ministry of Health
NACADA:	National Authority for the Campaign against Alcohol and Drug Abuse
NDMP:	National Drug Master Plan
NHIF:	National Health Insurance Fund
NIAAA:	National Authority for the Campaign against Alcohol and Drug Abuse
NGOs:	Non-Governmental Organizations
OECD:	Organization for Economic Co-operation and Development
STEPS:	Stepwise Approach to Surveillance
SUDs:	Substance Use Disorders
UNODC:	United Nations Office of Drug Abuse and Crime
US:	United States
WHO:	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Absenteeism: In reference to this study the term refers to failure by a worker, employee or staff within an organization to report to his or her designated workplace due to alcoholism and alcohol abuse (Parsley et al., 2022).

Addiction: According to Gireli (2019) addiction is the dependence on a dangerous substance and usage of the same in spite of its negative effects. According to NACADA (2017), alcohol addiction among employees leads to declined work performance, increased absenteeism, work related accidents, illness and deaths.

Alcohol Dependence: This is basically the habitual act of using alcohol or any other drug that is alcohol laced by someone in order to feel good or comfortable (Veltrup & John, 2020).In this study, alcohol dependence will refer to cases where alcohol users become hooked on to the consumption of alcohol.

Alcohol Use Disorder: This is an undesirable pattern of alcohol consumption resulting to clinically notable harm or distress to the user (Kranzler & Soyka, 2018).In this study, alcohol use disorder will refer to the adverse consequences such as alcohol dependence, harmful use, and alcohol induced mental disorders and psychosocial challenges.

Alcohol Abuse: The tendency of consistent and excessive taking of alcohol beyond medically accepted levels leading to dependence (Boitt, 2016). For the purpose of this research, alcohol abuse will involve consumption levels in excess of what is normally recommended leading to negative consequences.

Alcoholism: This is when someone is unable to control himself or herself from taking alcohol due to addiction ((Gómez-Recasens et al., 2018). In this study, it will refer to excessive drinking by employees at NHIF leading to dependence.

Effectiveness: This is the extent to which an issue is successful. In this study it refers to the measurement of the success rate of the interventions and approaches employed in the fight against workplace alcoholism (NACADA, 2018).

Employee: This term refers to an individual who enters into a mutual engagement with an employer to offer their services or skills for a specific period in return for payment (Kinyanjui, 2022).

Interventions: These are measures and strategies formulated by employers to address alcohol use among employees (Yuvaraj et al., 2019). For the purposes of this study, they will include preventive such as awareness, early identification, counselling among others while curative entails treatment and rehabilitation interventions at NHIF.

Prevalence: The term refers to a certain proportion of the population with specific attributes over a period of time. In this study it refers to the rate and level of alcohol use among public sector employees (NACADA, 2017).

CHAPTER ONE: INTRODUCTION AND BACKGROUNDTO THE STUDY

Introduction

This chapter is an overview of the problem of alcoholism, its prevalence globally, regionally and locally. It also reviews interventions against workplace alcoholism and their effectiveness with specific focus on the public sector. The chapter has also outlined background of the research, problem statement, objectives, research questions, assumptions of the study, justification, significance, scope, limitations and delimitations.

Background to the Study

Diagnostic and Statistical Manual (2017) describes alcoholism as a combination of patterns of alcohol abuse that leads to clinical impairment or distress to the user. It manifests through consumption of alcohol over a long period than previous practice, inability to control the intake and craving for the same, focusing more on opportunities that facilitate access to alcohol leading to neglect of responsibilities, persistent use despite dangers to one's health and development of withdrawal symptoms when unable to access alcohol (Saunders et al., 2019).

Globally, alcohol has serious negative effects in the workplace, such as reduced productivity, absenteeism, sickness, tardiness, accidents, difficulties finishing tasks, deaths and ultimately poor organizational performance (Dordoye et al., 2021)). The problem is equally burdensome to the family as it contributes to strained relationships, violence, financial challenges, mental health disorders as well as increased risks to alcohol-related illnesses (Chinnusamy et al., 2021).

In America out of the 14.8% of the individuals who abuse drugs and alcohol, 70% of them are employed (SAMHSA Survey, 2020). Smith (2017) found out that employees who reported having at least three jobs in the span of five years are twice as likely to abuse drugs as those who reported having at most two jobs in the same time frame. Additionally, alcohol consumption by employees has a severe impact on public safety, especially when performing crucial tasks like security and medical care as it enhances instances of aggression among employees towards clients (Lokesh, 2019). It also compromises an individual's capacity to work effectively (Gómez-Recasens et al., 2018). Data indicates that within the European Union between 5 and 20% of the region's active employees are experiencing alcohol related challenges (Borrelli et al., 2022). The United Nations acknowledges that alcohol use has increased at an unforeseen rate over the last two decades, hence affecting every part of the globe (UNODC, 2022).

According to the World Health Organization alcohol is one of the top three public health priorities worldwide, standing out as the third biggest cause of illness and early mortality despite the fact that just half of the global inhabitants use it (WHO, 2018). Workplace alcoholism is a grave hazard to the safety and the health of employees as well as a burden to organizations (Sullivan et al., 2019). The vice is associated with work place injuries, deaths and poor performance (WHO, 2018). Sawicki and Szóstak, (2020) in a study of 219 accidents established that 17.4% of the incidences were as a result of excessive and disproportionate intake of alcohol while at work. Although the problem of alcoholism continues to grow affecting at least 273 million people globally which is about 5.1 % of the adult population, there is limited attention given to the workplace alcohol crisis so as to inform appropriate

interventions (Kamenderi, 2022). The WHO (2017) explains that workplace specific data on alcoholism is limited which has implications on interventions.

Regionally (Mupara et al., 2022) says that although a number of workplace alcohol interventions are being implemented in Africa, their effectiveness remains untested. Most Nigerian workers mainly consume alcohol as a stress relieving mechanism during working hours which impacts negatively on their optimal performance (Ani et al., 2022). In Ghana, teachers who consume excessive alcohol not only experience hangovers while at work but also have high incidents of absenteeism, skipping lessons because of time spent in drinking spots and not being able to complete the curriculum (Ayom-Yeri & Edmund, 2020).

In Kenya, The United Nations Office of Drug and Crime in its World Drug Report (UNODC, 2018), says Nairobi is one of the top four African cities with significant drug and alcohol problems. Chemworsio (2019) says alcohol is the most abused substance in Kenya at a rate of 36.3%, followed by nicotine at 17.5%, bhang at 9.9 %, heroin at 8.0%, khat at 2.7% and Cocaine at 2.2%. The National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) explains that alcohol abuse is responsible for a wide variety of harmful practices such as low productivity, social disharmony, failing health, exposure to diseases such as HIV/AIDS, and unnatural deaths (NACADA, 2017). NACADA established that majority of alcohol abusers are in employment and cost employers billions of shillings in lost productivity. The findings confirmed that at least 57.9% of public service employees had ever used alcohol at least once in their lifetime with 33.3% classified as current consumers (NACADA, 2018).

Alcohol abuse has become a serious national occupational, health and safety concern among employees due to its adverse consequences on the individuals, society and the affected

organizations (NACADA, 2022). Research indicates that prevalence of current alcohol related problems in Kenya has grown with about 5.8% of individuals aged between 15 and 65 which is the most productive and employable age bracket (Gitatui et al., 2019). Excessive alcohol consumption surges the unemployment risk and absconding of duty for those who are already employed (Parsley et al., 2022). Additionally, it has been proven that it contributes to loss in productivity and high turnover of employees (Davidson, 2018).

In Kenya (Jaguga et al., 2022) suggests that deliberate measures should be taken to implement prevention interventions targeting newly recruited workers as well as dealing with workplace cultures that promote use of alcohol. Public sector organizations such as the National Health Insurance Fund (NHIF) have introduced preventive and curative interventions to mitigate alcohol abuse among its employees (NACADA, 2021). Alcohol abuse interventions include counselling, screening, peer-based workplace programs, well and training, stress management while curative entails treatment, rehabilitation and referrals. The interventions are aimed at ensuring employees maintain their careers and productivity (Christopher et al., 2020). Employers have put in place EAPs to assist employees deal with any work-related stressors through training, counselling, conflict resolution, substance abuse treatment among others (Azmi et al., 2022).

The objective end of the intervention programs is to combat alcoholism in the workplace (Ames & Bennett, 2017). Employee alcoholism pertains to a situation where an employee in a workplace has developed a dependence on alcohol, leading to negative consequences that affect their job performance and overall well-being (Quinlan et al., 2016). In the context of the workplace, employee alcoholism can manifest in various ways, including a decline in an employee's ability to focus, concentrate, and perform their job effectively (Wu

et al., 2020). Employees struggling with alcoholism may frequently miss work due to hangovers, health issues related to excessive drinking, or personal problems arising from their addiction. Alcoholism can lead to changes in behavior and attitude, such as increased irritability, mood swings, conflicts with colleagues or superiors, and decreased motivation (McLellan et al., 2018). Alcohol impairs judgment, coordination, and reaction time, which can pose significant safety risks in certain work environments. Alcoholism may lead to inappropriate behavior in the workplace, including violations of company policies, harassment, or other misconduct (Frone, 2016). Effectiveness of intervention programs manifest in the ratio of users to non-users, the share of addicted staff and those that can be categorized as vulnerable or at risk (Reynolds et al., 2015).

Effectiveness of interventions are however contingent on alcohol abuse risk factors. These include personality of the employee, alcohol use expectations, socio-demographic characteristics, workplace alcohol availability, and workplace stressors. Certain personality traits, such as impulsivity, sensation-seeking, and low self-control, have been associated with an increased risk of alcoholism (Schou et al., 2016). Individuals with these traits may be more prone to engaging in risky behaviors, including excessive alcohol consumption. Expectations regarding the effects and benefits of alcohol use can influence an individual's drinking behavior (Rychtarik et al., 2015). Positive alcohol use expectations, such as beliefs that alcohol reduces stress or enhances social interactions, can contribute to the development of problematic drinking patterns and increase the risk of alcoholism (Mucci et al., 2016).

Various socio-demographic factors, such as age, gender, socioeconomic status, and cultural background, can influence the risk of alcoholism. For example, young adults, males, individuals with lower socioeconomic status, and certain cultural groups may be more

susceptible to alcohol-related problems (Frone, 2015). The availability of alcohol in the workplace can also contribute to increased alcohol consumption and subsequent alcohol-related problems among employees. Access to alcohol on the premises or workplace events involving alcohol may create an environment that normalizes drinking behaviors and increases the risk of alcoholism (Schou et al., 2016). Work-related stressors, such as high job demands, low job control, interpersonal conflicts, and job insecurity, can contribute to increased alcohol use and the development of alcohol-related issues. Employees may turn to alcohol as a coping mechanism to deal with workplace stress, which can lead to alcoholism over time (Nielsen et al., 2017).

It is against this background that the current study investigated the effectiveness of interventions against workplace alcoholism at the NHIF in Nairobi County, Kenya. This is based on the conviction that if effective interventions are identified, they can help individuals struggling with alcoholism to seek help and recover from their addiction. Implementing effective interventions can reduce the negative consequences associated with alcoholism and improve productivity within the NHIF.

Statement of the Problem

Alcohol abuse is rampant in workplaces posing serious challenges to the employees, their families and the respective organizations besides adding risks to pre-existing occupational hazards (Borrelli et al., 2022). Workplace alcoholism contributes to low productivity, poor health and deaths, high safety risks which not only compromises service delivery, but also to the overall economic development.

The Kenyan Government has set out clear policies on how to manage and deal with the growing problem of workplace alcoholism (NACADA, 2021). NACADA has been mandated to oversee the implementation of the interventions and policies within the public sector which include, but not limited to enhanced awareness and education, early identification and support of the affected staff but the problem persists. As a result, a number of organizations have embraced various interventions to mitigate the harmful impacts of SUDs (Jaguga & Kwobah, 2020).

The key question is why the problem of workplace alcoholism has persisted in defiance of many measures taken by organizations to reverse the trend. Studies have been done on other aspects of alcoholism in the workplace. Kaithuru and Stephen (2015) studied the impact of alcoholism on the work force at the Kenya Meteorological Station in Nairobi, Kenya. The researchers established that there exists a link between alcoholism and workplace inefficiency, mental distress, ill health, hangovers and financial challenges. The study recommended for further studies on the effectiveness of the different workplace interventions. It is against this gap that this survey was undertaken, seeking to assess the effectiveness of workplace policies and interventions in combating alcoholism within the public sector with specific focus on NHIF.

Objectives of the Study

General Study Objective

To assess the effectiveness of the employees' interventions against alcoholism in the public sector.

Specific Study Objectives

1. To assess the prevalence of alcoholism among NHIF employees in Nairobi County, Kenya.
2. To establish the risk factors contributing to alcoholism among NHIF employees in Nairobi County, Kenya.
3. To determine the level of employee awareness of the alcoholism interventions at NHIF in Nairobi County, Kenya.
4. To examine the effectiveness of the interventions put in place to mitigate alcoholism among NHIF employees in Nairobi County, Kenya.

Research Questions

1. What is the prevalence of alcoholism among NHIF employees in Nairobi County, Kenya?
2. What are the risk factors contributing to alcoholism among NHIF employees in Nairobi County, Kenya?
3. To what extent are NHIF employees in Nairobi County, Kenya aware of the interventions against alcoholism?
4. How effective are the interventions put in place to mitigate alcoholism among NHIF employees in Nairobi County, Kenya?

Assumptions of the Study

i. The study assumed that the prevalence of alcoholism among NHIF employees was of significant concern thus the need to establish the prevalence. This assumption was affirmed by reported incidences of work absenteeism associated with alcoholism.

ii. The study also assumed that there were key risk factors that NHIF employees were exposed to which may contribute to alcoholism. This was ascertained through the study findings which identified ready access to alcohol in the environment as a key risk factor.

iii. This study was based on the assumption that NHIF had in place intervention measures against alcoholism among its employees thus the need to evaluate their effectiveness. This assumption was proven by the existence of preventive and curative intervention measures put in place by NHIF minimize alcoholism and its adverse effects on employees.

iv. The study also assumed that every participant was aware of the NHIF intervention measures against alcoholism among its employees thus the need to evaluate their effectiveness. This assumption held true given the high awareness scores established among the study participants.

Justification of the Study

Alcoholism stands out as the early mortality and disability risk factor in persons aged between 15 and 49 years (Griswold et al., 2018). Alcohol consumption has a remarkable detrimental effect on people's physical, mental, and social health, as well as the welfare of their close family members and the surrounding communities (WHO, 2018).

Parsley et al., (2022) says workplace is the most ideal, and should act as the initial point of prevention and intervention for persons with AUDs, especially using resources such as Employee Assistance Programmes. It has also been established that alcoholism does not only

affect the addicted person, but society at large (Chinnusamy et al., 2021). Therefore, there is need for organizations such as NHIF to ascertain the effectiveness of their interventions.

Significance of the Study

Findings of this research will benefit policy makers, government and decision makers in organizations, especially in the public sector. The study findings will help enhance existing EAPs, besides other strategies to curb alcoholism within public and private sector organizations. It will help organizations ascertain the weaknesses and effectiveness of workplace interventions and how to improve.

The findings will help equip mental health practitioners in the field of Marriage and Family Therapy (MFT), counsellors, psychologists as well as mental health institutions with essential insights on how to enhance their service delivery. The Ministry of Health will equally get insights on ways of addressing alcoholism not just in the public sector but in society at large.

Additionally, NHIF will benefit from the study since it will inform policy on how to deal with affected employees. The study will also benefit families of affected employees. Lastly, the findings will add to the existing body of knowledge on the subject.

Scope of the Study

The study was undertaken at the NHIF headquarters, Nairobi, Kenya and included five other branches within Nairobi City County which were purposively selected since they fall in the large and medium category and have the highest number of employees. They also serve the highest number of clients. This exposes staff to work-related pressures. Their proximity to a

high concentration of drinking establishments is a risk factor to the employees. The branches include Upper Hill, Westlands and Industrial Area in the large branch category. In the medium branch category, the study targeted Ruaraka and Buruburu branches. Research participants targeted included all staff at all levels. The study involved a sample size of 234 respondents. Descriptive research design was adopted while data collection took 21 days. An In-depth interview guide was used to gather data from selected managers and supervisors. A questionnaire was administered to all staff from the NHIF headquarters in Nairobi and the selected five branches within the County. The research was conducted within a work setting.

Limitations

Considering the sensitivity associated with alcoholism, some of the respondents may have been uncomfortable sharing factual information for fear of victimization and stigmatization. Some of the respondents may have been biased which could have led to inaccuracy of some of the information. To counter this, the researcher ensured strict adherence to confidentiality and anonymity of participants. Results of the study may have been biased due to the impact of the unreturned questionnaires. Results of the study may not be generalizable to other public sectors due to the different management styles and the existing structures and cultural differences.

Delimitations

This study was delimited to assessing the effectiveness of interventions against alcoholism in the public sector. The study focused on the National Health Insurance Fund (NHIF) in Nairobi County, Kenya. Population of the study involved junior staff and their

respective supervisors from NHIF headquarters and selected five branches within Nairobi County.

Chapter Summary

This chapter has provided an overview of global, regional and the Kenyan situation of workplace alcoholism crisis. It also focuses on the various efforts in place to mitigate the challenge. A description of the statement of the problem is also provided as well as the research objectives and the research questions. The justification, significance, scope as well as the limitations and delimitations of the study are discussed. The next chapter focuses on the literature review, theoretical and conceptual framework and synthesis of research gap.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter presents a review of empirical, theoretical and conceptual frameworks on the effectiveness of interventions in combating workplace alcoholism. The chapter begins with a critical review of the study objectives: Prevalence and alcohol use at the work place, risk factors contributing to alcoholism, employee awareness on alcoholism interventions and a review of the different interventions used in combating workplace alcoholism. It also presents the theoretical and conceptual framework guiding the research.

Prevalence and Use of Alcohol

Alcoholism is deeply ingrained in most societies across the globe with about 2.3 billion said to be consumers of alcoholic drinks, posing serious harm to individual health and society (WHO, 2018). Of particular concern is the increasing consumption of alcohol among employees with studies indicating that 5-20% of workers within the European Union have serious alcohol-related problems (Borrelli et al., 2022).

Globally, a study conducted in Norway confirmed that alcohol remains the most consumed and abused substance among employees with 1-3 of 10 workers associated with risky drinking and in need of interventions (Thørrisen et al., 2019). The impact to those who drink, and their employers have far reaching consequences on productivity and efficiency (Sullivan, et al., 2018). This study is therefore timely in unfolding the menace of workplace alcoholism and offering recommendations.

Alcohol consumption and abuse among different populations continues to be on the rise resulting to various disorders among the users (Tran et al., 2019). In a related study, Cheng et al. (2018) assessed the alterations in the frequency of alcohol use related disorders and alcohol consumption in the United States. The study used thirteen independently collected, nationally representative probability samples from the year 2002 through 2014 on non-institutionalized US civilians. Logistic regressions were created using Joinpoint, version 4.5, and statistical summaries were created using Stata's Metacum modules, version 14.1. The study indicated that between the years 2001–2002 and 2012–2013, the prevalence of alcohol use rose from 65.4 to 72.7% of the population examined. In the same period, there was a rise in the prevalence of alcohol use disorders, from 8.5 to 12.7% of the population assessed. This is a longitudinal study and was conducted in the American setting with a particular emphasis on the changes in alcohol consumption and use disorder prevalence. The present study is however a cross-sectional study focusing on effectiveness of the interventions against alcoholism among employees.

Regionally, Walls et al. (2020) reports that alcohol makers have focused their attention on developing regions, especially Africa and other middle-income regions as new sources of growth, profit and increased consumption. In Tanzania, a study established that about 3 in every police officer in urban Tanzania consumes alcohol which is two times higher than that in the general population (17.2%), overall prevalence of alcoholism in the general population stands at 6.8% (Ndumwa et al., 2023). This calls for careful consideration of alcoholism in the workplace so to enhance effective interventions to mitigate the same, hence the timeliness of this study.

Paltzer et al. (2022) in a study in Zambia established that investors in the alcoholic industry are setting up major production and marketing operations in sub-Saharan Africa to capitalize on the growing demand. The study found out that prevalence of alcohol abuse among Zambians had hit 5.5 %. The World Health Organization African region (WHO, 2018) says Zambia's prevalence is larger in comparison with the rest of the continent's nations which stands at 3.7%. This calls for intensified efforts as more working class populations are likely to be lured which makes this study timely in offering possible solutions.

In their research, Smook et al. (2018) assessed the occurrence of substance abuse at the workplace as well as the extent to which employers and outpatient treatment centres collaborate to address the issue. The study established that South Africa is one of the top global destinations for alcohol abuse which has affected a high number of employees and the general population. Whereas the study adopted qualitative exploratory and descriptive designs, the current study is limited to the use of descriptive design. The socio-economic crisis poses a major challenge to employers hence the relevance for this study to provide recommendations and possible solutions aimed at enhancing interventions.

A study by NACADA (2022) found out that the prevalence of alcoholism is high among public sector workers in Kenya standing at 44.5%, with 34% of the staff having used alcohol in the last one year. Further, 23.8% of the employees are current consumers of alcohol. The researchers recommended for implementation of tailor-made interventions targeting public sector employees. These statistics are corroborated by empirical studies done in various parts of the country. For instance, a study by Christopher et al., (2020) on examining the treatment and rehabilitation programmes for staff at Kapsabet County Referral Hospital found out that alcohol prevalence stood at 30% mostly affecting men at 25%.

Nonetheless, other studies have shown contrasting results for instance Kinyanjui, (2022) in a study on alcoholism among employees in selected companies in Nairobi County, established that majority of employees had low levels of alcohol use at 80%, 18.8% had moderate while only 1% had high intake levels. Musyoka et al. (2020) focused on alcohol and substance prevalence use amongst University of Nairobi, Kenya, students within their first year of study, in which alcohol emerged as the most frequently consumed substance of abuse with a prevalence rate of 17%.These statistics on prevalence rates inform the need for assessment of the effectiveness of the existing interventions against alcoholism in public sector organizations with the aim of informing policy and practice, hence the relevance of the current study.

Risk Factors Contributing to Alcoholism among the Workforce

Several factors are responsible for alcoholism as evidenced by extensive research (NACADA, 2021; Jaguga et al., 2022; Dordoye et al., 2021; Calling et al., 2019). Gmel et al. (2020) in a study involving young men aged between 20-25 years investigated whether variations in alcohol use longitudinally was linked with personality changes. It was revealed that aggression-hostility, sensation seeking, and sociability were substantially and positively linked to both alcohol consumption and binge drinking. Gedam and Ratil (2018) in a cross-sectional study targeting 99% males and 1% females aged 26-35 years found an association between severe alcohol intake and personality factors such as emotional stability, personality traits, perfectionism and vigilance. It also contributes to high chances of relapse, more severity and poor treatment outcome. This was qualified by Hell et al. (2022) that individual differences and personality attributes seem to impact the choice of treatment and also had an

influence on the risk of severe drinking at follow-up. Personality traits are therefore important factors to be considered hence the need for the current study.

A large body of knowledge suggests that alcohol expectancies both positive and negative contribute to greater drinking (Lac & Luk, 2019). A study by (Frone, 2016) suggested that workplace stressors, fatigue and negative affect are conditionally related to problematic alcohol consumption. However, this was dependent on the level and type of alcohol expectancies and gender, with a higher impact on males who hold strong tension or fatigue reduction alcohol expectancies. Bacio (2021) suggests that alcohol expectancies were indirectly linked with problematic drinking through coping motives. Other studies implied that regardless of gender, there is a direct relationship between positive expectancies associated with alcohol use (Ramirez et al., 2020). Lee et al., (2018) found that positive and negative consequences are associated with the next day expectancies and drinking. Effective interventions are therefore critical in supporting employees to avoid dysfunctional alcoholism hence the relevance of the current study.

According to Halgar et al. (2019), socio-demographic factors have been known to play a crucial role in the onset and continuation of alcohol use in early life. A study involving male patients aged above 18 in the psychiatry department at a tertiary hospital found that early age of first intake of alcohol significantly heightens the chances of progression to the development of alcohol dependence. Other factors include nuclear family, family alcoholism, being unmarried, high educational level, unemployment and peer pressure (Karandikar et al., 2021). Alcohol use by middle-aged women has significantly increased according to Miller et al. (2022), in a study done in Australia among women aged 40-65 years. However, this contrasts a study done in Nigeria by Goar et al. (2018), which found out that high prevalence among

younger women aged 18-34 years, with high school education with no history of family use, were mainly affected.

Halgar et al. (2019) indicated that age, gender and total family income were significantly linked with drinking with persons aged 22-23 said to consume more than those aged 18-21years.Cestone (2019) advances the view that those in poverty are at a higher risk of abusing alcohol. However, it has also been demonstrated that the same applies to the more affluent. Findings of a study done by Mohandas et al. (2019) agrees with Karandikar et al. (2021) that family history of alcohol use was significantly associated with age at the initiation of drinking.

Empirical Studies have shown a significant link between alcohol use and gender. A study undertaken among older adults have indicated that male gender, higher socioeconomic status and living alone were important determinants of alcohol consumption (Abbasi et al., 2022).To corroborate this (Kendagor et al., 2018; Ndumwa et al. (2023) suggest that male sex is a primary driver of excessive drinking adding that men are more likely to be involved in high episodic drinking than women. Most of the studies have been undertaken in the western world which limits them for generalization to the local context.

There is a significant increase in availability and accessibility of alcohol associated with the growing numbers of outlets due to increased licensing and the unregulated operating hours (WHO, 2018).A study by Sherk et al. (2018) suggests that limiting the physical availability of take-away alcohol will decrease consumption. Employers have a duty of care to promote wellbeing and health of their employees by restricting access and availability of alcohol through possession, consumption and sale of the same at their premises including

canteens, cafeteria, restaurant and recreation areas (NACADA, 2021). This has necessitated workplaces such as the Ministry of Labour, Social Security and Services to enact regulations to govern alcohol availability and use within their establishments (Ministry of Labour, Social Security and Services, 2014).

In the European context, specifically in France employers must ensure the well-being of employees if alcohol is present as they can be held responsible for any accident caused by an intoxicated employee, while in Germany employees are at liberty to take a glass of beer during lunch. However, it is their responsibility to determine whether and how much they will consume (Borrelli et al., 2022).A study conducted in Ontario Canada revealed that there is an overall positive relationship between alcohol availability and enhanced intake of alcohol. However, some cities showed a negative relationship (Friesen et al., 2022). This signifies the need for the current study.

Many studies have found a significant correlation between workplace stress and high levels of alcohol consumption with varied factors identified as predictors of stress among employees (Pereira et al., 2022; Houdmont & Jachens, 2022). A study to establish a link between work-related stress and addiction, reported a positive relationship with internet and alcohol addiction indicated to be the most prevalent addictions. Monotonous work, unrealistic targets, too much labor, and long working hours are said to be most common (Kumar et al., 2021). Thørrisen et al. (2022) conceptualized workplace factors in form of terms and conditions of work including working hours, schedule of work, position, scope of work and pay culture as predictors of alcohol use.

Ozoemena et al. (2021) found that high pervasiveness of psychological distress and burnout predisposed teachers to extreme stress. Muchiri (2019) examined the effect of work related stress on alcoholism. The researcher found that heavy workloads, poor working conditions and inadequate support from other staff and students nurses contributes to work related stress among student nurses in Sagana Sub County hospital in Kirinyaga, Kenya. These results are pointers to the need for the current study.

Employee Awareness on Alcoholism Interventions

Workplaces serve as ideal environments for implementation of interventions to mitigate alcohol abuse (Ayub & Martins, 2021). Gómez-Recasens et al., (2018) conducted non-randomized, single-group study in 12 work centers in Spain. Emphasis was health promotion through awareness and health monitoring through evaluation and monitoring of alcohol and drug consumption whose decrease was maintained over a 3-year follow-up duration. This implies that a well thought out and comprehensive awareness strategy incorporating key stakeholders has the potential to bring about positive behaviour change leading to reduced alcohol use. Elling et al. (2020) in a study which was done in Sweden concluded that empowering managers with adequate knowledge on alcoholism will enhance their managerial responsibility in initiating workplace interventions against alcohol abuse.

In Kenya, NACADA's key mandate is to organize public education, training and awareness campaigns to sensitize employers and employees with the aim of preventing alcohol abuse in the workplace. They have also provided guidelines for developing a workplace ADA prevention and management policy to serve as a reference point for the standardization of a workplace alcohol and drug abuse policy in both public and private sector organizations. The

objective is to promote an alcohol and drug free work environment, early identification and relevant support towards employees with ADA disorders through appropriate interventions (NACADA, 2018). This is evidenced through different workplace policies put in place by public sector organizations such as the Public Service Substance Abuse Policy by NACADA (2017), Kenya Medical Training College's (2019) Alcohol, Drug and Substance and Drug abuse policy, among others.

A study by Jaguga and Kwobah (2020) demonstrated concerted efforts towards prevention and treatment of SUDs. They argued that in 2019/2020 financial year in Kenya, 70 % of the counties had their SUDs programs scattered under various departments including the public administration, education, social services and youth empowerment. A number of NGOs are said to implement projects on the same. Konchellah (2016) cited different interventions used to limit alcohol abuse at Kenya Ports Authority including strict rules and regulations on drug abuse at workplace, staff wellness programs, counselling sessions for affected and financial support to staff in rehabilitation. However, no informative materials on drugs are made available to the staff.

Bophela and Govender (2015) in a study focusing on employee assistance programs (EAPs) and quality of work life in South Africa established that public sector organizations were under intense pressure to deliver on efficient services and also strike a balance in the work-life demands. The significance and growing demand for interventions against the increasing crisis of workplace alcoholism has forced nations to root for EAPs so as to address the problem. For instance, in Kenya, the County Government of Murang'a made it a priority in the 2018-2022 to integrate Employee Assistance Programs in its development plan owing to the high alcohol consumption levels reported within the county (Njoroge & Mwenje, 2020).

Christopher et al. (2020) has however cautioned of possible resistance in the full adoption of the workplace intervention policies. In the subsequent review of literature, attention is drawn to assessment of effectiveness of these interventions against workplace alcoholism in the public sector.

Effectiveness of Interventions Mitigating Alcoholism

Several studies have been done to establish the effectiveness of workplace interventions in mitigating problematic alcohol use. Richmond et al. (2016) found that enhanced workplace policies and strategies can aid in eradicating several common obstacles to accessing Alcohol and Other Drugs (AOD) treatment. They argued that they are ideal and appropriate strategies for curbing less complex substance use and abuse related issues from metamorphosing into chronic and intense consumption patterns. Despite this, however, programs that explicitly address AOD issues, including evidence-based strategies of prevention or reduction of alcohol consumption at the workplace, are relatively not common. A study by Oh, (2023) examined the availability of alcohol and other drugs (AOD) policies and support services in workplaces and the association between a combination of the workplace measures and the current alcohol and drug use. Results revealed that having both a workplace AOD policy and support services was linked with significantly lower rates of AOD in comparison to having neither of the two measures or only support services.

Yuvaraj et al. (2019) conducted a study on assessment of effectiveness of intervention offered at the workplace or initiated through workplace through either web-based intervention or face to face counseling, found weak evidence for workplace interventions towards reducing alcohol use (varying modes) among employees, but only among the heavier consumers.

Brendryen et al. (2017) supports the viability and the safety use for both brief and intensive Internet-based self-help in a workplace setting. A randomized controlled trial in Japan to investigate the impact of screening and brief interventions in the workplace combined with a recommended screening tool at the workplace provided evidence that the measures are effective on reducing harmful alcohol use (Kuwabara et al., 2021).

Morse et al., (2022) did a systematic review of the efficacy, effectiveness and cost-effectiveness of workplace based interventions for mitigating workplace alcoholism. The findings revealed that health promotion interventions and brief interventions contributed to a reduction in alcohol consumption while psychosocial interventions which include combination of education, problem solving, role playing and reinforcement exercises found mixed outcomes suggesting that each organization should tailor make its own interventions, e-health interventions were said to have mixed outcomes in reducing alcohol use. Further, there was no consistent evidence that EAPs were effective in reducing alcohol usage.

Jaguga and Kwobah (2020) posits that little is known about substance use disorder treatment and prevention systems in the Sub-Saharan Africa region. In Kenya, there is urgent need for an effective SUD treatment and prevention system since the Mental Health Act 1989 is outdated as it focuses on institutional care only. The scholars also say that there is limited cross-bar collaboration between the three public health facilities offering SUD treatment in Kenya and the non-public sector players involved in SUD treatment and prevention activities. However, the proposed Mental Health (Amendment) Bill, 2018, currently before Parliament, is expected to address the gap. It proposes that treatment and prevention of mental health and SUDs include prevention, early intervention, rehabilitation and follow-up.

Based on these findings, it is evident that employers may need to use a combination of tailor-made interventions to effectively address problematic workplace alcoholism.

Theoretical Framework

This research was guided by the principles of Cognitive Behavioral Theory and complemented by Reality Theory.

Cognitive Behavioral Theory

The study was guided by cognitive behavioral theory by Aaron Beck which explains different factors that trigger the process of alcohol abuse. Cognitive behavioral theory defines alcohol dependence as a maladaptive means of coping with social problems or meeting certain needs. The theory explains that individuals take into alcohol due to positive and feel-good experiences it gives them which leads to expansive consumption. The theory, however, offers ways of reversing factors that precipitate and sustain the habit through treatment interventions that confront or avoid situations that may lead to excessive drinking (Kadzin, 2017). The theory further explains that alcoholism starts through imitating role models who say it gives them a good and positive feeling and helps them overcome anxiety, relieves pain and enhances sociability (Leahy, 2017). This means those who develop such expectations ultimately end up in addiction, which perpetuates abuse.

Cognitive behavioral theory is founded on the principles of self-efficacy and outcome expectancies. Self-efficacy can be conceptualized as an individual's certainty that he or she can uphold control over the aspects that stimulate his or her way of life. It includes a general way of reasoning, which intervenes in the person's behavioral response to the received stimuli. On the other hand, outcome expectancies refer to a person's belief whether their involvement in certain behaviors is likely to result in the desired outcomes or not. Outcome expectancies are formed either through a person's immediate experience of a certain behavior, or through

observation of other people's experiences regarding the outcomes of a particular behavior (Padesky & Greenberger, 2015).

Cognitive behavior theory (CBT) was applied in this study on the effectiveness of interventions and measures that have been placed against alcoholism in the public sector. The theory claims that people presume positive expectancies and attitudes towards alcohol drinking through the process of observing or imitating their models. Therefore, this theory is relevant to the study since it helps explain that alcoholism is a sequence or outcome of learned behaviour acquired over time as a means of coping with social challenges such as anxiety or meeting certain expectations. But over time some of the users begin to rely on alcohol consumption as a coping mechanism. In addition, the notion of feel-good experiences accounting for expansive consumption of alcohol implied in cognitive behavior theory made it relevant for explaining prevalence of alcoholism among NHIF employees. Secondly, the theory's identification of imitation of alcoholic role models in the equation of alcoholism underscores its significance in making sense of the risk factors contributing to alcoholism among NHIF employees.

The theory was further useful in explaining the effectiveness of the interventions put in place to mitigate alcoholism among respondents in this study due to its pointers to ways of reversing alcoholism through confrontation or avoidance of situations that encourage excessive drinking. The theory therefore offers the framework for explaining the effectiveness of the various approaches used as interventions to mitigate alcoholism among public sector employees. For instance, alcoholic individuals can identify and challenge negative thoughts and beliefs that contribute to alcohol use. By recognizing and modifying these maladaptive thoughts, individuals can develop healthier coping mechanisms to deal with stressors and

triggers. The aim of CBT is to increase an individual's self-efficacy or belief in their ability to abstain from alcohol use. This is done through setting small, achievable goals and providing positive reinforcement for successful behavior change. The theory can also inform the inculcation of individuals' skills to manage cravings and avoid triggers that lead to alcohol use. This includes identifying high-risk situations and developing coping strategies to manage them.

Reality Theory

Reality theory is credited to the works of William Glasser who focused on individual behavior and how it affects their relationships with others (Glasser, 2014). The theory is based on the belief that individuals have the power to choose how they behave and that they are responsible for their own actions. Thus, the theory puts emphasis on personal responsibility and the ability to make choices in one's life. It suggests that people's behaviors are the result of the choices they make, and that individuals are capable of changing their behaviors by making different choices (DeCarvalho & Johnson, 2019).

Reality theory is effective in explaining addiction problems such as alcoholism. However, it has been criticized for placing too much emphasis on individual responsibility for one's problems and ignoring the impact of systemic or social factors (Hart, 2017). It is also overly focused on behavior change and as such, does not draw attention to the underlying emotional issues that may be contributing to the problem in question (Magallon-Neri et al., 2018).

Notwithstanding the acknowledged limitations, the use of reality theory in this study will facilitate understanding of the consequences of behavior and making responsible choices. The theory emphasizes the importance of the present moment and encourages individuals to

focus on what they can control in their lives. The theory explains why individuals may continue to engage in alcohol use despite the negative consequences (Wubbolding, 2021). For example, an individual may feel that they have no other choice but to drink in order to cope with stress or anxiety. In this case, the individual may benefit from understanding that they do have choices, and that they can choose to engage in alternative coping strategies instead of turning to alcohol.

Reality theory was useful for explaining individuals' responsibility for their behavior and the consequences of their actions. The theory is useful for the identification of the underlying issues that contribute to alcohol use, such as stress, anxiety, or trauma (Wubbolding, 2018). The theory explains coping strategies that do not involve alcohol, such as meditation, exercise, or spending time with supportive friends and family members. The theory provides a framework for understanding the psychological factors that contribute to alcoholism, thus facilitating recommendations that can help individuals to take responsibility for their behaviors and make positive changes in their lives.

Conceptual Framework

A conceptual framework is a structure that outlines and connects the different concepts, theories, and ideas used in the study. The conceptual framework provided in Figure 1 below illustrates the relationship between the independent variable, dependent variable and moderating variable.

Figure 2.1: Effectiveness of interventions against alcoholism

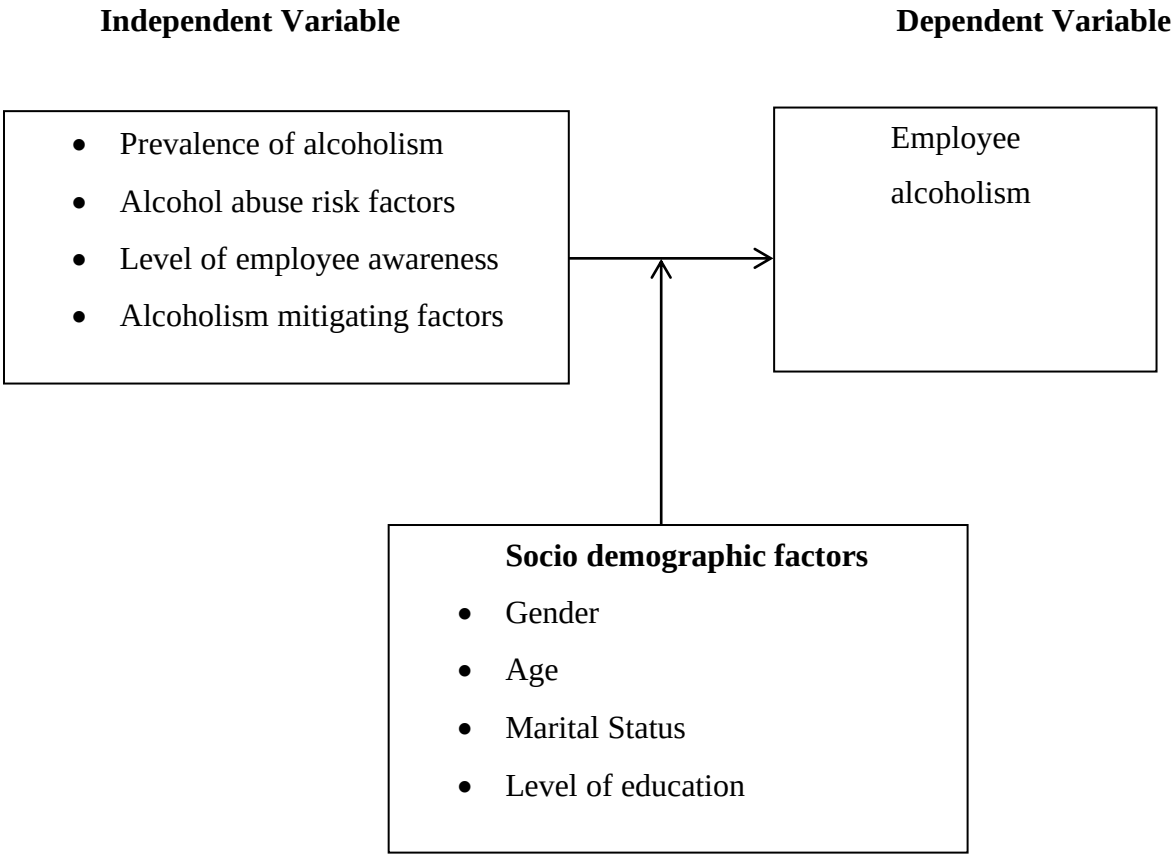


Figure 2.1 *Relationship among study variables*

→ Direction of relationship

Source: Researcher (2023)

The conceptual framework in figure 2.1 shows four independent variables: prevalence of alcoholism, risk factors contributing to alcoholism, level of employee awareness and alcoholism mitigating factors. Employee alcoholism serves as the dependent variable. The moderating variable are the demographic factors which includes gender, age, marital status and level of education. The figure shows that the independent variable has an influence on the dependent variable, but the socio demographic factors can moderate the relationship between the independent and dependent variables.

Chapter Summary

This chapter reviewed different empirical literature concerning alcoholism and alcohol abuse and interventions amongst the workforce. This chapter also includes Cognitive Behavioral theory which guided the research. Further, it consists of the conceptual framework that provides a description of the different variables that were studied and investigated in response to the research objectives. The next chapter contains the methodology that was used to gather, analyze data and present findings on effectiveness of the interventions against alcoholism among employees in the public sector.

CHAPTER THREE: RESEARCH METHODOLOGY

Introduction

The chapter provides a discussion of the research methodology and research design that was used. It explains the study population, sample size and sampling methodologies and techniques. It also details types of data, data collection methods and procedures, instrument pilot testing, site of the study, reliability and validity, data analysis and presentation. It further describes the ethical considerations that were made before, during and after completion of the study.

Research Design

Research design provides the framework for the data collection, analysis and presentation of the research findings. The current research adopted descriptive research design. This design, according to Rojon and Saunders (2012) entails gathering data that describes events, trends and relationships to depict the status of the subject under study. Cooper and Schindler (2013) explains descriptive research design as the process of collecting data for the purposes of answering who, what and how questions in relation to the subject of study. It explains the cause-and-effect relationships among variables. Kothari (2014) intimate that a descriptive research design describes the state of affairs as they exist.

Descriptive research design was adopted as it involves analyzing of the relationship between dependent variable; employee alcoholism and independent variables; alcohol abuse intervention measures. The design also enabled the researcher to obtain in-depth statistics concerning the population being studied from the research respondents. Through descriptive design the researcher has had the opportunity to give the appropriate and concise

recommendations to the NHIF management and other public institutions for improved interventions.

Population

According to Cooper and Schindler (2013), a population is the total collection of elements about which to make inferences. Mugenda and Mugenda (2019) describe population as a complete set of individuals, cases or objects that possess common observable characteristics. Target population is the specific population in which a sum of group of persons from where a sample is drawn from (Kothari, 2014). The target population was 562 employees of the National Health Insurance Fund headquarters and selected branches within Nairobi County (NHIF, 2023). The selected branches were: Upper Hill, Westlands and Industrial Area, Ruaraka and Buruburu. These branches were selected because they account for the largest share of NHIF employees in Nairobi County and nationally. Nairobi County was targeted as the study site because it is leading in the prevalence of alcoholism, with a prevalence rate of 17.5% in comparison to the other seven regions of Kenya (NACADA, 2017). Weak enforcement of regulations governing alcohol sales and drinking have contributed to increased alcohol abuse with Nairobi still leading (NACADA, 2017). The choice of the headquarters was also informed by the fact that decisions on implementing the employee assistance program on alcohol abuse interventions are made at the head office.

Sample

Kombo and Tromp (2016) describes a sample as a set of respondents selected from a larger population for purposes of a survey. Rojon and Saunders (2012) postulates that the sample must be carefully selected to be representative of the target population and the

researcher also needs to ensure that the subdivisions entailed in the analysis are accurately catered. To calculate the sample size of the respondents, Yamane's formula was employed as follows (Fraenkel et al., 2019):

$$n = \frac{N}{1+N(e)^2}$$

Where n is the size of the sample, N is the size of the population and e is the precision level at (0.05).

$$n = 562/\ 1+\ 562\ (0.05)^2$$

$$= 562/1+\ 562\ (0.0025)$$

$$= 562/2.405$$

$$= 234$$

Sampling frame on the other hand is an impartial enumeration of the individuals from which the researcher may select from. Cooper and Schindler (2013) adds that a sampling frame should be a complete and correct list of population members only. The sampling frame for this study was the NHIF employees from the headquarters and the five branches obtained from the human resources department as shown in table 1 (NHIF, 2023).

Table 3.1

The Distribution of Accessible Population and Sample

Population Category	Accessible Population	Sample Size	Percentage
NHIF Headquarters	379	158	67.4
Westlands	28	12	5.0
Upperhill	56	23	10.0
Buruburu	35	15	6.2
Industrial Area	34	14	6.0
Ruaraka	30	12	5.3
Total	562	234	100.0

Source: Researcher (2022)

The formula for calculating the sample size for stratified sampling is as follows:

$n_h = (N_h / N) \times n$

Where:

n_h is the desired sample size for each branch.

N_h is the total number of employees in each branch.

N is the total number of employees.

n is the desired overall sample size.

Table 3.1 shows that the list consists of 234 employees from NHIF headquarters, 28 employees from Westlands, 56 employees Upperhill, 35 employees from Buruburu, 34 employees from Industrial Area and 30 employees from Ruaraka. The sample size was 234 employees which was 41.6% of the accessible population.

Sampling Method

Sampling method permits researchers to deduce content concerning a population being studied based on results from a subgroup of the entire population, without necessarily calling and questioning every other individual within this entire population (Kothari, 2014). The technique of stratified random sampling was applied in sample selection. Cooper and Schindler (2013) indicated that this technique generates approximations of total parameters of the population with a great exactness and guarantees a sample that is quite representative, and which is reasonably homogeneous since the target population for the study is non-homogeneous. According to Cooper and Schindler (2013) stratified random sampling reduces the fault or error of sampling amongst the population. The following formula was used to compute the sample size per stratum (Kish, 2018):

$n_i = N_i * (n / N)$

Where:

n_i = the sample size for stratum i

N_i = the population size for stratum i

n = the desired sample size for the entire population

N = the total population size

The respondents from every stratum were then selected using simple random sampling method. This is whereby a number was assigned to employees in each stratum, then random numbers were generated for each employee in the stratum sample using Microsoft Excel (Karacay & Basaran, 2018).

Types of Data

Primary data was collected for the study. The primary data was both qualitative and quantitative in nature and gathered from the questions in the questionnaire and the interview guide which enables the participants to give detailed and well thought responses (Erik & Marko, 2011). Structured questionnaires were given to some of the 234 sampled NHIF staffs from selected branches and at NHIF headquarters while an interview guide was used to collect data from 27 managers and supervisors at both NHIF headquarters and selected branches within Nairobi County and its environs.

The questionnaires administered contained both open ended and close ended questions. The questionnaires were split into two parts. The first part captured demographic information about the respondent while the second part captured information on the effectiveness of interventions against alcohol abuse at the NHIF. One-on-one interviews were carried out with

the managers and supervisors using an in-depth interview guide. Through this method, the researcher obtained relevant information on the effectiveness of interventions against alcoholism at the NHIF.

Data Collection Methods

The research adopted a mixed method research approach through utilization of qualitative and quantitative techniques. According to Wisdom and Creswell (2013), the adoption of more than one technique to investigate a similar research problem reinforces the research findings through triangulation of information sources and analytical approaches. Mixed method approach suppresses and helps to overcome any bias, which is characteristic of a single method approach, adds value to the theoretical debate and also complements the limitations of one method with the other's strength (Creswell& Creswell, 2017).

The questionnaire was adapted from the Alcohol Abuse Disorders Identification Assessment guideline developed by the World Health Organisation (Hahn et al., 2016).This is a widely used screening tool to identify individuals with hazardous and harmful patterns of alcohol consumption, including alcohol dependence. The tool assesses alcohol use frequency and quantity, alcohol-related problems, and alcohol dependence symptoms. It has been validated in many countries and is considered a reliable and valid tool for identifying individuals with alcohol use disorders (Rice & White, 2015).

The interview guide administered to management staff at the NHIF headquarters was developed by the researcher. The interview questions covered thematic areas in line with the study objectives and research variables. These included risk factors and intervention measures put in place by NHIF to mitigate alcohol abuse. Examples of questions asked were: what do

you think are the risk factors that influence the use of alcohol and drugs of abuse in the organization? What are the Workplace Alcohol Abuse Interventions put in place in the organization, e.g., prevention, early identification, counselling, referral, treatment and rehabilitation programs in regard to alcoholism and how effective are they?

Data Collection Procedure

The questionnaire and the interview guide were piloted in order to determine the appropriateness of the tool before administering it to the respondents. After the researcher's proposals had been granted approval by the supervisors, the researcher sought permission from Ethics and Research Board at PAC University and obtained a research permit from the National Council for Science and Technology (NACOSTI) before conducting the research. The researcher then sought approval from NHIF management so as to facilitate the administration of interview guides and questionnaires to NHIF employees. The researcher sought the services of a research assistant in the administration of the questionnaire to the selected respondents as the researcher conducted the in-depth interviews in person. The questionnaires were administered in-person.

Instrument Pilot Testing

Piloting was done through administration of the questionnaire to 24 respondents from NHIF Eldoret branch. Mugenda and Mugenda (2019) explains that 10% of the sample size is adequate to form the pilot test group. A pilot test should be done before the main research in order to resolve any sensitive, confusing or biased items (Kothari, 2014). After pilot testing, adjustments were made to correct the ambiguities so that it would capture what was intended. For instance, a follow up question was added to question number 8 on whether respondents

had ever taken alcohol in order to clarify the age at first intake. In the interview guide, a probing question was added to interview question number 5 and 6. The pilot test was used to ensure that the data gathering instrument is valid and reliable. This enabled the researcher to appropriately adjust the questionnaire and interview guide for objectivity and efficiency of the process. The questionnaires and the interview guide were administered to the targeted respondents by the researcher and collected upon completion.

Reliability

Mugenda and Mugenda (2019), conceptualize reliability as the rate at which a measure retains consistency at producing the same results or readings when measured at different occasions. A preliminary analysis was also undertaken based on information from the pilot study to enable answering of the research questions. Reliability of the data collected was increased through pilot testing using internal consistency technique to minimize the errors in possible instrumentation. The ease and clarity of the instrument was assessed during piloting of the instrument by the researcher (Mugenda & Mugenda, 2019). This research measured reliability using Cronbach alpha which points out the degree to which a set of measurement items could be treated as quantifying a single variable. The acceptable level of 0.70 that is the reliability desirable where the statements on the Likert scale was tested for reliability (Bryman & Bell, 2015). The findings of this study were to be compared with past studies outcomes to determine the level of accuracy and consistency.

Cronbach's Alpha test was performed for all the variables using the SPSS. The tests results are presented in Table 2. The table shows variables, the number of items and their respective Cronbach's coefficients. It shows that prevalence of employee alcoholism (N=6) had a reliability coefficient of 0.893, risk factors for alcoholism and alcohol abuse (N=6), had

a reliability coefficient of 0.815, employee awareness of interventions (N=4) had a reliability coefficient of 0.779 and effectiveness of interventions (N=5) had a reliability coefficient of 0.922. The result suggests that the tool was highly reliable.

Table 3.2

Reliability Statistics

Variable	Number of Items	Cronbach's Alpha
Prevalence of Employee Alcoholism	6	.893
Risk Factors	6	.815
Employee Awareness of Interventions	4	.779
Effectiveness of Interventions	5	.922

Validity

Validity deals with precision of study answers based on the questions or conclusions made. There are three kinds of validity which are content validity, face validity, and construct validity (Creswell & Cresswell, 2017). In validity testing, one needs to find out whether the set of questions asked addresses the study objectives. The study employed content validity in order to ascertain whether the content provided in the research instruments was appropriate. Content validity is an aspect which determines the extent to which data or facts gathered using a given data gathering tool mirrors given content or concept (Erik & Marko, 2011). It is the extent to which the questionnaire covers all relevant aspects of the concept or construct being measured and assesses whether they adequately reflect the domain being measured. For the purpose of this study, content validity was established through review of literature. The goal

was to ensure that the questionnaire was comprehensive and included all relevant aspects of the construct being measured (Polit & Beck, 2022).

Face validity is the extent to which an assessment or measuring instrument appears to measure what it is intended to measure, based on a superficial examination of its content and its relevance to the construct being measured (Creswell & Creswell, 2017). In this study, face validity was assessed through expert judgment of the research supervisor (Devellis, 2017).

Construct validity is the degree to which a measure or test actually measures the psychological construct or concept it is intended to measure. In other words, it assesses whether the measurement accurately reflects the underlying theoretical construct (Creswell & Creswell, 2017). Construct validity is often evaluated by examining the relationships between the measure and other measures of related constructs, as well as by examining the relationship between the measure and external criteria, such as behavioral or clinical outcomes. In this study, construct validity was assured by the fact that the tool was developed by WHO and has been used by NACADA, both of which are authorities and experts in the field of substance addiction research (Devellis, 2017).

Data Analysis

This study used both quantitative and qualitative methods to analyze the data. The quantitative method was used for analysis of questionnaires while the qualitative methods was used for the interview guide. The quantitative analysis was applied using descriptive statistics in all the objectives. Therefore, data was coded and analyzed using Statistical Package for Social Sciences (SPSS) computer program. According to Kothari (2014) descriptive statistics involve a process of transforming a mass of raw data into tables, charts, with frequency

distribution and percentages which are a vital part of making sense of the data. For the inferential statistics, chi-square test and a multivariate regression model helped determine the association between the variables. Quantitative data was presented using tables, graphs and pie charts to give a clear picture of the research findings at a glance.

The data from the interviewees was analyzed through the use of content analysis where the data from the interviews were transcribed and then coded for better analysis. The researcher then accumulated the emerging issues, repeating and reoccurring elements and unique responses in the formatted manuscripts into narratives according to the research objectives. The data was then presented in the form of thematic narratives.

Ethical Considerations

Research heavily relies on ethical behaviour to ensure safety, security and protection of the respondents and the data. Cooper and Schindler (2013) argue that there can hardly be any thought of a complete research process without putting into consideration how researchers would actualize their ethical obligations upon the research participants. Researchers are expected to exercise responsibility in their area of profession and to the respondents that are involved in their research process through complying with all professional standards and codes of conduct (Cooper & Schindler, 2013). A permit was obtained from National Commission for Science, Technology & Innovation (NACOSTI) after approval from the Institutional Scientific Ethics Review Committee (ISERC) at PAC University. The researcher then sought approval from NHIF management to facilitate the administration of questionnaires and conducting interviews with NHIF employees. This study was conducted by strictly observing the confidentiality of respondents' data. The study respected respondents' privacy and

generally sought informed consent before proceeding with data collection and recording of interviews. The respondents participated voluntarily and anonymously and were allowed to exit the survey at any time. This was to prevent stereotyping and potential for discrimination. Data was destroyed soon after analysis.

Summary

This chapter provided an analysis of the methodology that the researcher used. The research design that was used has also been explained. The targeted population, size of the sample, the design used for sampling, research analysis and presentation of the findings were indicated. In addition, it described the procedure used in gathering data as well as the data gathering tools and how they were piloted. It also specified how the collected data was analyzed and presented.

CHAPTER FOUR: RESULTS AND DISCUSSION

Introduction

The overarching aim of this study was to assess the effectiveness of the employees' interventions against alcoholism in the public sector. This chapter involves data presentation, analysis, interpretation, and discussions of the results. This chapter has six sections. The first section presents a descriptive analysis of the response rate and the demographics of the respondents. The consequent sections are organized according to the specific objectives. Accordingly, the second section of the chapter presents and discusses the descriptive analysis of prevalence of alcoholism among NHIF employees. The third section constitutes the presentation and discussion of the descriptive analysis of the risk factors contributing to alcoholism among NHIF employees. The fourth section presents and discusses the descriptive analysis of the level of employee awareness of alcoholism interventions at NHIF. The fifth section presents descriptive analysis of the effectiveness of the interventions against alcoholism and the regression analysis of prevalence of employee alcoholism, risk factors and interaction term of effectiveness of the interventions and the risk factors. Lastly, a summary of the chapter.

Response Rate and Demographic Analysis

This sub-section comprises the response analysis, which includes the distribution of the responses by factors such as age, gender, and years of work. The section also provides the results of the descriptive statistics which provides the summary of the data in terms of frequency and percentages of the responses, giving a general overview of the data distribution trends.

Response Rate

Table 4.1 shows the response rate for the respondents who were reached with the questionnaires and were able to consent and participate in the study.

Table 4.1:

Response Rate

Number of Respondents	Responses	Percentage
234	149	63.7

Table 4.1 shows that 149 respondents successfully filled in the questionnaires, and returned after filling them. This was 63.7% response rate. This is a low response rate which could be associated with the stigma of alcoholism and alcohol abuse (Kulesza et al., 2017).

Gender of the Respondents

The study analyzed the gender of the respondents. Table 4.2 shows the distribution of the respondents by gender and the corresponding percentages of the number of respondents corresponding to gender.

Table 4.2: *Gender of Respondents*

Gender	Frequency	Percent
Male	56	37.6
Female	93	62.4
Total	149	100.0

Table 4.2 shows that most of the respondents in the study were females and constituted 62.4% of the respondents. Males constituted 37.6% of the respondents in this study. The results show that both genders were represented in the study.

Age of the Respondents

The study performed analysis of the age of the respondents. Table 4.3 shows the age distribution of the respondents and their corresponding percentages.

Table 4.3:

Age Brackets of Respondents

Age Bracket	Frequency	Percent
Below 25 years	1	.7
25-34 years	34	22.8
35-44 years	50	33.6
45 years or more	64	43.0
Total	149	100.0

Table 4.3 shows that most of the respondents who participated in the study were 45 years or more and they constituted 43.0% of all the respondents who participated in the study. This group was followed by those who are 35 to 44 years who made up 33.6% of the respondents. The number of respondents who are 25 to 34 years constituted 22.8% of the respondents in the study and the respondents who were under 25 years constituted 0.7% of the respondents in the study. The analysis suggests that most of the respondents were 45 years and above.

Respondents' Level of Education

Table 4.4 shows the level of education of the respondents. It reveals whether the respondents have attained primary, secondary, college level, bachelor's degree level, or postgraduate level of education.

Table 4.4:

Respondents' Level of Education

Strata	Frequency	Percent
Secondary level	9	6.0
College level	29	19.5
Bachelor's degree level	68	45.6
Post-graduate level	43	28.9
Total	149	100.0

Table 4.4 shows that 45.6% of the respondents had a bachelor's degree level of education, 28.9% had a post-graduate level of education, 19.5% had a college level of education and 6.0% had a secondary level of education. The analysis shows that most of the employees who work at NHIF have at least a college level education.

Marital Status of the Respondents

Table 4.5 shows the marital status of the respondents. It indicates whether the respondents were single, married, separated, divorced, or widowed.

Table 4.5:

Respondent's Marital Status

Strata	Frequency	Percent
Single	33	22.1
Married	102	68.5
Separated/ divorced/ widowed	14	9.4
Total	149	100.0

Table 4.5 shows the marital status of the respondents. It shows that 68.5% of the respondents were married, 22.1% of them, were single and 9.4% were either separated, divorced, or widowed. The results show that most of the employees of NHIF are married, which might be attributed to the cultural values which they have for marriage.

Duration Worked at NHIF

Table 4.6 shows the duration for which the respondents have worked at NHIF.

Table 4.6:

Duration Respondents have worked at NHIF

Years	Frequency	Percent
Below 5 years	10	6.7
5-9 years	41	27.5
10-14 years	28	18.8
15-19 years	20	13.4
More than 20 years	50	33.6
Total	149	100.0

Table 4.6 shows that 33.6% of the respondents have worked at NHIF for more than 20 years. 27.5% of the respondents had worked at NHIF for 5 to 9 years, 18.8% of the respondents had worked at NHIF for 10 to 14 years, and 13.4% of them had worked at NHIF for 15 to 19 years. The analysis suggests that a majority of the respondents have worked at NHIF for more than 20 years.

Respondent's Nature of Employment

Table 4.7 shows the nature of employment of the respondents at NHIF. It shows whether the respondents are employed on contract on permanent basis.

Table 4.7:

Respondents' Nature of employment

Strata	Frequency	Percent
Contract	9	6.0
Permanent	140	94.0
Total	149	100.0

Table 4.7 shows that 94.0% of the respondents were employed by the NHIF on a permanent basis while the remaining 6.0% were employed on a contractual basis. The table shows that most of the NHIF employees are employed on a permanent basis. The results suggest that the most common term of employment at NHIF is the permanent basis.

Respondents' Rate of Satisfaction

Table 4.8 shows the extent to which the respondents are satisfied with the working conditions at NHIF.

Table 4.8:

Rate of Satisfaction of Respondents

Strata	Frequency	Percent
Very satisfied	23	15.4
Satisfied	94	63.1
Somewhat satisfied	21	14.1
Not satisfied	11	7.4
Total	149	100.0

Table 4.8 shows the respondents' rate of satisfaction. It shows that 63.1% of the respondents are satisfied with their jobs, 15.4% of them are very satisfied with their jobs, 14.1 of the respondents are somewhat satisfied with their jobs and 7.4% of them were not satisfied with their job at NHIF. The results suggest that the level of job satisfaction at NHIF is very high because it is only 21.5% of the respondents who indicated that they were not satisfied.

Position at NHIF

Table 4.9 shows the different positions held by the respondents at NHIF. It reveals whether the respondents work as top-management, middle management, or as technical staff.

Table 4.9:

Position of Respondents at NHIF

Strata	Frequency	Percent
Top management	4	2.7
Middle management	103	69.1
Technical staff	42	28.2
Total	149	100.0

Table 4.9 shows that the largest portion of respondents, 69.1%, worked in middle level management positions. Furthermore, 28.2% of the respondents worked as technical staff and lastly, only 2.7% worked in top management positions. The results show that most of the employees at NHIF are in the middle level management.

The Prevalence of Alcoholism among NHIF Employees

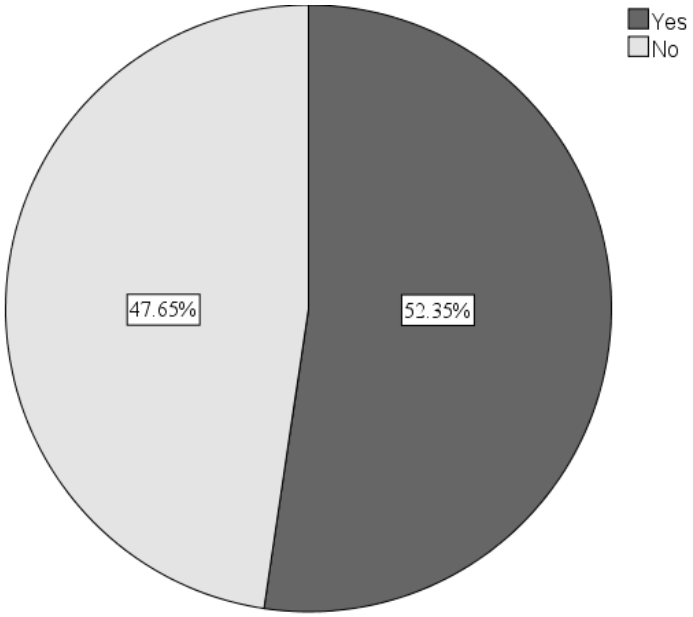
The first objective of the study was to assess the prevalence of alcoholism among the respondents. This section contains descriptive analysis and presents the findings in figures, charts, and tables to show the extent to which alcoholism is prevalent among the employees at NHIF.

Experience Taking Alcoholic Drinks

The study sought to investigate whether the respondents had ever taken any alcoholic drinks. Figure 2 shows a pie chart that investigates the experience of the respondents with any form of alcoholic drink.

Figure 4.1:

Respondents' Experience with Alcoholic Drinks



Age of Respondents when they took their First Alcoholic Drink

Figure 4.1 shows that a larger majority; 52.35% of the employees at NHIF have ever taken alcoholic drinks; whether bottled beer, spirit, traditional brew, or illicit liquor. 47.65% of the respondents reported that they had never taken any alcoholic drinks. The findings are coherent with the holdings of the study by Musyoka et al. (2020) which revealed that the prevalence of alcoholism among the residents of Nairobi, Kenya, is estimated to be over 50%. The finding is also consistent with findings of the study by Christopher et al., (2020), who showed that the prevalence of alcoholism and alcohol abuse was at least 30%, especially among the men. Nonetheless, alcoholism is a complex matter which could be highly prevalent among the respondents for so many reasons, and thus it is not accurate to hold that they form part of the larger population in Nairobi, Kenya, who have been found to engage more in taking of alcoholic drinks.

The study sought to unearth the age of the respondents when they first took alcoholic drinks. Figure 2 is a bar chart which shows the age of the respondents when they first took an alcoholic drink.

Figure 4.2:

Age of Respondents when they took their First Alcoholic Drink

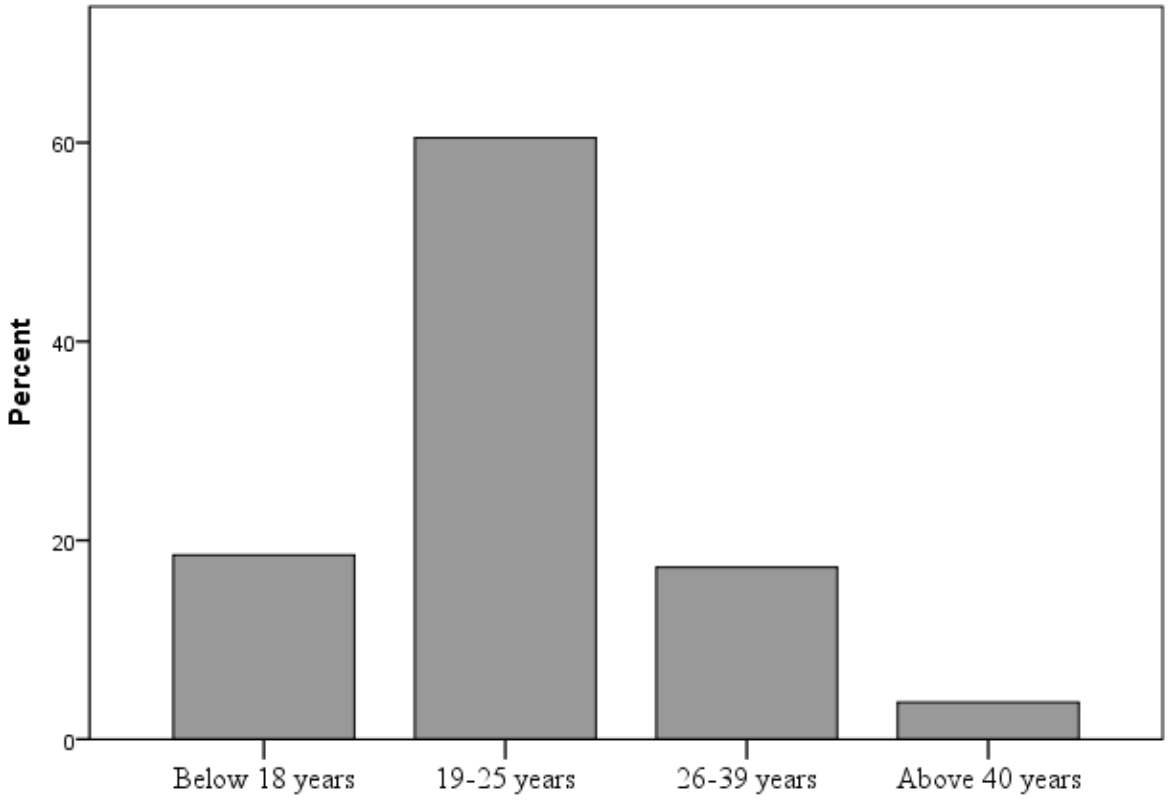


Figure 4.2 shows that 60.5% of the respondents took their first alcoholic drinks between the age of 19 and 25. The table also indicates that 18.5% of the respondents began taking alcoholic drinks before the legal age of 18 years. 17.3% of the respondents took their alcoholic drink at between the age of 26 and 39 years and lastly, 3.7% of the respondents took their first alcoholic drinks when they had reached 40 years above. The analysis is consistent with the results of the study by Kendagor et al. (2018) which showed that concerning heavy episodic drinking, Kenyan youth between 19 to 29 years scored very high.

Prevalence of Drinking in the Past Year

The study sought to find the prevalence of alcoholism and alcohol abuse in the previous year. Figure 4.3 is a pie chart showing whether or not the respondents had taken any alcoholic drinks in the past one year.

Figure 4.3:

Prevalence of Drinking in the Past Year

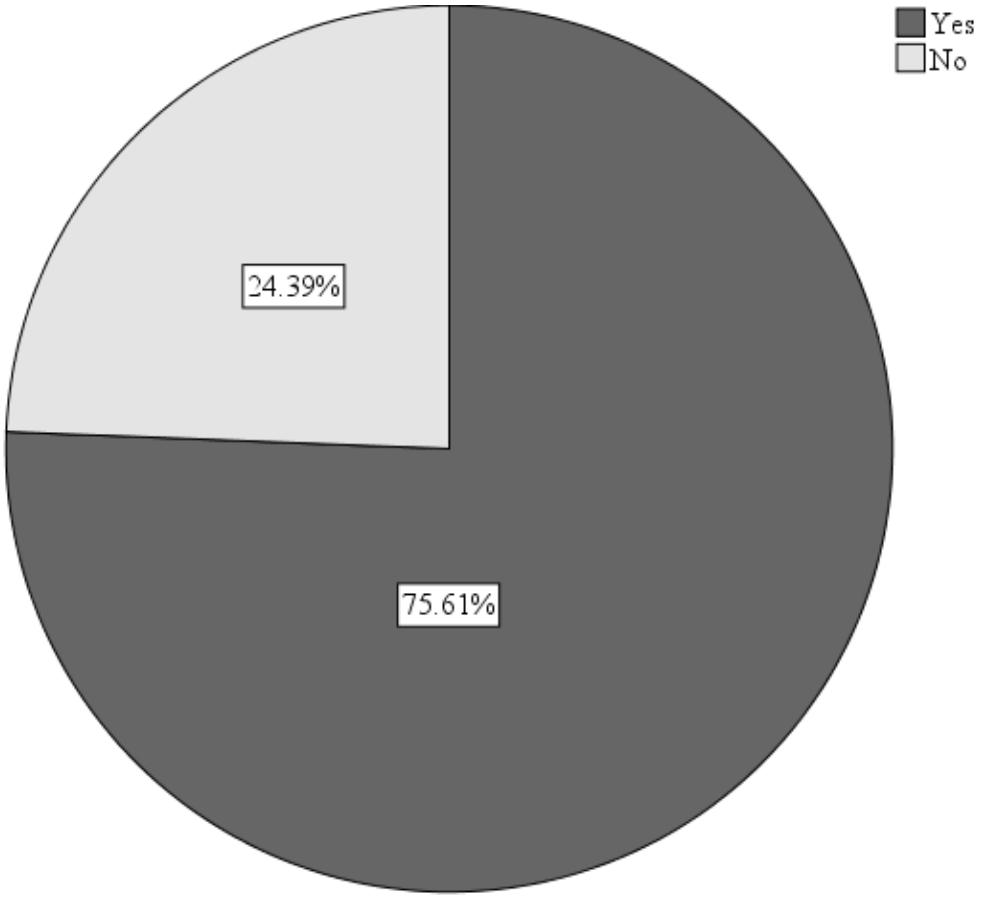


Figure 4.3 shows that in the past year, 75.61% of the 52.35% of 149 respondents who had accepted that they have ever taken alcoholic drinks at one point in their lives are continuing to take alcohol and have been doing so in the previous year. Respondents had taken alcoholic drinks while 24.39% of the respondents who had ever taken alcoholic drinks had not taken any in the past year. The results show that there are high levels of prevalence of alcoholism among

NHIF employees because of the 75.61% of the respondents who indicated having taken alcohol in the past year. The finding is consistent with results of the study by Cheng et al. (2018) who showed that the prevalence of alcoholism was one of the most prevalent disorders all over the world.

Respondents' Frequency of Taking Alcoholic Drinks

The study investigates the frequency of alcohol intake among the respondents. Figure 5 shows a bar chart showing the frequency at which the respondents take alcoholic drinks.

Figure 4.4:

Frequency of Taking Alcoholic Drinks

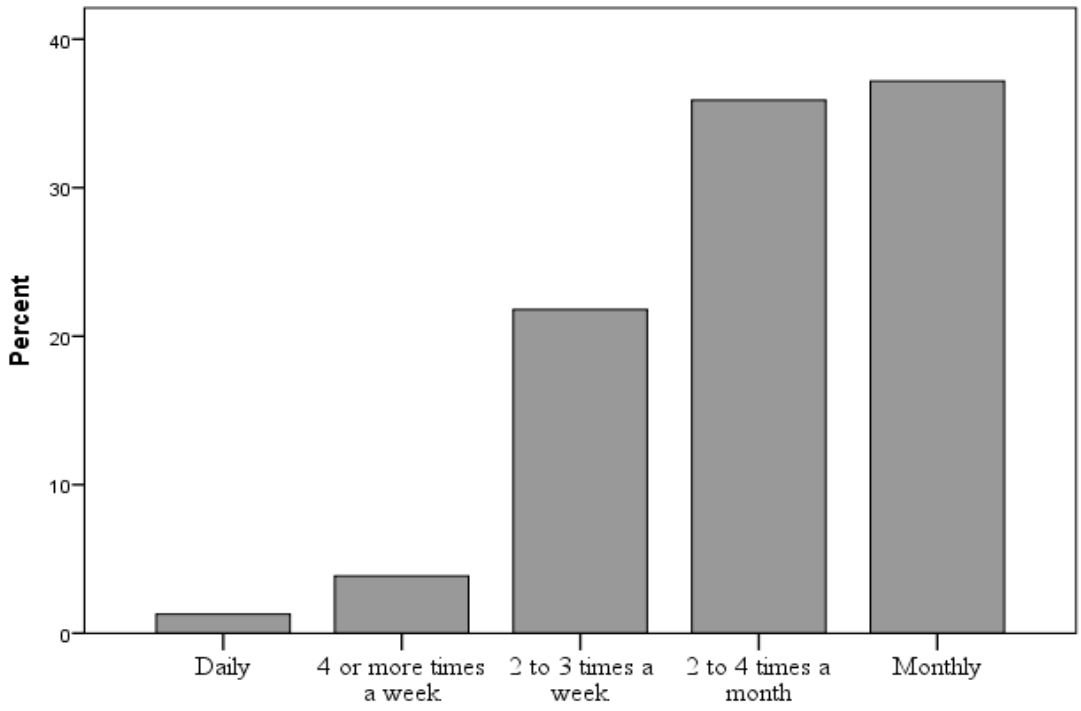


Figure 4.4 shows that 37.2% of the respondents took alcoholic drinks monthly. 35.9% of the respondents reported that they took alcoholic drinks at least 2 to 4 times, 21.8% of the

respondents took alcoholic drinks at least 2 to 3 times a week, 3.8% of them took alcoholic drinks 4 or more times a week and lastly, 1.3% of the respondents took alcoholic drinks daily.

Number of Alcoholic Drinks that Respondents Take on a Typical Drinking Day

The study examined the number of alcoholic drinks taken by the respondents on a typical drinking day. Figure 4.5 is a bar chart showing the number of alcoholic drinks which the respondents take on their typical drinking days.

Figure 4.5:

Number of Alcoholic Drinks Taken by Respondents on a Typical Drinking Day

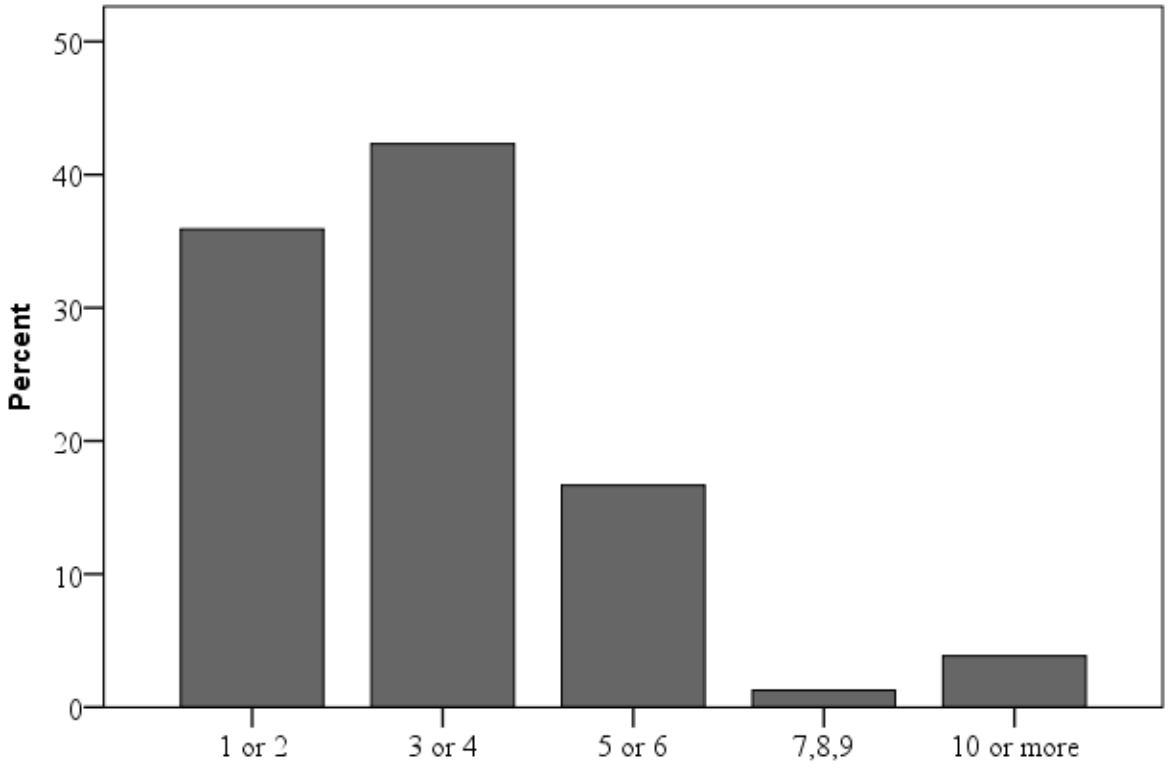


Figure 4.5 shows that on a typical drinking day, 42.3% of the respondents took 3 or 4 drinks containing alcohol, 35.9% of the respondents took 1 or 2 alcoholic drinks, 16.7% of the

respondents took 5 or 6 alcoholic drinks, 3.8% of them took 10 or more alcoholic drinks and lastly 1.3% took 7 or 8 or 9 drinks on their typical drinking day.

Descriptive Statistics for Prevalence of Alcoholism and Alcohol Use

Table 4.10 shows the descriptive statistics for the prevalence of alcoholism and alcohol use among the employees of NHIF, Nairobi, Kenya. It shows the means, standard deviations and maximum and minimum values.

Table 4.10:

Descriptive Statistics for Prevalence of Alcoholism and Alcohol Use

	N	Min	Max	Mean	Std. Deviation
How often do you have six or more drinks in one occasion?	149	1	4	1.87	.978
How often during the last year have you found that you were not able to stop drinking once you had started?	149	1	4	1.26	.717
How often during the last year have you failed to do what was normally expected from you because of drinking?	149	1	3	1.30	.661
How often during the last year have you needed a first drink in the morning to get yourself going after heavy drinking?	149	1	4	1.24	.677
How often during the last one year have you had a feeling of guilt or remorse after drinking?	149	1	5	1.52	.984
How often during the last one year have you been unable to remember what happened the night before because you had been drinking?	149	1	4	1.35	.776

Table 4.10 shows the descriptive statistics for the prevalence of alcoholism and alcohol use among the employees of NHIF. The table shows that regarding the statement, “How often do you have six or more drinks in one occasion?” on average most of the respondent conferred that they have six or more drinks almost monthly ($\bar{x}$=1.87, σx = .978, N=149). The results are inconsistent with the findings of the study by Ajayi et al. (2019) which revealed that the rate of alcoholism and alcohol use decreased from 43.5% to 31.1% and the number of drinks that the drinkers took also decreased when the people took part in religious activities or lived with their parents. Nonetheless, the authors investigated the prevalence of alcoholism among university students but the current study is among adults who are working and are presumably wholly responsible for their lives thus the autonomy would predispose the respondents working at NHIF, Nairobi, Kenya to the wrong decisions which let them take alcohol almost every less than a month.

Regarding the question, “How often during the last year have you found that you were not able to stop drinking once you had started?” most of the respondents on average held that they have never been unable to stop drinking once they began during the last year ($\bar{x}$=1.26, σx = .717, N=149). The analysis shows that even though most of the respondents take alcoholic drinks, they seem to take it within their control and they do not lose their ability to stop or halt whenever they feel like doing that. These results corroborate the findings by Musyoka et al. (2020) who after studying the drinking trends of students from the University of Nairobi revealed that while most students begin the drinking habit in their tertiary learning institutions as a fun activity, they go ahead and perfect the habit when they are employed.

Regarding the question, “How often during the last year have you failed to do what was normally expected from you because of drinking?” on average, most of the respondents

reported that their drinking had never in the last year been the reason why they failed something which was normally expected from them ($\bar{x}$=1.30, σx = .661, N=149). The analysis supposes that most of the respondents have not been hooked to the depths of alcoholism because the results by Konchellah (2016) suggested employees who have been deeply rooted in alcoholism often fail to meet the expected responsibilities which the company has put on them to achieve. This means that employees who are using alcohol are doing so in moderation, and this may be due to their high level of awareness of the health risks associated with alcoholism. This deduction is anchored on the premise that increased awareness can lead to more informed decisions about alcohol use and may lead some individuals to reduce their alcohol consumption.

Furthermore, regarding the question, "How often during the last year have you needed a first drink in the morning to get yourself going after heavy drinking?" on average most of the respondents commented that they have never in the past year needed alcohol to get going in the rest of the day after heavy drinking ($\bar{x}$=1.24, σx = .677, N=149). The analysis shows that on average most of the respondents are not dependent on alcoholic drinks because they have not gotten to the level used by Gireli (2019) when describing addiction which holds that it requires one to be unable to operate without having taken an alcoholic drink. The respondents at NHIF therefore might have known ways through which they manage their drinking so that they do not have to take alcoholic drinks to be effective at work.

Regarding the question, "How often during the last year have you had a feeling of guilt or remorse after drinking?" most of the respondents on average reported that they had not felt guilt and remorse after drinking for less than a month which they had been taking alcoholic drinks ($\bar{x}$=1.52, σx = .984, N=149). The results show that feelings of remorse or guilt after

taking alcoholic drinks are not common among the respondents after they have taken alcoholic drinks. The absence of feeling or remorse is inconsistent with findings by Cheng et al. (2018) which indicated that the prevalence of alcoholism among users indicates that they have surpassed the cultural effects which push back the drinking habits and culture. A possible reason for this finding is that alcohol consumption in Kenya is legal, and thus, they did not see anything wrong with drinking alcohol. It is possible that when a substance is legalized, it becomes more socially acceptable and may be viewed as less stigmatized. In any case, it does not necessarily mean that everyone who uses alcohol will develop a problem with it.

Lastly, regarding the question, "How often during the last year have you been unable to remember what happened the night before because you had been drinking?" on average most of the respondents reported that they had never failed to recall the occurrences of the previous night because they were drinking ($\bar{x}$=1.35, σx = .776, N=149). The results postulate that the respondents do not often participate in heavy episodic drinking (HED) which is often associated with the loss of memory and blackout. The finding are contradictory to the findings of the study by Kendagor et al. (2018) which held that HED is common among adults who are working, married or cohabiting. Nonetheless, the respondents were all professionals who are required to be working at given times for the number of times in the whole month or weeks. Therefore, their jobs might be a restraining factor, making them not be involved too much in HED.

Descriptive Statistics for Prevalence of Alcoholism Composite Score

Table 4.11 shows the descriptive statistics for the prevalence of alcoholism composite score. It shows the mean, standard deviation, upper and lower limits and the maximum and

minimum values. The average prevalence of alcoholism was converted to percentage by dividing the mean composite by total possible score of 5, and multiplying by 100 percent.

Table 4.11:

Descriptive Statistics for Prevalence of Alcohol Composite Score

			Statistic	Std. Error
Prevalence of Alcoholism Composite Score	Mean		1.4248	.07214
	95% Confidence Interval for Mean	Lower Bound	1.2813	
		Upper Bound	1.5683	
	5% Trimmed Mean		1.3383	
	Median		1.1667	
	Variance		.427	
	Std. Deviation		.65324	
	Minimum		1.00	
	Maximum		3.83	
	Range		2.83	
	Interquartile Range		.54	
	Skewness		1.947	.266
	Kurtosis		3.362	.526

Table 4.11 show the descriptive statistics for the prevalence of alcoholism composite score. It shows that on average the prevalence of alcoholism and alcohol abuse was low among employees of NHIF, Nairobi, Kenya ($\bar{x}$=1.42488, σx =. 65324). This translated to 24.5% prevalence rate. The results are contradictory to the findings of the study by Musyoka et al. (2020) which showed that alcoholism is a pervasive habit among adults in Kenya, suspecting that 60% of them drink. However, the employees at NHIF might be having knowledge about how to manage their drinking in a manner that it does not become a bondage for them. The respondents showed low prevalence of alcoholism perhaps due to the steps which the institution might have taken to intervene in dealing with alcoholism and alcohol abuse.

Normality Test for Prevalence of Alcoholism Composite Score

Figure 4.6 shows a histogram for the prevalence of alcoholism composite score. It was used to test for the normality of the prevalence of alcoholism composite score.

Figure 4.6:

Histogram for Prevalence of Alcoholism

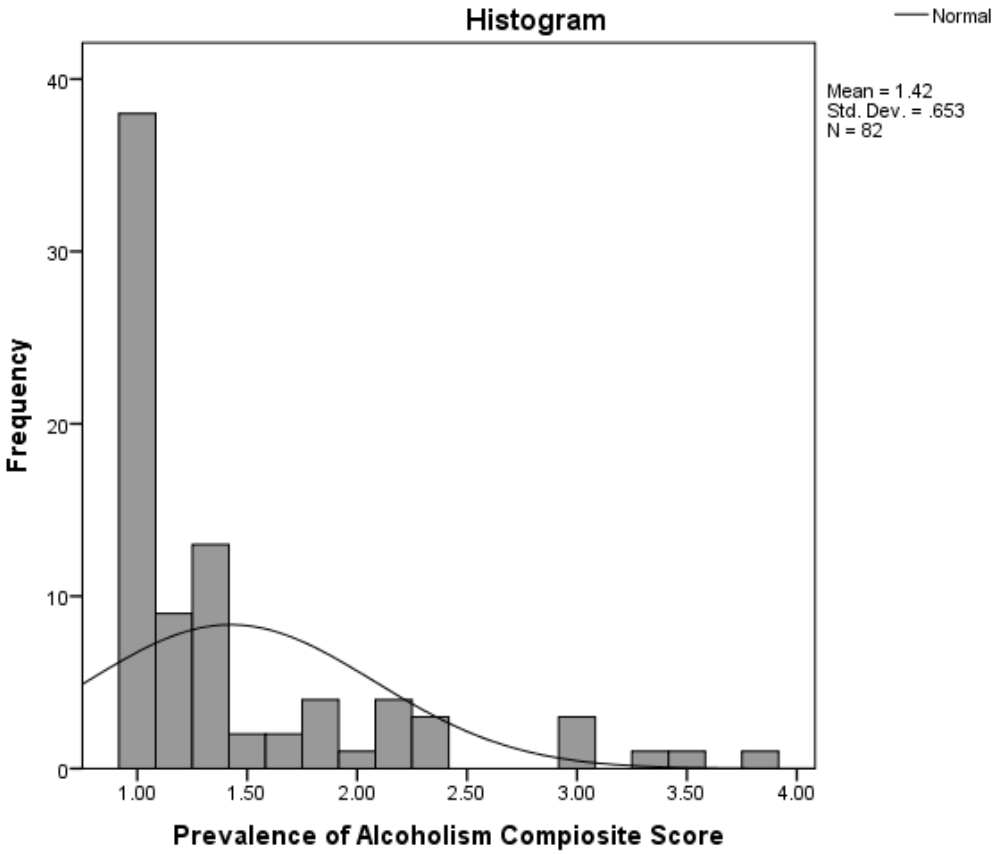


Figure 4.6 shows a histogram that was used to test for the normality of the prevalence of alcoholism data. The figure shows that there was the presence of abnormality in the data, which violated the assumption of no abnormality and was treated using log transformation.

Outlier Test for Prevalence of Alcoholism

Figure 4.7 shows a boxplot for the prevalence of alcoholism and alcohol use among NHIF employees. It was used to test for the presence of outliers in the data for the prevalence of alcoholism among the NHIF employees.

Figure 4.7:

Boxplot for Prevalence of Alcoholism

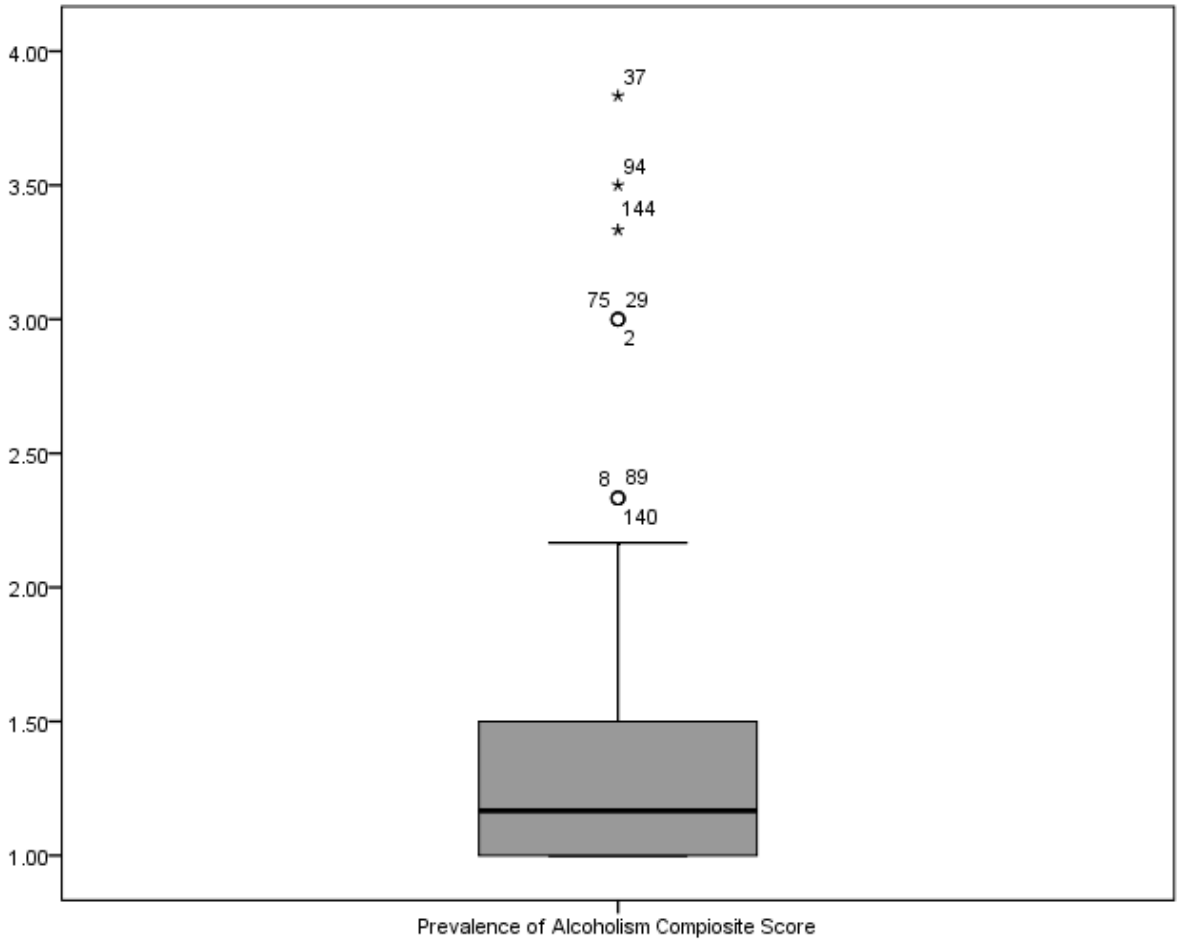


Figure 4.7 shows a boxplot that was used to test for the outliers in the prevalence of alcoholism among the employees of NHIF. The figure shows that there were outliers in the data which violated the assumption of no outliers in the data and thus the data was treated for the outliers using log-linear transformation.

Concerns about Drinking

Figure 4.8 is a pie chart used to examine the level of concern and the source of such concern which the respondents have received based on their drinking habits.

Figure 4.8:

Concerns about Drinking

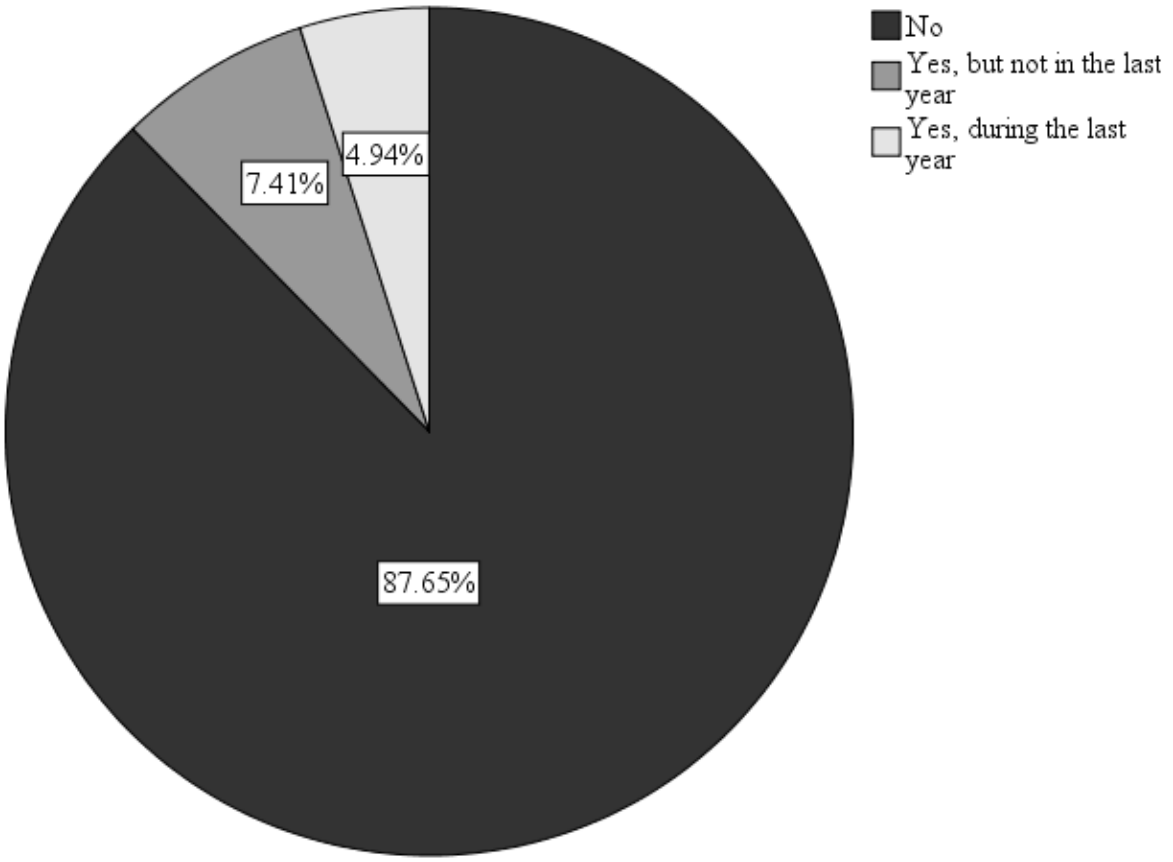


Figure 4.8 shows that 87.65% of the respondents who took alcoholic drinks had never received any concern from a relative, friend, or doctor about their drinking. 7.41% of the respondents who took alcoholic drinks had received concerns from either a relative, friend, or doctor about their drinking habit in the previous year. Lastly, 4.94% of the respondents who

took alcoholic drinks had received concerns from a relative or friend, or doctor about their drinking but not in the previous year.

Prevalence of Alcoholism by Respondents' Gender

Table 4.12 is a cross-tabulation output showing the prevalence of alcoholism and alcohol use among the respondents by gender.

Table 4.12:

Prevalence of Alcoholism and Alcohol Abuse by Gender

			Gender		
			Male	Female	Total
Have you ever taken any alcoholic drink i.e., bottled beer, spirit, traditional brew or illicit liquor?	Yes	Count	43	35	78
		% within Gender	76.8%	37.6%	52.3%
	No	Count	13	58	71
		% within Gender	23.2%	62.4%	47.7%
Total		Count	56	93	149
		% within Gender	100.0%	100.0%	100.0%

Table 4.12 shows a crosstabulation analysis of the prevalence of alcoholism and alcohol use among the respondents by their gender. The analysis revealed that 52.3% of the employees had ever taken alcohol while 47.7% had never taken alcohol. The analysis revealed that 76.8% of the males responded in the affirmative meaning that they have ever taken alcoholic drinks, while only 37.6% had taken any alcoholic drinks. The results show that most of the respondents who were involved in drinking of alcohol and alcoholic drinks were males. The analysis is consistent with the results of the study by Vellios and Van Walbeek (2018) which showed that more males than females are involved in drinking alcohol and alcoholic drinks making them more predisposed to injuries caused by drinking alcohol. It can be argued that may be cultural norms and expectations encourage men to drink more than women. Men are often expected to

engage in drinking behaviors as a way of proving their masculinity or as a means of social bonding with other men. Men may also be more likely to use alcohol as a coping mechanism to deal with stress or emotional issues. This can lead to higher levels of consumption and increased risk of alcohol use disorder.

Chi-Square Tests for Prevalence of Alcoholism by Gender of Employees

Table 4.13 shows Chi-square test for the prevalence of alcoholism and alcohol abuse among the employees by their gender factors.

Table 4.13:

Chi square tests for Prevalence of Alcoholism by Gender of employees

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square	21.478[a]	1	.000		
Continuity Correction[b]	19.937	1	.000		
Likelihood Ratio	22.364	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	21.334	1	.000		
N of Valid Cases	149				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.68.
b. Computed only for a 2x2 table

Table 4.13 shows that there was a statistically significant association between prevalence of employee alcoholism and the gender of the employees, $\chi^2(1) = 21.478$, $p < .05$. This implies that the prevalence of alcoholism varied with the gender of the respondents, which shows that gender is a significant predictor of prevalence of alcoholism among employees.

Prevalence of Alcoholism by Age of Respondents

Table 4.14 shows the results of crosstabulation analysis of the prevalence alcoholism by the age of the employees at NHIF.

Table 4.14:

Crosstabulation Analysis Prevalence of Alcoholism by Age of Respondents

		Age				
		Below 25 years	25-34 years	35-44 years	45 years or more	Total
Have you ever taken any alcoholic drink i.e., bottled beer, spirit, traditional brew or illicit liquor?	Yes Count	0	17	36	25	78
	% within Age	0.0%	50.0%	72.0%	39.1%	52.3%
	No Count	1	17	14	39	71
	% within Age	100.0%	50.0%	28.0%	60.9%	47.7%
Total	Count	1	34	50	64	149
	% within Age	100.0%	100.0%	100.0%	100.0%	100.0%

The table shows the prevalence of alcoholism and alcohol abuse among NHIF employees depending on their ages. For the employees who were below 25 years, none of them was involved in alcoholism. 100% of them had never taken alcohol. For individuals between 25 to 34 years, 50% had taken alcoholic drinks and 50% had never taken any alcoholic drinks. The table also revealed that 72.0% of the employees between 35 to 44 years were involved in taking alcoholic drinks while 28.0% was not involved in taking alcoholic drinks. Lastly, 39.1% of the respondents of 45 year and above had taken alcoholic drinks while the remaining 60.9% were not involved in taking alcoholic drinks. The results suggest that employees between 35 to 44 years are the most vulnerable to alcoholism and alcohol abuse at NHIF and the interventions should target them.

Chi-Square Tests for Prevalence of Alcoholism by Age of Employees

Table 4.15 shows the chi-square tests for the prevalence of alcoholism among the NHIF employees by their age factor.

Table 4.15:

Chi Square Tests for Prevalence of Alcoholism by Age

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.443[a]	3	.004
Likelihood Ratio	14.164	3	.003
Linear-by-Linear Association	1.825	1	.177
N of Valid Cases	149		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .48.

The table shows that there was significant association between prevalence of alcoholism and the age of the individuals, $\chi^2(3) = 13.443$, $p<.05$. This means that prevalence of employee alcoholism varied with the age of the respondents, which shows that age is valid predictor of alcoholism and thus the intervention programs should target specific age groups. It is noteworthy that the prevalence of alcohol consumption peaked in midlife and decreased with old age, implying that interventions would be most effective when targeting employees in their midlife.

A possible explanation for the foregoing finding is that individuals in mature adulthood may have more disposable income and free time, which can lead to increased social opportunities that involve drinking. Qualitative analysis of the responses given by the key informants yielded that there is poor financial management among some of the employees of NHIF, Nairobi, Kenya. Some of the respondents agreed that all other risk factors aside, poor financial management is probably a major risk factor for alcoholism and alcohol abuse.

Commenting on the same respondent 13 said, “Availability of extra money.” The respondent seems to suggest, according to the foregoing quote that the sum of money that some of the employees earn at NHIF not only meets their basic needs but leaves them with some extra money enabling them to indulge in purchasing and drinking of alcoholic drinks. Since the remuneration of employees is controlled by law, the employees, and any unlawful interference with the amount they earn in salary as a way of protecting them from alcoholism and alcohol abuse would be a breach of their rights, the institution should take great care to educate them on prudent spending of their salary.

Prevalence of Alcoholism by Employees’ Level of Education

Table 4.16 shows the results of crosstabulation analysis of the prevalence alcoholism by the level of education of the employees at NHIF. Table 4.16 shows that there 44.4% of secondary level educated employees were involved in alcoholism and alcohol abuse and 55.6% were not. Furthermore, 48.3% of college level educated employees were involved in alcoholism and alcohol abuse and 51.7% were not involved in taking alcoholic drinks. For bachelor’s degree graduates, 50.0% of them were involved in alcoholism while the other 50% was not involved in taking alcoholic drinks. Lastly, for the postgraduate level educated employees a majority, 60.5% of them were involved in taking alcohol and alcoholic drinks while 39.5% were not involved in alcoholism and alcohol abuse. The results suggest that the increase in education level is directly linked to the possibility of involving in alcoholism and alcohol abuse. The results are consistent with the findings of the study by Musyoka et al. (2020) which showed that students pick up heavy drinking habits in their tertiary levels of education and continue with the habits into their future professional lives.

Table 4.16:

Crosstabulation Analysis of Prevalence of Alcoholism by Employees' Level of Education

			Level of Education				
			Secondary level	College level	Bachelor's degree level	Post-graduate level	Total
Have you ever taken any alcoholic drink i.e., bottled beer, spirit, traditional brew or illicit liquor?	Yes	Count	4	14	34	26	78
		% within Level of Education	44.4%	48.3%	50.0%	60.5%	52.3%
	No	Count	5	15	34	17	71
		% within Level of Education	55.6%	51.7%	50.0%	39.5%	47.7%
Total		Count	9	29	68	43	149
		% within Level of Education	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests for Prevalence of Alcoholism by Employees' Level of Education

Table 4.17 shows the chi square analysis of the prevalence of alcoholism among NHIF employees by their level of education.

Table 4.17:

Prevalence of Alcoholism by Employees' Level of Education

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.704[a]	3	.636
Likelihood Ratio	1.715	3	.634
Linear-by-Linear Association	1.371	1	.242
N of Valid Cases	149		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 4.29.

Table 4.17 shows that there was no statistically significant association between prevalence of alcoholism and employee level of education, $\chi^2(3) = 1.704$, $p > .05$. This means

that the level of education is not a significant predictor of the prevalence of employee alcoholism and it should not be considered a factor when creating interventions for employees at NHIF, Nairobi, Kenya. This may be due to the fact that the relationship between education level and alcohol consumption is complex and as such, level of education, per se, does not adequately explain alcoholism as there may be other related factors that come into the equation of alcoholism among employees.

Prevalence of Alcoholism by Respondents' Marital Status

Table 4.18 shows the crosstabulation analysis of the prevalence of alcoholism with the respondents' marital status.

Table 4.18:

Crosstabulation Analysis of Prevalence of Alcoholism by Employee Marital Status

			Marital status			
			Single	Married	Separated/ divorced/ widowed	Total
Have you ever taken any alcoholic drink i.e., bottledn beer, spirit, traditional brew or illicit liquor?	Yes	Count	20	52	6	78
		% within Marital status	60.6%	51.0%	42.9%	52.3%
	No	Count	13	50	8	71
		% within Marital status	39.4%	49.0%	57.1%	47.7%
Total		Count	33	102	14	149
		% within Marital status	100.0 %	100.0%	100.0%	100.0%

The table shows that most of the people who were involved in alcoholism were single (60.6%) followed by the married (51.0%) and lastly the widowed, divorced or separated (42.9%). The results suggest that the prevalence of alcoholism and alcohol abuse varies with the marital status of the individual.

Chi-Square Tests for Prevalence of Alcoholism by Employees' Marital Status

Table 4.19 shows the chi-square tests for the prevalence of alcoholism of the employees with regard to their marital status.

Table 4.19:

Chi-Square Tests for Prevalence of Alcoholism by employees' Marital Status

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.484[a]	2	.476
Likelihood Ratio	1.493	2	.474
Linear-by-Linear Association	1.468	1	.226
N of Valid Cases	149		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.67.

The table shows that there was no statistically significant influence between the prevalence of employee alcoholism and marital status, $\chi^2(2) = 1.484$, $p > .05$. It shows that marital status is not a significant predictor of the prevalence of alcoholism, which suggests that when studying the prevalence of employee alcoholism among NHIF employees, marital status is not a factor to use in determining the trends in employee alcoholism.

Prevalence of Alcoholism by of Respondents' Duration of Employment at NHIF

Table 20 shows the crosstabulation analysis of employee alcoholism by the duration for which they have worked at NHIF.

Table 4.20:

Crosstabulation Analysis of Employee Alcoholism by Duration of Employment

			Duration worked at NHIF					
			Below 5 years	5-9 years	10-14 years	15-19 years	More than 20 years	Total
Have you ever taken any alcoholic drink i.e., bottled beer, spirit, traditional brew or illicit liquor?	Yes	Count	8	21	17	11	21	78
		% within Duration worked at NHIF	80.0%	51.2%	60.7%	55.0%	42.0%	52.3%
	No	Count	2	20	11	9	29	71
		% within Duration worked at NHIF	20.0%	48.8%	39.3%	45.0%	58.0%	47.7%
Total		Count	10	41	28	20	50	149
		% within Duration worked at NHIF	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The table shows that 80.0% of the respondents who had been working at NHIF for a duration of were involved in alcoholism, 51.2% of the respondents who had worked at NHIF for between five to nine years took alcoholic drinks, and 60.7% of the employees who had been employed at the institution for between 10 to 14 years took alcoholic drinks. Furthermore, the table shows that for those employees who have worked at NHIF for between 15 and 19 years, 55.0% were involved in alcoholism and alcohol abuse. Lastly, for the employees who had been working at NHIF for more than 20 years, only 42.0% of them had taken alcoholic drinks. The trend seems to suggest that the number of years worked at the company has a reverse relationship with prevalence of alcoholism among the employees, which is in line with the results of the study by Ndumwa et al. (2023) who held that the rates of alcoholism was high among people of different ages.

Chi-Square Tests for Prevalence of Alcoholism by Employees' Duration Worked at NHIF

Table 4.21 shows the chi-square test for the employee alcoholism by the duration worked at NHIF.

Table 4.21:

Chi-Square Tests for Prevalence of Alcoholism by Employees' Duration Worked at NHIF

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.075[a]	4	.194
Likelihood Ratio	6.332	4	.176
Linear-by-Linear Association	3.178	1	.075
N of Valid Cases	149		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.77.

The table shows that there is no statistically significant association between duration of work and the prevalence of employee alcoholism among the respondents $\chi^2(4) = 6.075$, $p > .05$. The results imply that the duration one has worked at NHIF does not impact their use or lack of it therefore of the alcoholic drinks. Therefore, duration should be a factor which is considered when implementing interventions which target the level of alcoholism among the employees of NHIF, Nairobi, Kenya. The findings of the study are consistent with the results of the study by Tran et al. (2019) who held that despite the time spent in organization, alcoholism is a collective activity for colleagues.

Risk Factors Contributing to Alcoholism among NHIF Employees

The second objective of this study was to establish the risk factors which contribute to alcoholism among NHIF employees. This section does a descriptive analysis and presents the results on the different risk factors whether personality, alcohol abuse expectations, socio-demographic characteristics, workplace alcohol availability, and workplace stressors, revealing how each contributes to alcohol abuse among NHIF employees.

Descriptive Statistics for Risk Factors Contributing to Alcoholism and Alcohol Abuse

Table 4.22 shows the descriptive statistics for the risk factors contributing to alcoholism and alcohol abuse among NHIF employees.

Table 4.22:

Descriptive Statistics for Risk Factors Contributing to Alcoholism and Alcohol Abuse

	N	Min	Max	Mean	Std. Deviation
Personality/nature of individuals contributes to alcoholism and alcohol abuse	149	1	5	2.97	1.330
The desire to take alcohol in excess is motivated by the expected outcomes of its consumption i.e gain confidence, freely socialize, improved moods and courage	149	1	5	3.20	1.342
Peer influence from family members, friends or colleague contributes to alcoholism and alcohol abuse	149	1	5	3.95	1.211
A stressful home environment contributes to alcoholism alcohol abuse	149	1	5	3.73	1.245
Workplace pressure and stress contribute to alcoholism and alcohol abuse	149	1	5	3.54	1.232
Accessibility and exposure to alcohol contributes to alcoholism and alcohol abuse	149	1	5	3.64	1.225

Table 4.22 shows the descriptive statistics for the risk factors which contributes to alcoholism and alcohol abuse among employees of NHIF. The table shows that on average, most of the respondents neither agreed with nor refuted the statement, “Personality or nature of an individual contributes to alcoholism and alcohol abuse,” ($\bar{x}$=2.97, σx =1.330, N=149). The results suggest that the respondents neither denied nor affirmed the role of personality in contributing to individuals taking alcoholic drinks. The results are consistent with the results by Sudhinaraset et al. (2016) which revealed that an array of issues including genetics, personality, and sociocultural and societal environment affect the usage of alcohol among individuals.

Regarding the statement, “the desire to take alcohol in excess is motivated by the expected outcomes of its consumption i.e. gain confidence, freely socialize, improved moods and courage,” on average most respondents neither agreed or disagreed that the expectations of taking alcohol such as gaining confidence, socializing and improving moods are a major reason for taking alcohol and alcoholic drinks among the employees of NHIF ($\overline{x}$=3.20, σx =1.342, N=149). The results show that most of the respondents on average do not consider reasons for taking alcohol but are heavily swayed by the short-term outcomes of taking alcohol and alcoholic drinks. These results do not corroborate the findings by Roberts et al. (2014) that social factors such as moods, relationships, and other interactions have the potential to greatly affect alcohol use and abuse. Nonetheless, the employees at NHIF might have different reasons besides the expectations which drive them into taking alcoholic drinks. Furthermore, since the study depended on the self-report which came from the respondents, it is possible that on average most of the respondents did not understand that some of the reasons that the employees at NHIF took alcohol is because of the expected outcomes of drinking alcohol.

Regarding the statement, “Peer influence from family members, friends or colleagues contributes to alcoholism and alcohol abuse,” on average most of the respondents agreed that peer influence from family members, friends, and workmates contributed to alcohol abuse among the employees of NHIF ($\overline{x}$=3.95, σx =1.211, N=149). The findings are consistent with the findings of the study by Gathumbi and Cheloti (2016) which concluded that peer pressure is a major contributor to alcoholism and alcohol abuse not only among students but also adults. The results suggest that the pressure which people succumb to during their studies in tertiary level education as found by Musyoka et al (2020) does not end after the individuals have

graduated and transitioned into their professional lives. Instead, it is the source of the peer influence that changes from fellow students to friends, colleagues and friends.

Peer pressure was also identified in the qualitative analysis as one of the salient themes. Most of the respondents held that peer pressure is one of the major risk factors for employee alcoholism and alcohol abuse at NHIF, Nairobi, Kenya. Some respondents who believed that peer pressure was a factor to be careful of regarding matters alcoholism are respondents 15 and 16 who commented "Peer pressure," and "Peer influence," respectively, when asked about the risk factors for alcoholism and alcohol abuse among the employees of NHIF. The responses suggest strongly that peers either at the workplace or outside the workplace greatly contributes into influencing the decision by an employee to take alcoholic drinks. The suggestions are in line with the results of the study conducted by Gathumbi and Cheloti (2016) which held that peer pressure is a major risk factor for alcohol abuse for teenagers, youth and adults alike.

Regarding the statement, "A stressful home environment contributes to alcoholism and alcohol abuse" on average most of the respondents agreed that a stressful home environment can give an employee at NHIF the impetuous to take alcoholic drinks ($\bar{x}$=3.73, σx =1.245, N=149). The findings are consistent with findings by the study by Jones and Sumnall (2016), which revealed that the home environment has the potential to greatly affect the possibility, frequency and intensity of alcohol abuse.

Regarding the statement, "Workplace pressure and stress contributes to alcoholism and alcohol abuse," on average most of the respondents agreed that workplace stress experienced at NHIF was enough to contribute to alcoholism and alcohol abuse ($\bar{x}$=3.54, σx =1.232, N=149). The analysis is consistent with the findings of the study by Kirkham et al. (2015) which held that psychosocial factors include; tolerance and perceptions towards colleagues

who consume alcohol or other drugs, attitudes toward policies, workplace-related environment, and group processes. Nonetheless, alcohol abuse and alcoholism are complex issues to which can be contributed by many interrelated factors and thus there is no absolute indication that work-related issues are causing NHIF employees to engage in alcoholism and alcohol abuse.

Another theme which was salient in the qualitative analysis of the risk factors for alcoholism and alcohol abuse was stress. Stress manifested in two variates; family-related stress and work-related stress. The respondents seemed to suggest through their comments that despite the type of stress and the source, it can easily lead one down the path of alcoholism and alcohol abuse. One such respondent is respondent 8 who when asked about risk factors for alcoholism at NHIF commented as follows; "Family break-up. Not being fully engaged at work and at home. Lack of recognition by management at work. Peer pressure. Terminal illness stress." There are various issues which can cause stress in the life of an individual including work, which often comes with occupational stress. The results herein suggest that if stress, no matter the source or variant, is not properly managed, it may build up and lead the stressed individual to alcoholism and alcohol abuse. The suggestions corroborate the holdings of the study by International Labor Organization (ILO, 2013) which held that detrimental workplace events like stress, monotonous work, shift work, relocations, and the regular switching of coworkers and supervisors can lead to alcoholism and harm the employee.

Regarding the statement, "Accessibility and exposure to alcohol contributes to alcoholism and alcohol abuse," on average most of the respondents agreed that accessibility to alcohol at the workplace was a major risk factor contributing to alcoholism and alcohol abuse among the employees at NHIF ($\bar{x}$=3.64, σx =1.225, N=149). The results seem to suggest that

the environment at NHIF easily allows access to alcoholic drinks for the employees, promoting their alcoholism. The results are consistent with the holdings by Roberts et al. (2014) that alcoholism can contribute to an array of issues including work and home environment and how they incline or realign the individual's appetite or need for taking alcohol. It is instructive to note that alcohol is widely available and accessible in Kenya, with many licensed alcohol selling establishments in urban areas, and Nairobi City is not an exception. This wide availability of alcohol is one of the factors that can contribute to high alcohol consumption.

Descriptive Statistics for Risk Factors Composite Score

Table 4.23 shows the descriptive statistics for the risk factors composite score. It shows the skewness, lower and upper bounds, mean and standard deviation and maximum and minimum values.

Table 4.23:

Descriptive Statistics for Risk Factors Composite Score

			Statistic	Std. Error
Risk Factors Composite Scores	Mean		3.5068	.07546
	95% Confidence Interval for Mean	Lower Bound	3.3577	
		Upper Bound	3.6560	
	5% Trimmed Mean		3.5528	
	Median		3.6667	
	Variance		.831	
	Std. Deviation		.91180	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.04	
	Skewness		-.747	.201
	Kurtosis		.279	.399

Table 4.23 shows the descriptive statistics for the risk factors of alcoholism composite score. The table shows that on average most of the respondents agreed that the risk factors contributed to the use of alcohol among the employees of NHIF ($\bar{x}$=3.5068, σx =.91180). The table also indicates that the respondents at the middle of the sample agreed that the risk factors contributed to alcoholism and alcohol use among the employees at NHIF (IQR= 1.02). There was a negative skewness in the data (Skn=-.747), indicating that most of the respondents agreed with the statements indicating "Agree" and below.

Normality Test for Risk Factors Composite Score

Figure 4.9 shows a histogram for the risk factors composite score. The histogram was used to test for the normality of the risk factors data.

Figure 4.9
Histogram for Risk Factors Composite Score

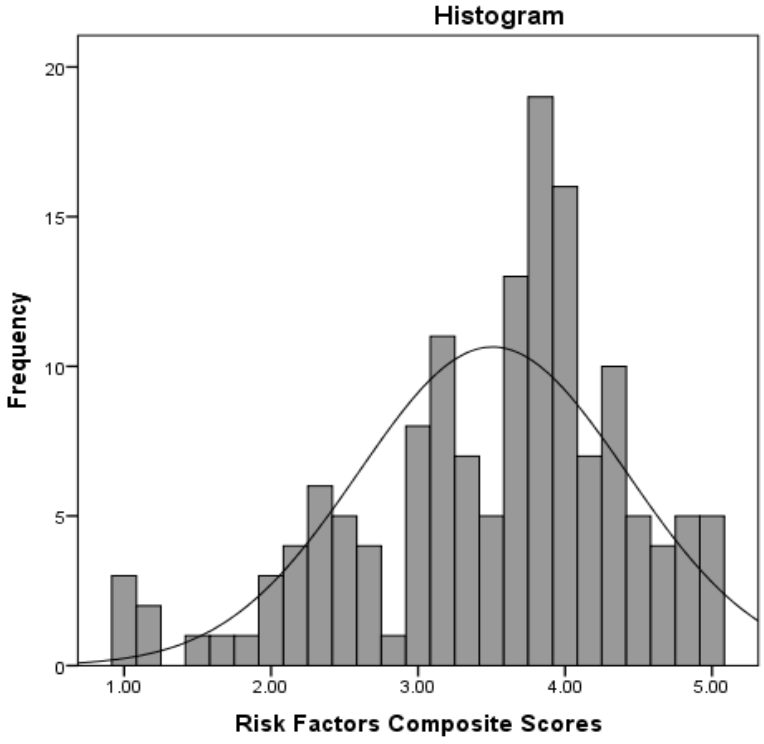


Figure 4.9 shows a histogram for the risk factors of alcoholism and alcohol abuse. It shows that on average, most of the respondents agreed that the risk factors contributed to alcoholism and alcohol abuse. The histogram shows that there was the presence of an abnormality in the data. This violated the assumption of normality and the abnormality was treated using log transformation.

Outlier Test for Risk Factors of Alcoholism and Alcohol Abuse

Figure 4.10 shows a boxplot for the risk factors of alcoholism and alcohol abuse. The boxplot was used to test for the presence of outliers in the data.

Figure 4.10:

Boxplot for Risk Factors for Alcoholism and Alcohol Abuse

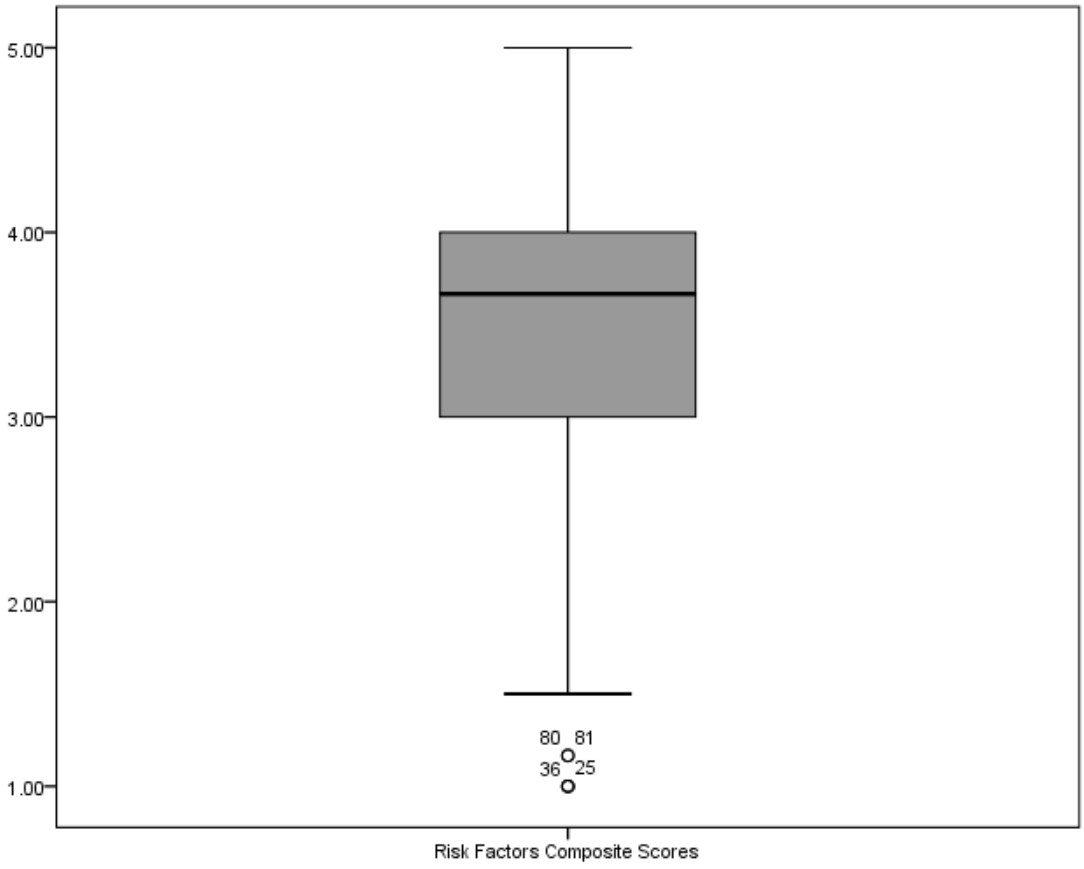


Figure 4.10 shows that there was the presence of outliers in the risk data for the risk factors composite score. This violated the assumption for the absence of outliers and the data was treated using log-linear transformation.

The Level of Employee Awareness of the Alcoholism Interventions at NHIF

The second objective of the study was to determine the level of employee awareness of the alcoholism interventions at NHIF. This section performs descriptive and Chi-square tests to investigate the level of awareness among the respondents of alcoholism interventions at NHIF. It presents the results in tables and figures and discusses the findings of the study, regarding this objective.

Descriptive statistics for the Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 1

Table 4.24 shows the descriptive statistics for the level of employee awareness of alcoholism and alcohol abuse interventions. The table shows the means, standard deviations, and minimum and maximum values.

Table 4.24:

Descriptive Statistics for the Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions

	N	Min	Max	Mean	Std. Deviation
Are you aware of any activities undertaken in NHIF to address alcoholism and alcohol abuse at the workplace?	149	1	3	2.53	.810
Are you aware of the existence of counselling and treatment services for people with substance use disorder/addiction in NHIF?	149	1	3	2.69	.687
Are you aware of the existence of an alcohol and drug abuse workplace policy at NHIF?	149	1	3	2.51	.819
In the last one year, have you seen any messages on alcohol and drug abuse within the workplace? E.g., Charts, banners, etc.	149	1	3	1.82	.966

Table 4.24 shows that on average, most of the respondents were aware of the activities which NHIF had undertaken to address alcoholism and alcohol abuse at their workplace and this was evident in the way they responded to the question, “Are you aware of any activities undertaken in NHIF to address alcoholism and alcohol abuse at the workplace?” ($\bar{x}$=2.53, σx =.810, N=149). The analysis is consistent with the findings by Baridi and Oke (2014) which revealed that various government institutions were at different levels in the fight against Alcohol and Drug Abuse ADA. NHIF could be one of the institutions which are at the forefront in fighting against the ADA. Nonetheless, since the employees in NHIF are working in one of the most important institutions, which is indirectly responsible for the health of a majority of Kenyans because they handle the funds, they might have developed a keen eye to detail which allows them to notice most activities which the institution is undertaking to combat ADA in their workplace and among specific employees.

Multidimensional intervention strategy was a salient theme in the qualitative analysis of the possible effective interventions which the respondents preferred to be used by NHIF in handling matters alcoholism and alcohol abuse among the employees of the institution. The theme manifested through different sub-themes including immediate action, sensitization, counseling, social support, improved organizational communication, role modeling and involvement of religious institutions such as the Church. Regarding the immediate action, respondent 3 commented thus, "Taking immediate action by reporting changes in behavior and performance to the relevant management." The analysis suggests that since alcoholism is a complex issue and the risks of addiction are imminent when the victim is not treated or their issue of alcoholism is not addressed with urgency, as argued by Richmond et al. (2016), there is need to always act to any pointers which may suggest that one might be taking up or deteriorating into alcoholism and alcohol abuse to increase the chances of helping them early.

Regarding sensitization, improved organization communication and social support, respondent 12 commented as follows:

> "More sensitization. Culture change (abusers to be supported instead of stigmatization) Improving work environment (better communication between management and staff, fairness). Social support (extending support to staff families, management tend to apply too much policies and end up not supporting the person with a challenge)."

From the foregoing verbatim excerpt, it is clear that the respondent feels that sensitizing the employees about the dangers of alcoholism and alcohol abuse alone might not suffice. Furthermore, the sensitization can only improve if the management and the employees are able to clearly communicate about their issues and struggles so that they know where and how to best help one another to achieve the institution's goal of reducing the rate of alcoholism as a team. Furthermore, it is through improved communication that the institution's management

can know best the kind of social support or intervention that will be beneficial for the employee in their attempt to curb or shun alcoholism and alcohol abuse.

Regarding role modeling and involving the religious bodies such as the Church, one of the respondents commented as follows in the verbatim excerpt;

> "Mentorship and Coaching- The issue is behavioral thus staff members do not have mentors. New employees should also be coached in the right manner. Also incorporating religious bodies like churches to sensitize staff on the dangers that accrue from drugs and substance abuse."

From the foregoing verbatim excerpt, it is clear that respondent believed that coaching and mentorship would be beneficial in dealing with alcohol and drug abuse menace which according to Musyoka et al. (2020) is a fast-increasing vice in Kenya which demands immediate attention of the government and other institutions. Furthermore, the respondent also expressed their belief in the fact that involving religious institutions like the Church could help deal with drug abuse not only in society but also the workplace. The Church should use the advantage of the heavy religious and cultural backgrounds of the country to sway individuals and groups to shun alcoholism and alcohol abuse. Generally, the analysis shows that alcoholism, as argued by Richmond et al. (2016) is a complex issue which needs solving from different fronts. Therefore, integrating a multidimensional intervention strategy is most likely to bring NHIF closer to curbing the issue of alcoholism and alcohol abuse among its employees.

Furthermore, regarding the question, "Are you aware of the existence of counseling and treatment services for people with substance use disorder/addiction in NHIF?" on average most of the respondents agreed that they were aware of counseling and treatment services offered by NHIF to employees with substance use disorder or addiction ($\bar{x}$=2.69, σx =.687, N=149). These findings are consistent with the findings of the study by Jaguga and Kwobah

(2020) which revealed that in the 2019/2020 financial year in Kenya, 70 % of the counties had their SUDs programs under various departments including public administration, education, social services, and youth empowerment, and the treatment for ADA was one of the components of the advancements which the NGOs targeted in the different counties in Kenya. The results suggest that NHIF is one of the institutions which have taken the awareness of their employees on alcoholism and alcohol abuse interventions seriously to the point that they are providing treatment and ensuring that the employees are aware of the same.

Counseling and rehabilitation were the most salient themes in the qualitative analysis regarding the most fitting interventions which can help reduce the rate of alcoholism and alcohol abuse among the employees of NHIF. The themes were manifested in various subthemes including support groups and treatments. Most of the respondents felt that by taking the initiative to commit to counseling and rehabilitation of the employees who have been diagnosed with alcohol and substance abuse disorder, the organization would help them not only deal with their current problem but also prevent them from bringing more harm to themselves, their loved ones, their co-workers and the organization. The finding was consistent with the findings of the study by Yuvaraj et al. (2019) who suggested that counseling was one of the interventions against alcoholism. The consideration of the counseling and rehabilitation as the most fitting intervention to be offered to the employees affected by alcoholism and alcohol abuse was especially evident in the comments of respondent 14 who said, when asked about the most effective intervention, “Counselling, rehabilitation, very effective.”

Even though there is no way of telling whether effectiveness of the proposed interventions can be gauged and the scale which can be used to gauge it, the general feelings among the respondents is that providing counseling and rehabilitation to the employees would

help NHIF as an institution to effectively deal with the problem of alcoholism and alcohol abuse among its employees. The stance of the respondents is in line with the results of the study conducted by Konchellah (2016) which revealed that provision of counseling to individuals affected by alcoholism and alcohol abuse is one of the most effective ways to deal with the issue. Therefore, even as the institution continues to deal with this elusive issue of alcoholism and alcohol use, one of the issues that it must consider counseling, because it will not only benefit the people who have already started taking alcohol, but also the ones who might be contemplating the same.

Regarding the question, "Are you aware of the existence of an alcohol and drug abuse workplace policy at NHIF?" on average most of the respondents agreed that they were aware that NHIF had a workplace ADA policy ($\overline{x}$=2.51, σx =.819, N=149). The results suggest that the NHIF has clearly set policies on ADA and it has ensured that employees are aware of the same. The results are contradictory to the findings of the study by Jaguga and Kwobah (2020) which revealed that most institutions were at the sensitization level, with education through seminars and sensitization registering a score of 35.7% and that most government institutions lacked a coordinated approach toward the problem of alcohol and drug abuse. Nonetheless, it has been close to a decade since the researchers published their findings and many changes could have occurred since then. Therefore, NHIF could be one of the government institutions which has been on alert to ensure that they have a clear approach that will keep their employees from the debilitating effects of alcohol and drug abuse.

Lastly, regarding the statement, "In the last year, have you seen any messages on alcohol and drug abuse within the workplace? E.g., Charts, banners, etc.," on average most of the respondents disagreed, averring that they are somewhat aware of messages on alcohol and

drug abuse within the workplace within the previous year ($\bar{x}$=1.82, σx =.966, N=149). The findings are contradictory to the findings of the study by Jacobson and Attridge (2010) which suggested that most employees are aware of the EAPs which are provided by their respective organizations. Nonetheless, in the case of NHIF, there are various reasons why the employees might not have a deep awareness of EAPs. One reason why employees in Kenya may not be aware of the EAPs provided by their employer organizations, unlike in the U.S, is the lack of adequate dissemination of information.

Descriptive Statistics for Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 1 Composite Score

Table 4.25 shows the descriptive statistics for the Level of Employee Awareness of Alcoholism and Alcohol Abuse Interventions: Part 1 Composite Score. It shows the skewness, interquartile range, mean, standard deviation, and maximum and minimum values.

Table 4.25:

Descriptive Statistics for Employee Awareness Composite Score

			Statistic	Std. Error
Awareness Composite	Mean		1.3943	.03674
	95% Confidence Interval for Mean	Lower Bound	1.3217	
		Upper Bound	1.4669	
	5% Trimmed Mean		1.3482	
	Median		1.2500	
	Variance		.201	
	Std. Deviation		.44852	
	Minimum		1.00	
	Maximum		3.00	
	Range		2.00	
	Interquartile Range		.75	
	Skewness		1.338	.199
	Kurtosis		1.437	.395

Table 4.25 shows that on average, most of the respondents were aware of the alcoholism and alcohol abuse interventions at NHIF ($\bar{x}$=1.3943, σx =.44852). The table also

indicates that the respondents in the middle of the sample were aware of the interventions against alcoholism and alcohol abuse that have been set at NHIF. (IQR= .75). There was a negative skewness in the data (Skp=1.338), indicating that most of the respondents agreed with the statements indicating “Yes” in most of their responses.

Normality Tests for Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 1 Composite Score

Figure 4.11 shows a histogram for the Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 1 Composite Score. It was used to test for the normality of the data in the composite score.

Figure 4.11:

Histogram for Employee Awareness Part1 Composite

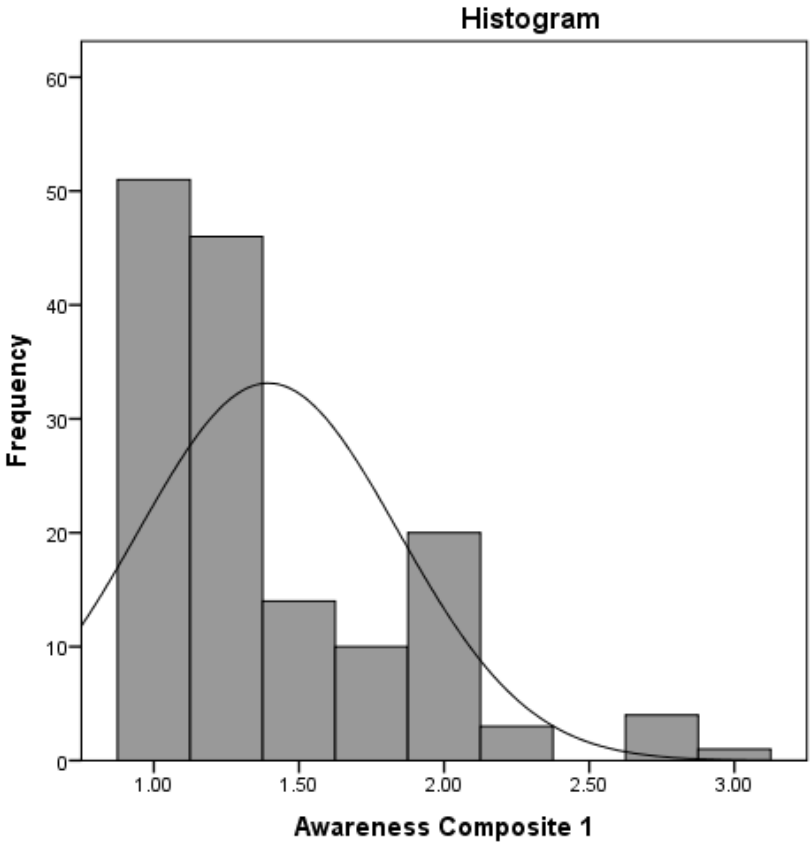


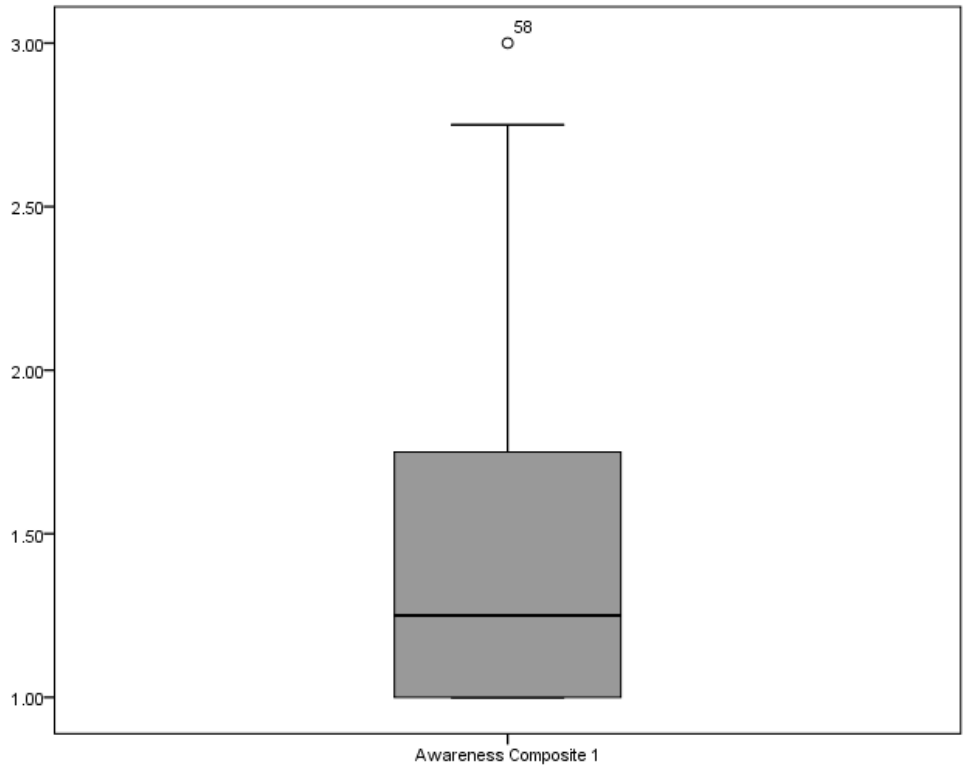
Figure 4.11 shows that there was a presence of abnormality in the data contained in the level of employee awareness on alcoholism and alcohol abuse interventions: Part 1 composite score. The presence of abnormality violated the assumption of normality and it was treated using log transformation.

Outlier Test for Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 1 Composite Score

Figure 12 is a boxplot of the level of employee awareness of alcoholism and alcohol abuse interventions: Part 1 composite score. The boxplot was used to test for outliers in the data.

Figure 4.12:

Boxplot for Employee Awareness Part1 Composite



The boxplot in figure 13 shows that there were outliers in the data, especially towards the upper end of it. The presence of outliers in the data violated the assumption of the absence of outliers and this was cleaned using log transformation.

Descriptive Statistics for Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 2

Table 4.26 shows the descriptive statistics for the level of employee awareness of alcoholism and alcohol abuse interventions: part 2. It shows the means, standard deviations, and maximum and minimum values.

Table 4.26:

Descriptive Statistics for Level of Employee Awareness and Alcohol Abuse Part 2

	N	Min	Max	Mean	Std. Deviation
During the past year how many times have you attended a training/ sensitization on alcohol and drug abuse?	149	1	5	1.29	.607
During the past year, how many times have you received any awareness information, education and communication (IEC) material on alcohol and drug abuse?	149	1	5	1.51	.927

Table 4.26 shows the descriptive statistics for the second part of the employee awareness of alcoholism and alcohol abuse interventions. The table shows that on average, most of the respondents had never attended training or sensitization on alcohol and drug abuse ($\overline{x}$=1.29, σx =.607, N=149), and this was evident in how they responded to the question, "during the past year how many times have you attended a training/ sensitization on alcohol and drug abuse?" The findings suggest strongly that NHIF lags behind and does not often organize training and sensitization programs for their employees to help better their awareness and skills of dealing with alcoholism and alcohol abuse. These findings are contradictory to the findings by Baridi and Okech (2014) which proved that most of government institutions have not advanced their approaches in dealing with alcohol and drug abuse but they are still in the sensitizations levels which involve seminars. The findings suggest strongly that NHIF has not even attained the least level which the government institutions are expected to have reached almost a decade ago. This is an indication that the employees at NHIF are more vulnerable because they have not had the least necessary training to deal with the alcoholism menace.

Regarding the question, "During the past year, how many times have you received any awareness information, education, and communication (IEC) material on alcohol and drug

abuse?" on average most of the respondents reported that they had received awareness information, education, and communication (IEC) material on alcohol and drug abuse once in the previous year ($\bar{x}$=1.51, σx =.927, N=149). The results suggest that NHIF does not regularly and consistently send awareness information, education, and communication (IEC) material on alcohol and drug abuse to the employees. The results are inconsistent with the findings of the study by Richmond et al. (2016) which held that most organizations have interventions used against alcohol and drug abuse and they ensure these interventions are known to the employees in those organizations. Nonetheless, there are various possible reasons why employers in Kenya, unlike in Australia might not openly and aggressively reach out with messages about alcoholism and alcohol abuse interventions to their employees regularly. One possible reason for the difference in approach is cultural norms and attitudes. Alcohol consumption is more culturally accepted in Kenya than it is in Australia. In Kenya, alcohol is often viewed as a social lubricant and is widely consumed at social events and gatherings. As a result, there may be less urgency to address alcoholism and alcohol abuse in the workplace.

Descriptive Statistics for Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 2 Composite Score

Table 4.27 shows the descriptive statistics for the level of employee awareness of alcoholism and alcohol abuse interventions: part 2 composite score. It shows the interquartile, range, skewness, mean, and standard deviation.

Table 4.27:

Descriptive Statistics for Employee Awareness Part 2 Composite

			Statistic	Std. Error
Awareness 2	Composite	Mean	1.3993	.05470
		95% Confidence Interval for Mean Lower Bound	1.2912	

	Upper Bound	1.5074	
5% Trimmed Mean		1.3119	
Median		1.0000	
Variance		.446	
Std. Deviation		.66774	
Minimum		1.00	
Maximum		5.00	
Range		4.00	
Interquartile Range		.75	
Skewness		2.118	.199
Kurtosis		5.846	.395

Table 4.27 shows the descriptive statistics for the level of employee awareness of alcoholism and alcohol abuse interventions: part 2 composite score. It shows that on average most of the respondents had received or seen any form of communication from NHIF improving their awareness of the interventions for alcoholism and alcohol abuse ($\bar{x}$=1.3993, σx =.66774). The table also indicates that most of the respondents are the middle of the sample had not seen any awareness messages (IQR=.75). There was a positive skewness in the data (Skp=.75), indicating that most of the respondents denied having seen any communication about the interventions against alcoholism and alcohol abuse from NHIF in the past one year, indicating “once” and below.

Normality Test for the Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 2 Composite Score

Figure 4.13 shows a histogram for the level of employee awareness on alcoholism and alcohol abuse interventions: part 2 composite score. The histogram was used to test for the normality of the dataset.

Figure 4.13:

Histogram for Employee Awareness Part 2 Composite

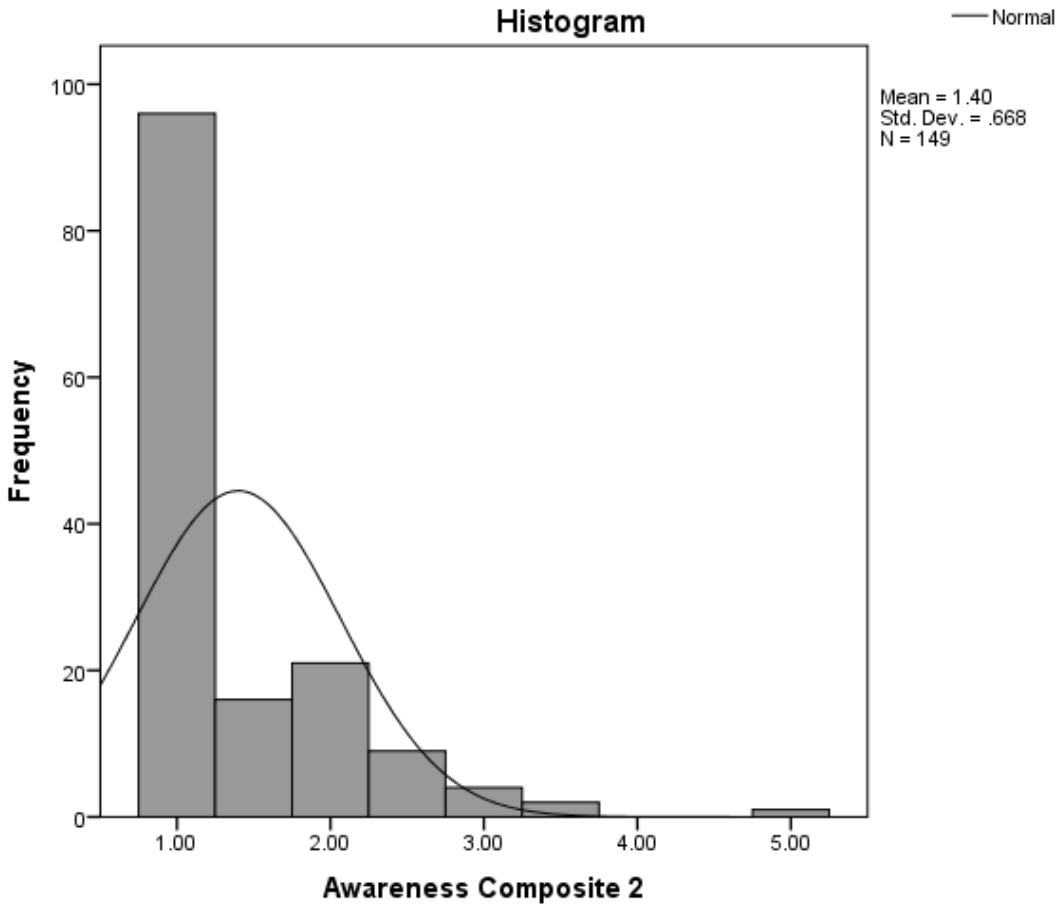


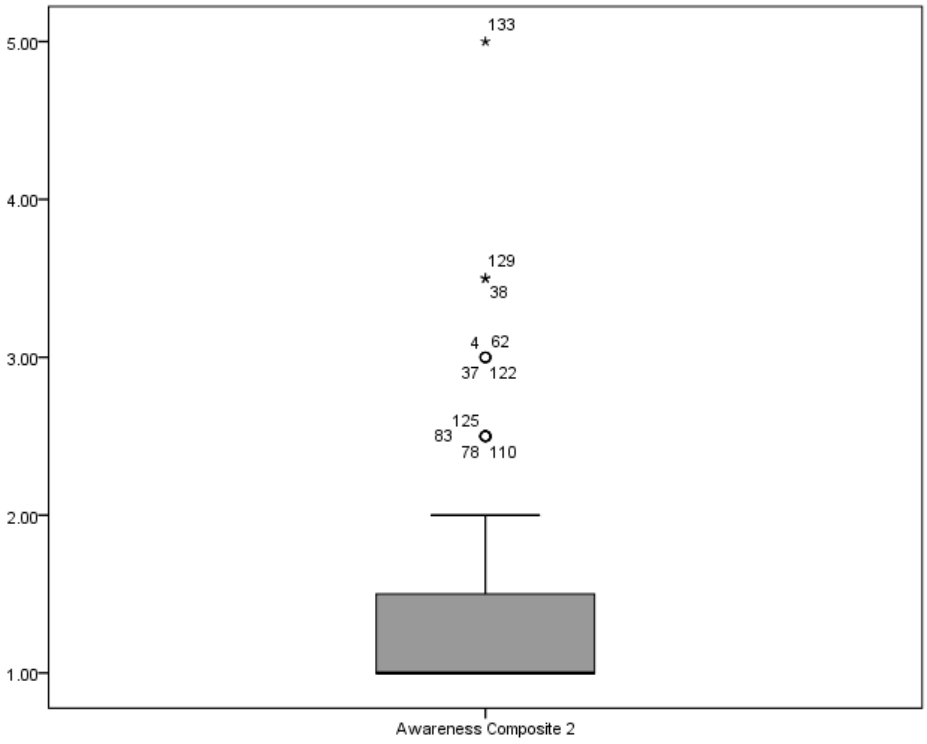
Figure 14 shows that there was a presence of abnormality in the dataset which violated the assumption normality of the dataset. The abnormality was treated using log transformation.

Outlier Test for Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions: Part 2 Composite Score

Figure 4.14 shows a boxplot for the level of employee awareness on alcoholism and alcohol abuse interventions: part 2 composite score. The boxplot was used to test for the presence of outliers in the dataset.

Figure 4.14:

Employee Awareness Part 2 Composite



The boxplot in figure 4.14 shows that there was presence of outliers in the dataset. The presence of outliers violated the assumption of the absence of outliers and it was treated using log-linear transformation before the analysis was done on the dataset.

Effectiveness of the Interventions Put in Place to Mitigate Alcoholism Among NHIF Employees

The last objective of the study was to examine the effectiveness of the interventions put in place to mitigate alcoholism among NHIF employees. This section performs descriptive and moderator analysis to determine how the risk factors moderate the relationship between the interventions against ADA and employee alcoholism.

Descriptive Statistics for the Employee Satisfaction with the Interventions Put in Place to Mitigate Alcoholism among NHIF Employees

Table 28 shows the descriptive statistics for Employee Satisfaction with the Interventions Put in Place to Mitigate Alcoholism among NHIF Employees. It shows the maximum and minimum values, the means, and the standard deviations.

Table 4.28:

Employee Satisfaction with the Interventions Put in Place to Mitigate Alcoholism among NHIF Employees

	N	Min	Max	Mean	Std. Deviation
How would you rate your satisfaction with NHIF in regard to the effectiveness of its alcohol abuse prevention?	149	1	6	3.21	1.259
How would you rate your satisfaction with regard to the early identification of people with alcohol abuse disorders?	149	1	6	3.44	1.467
How would you rate your satisfaction with support for people with alcohol abuse disorders at NHIF?	149	1	6	3.27	1.349
How would you rate your overall satisfaction with the performance of the NHIF regarding its alcohol and abuse prevention program?	149	1	6	3.30	1.393

Table 4.28 shows the descriptive statistics for employee satisfaction with interventions against alcoholism at NHIF. The table shows that on average, regarding the question, "How would you rate your satisfaction with NHIF in regard to the effectiveness of its alcohol abuse prevention?" were satisfied with the effectiveness of NHIF and its efforts in alcohol abuse prevention ($\bar{x}$=3.21, σx =1.259, N=149). The results are contradictory to the results of the findings by Jaguga and Kwobah (2020) who revealed that the intervention approaches in

Kenya are subpar, and they do not have the required standards to handle the needs of the employees with their issues surrounding alcoholism and alcohol abuse. One of the reasons why employees at NHIF might feel satisfied with these programs despite their low standards is because they most likely do not utilize these interventions and thus might not know whether they are effective or not.

Regarding the question, "How would you rate your satisfaction with regard to the early identification of people with alcohol abuse disorders?" on average most of the respondents were satisfied with the ability of NHIF to identify people with alcohol abuse disorder early ($\overline{x}$=3.44, σx =1.467, N=149). The results seem to suggest that NHIF efficiently identifies people with alcohol abuse disorders and provides them with the appropriate help. These suggestions corroborate the study by Richmond et al. (2016) even though there is always a need to determine the effectiveness of the interventions against alcohol and alcohol abuse, one thing is constant, that the earlier the intervention is able to identify the problem of alcoholism among a given group of individuals, the better the chances of dealing with the addiction.

In response to the question, "How would you rate your satisfaction with support for people with alcohol abuse disorders at NHIF?" most of the respondents agreed that they were satisfied with the level of support which NHIF offers to individuals with ($\overline{x}$=3.27, σx =1.349, N=149). This finding is consistent with the findings of the study by Konchellah (2016) who held that different organizations in Kenya have set their foot on the path of ensuring that they effectively intervene in cases where employees are experiencing alcohol and drug abuse disorders. Some of the support comes in terms of informative materials and financial aid when an individual is taken for rehabilitation from alcohol abuse disorders.

Lastly, regarding the question, “How would you rate your overall satisfaction with the performance of the NHIF regarding its alcoholism and alcohol abuse prevention program?” on average most of the respondents reported that they were satisfied with the performance of NHIF when it comes to the efforts that it makes towards the prevention of alcoholism and alcohol abuse ($\bar{x}$=3.30, σx =1.393, N=149). The result suggests that NHIF has put in place various approaches and mechanisms to effectively prevent employees from descending into alcoholism and alcohol abuse. The analysis corroborates the guidelines of NACADA (2020) which advocates for comprehensive intervention programs to mitigate risks of alcoholism and alcohol abuse. These include training of managers and supervisors to enable them identify affected employees for appropriate support. In addition, awareness programs targeting staff on workplace alcohol prevention, stress management among others are recommended. By applying such methods, therefore, NHIF is increasing the rate at which the employees are efficiently kept away from the rapidly increasing menace of alcoholism and alcohol abuse, which is continuously growing in Kenya (Njoroge & Mwenje, 2020).

Descriptive Statistics for the Employee Satisfaction with the Interventions against Alcoholism Composite Score

Table 4.29 shows the descriptive statistics for employee satisfaction with the interventions against alcoholism composite score. It shows the upper and lower bounds, standard, deviation, interquartile range, and maximum and minimum values.

Table 4.29:

Descriptive Statistics for the Employee Satisfaction with the Interventions against Alcoholism Composite Score

			Statistic	Std. Error
Satisfaction with Effectiveness of Interventions Composite Score	Mean		3.3020	.09640
	95% Confidence Interval for Mean	Lower Bound	3.1115	
		Upper Bound	3.4925	
	5% Trimmed Mean		3.2929	
	Median		3.2500	
	Variance		1.385	
	Std. Deviation		1.17666	
	Minimum		1.00	
	Maximum		6.00	
	Range		5.00	
	Interquartile Range		1.50	
	Skewness		.108	.199
	Kurtosis		-.152	.395

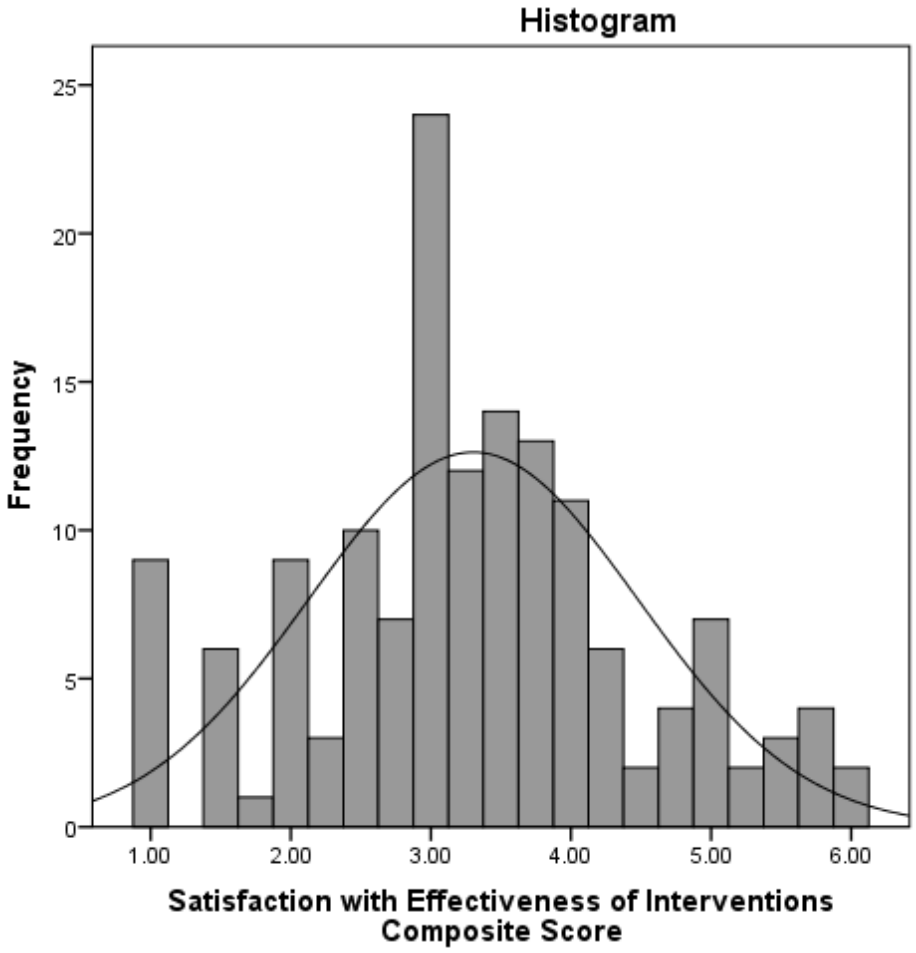
Table 4.29 shows that on average most of the respondents were satisfied with the effectiveness of the interventions put in place to mitigate alcoholism among NHIF employees ($\bar{x}$=3.3020, σx =1.17666). The table also indicates that most of the respondents are the middle of the sample were satisfied with the interventions which NHIF has put against Alcoholism and alcohol abuse (IQR=1.50). There was a positive skewness in the data (Skp=.108), indicating that most of the respondents expressed satisfaction with the interventions against alcoholism and alcohol abuse at NHIF, indicating “satisfied” and above.

Normality Test for Employee Satisfaction with the Interventions against Alcoholism Composite Score

Figure 4.15 shows a histogram of employee satisfaction with the interventions against alcoholism. The histogram was used to tests for abnormality in the dataset.

Figure 4.15:

Histogram of Employee Satisfaction with the Interventions against Alcoholism



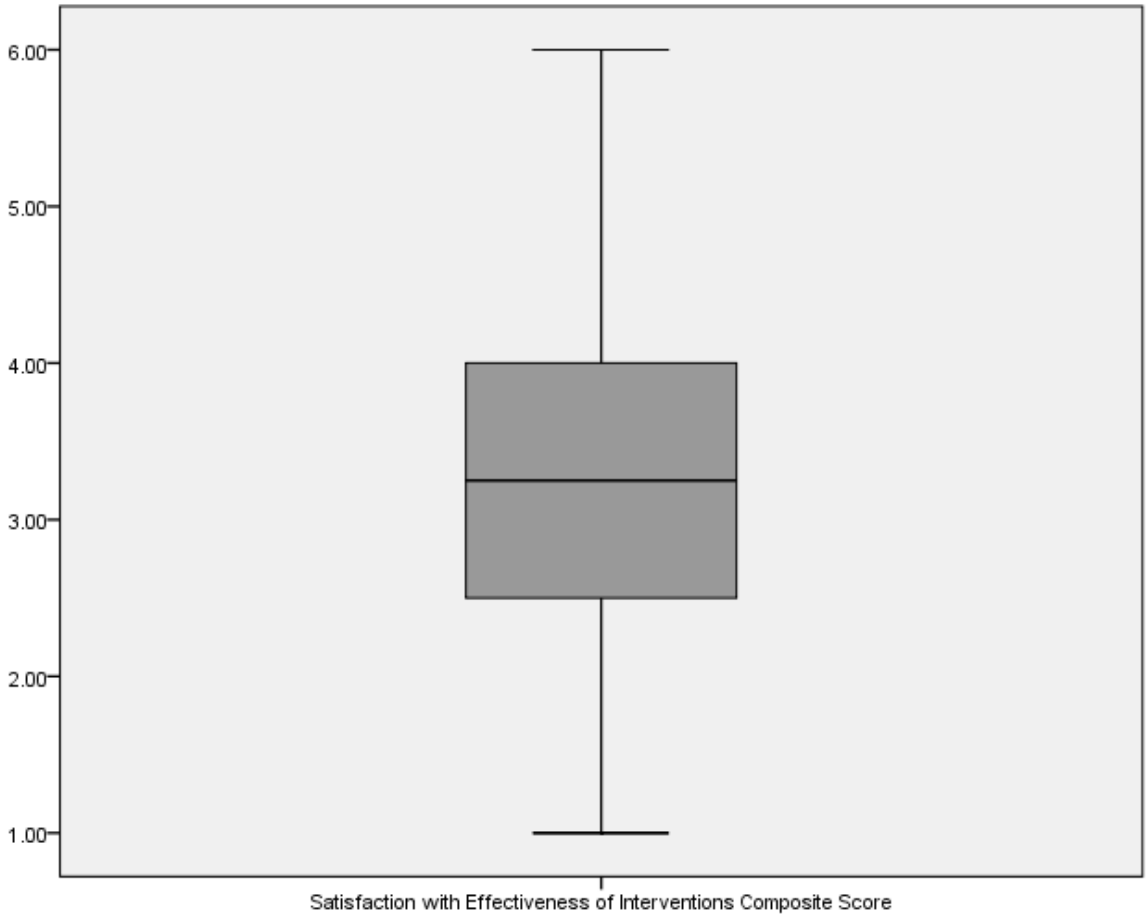
The histogram in figure 4.15 shows that there was no abnormality in the dataset, which did not violate the assumption of the normality of the dataset.

Outlier Test for Employee Satisfaction with the Interventions against Alcoholism Composite Score

Figure 4.16 shows a boxplot for employee satisfaction with the interventions against alcoholism. The boxplot was used to test for the presence of outliers in the dataset.

Figure 4.16:

Boxplot for Employee Satisfaction with the Interventions against Alcoholism



The boxplot in figure 4.16 revealed that there were no outliers in the dataset and thus there was no violation of the assumption of the absence of outliers in the dataset.

Descriptive Statistics for the Effectiveness of the Interventions put in Place to Mitigate Alcoholism among NHIF Employees

Table 30 shows descriptive statistics for the effectiveness of interventions put in place by NHIF to deter alcoholism among its employees. The table shows the effectiveness items, minimum and maximum values, means, and standard deviations.

Table 4.30:

Descriptive Statistics for the Effectiveness of Interventions

	N	Min	Max	Mean	Std. Deviation
How would you rate the effectiveness of workplace counseling and referral programs available in NHIF?	149	1	4	2.25	.846
How would you rate the effectiveness of employee assistance programs (EAPs) in NHIF?	149	1	4	2.32	.857
How would you rate the effectiveness of the workplace alcohol prevention program available at NHIF?	149	1	4	2.12	.846
How would you rate the effectiveness of educational intervention programs available in NHIF?	149	1	4	2.10	.864
How would you rate the effectiveness of treatment for alcohol use programs available in NHIF?	149	1	4	2.36	.831

Table 30 shows that regarding the question, "How would you rate the effectiveness of workplace counseling and referral programs available in NHIF?" on average most of the respondents reported that the workplace counseling and referral programs available at NHIF were slightly effective ($\bar{x}$=2.25, σx =.846, N=149). The results strongly suggest that counseling and referral programs at NHIF are not effective to handle the employees who are at risk of taking up or those who have taken up alcoholism and alcohol abuse and help them cope better. They also suggest that the respondents were not sure whether the counseling and referral services can afford the alcoholic individuals real help when they need it and this vindicates the view by Rono (2014) who, in his research study suggested that further research be conducted on the impact of guidance and counseling programs towards addressing workplace drug and substance abuse. Furthermore, since the respondents are not sure about the effectiveness of the

interventions by the organization to curb alcoholism and alcohol abuse among employees, it portends that the channels for such are not clear to the employees and this can be attributed to the stigma which might be accompanying alcoholism in the Kenyan context.

Regarding the question, “How would you rate the effectiveness of employee assistance programs (EAPs) in NHIF?” on average most of the respondents averred that the EAPs in NHIF are slightly effective in dealing with cases of alcoholism and alcohol abuse among the employees ($\bar{x}$=2.32, σx =.857, N=149). The results suggest that the EAPs are not effective enough to match the needs of the employees regarding matters of intervention against alcoholism and alcohol abuse. The analysis is inconsistent with the findings of the study by Njoroge and Mwenje (2020) which underscored the unique value-adding ability of employee assistance programs in raising awareness levels of traumatic situations and improve preparedness for the same especially because of major emerging workplace issues that managers may be unsure of how to handle on their own. However, EAPs might not be effective due to the stigma which prevents the employees from using them and the underdevelopment by the organization which does not give them ample time to fit many resources and time to help employees with alcoholism and alcohol abuse disorders.

Regarding the question, “How would you rate the effectiveness of the workplace alcohol prevention programs available at NHIF?” on average most of the respondents held that the workplace alcohol prevention programs available at NHIF were only slightly effective ($\bar{x}$=2.12, σx =.846, N=149). These results suggest that the workplace alcohol prevention program available at NHIF are not sufficiently effective to help the employees in their struggles with alcoholism and alcohol abuse. The results are contrary to the finding of the study by Jaguga and Kwobah (2020) which showed that having the prevention methods integrated into

the workplace would help deal well with the cases of alcoholism and alcohol abuse at the workplace. Nonetheless, NHIF might have not integrated the prevention methods correctly at their workplace to help the employees deal with issues of alcoholism, hence the feeling among most of the respondents that these programs are not effective.

Regarding the question, "How would you rate the effectiveness of educational intervention programs available in NHIF?" on average most of the employees commented that the educational intervention programs targeting alcoholism and alcohol addiction at NHIF are slightly effective ($\overline{x}$=2.10, σx =.864, N=149). The results suggest that the educational intervention programs at NHIF are not sufficiently effective to address the issues of alcoholism and alcohol abuse that are faced by the employees at the organization. The analysis is inconsistent with the findings of the study by Gómez-Recasens et al. (2018) which found out that awareness training programs contributed to a reduction of risky alcohol use from 14.7% to 10.6%. This was maintained over a three year monitoring and evaluation period.

Lastly, regarding the question, "How would you rate the effectiveness of treatment for alcohol use programs available in NHIF?" on average most of the respondents held that the treatment for alcohol use programs available at NHIF was slightly effective ($\overline{x}$=2.36, σx =.831, N=149). The analysis portends that alcohol treatment programs available at NHIF are not sufficiently effective in dealing with the challenges of alcoholism and alcohol abuse which some of the employees might face. The analysis is inconsistent with the findings of the study by Njoroge and Mwenje, (2020) which established that the treatment offered to people struggling with alcoholism and alcohol abuse at their workplaces is most likely to be effective because the workplace can take advantage of the long hours that the employees take with them. NHIF might not have integrated the treatment well in a way that can help the staff deal with

the problem of alcoholism and alcohol abuse. Furthermore, another possible reason why these treatment programs are not beneficial to the employees at NHIF is because they are possibly underutilized due to the stigma associated with alcoholism and alcohol abuse within the Kenyan context.

Descriptive Statistics for Effectiveness of the Interventions for Alcoholism Composite Score

Table 4.31 shows the descriptive statistics for the effectiveness the interventions composite score. It shows the interquartile range, mean, standard deviation, skewness and the maximum and minimum values.

Table 4.31:

Descriptive Statistics for Effectiveness of Interventions for Alcoholism Composite Score

			Statistic	Std. Error
Effectiveness of Intervention Composite Score	Mean		2.2303	.06151
	95% Confidence Interval for Mean	Lower Bound	2.1088	
		Upper Bound	2.3519	
	5% Trimmed Mean		2.2092	
	Median		2.2000	
	Variance		.549	
	Std. Deviation		.74062	
	Minimum		1.00	
	Maximum		4.00	
	Range		3.00	
	Interquartile Range		1.00	
	Skewness		.173	.201
	Kurtosis		-.351	.400

Table 4.31 shows the descriptive statistics for the effectiveness of interventions for alcoholism composite score. The table shows that on average, most of the respondents considered the interventions which the NHIF has availed to help employees deal with alcoholism and alcohol abuse to be slightly effective ($\overline{x}$=2.2303, σx =.74062). The table also

indicates that most of the respondents are the middle of the sample commented that the interventions which NHIF has put against alcoholism and alcohol abuse were not effective at all (IQR=1.00). There was a positive skewness in the data (Skp=.173), indicating that most of the respondents expressed ineffectiveness of the interventions against alcoholism and alcohol abuse at NHIF, indicating "slightly effective" and below.

Normality Test for Effectiveness of the Interventions for Alcoholism Composite Score

Figure 4.17 shows a histogram for the effectiveness of the interventions for alcoholism composite score. The histogram was used to test for normality of the dataset.

Figure 4.17:

Histogram for Effectiveness of the Interventions for Alcoholism Composite Score

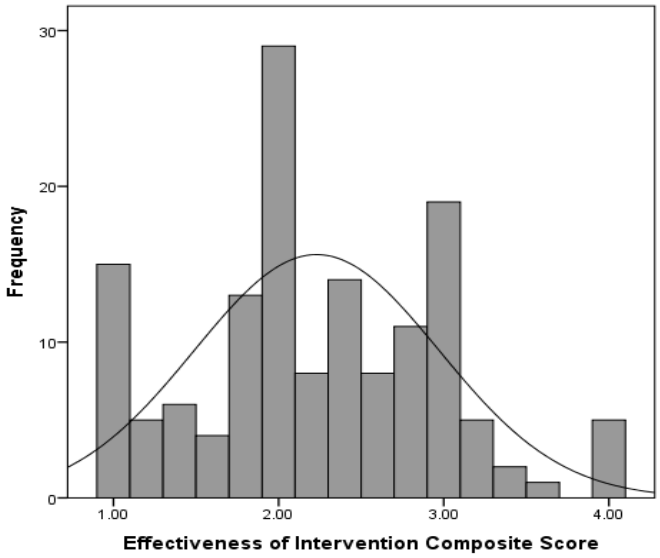


Figure 4.17 is a histogram for effectiveness of the interventions for alcoholism composite score. The histogram revealed that there was not violation of the normality assumption in the dataset.

Outlier Tests for Effectiveness of the Interventions for Alcoholism Composite Score

Figure 4.18 is a histogram of the effectiveness of the interventions for alcoholism composite score. The boxplot was used to test for the presence of outliers in the dataset.

Figure 4.18:

Boxplot for Effectiveness of the Interventions for Alcoholism Composite Score

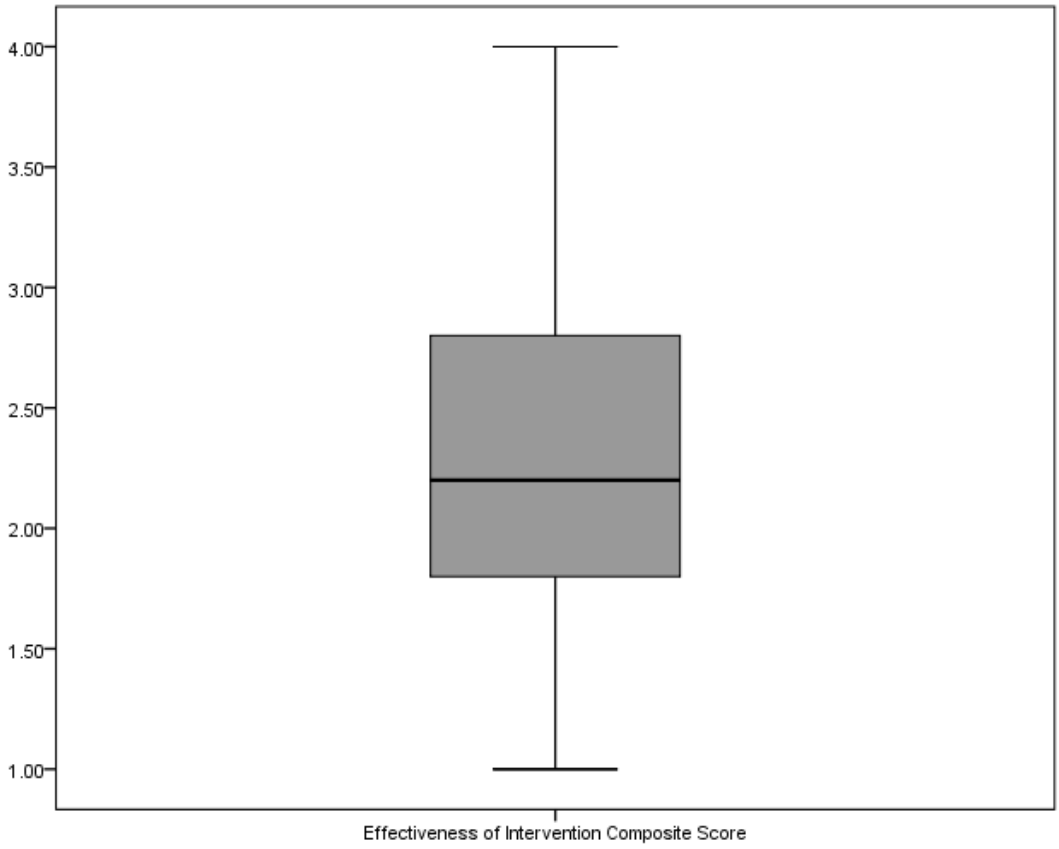


Figure 4.18 shows a boxplot for effectiveness of the interventions for alcoholism composite score. The boxplot revealed that there was no violation of the assumption of the absence of outliers in the dataset.

Regression Analysis of Prevalence of Employee Alcoholism, Alcoholism and Alcohol Abuse Interventions and Risk Factors for Alcoholism and Alcohol Abuse

To determine the relationship between the prevalence of employee alcoholism, intervention for alcoholism and alcohol abuse, and risk factors for employee alcohol and alcohol abuse, a regression analysis was performed on the three variables and the interaction term of risk factors and alcohol abuse interventions. Table 34, table 35, and table 36 shows the model summary, ANOVA output, and regression coefficients respectively, which are the regression analysis of the prevalence of employee alcoholism, intervention for alcoholism and alcohol abuse, and risk factors for employee alcohol and alcohol abuse, and the interaction term.

Table 4.32:

Model Summary for *regression analysis of Prevalence of Employee Alcoholism, Alcoholism and Alcohol Abuse Interventions and Risk Factors for Alcoholism and Alcohol Abuse*

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.085[a]	.007	-.033	.67531

a. Predictors: (Constant), Interaction Term of Intervention and Risk Factors, Risk Factors Composite Scores, Effectiveness of Interventions Composite Score

The model summary in table 4.32, the tables revealed that the risk factors, the effectiveness of interventions, and the interaction term were responsible for 0.7% of the prevalence of employee alcoholism (R^2 = 0.007). The ANOVA output is presented in Table 35.

Table 4.33:

ANOVA Output of regression analysis of Prevalence of Employee Alcoholism, Alcoholism and Alcohol Abuse Interventions and Risk Factors for Alcoholism and Alcohol Abuse

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.243	3	.081	.178	.911[b]
	Residual	33.747	74	.456		
	Total	33.990	77			

a. Dependent Variable: Prevalence of Alcoholism Composite Score

b. Predictors: (Constant), Interaction Term of Intervention and Risk Factors, Risk Factors Composite Scores, Effectiveness of Interventions Composite Score

Table 4.33 indicates that the regression model had no statistically significant explanatory power on prevalence of alcoholism; $F(3)$, $p > .05$. The regression coefficients are displayed in Table 4.34.

Table 4.34:

Regression coefficients for *regression analysis of Prevalence of Employee Alcoholism, Alcoholism and Alcohol Abuse Interventions and Risk Factors for Alcoholism and Alcohol Abuse*

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.021	1.135		.899	.371
	Effectiveness of Interventions Composite Score	.110	.521	.109	.211	.834
	Risk Factors Composite Scores	.094	.301	.126	.312	.756
	Interaction Term of Intervention and Risk Factors	-.020	.135	-.101	-.146	.884

a. Dependent Variable: Prevalence of Alcoholism Composite Score

Table 4.34 reveals that a unit increase of effectiveness of interventions against alcoholism and alcohol abuse led to a .110 change in prevalence of employee alcoholism (B=.110, p>.05). Further examination of the coefficient table revealed that a unit increase in risk factors for alcoholism led to a .094 change in the prevalence of alcoholism among employees (B=.094, p>.05). Lastly, a unit increment in the interaction term led to a .020 decrease in the prevalence of employee alcoholism.

The results suggest that despite the incorporation of alcoholism and alcohol abuse intervention programs at NHIF, they do not affect the prevalence of alcoholism among the employees at the institution. The analysis is inconsistent with the findings of the study by Jaguga and Kwobah (2020) which implied that incorporating such programs at the workplace can reduce the prevalence of alcoholism because the programs take advantage of the longer hours which the employee spends at the workplace. The findings further contradict the findings of the study by Kuwabara et al. (2021) who posited that the ineteverntion mechanisms such as counseling and rehabilitation were very effective in deterring alcoholism and alcohol abuse among employees. Furthermore, since the study has revealed that the employees barely know the programs which the institution is offering for those with alcoholism problems, it would be consistent that they do not find the intervention programs effective.

Chapter Summary

This chapter focused on performing data analysis and presenting and discussing the major findings of the study. The analysis has comprised of both quantitative findings and qualitative results, whereby the qualitative results were used to corroborate the findings from quantitative analysis. The findings have been presented in appropriate figures and tables. In the next chapter, the key findings are summarized, and implications discussed before drawing the final conclusions of the study.

CHAPTER FIVE: SUMMARY, RECOMMENDATIONS AND CONCLUSION

Introduction

This chapter brings the study to a conclusion by giving a summary of the findings of the study, discussing the implications of the findings for theory and practice before making recommendations of the study, and giving conclusions based on the findings of the study. The chapter commences by providing a summary of the key findings in line with the study objectives. The implications of the findings are discussed in light of theory and reviewed literature. Recommendations are then made subsequent to the implications considered. Lastly, the chapter suggests possible areas for future research.

Summary of Key Findings

The Prevalence of Alcoholism among NHIF Employees

The first objective of the study was to assess the prevalence of alcoholism among NHIF employees. Descriptive statistics revealed that 52.35% of the employees at NHIF had ever taken alcoholic drinks and 60.5% of the respondents took their first alcoholic drinks from the age of 19 to 25. Furthermore, 76.8% of the respondents who were involved in taking alcoholic drinks were males. Further examination of alcohol abuse composite score revealed that on average the prevalence of alcoholism and alcohol abuse was low among employees of NHIF, Nairobi, Kenya ($\bar{x}$=1.42488, σx =. 65324).

Risk Factors Contributing to Alcoholism among NHIF Employees

The second objective of the study was to establish the risk factors contributing to alcoholism among NHIF employees. Examination of the risk factors composite score revealed

that on average most of the respondents agreed that the risk factors including personality of individuals, alcohol use expectations, socio-demographic characteristics, workplace alcohol availability and workplace stressors contributed to the use of alcohol among the employees of NHIF ($\bar{x}$=3.5068, σx =.91180). Qualitative analysis of the responses given by the key informants yielded that poor financial management among some of the employees of NHIF, Nairobi, Kenya, was as a result of alcoholism. Some of the respondents agreed that all other risk factors aside, poor financial management is probably a major risk factor for alcoholism and alcohol abuse. Peer pressure was also identified in the qualitative analysis as one of the salient themes. Another theme which was salient in the qualitative analysis of the risk factors for alcoholism and alcohol abuse was stress.

The Level of Employee Awareness of the Alcoholism Interventions at NHIF

The third objective of the study was to determine the level of employee awareness of the alcoholism interventions at NHIF. The descriptive statistics established that on average most of the respondents were not aware of the alcoholism interventions which the institution has put in place to mitigate the vice ($\bar{x}$=1.3943, σx =.44852), and on average, in the previous year they had never seen any materials or attended any trainings to boost their awareness ($\bar{x}$=1.3993, σx =.66774).

Effectiveness of the Interventions Put in Place to Mitigate Alcoholism among NHIF Employees

The last objective of the study was to examine the effectiveness of the interventions put in place to mitigate alcoholism among NHIF employees. Regression analysis revealed that there was insignificant effect of effectiveness of the interventions on the prevalence of

employee alcoholism. Furthermore, on average, most of the respondents believed that the interventions were only slightly effective ($\bar{x}$=2.2303, σx =.74062). Multidimensional intervention strategy was a salient theme in the qualitative analysis of the possible effective interventions which the respondents preferred to be used by NHIF in handling matters alcoholism and alcohol abuse among the employees of the institution. Counseling and rehabilitation were the most salient themes in the qualitative analysis regarding the most fitting interventions which can help reduce the rate of alcoholism and alcohol abuse among the employees of NHIF. The themes were manifested in various subthemes including support groups and treatments.

Discussion

Descriptive analysis of the demographic information of the respondents revealed that males were more into alcoholism and alcohol abuse than their female counterparts. The results corroborated findings that had been undertaken by many previous researchers including Sudhinaraset et al. (2016) who opined that men are more involved in alcohol drinking than women. The study reveals that male employees are more susceptible to alcoholism and alcohol abuse than women. Therefore, employees, organizations, and governments should target men more with intervention programs for alcoholism and alcohol abuse because, in the end, it is them who are the most vulnerable. Targeting them will help identify their drinking early and improve their lives and productivity at their respective workplaces.

Cross-tabulation analysis revealed that there was a trend of prevalence of alcoholism with increase in the level of education among the respondents. Therefore, as the institutions such as NHIF continue to formulate and implement interventions to deal with alcohol and drug abuse among the employees, they should target those with advanced education because the

results of this study portended that they seem more engaged in alcoholism and alcohol abuse. Targeting them will have a positive influence on the rest of the employees who might be swayed to delve into alcoholism because their more learned colleagues are doing it.

Chi-square tests revealed that there was significant association between prevalence of alcoholism and the age of the individuals, $\chi^2(3) = 13.443$, $p < .05$. Therefore, even as the different bodies and institutions such as NHIF and other stakeholders concerned with drug abuse in Kenya such as NACADA make policies and interventions to curb the prevalence of alcoholism and alcohol abuse among the employees in Kenya's public sector, they should consider age because it is a significant factor in the predictor of the prevalence of alcoholism among the respondents.

Lastly, qualitative analysis revealed that apart from other risk factors such as peer pressure and stress, poor financial management was a major risk factor of alcohol abuse among the respondents. This suggests the need for NHIF employees to be trained in the prudence use of their finances, especially surplus cash, instead of using it to consume alcoholic beverages. The companies and remuneration bodies should collaborate to educate the youth, especially the students on how to better manage their finances in ways that bring them value and satisfaction so that when they transition into the workplace, they do not use their finances to indulge in alcoholism and alcohol abuse.

One of the major findings of the study was that men are more vulnerable to alcoholism and alcohol abuse than women. This analysis corroborated the findings which have been posited by researchers like Richmond et al. (2016) who established that even though men are more likely to engage in alcoholism, women are more likely to respond to intervention measures. One theoretical implication of this research finding is that it could lead to a better

understanding of the social and cultural factors that contribute to gender differences in alcohol abuse. For example, it could lead to research on the gendered socialization processes that shape alcohol use and addiction. This could include examining the ways in which societal expectations of masculinity and femininity influence alcohol use and ultimately addiction. Furthermore, this research finding could also have implications for the development of effective prevention and treatment programs for alcohol addiction. It could prompt researchers to develop programs that are tailored to the specific needs of men and women, and which take into account the social and cultural factors that influence gender differences in alcohol abuse.

Even though the cross-tabulation analysis showed that the increase in the level of education increased the level of employee alcoholism among the respondents, the chi-square analysis rebutted the suggestions by showing that there was no statistically significant association between prevalence of alcoholism and employee level of education, $\chi^2(3) = 1.704$, $p > .05$. Further studies should be done to determine whether or not the level of education of an individual especially in Nairobi, Kenya affect their alcoholism or not.

Regression analysis revealed that the interventions put in place at NHIF did not affect the prevalence of alcoholism among the employees in any way. Further studies should be conducted to look deeply into the validity of the intervention tools and programs in the context of the employees of NHIF. Having effective interventions against the alcohol and drug abuse menace in Kenya will help NACADA and the other institutions like NHIF to support their employees who might be entangled in alcoholism.

Recommendations

The following recommendations for practice and further studies were proposed:

Therapists in collaboration with NHIF, NACADA and all other government institutions and NGOs should perform an in-depth study to determine the underlying issues which make men more predisposed to alcohol abuse than women to help create interventions which target men before they succumb to the detrimental effects of alcoholism and alcohol abuse. Furthermore, there was a mixed stand on the issue of whether or not the prevalence of alcoholism is affected by the level of education of the individuals. Therapists, government and other institutions should collaborate to perform an in-depth study to unearth the correlation or lack of it between alcoholism and level of education to help target the predisposed individuals with intervention programs so as to offer early, timely and effective treatments.

The qualitative analysis revealed that poor financial management, peer-pressure and stress are major risk factors contributing to alcoholism and alcohol abuse. While the two other risk factors like stress and peer pressure have been determined by previous literature like NACADA (2018) report, poor financial management stood out in the current study. Therefore, therapists and the government should come up with better strategies on how to educate and train the youth, especially college students in their final year of tertiary education on better ways to manage their finances and avoid excessive consumption of alcohol once they are employed. The National Government should come up with policies which help enhance and entrench awareness among public sector employees on the risks of alcohol abuse. The measures should include recruitment of Marriage and Family Therapists and other counselors to strengthen the existing interventions in order to mitigate the burden of mental health problems and disorders. The National Government should partner with other stakeholders and

come up with strategies to improve the effectiveness of alcohol abuse interventions in the workplace, in both public and private sector organizations. Equally, the National Government should invest more resources in hiring and training more skilled mental health personnel. National and County Governments should jointly promote massive public education and awareness campaigns in the fight against alcohol abuse within and beyond the workplace so as to minimize its negative socio-economic effects.

Areas for Further Research

Descriptive analysis produced mixed signals in relation to employee alcoholism abuse and levels of education. There is, therefore, a need to do further research to determine the various issues relating to the level of education and the extent to which it may be a significant contributor to the prevalence of alcoholism among employees.

Qualitative analysis yielded a corroborative result positing that peer-pressure and work-related and family-related stress are some of the major causes of employee alcoholism. There is need to research the ways in which employee resilience can be developed to help them handle their stress without succumbing to it and resorting to alcoholism and alcohol abuse as a coping mechanism.

Lastly, the study also established that the interventions recommended by NACADA to help deal with employee alcoholism were only slightly effective in dealing with the prevalence of alcoholism which is not significant to produce any effect on employee alcoholism. There is need, therefore, to research further and come up with other intervention programs which will help curb employee alcoholism and alcohol abuse effectively and improve their overall well-being and performance in their organizations.

Conclusion

The main conclusion which can be drawn from this study is that even though a larger percentage (53.5%) of the employees of NHIF are involved in alcoholism and alcohol abuse and most of them are males, the overall prevalence of alcoholism among the respondents was low, the risk factors affected their likelihood of using alcohol and the interventions are slightly effective in addressing employee alcoholism. These findings are significant to counseling, especially marriage and family therapy in that they propose a need for more effective interventions in dealing with alcoholism which is a constantly increasing vice in Kenya. The study has also exposed men as a vulnerable group to target with the interventions of alcoholism and alcohol abuse. Nonetheless, alcoholism is a sophisticated issue which requires a multidimensional approach and effective interventions should not be considered as the only solution to this matter. Therefore, these findings can only be applied as one of the many ways to deal with employee alcoholism at NHIF and in the public sector.

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APPENDICES

Appendix A

Informed Consent Form

Dear Participant,

You are being invited to participate in a study on the effectiveness of interventions against alcoholism in the public sector. The purpose of this study is to evaluate the impact of different interventions on reducing alcohol consumption in public sector employees. The study will focus on the case of National Health Insurance Fund in Nairobi County, Kenya.

The following information is provided to help you understand what participation in this study will involve and to help you make an informed decision about whether or not to participate.

Purpose of the Study:

The purpose of this study is to evaluate the effectiveness of various interventions aimed at reducing alcohol consumption among public sector employees. The results of this study will be used to improve alcohol prevention and treatment programs in the public sector.

Confidentiality:

The confidentiality of your information will be protected to the extent possible by law. Your name will not be linked to your survey responses. The data collected from this study will be kept confidential and will only be used for research purposes.

Risks and Benefits:

There are no known risks associated with participating in this study. However, some participants may find the survey questions about their alcohol consumption to be personal or sensitive. Participants are free to skip any questions that they do not feel comfortable answering. The potential benefits of this study include contributing to the development of effective interventions to reduce alcohol consumption in the public sector and improving the health and well-being of public sector employees.

Participation in this study is voluntary and you are free to choose whether or not to participate. If you choose not to participate, you will not be penalized in any way. You are also free to withdraw from the study at any time without consequences. If you decide to withdraw from the study, simply let the researcher know and your participation will end.

Compensation:

Participants will be compensated with 1GB data equivalent to 1 hour of data for participating in this study.

Contact Information:

If you have any questions about the study, you may contact the researcher at tabitha.mokaya@students.pacuniversity.ac.ke or psychology department of PAC University dept.psychology@pacuniversity.ac.ke

Consent:

By signing this informed consent form, you indicate that you have read and understood the information provided and that you agree to participate in this study. If you have any questions about your rights as a research participant, you may contact PAC University Research Ethics Review Committee at ethicsreview@pacuniversity.ac.ke

Thank you for considering to participate in this study.

Participant's signature: _____ Date: _____

Appendix B

Questionnaire to NHIF Staff

(Adapted from Alcohol Abuse Disorders Identification Assessment guideline developed by the World Health Organisation)

Section A: Demographic Information

(Tick whichever is applicable)

1.What is your gender?

[ ] Male

[ ] Female

2.How old are you?

[ ] Below 25 years

[ ] 25-34 years

[ ] 35-44 years

[ ] 45 years or more

3.What is the highest level of education you have completed?

[ ] Primary level……..……

[ ] Secondary level ……..……..…….

[ ] College level...…….....

[ ] Bachelor's degree level…….……

[ ] Post-graduate level……..

4. What is your marital status?

[ ] Single

[ ] Married

[ ] Separated/ divorced/ widowed

5. How long have you worked in the organization?

   [ ] Below 5 years

   [ ] 5 – 10 years

   [ ] 10 – 15 years

   [ ] 15 – 20 years

   [ ] More than 20 years

6. How would you rate your satisfaction with the working conditions in the organization?

   [ ] Very satisfied

   [ ] Satisfied

   [ ] Not satisfied

7. What is the nature of your employment?

   [ ] Contract

   [ ] Permanent

   [ ] Casual

Section B: Prevalence of alcoholism and alcohol abuse

8. Have you ever taken any alcoholic drink i.e. bottled beer, spirit, traditional brew or illicit liquor?

   [ ] Yes

   [ ] No

   If yes, how old were you when you took your first alcoholic drink…….

9. If you drink alcohol, how frequent do you take alcoholic drink?

   Daily [ ]

4 or more times a week [ ]

2 to 3 times a week [ ]

2 to 4 times a month [ ]

Monthly [ ]

10. How many drinks containing alcohol do you have on a typical day when you are drinking?

1 or 2 [ ]

3 or 4 [ ]

5 or 6 [ ]

7, 8, 9 [ ]

10 or more [ ]

11. How often do you have six or more drinks on one occasion?

Never [ ]

Less than monthly [ ]

Monthly [ ]

Weekly [ ]

Daily or almost daily [ ]

12. How often during the last year have you found that you were not able to stop drinking once you had started?

Never [ ]

Less than monthly [ ]

Monthly [ ]

Weekly [ ]

Daily or almost daily [ ]

13. How often during the last year have you failed to do what was normally expected from you because of drinking?

Never [ ]

Less than monthly [ ]

Monthly [ ]

Weekly [ ]

Daily or almost daily [ ]

14. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

Never [ ]

Less than monthly [ ]

Monthly [ ]

Weekly [ ]

Daily or almost daily [ ]

15. How often during the last year have you had a feeling of guilt or remorse after drinking?

Never [ ]

Less than monthly [ ]

Monthly [ ]

Weekly [ ]

Daily or almost daily [ ]

16. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

Never [ ]

Less than monthly [ ]

Monthly [ ]

Weekly [ ]

Daily or almost daily [ ]

17. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?

No [ ]

Yes, but not in the last year [ ]

Yes, during the last year [ ]

Section C: Risk Factors Contributing To Alcoholism And Alcohol Abuse

18. Please indicate with a tick in the relevant column your agreement on the following statement regarding risk factors contributing to alcoholism and alcohol abuse. Rate on a 5-point scale where: 1- Strongly disagree, 2-Disagree, 3-Neutral, 4- Agree, 5- Strongly agree

Statement	1	2	3	4	5
Personality of individuals contributes to alcoholism and alcohol abuse					
Alcohol use expectations contributes to alcoholism and alcohol abuse					
Workplace alcohol availability contributes to alcoholism and alcohol abuse					
Lack of parental guidance and poor upbringing contributes to alcoholism and alcohol abuse					
Peer pressure school or college contributes to alcoholism and alcohol abuse					

Peer pressure from family member, friend or colleague contributes to alcoholism and alcohol abuse					
A stressful home environment contributes to alcoholism and alcohol abuse					
Workplace pressure and stress contributes to alcoholism and alcohol abuse					
Accessibility and exposure to alcohol contributes to alcoholism and alcohol abuse					

Besides the above listed risk factors contributing to alcoholism and alcohol abuse, which other factors can you identify?

……

……

Section D: The Level of Employee Awareness on Alcoholism and Alcohol Abuse Interventions

19. Are you aware of any activities undertaken in the organization to address alcohol and drug abuse problem at the workplace?

    [ ] Yes

    [ ] No

20. Are you aware of existence of counseling and treatment services for people with substance use disorder/ addiction in the organization?

    [ ] Yes

[ ] No

21. Are you aware of existence of an alcohol and drug abuse workplace policy in the organization?

    [ ] Yes

    [ ] No

22. During the past year, how many times have you attended a training/ sensitization on alcohol and drug abuse?

    [ ] None

    [ ] Once

    [ ] 2 -3 times

    [ ] 4 times or more

    [ ] Frequently

23. In the last one year, have you seen any messages on alcohol and drug abuse within the workplace? E.g. charts, banners etc.

    [ ] Yes

    [ ] No

24. During the past year, how many times have you received any awareness information, education and communication (IEC) material on alcohol and drug abuse?

    [ ] None

    [ ] Once

    [ ] 2 -3 times

    [ ] 4 times or more

    [ ] Frequently

Section E: Effectiveness of Interventions Mitigating Alcoholism and Alcohol Abuse

25. How would you rate your satisfaction with your organization in regard to the effectiveness of its alcohol abuse prevention?

    [ ] Not aware

    [ ] Very satisfied

    [ ] Satisfied

    [ ] Slightly satisfied

    [ ] Dissatisfied

    [ ] Very dissatisfied

26. How would you rate your satisfaction with regard to early identification of people with alcohol abuse use disorders?

    [ ] Not aware

    [ ] Very satisfied

    [ ] Satisfied

    [ ] Slightly satisfied

    [ ] Dissatisfied

    [ ] Very dissatisfied

27. How would you rate your satisfaction with the support for people with alcohol abuse disorders?

    [ ] Not aware

    [ ] Very satisfied

    [ ] Satisfied

    [ ] Slightly satisfied

    [ ] Dissatisfied

    [ ] Very dissatisfied

28. How would you rate your overall satisfaction with the performance of the organization regarding its alcohol and abuse prevention program?

    [ ] Not aware

    [ ] Very satisfied

    [ ] Satisfied

    [ ] Slightly satisfied

    [ ] Dissatisfied

    [ ] Very dissatisfied

29. How would you rate the effectiveness of workplace counselling and referral Programs available in your organization?

    Not effective at all [ ]

    Slightly effective [ ]

    Effective [ ]

    Very effective [ ]

30. How would you rate the effectiveness of employee assistance Programs (EAPs) available in your organization?

    Not effective at all [ ]

    Slightly effective [ ]

    Effective [ ]

    Very effective [ ]

31. How would you rate the effectiveness of workplace alcohol prevention Programs available in your organization?

    Not effective at all [ ]

    Slightly effective [ ]

Effective [ ]

Very effective [ ]

32. How would you rate the effectiveness of educational interventions Programs available in your organization?

Not effective at all [ ]

Slightly effective [ ]

Effective [ ]

Very effective [ ]

33. How would you rate the effectiveness of treatment for alcohol use Programs available in your organization?

Not effective at all [ ]

Slightly effective [ ]

Effective [ ]

Very effective [ ]

Appendix C

In-depth Interview Guide for Management Staff

1. Please introduce yourself
2. Could you please tell me your rank and job position in the organization?
3. To what extent is alcohol and drug abuse a challenge to the organization?
4. What do you think are the risk factors that influence the use of alcohol and drugs of abuse in the organization?
5. Are the employees aware of alcoholism intervention Programs? Do they utilize them?
6. What are the Workplace Alcohol Abuse Interventions put in place in the organization, e.g., prevention, early identification, counselling, referral, treatment and rehabilitation programs in regard to alcoholism? And how effective are they?
7. What are the workplace alcohol prevention programs put in place in your organization and are they effective?
8. What are the education interventions put in place in your organization to prevent employee alcoholism and are they effective?
9. What are the treatment interventions for alcohol abuse put in place in your organization and are they effective?
10. What can you do to support the organization in controlling alcohol abuse at the workplace?

    Thank you for your time and cooperation

Appendix D

Certificate of Ethical Clearance

Certificate of Ethical Clearance

INSTITUTIONAL SCIENTIFIC ETHICSREVIEW COMMITTEE (ISERC)

This Certificate is awarded to

Mokaya, Tabitha Waruguru

For the research titled

EFFECTIVENESS OF INTERVENTIONS AGAINST ALCOHOLISM IN THE PUBLIC SECTOR: THE CASE OF NATIONAL HOSPITAL INSURANCE FUND IN NAIROBI COUNTY, KENYA.

Ref/PAC/ISERC/007/2/23

having complied with PAC University Institutional Scientific Ethics Review Committee's guidelines and Standard Operating Procedures for ethical clearance.

This Certificate is issued subject to compliance with the following requirements:

i. Before commencing the study, you are required to obtain a Research License from the NationalCommission for Science, Technology and Innovation (NACOSTI) as well as other institutional clearances as and where needed.

ii. Only approved documents including research instruments and informed consent forms will beused.

iii. All changes including amendments and/or deviations are to be submitted for review andclearance by PAC University Institutional Scientific Ethics Review Committee before use.

iv. Any expected or unexpected changes that may increase the risks to study participants or affectthe integrity of the study must be reported in writing to PAC University Institutional Scientific Ethics Review Committee within two days.

v. Any request for renewal or approval must be submitted to PAC University Institutional ScientificEthics Review Committee at least four weeks prior to the expiry of this Certificate and must be accompanied by a comprehensive progress report to support the renewal.

Date of issue	27/2/2023	**Expiry date**	27/2/2024

DR.JANE KINUTHIA

Secretary PAC_ISERC

Appendix E

PAC University Research Authorization

1ST MARCH, 2023

PAN AFRICA CHRISTIAN UNIVERSITY
P.O. Box 56875 - 00200
Nairobi, Kenya
Lumumba Drive, Roysambu
off Kamiti Rd, off Thika Rd
Tel: 0734 400694/0721 932050
Email: enquiries@pacuniversity.ac.ke
website: www.pacuniversity.ac.ke

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION & ETHICS CLEARANCE LETTER FOR TABITHA WARUGURU MOKAYA REG. NO: MMFT/7501/16

Greetings! This is an introductory letter for the above named person a final year student at Pan Africa Christian University (PAC University), pursuing the degree of Master of Arts in Marriage and Family Therapy.

She is at the final stage of the programme and is preparing to collect data to enable her finalise on the Thesis. The Thesis title is ***"Effectiveness of Interventions against Alcoholism in The Public Sector: The Case of National Hospital Insurance Fund in Nairobi County, Kenya".***

We kindly request that you allow her obtain a research permit so as to proceed and conduct research at the National Hospital Insurance Fund in Nairobi County, Kenya.

Warm Regards,

PAN AFRICA CHRISTIAN UNIVERSITY
REGISTRAR
P.O. Box 56875 - 00200
TEL: 0721 932050 0734 400694
NAIROBI KENYA

Dr. Lilian Vikiru
Registrar Academic Affairs
Pan Africa Christian University
Lumumba Drive, Roysambu, off Kamiti Rd, off Thika Rd
Tel: +254 730-955306/+254734400694
Email: registrar.aa@pacuniversity.ac.ke
Web: www.pacuniversity.ac.ke

Appendix F

NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 595282

Date of Issue: 08/March/2023

RESEARCH LICENSE

This is to Certify that Ms., TABITHA WARUGURU of Pan Africa Christian University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: EFFECTIVENESS OF INTERVENTIONS AGAINST ALCOHOLISM IN THE PUBLIC SECTOR: THE CASE OF NATIONAL HOSPITAL INSURANCE FUND IN NAIROBI COUNTY, KENYA for the period ending : 08/March/2024.

License No: NACOSTI/P/23/24261

595282

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix G

Permission Letter from NHIF

HF/PUB/13/3/VOL.II/290

15TH MARCH 2023

TABITHA WARUGURU
P.O. BOX 30443 - 00100
NAIROBI

Dear Tabitha,

RE: REQUEST FOR AUTHORITY TO CONDUCT RESEARCH

Reference is made to your letter dated 9th March 2023, in which you sought approval from the management of National Hospital Insurance Fund (NHIF) in order to collect data from Managers and Staff towards undertaking a study entitled "*Effectiveness of Interventions against Alcoholism in the Public Sector: The case of National Hospital Insurance in Nairobi County, Kenya*".

We acknowledge receipt of your request and take note of description of the requirement thereof. We are pleased to inform you that your request has been granted and the authorization is for the duration of the study, with effect from the date of this letter. Further, you are advised to contact the Manager, Research & Policy to facilitate the coordination of the exercise. Upon completion, you will be expected to submit a copy of your research report to the NHIF's Chief Executive Officer's office.

If you need further assistance, do not hesitate to contact the undersigned and we look forward to the study outcome.

Yours Faithfully,

MARY KEMOCHE
FOR: AG. CHIEF EXECUTIVE OFFICER

Appendix H

Study Map