

ASSESSMENT OF THE KNOWLEDGE, ATTITUDES AND PRACTICES OF YOUNG
ADULTS ON ALCOHOL CONSUMPTION AND ITS EFFECTS ON THEIR HEALTH –
WINDHOEK, NAMIBIA.

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE

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Astract

Excessive alcohol consumption has been on the rise globally and Namibia is no exception, thus making the rise thereof and its adverse effects a public health concern. Various studies indicated that excessive alcohol consumption leads to a great deal of health and social consequences. The main purpose of the study was to determine the knowledge, attitudes and practices of young adults on alcohol use and its effects on their health. The study applied a quantitative approach, using a cross-sectional, descriptive and exploratory design to obtain data from 383 participants aged 18 – 30 years. A cluster random sampling method was employed, data was compiled and analysed using SPSS version 25.

Questionnaires were used to determine the knowledge, attitudes and practices relating to alcohol consumption. Descriptive quantitative statistics were used to present the results. The mean age of the respondents was 22.9, ± 40.05 SD. 134 of the respondents (male and female) were from the age of 21 -23 whereby females made up most of the respondents in the study from all age groups with 58.5%.

This study found that most of the respondents had a good knowledge with more than 67.6% describing the awareness and dangers of alcohol (e.g. stomach ulcers, liver damage and increased risk of motor vehicle accidents). Furthermore, 58.7% of respondents agreed that alcohol is a drug, and 87.7% agreed that 10% of road accidents are alcohol-related. Respondents showed inadequate knowledge regarding the term “standard drink” and the recommended number of standard drinks. Overall, respondents had a good attitude and safe practices towards alcohol consumption and its effects on their health. 71.3% of the respondents indicated that their alcohol consumption was enquired during visits to a health facility. This study, therefore, recommends that there is a need to increase knowledge, improve attitudes and maintain practices towards alcohol consumption and its adverse effects among the youth by creating new platforms to increase awareness and intensify alcohol education. This can be achieved by establishing a multisectoral approach between the Ministry of Health and Social Services (MoHSS), Ministry of Education (MoE) and other relevant stakeholders in Namibia.

Key words. Alcohol ,alcohol consumption, young adults, Windhoek, Namibia

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List of abbreviations

AIDS	Acquired Immunodeficiency Syndrome
AUDIT	Alcohol Use Disorder Identification Test
Ca	Cancer
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HPT	Hypertension
IARD	International Alliance for Responsible Drinking
KAP	Knowledge Attitude and Practice
MoE	Ministry of Education
MoHSS	Ministry of Health and Social Services
MRBI	Market Research Bureau of Ireland
MPH	Master of Public Health
MVA	Motor vehicle accidents
NCDs	Non-communicable diseases
NGOs	Non-Government Organizations
NSA	Namibia Statistics Agency
SA	South Africa
SPSS	Statistical Packages for the Social Sciences
UNDP	United Nation Development Programme
WHO	World Health Organization

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To my siblings who shared words of advice and encouragement to finish this study. I also dedicate this work to all my niece and nephews; may this serve as a source of inspiration and an encouragement for hard work.

Declaration

I, Aina Ndapandula Katatu Nghitongo, hereby declare that this study is my work and a true reflection of my research. This work or any part thereof has not been submitted for a degree at any other institution.

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AINA NK NGHITONGO  **DATE** 16 April 2021

CHAPTER 1: INTRODUCTION

1.1. Background of the study

Alcohol is one of today`s major lifestyle-related health determinants. Alcohol-related problems as a result of high alcohol consumption rank amongst the world`s major public health problems (Rehm et al., 2009) The misuse of alcohol has pervasive and potentially detrimental effects on the body (de Bruijn, 2014), in society and the economy at large. However, low public and health policy priority are observed to combat these harmful uses of alcohol in countries (World Health Organization, 2014a). Although consumption rates and effects vary from region to region, consumption rates remain significantly high in some parts of the world. In Europe, consumption of alcohol starts as early as twelve (12) years old and the quantity of consumption (Moore, Rothwell, & Segrott, 2010) has since been on the increase.

Alcohol use and consumption has been in existence for many centuries (World Health Organization, 2014a) and has since been on the increase worldwide (Sherlock & Dooley, 1997). Alcohol is the potentially addictive substance most commonly used by young adults. The World Health Organization (WHO) classified harmful drinking as a global problem, endangering the development of the individual, family and community, causing 3.3 million deaths each year, with different characteristics and damages that go beyond the physical and psychological health of those who drink such as violence, trauma, illegal traffic (World Health Organization, 2018). According to the World Health Organization, 320,000 young people aged 15-29 die from alcohol-related factors, representing 9% in this group in particular. Additionally, the use of alcohol in excessive amounts has many adverse effects on every organ in the human body (/Uiras & /Uirab, 2015). The liver is one of the organs most significantly affected, damaged and physiologically deranged because of alcohol ingestion. However, these harmful effects of alcohol consumption may be determined by the amount of alcohol consumed, pattern and quality/type of alcohol. Previous studies have shown that a correlation between alcohol consumption and the causal relationship of infectious diseases such as HIV exists (Kalichman, Simbayi, Kaufman, Cain, & Jooste, 2007).

The drinking behaviour of the youth is strongly influenced by factors such as their parents as well as peers (Cleveland, Feinberg, & Greenberg 2010). For example, parents who do not

approve of their children's drinking can decrease alcohol use (Kristjansson, et al 2010) Parents can influence the behaviour of children towards alcohol by reducing the availability of alcohol at home as well as by prohibiting alcohol. Peers also strongly influence the use of alcohol by the youth and getting respect from peers when drinking contributes to adolescent alcohol use. The youth tend to have mixed views on drinking peers, whereby they see drinking peers as relatively well adjusted but also as rebellious (Spijkerman, van den Eijnden, Vitale, Engels, 2004). A study done by Jahoda and Cramond (1972) found that young children (under the age of 10) highly disapproved of drunkenness and voiced negative attitudes towards alcohol. Young female drinkers were also judged more harshly than male drinkers (Fosseyk, 1994). A study by Aitken, (1978) found that by the age of fourteen (14), young people's attitudes towards alcohol had changed considerably with many teenagers beginning to express quite favourable views. Teenagers perceive alcohol as a social exchange and despite the harm caused by some levels of alcohol consumption, the consequences are disregarded (Ajzen and Fishbein, 1980).

Namibia is one of the top 10 countries with a high alcohol consumption rate and ranking at number 5 in Africa (World Health Organization, 2014a), and an alcohol use per capita rating at 9.62 litres per year. A report on alcohol consumption levels and patterns in Namibia states that the total alcohol per capita consumption from the age of 15 and above for alcohol drinkers in 2010 stood at 27.7 % (in litres of pure alcohol) for both sexes. Over 900 registered drinking places are found in Windhoek alone (Siiskonen, 1994) thus making alcohol abuse a major problem in Namibia, where an estimated 53.5% of youths aged 13-30 use alcohol (Barth & Hubbard, 2009). These findings further state that 28.4% of youths use alcohol at least once a week and 6.8% daily. These problems reduce life expectancy, lower productivity; require substantial expenditures for health resources and desolate community life (Barth & Hubbard, 2009). Windhoek, the capital city of Namibia had a population of 325 858 inhabitants in 2011 and increased to +/- 400 000 in 2018. Also, the city has a total population of 108 785 young adults between the ages of eighteen (18) and thirty (30) ‘‘Namibia Statistics Agency 2013’’.

According to Rwafa (2015), high numbers of alcohol-related incidences are reported to the police in most residential areas in Windhoek. Noting that Namibia does not have a policy on alcohol consumption, there is great societal damage due to uncontrolled opening hours and

the presence of illegally operating liquor outlets – especially in the informal areas, hence a need to curtail the concern to minimise the negative impacts of alcohol.

1.2. Statement of the problem

The production and trade of alcohol form an important part of Namibia's GDP (UNDP, 1999) and the fact that alcohol is easily and readily available makes it easy for youth to consume alcohol (Lebeau & Yoder, 2009). Over 900 registered drinking places are found in Windhoek alone (Siiskonen, 1994) thus making alcohol abuse a major problem in Namibia, where an estimated 53.5% of youths aged 13-30 use alcohol (MoHSS, 2007; Barth & Hubbard, 2009). These findings further state that 28.4% of youths use alcohol at least once a week and 6.8% daily. Knowledge, attitudes and practices on alcohol use and its effects on health may be known, but there are limited to no documented data found in the Namibian context.

The Namibian Liquor Act, 1998 (Regulations, 2015) regulates aspects of licensing of liquor outlets, age restrictions and type of liquor sold. However, there are limited surveillance activities to record alcohol consumption, harm and its impact on health. It is for this reason that public health policies on alcohol consumption need to be introduced (Rwafa, 2015). There are many reasons why people start drinking, such as to increase self-confidence, escape from personal problems and relieve stress, or overcome a poor self-image, or simply to just get drunk (Berkowitz & Perkins, 1986). The International Alliance for Responsible Drinking (IARD) concurs with consequences of different attitudes towards alcohol use vary, but still do not make it reasonable. Considering that studies indicate that the youth as young as- 13 years consume alcohol, and it is not known whether the adverse effects thereof are known; this may put the future generation in a vulnerable state unless steps are taken to control the contributing factors to alcohol consumption. Alcohol consumption, especially in high amounts, can cause a lot of health problems such as anxiety, depression, gastrointestinal disorders, a risk factor for some types of cancers and can lead to death. van Heerden, 2017 mentions that alcohol consumption in Namibia is a high concern and that there are a few people that are aware of the negative effects of excessive alcohol consumption. In Namibia, high motor vehicle accident-related deaths at a rate of 66.1% have been linked to alcohol consumption, 68% of deaths are due to liver cirrhosis and prevalence of alcohol use disorder at 5.1%, which is above the regional average of 3.3%. These high rates of alcohol consumption contribute to violence, assault and road traffic accidents (The Namibian police, 2013) (Kalunta-Crumpton, Kazembe, & Neema, 2018).

Since no similar study have been documented in Namibia, this study will focus on exploring the knowledge, attitudes and practices of young adults on alcohol use and its effects on their health. This study will, therefore, contribute to filling the gap in the knowledge related to the perception of people towards the use of alcohol in Windhoek, Namibia.

1.3 Objective of the study

This study seeks to assess and describe the knowledge, attitudes and practices towards alcohol use and its effects on their health among young adults age eighteen (18) to thirty (30) in Windhoek. It is hoped that the conclusions drawn from this study will reveal new and important information that will assist in designing various community education campaigns to educate the public on the effects of high-risk alcohol consumption on their health.

1.2.1. Specific objectives

The following are the specific objectives for the study:

1. To assess and determine the knowledge of young adults regarding alcohol use and adverse effects on their health.
2. To assess and describe attitudes towards alcohol use among young adults.
3. To assess and describe behavioural practices toward alcohol use among young adults

1.4 Significance of the study

This study is serving as an alarm blower in creating awareness of risks associated with alcohol abuse and adverse effects among young adults living in Windhoek. The study will additionally provide baseline information that will serve as a health priority and guide in the health care delivery system. The study findings will be available to stakeholders to assist policymakers and help improve programme implementation.

1.5 Definition of key concepts

Alcohol, according to the Centre of Disease Control and Prevention is defined as an organic compound (scientifically named ethanol) which is found naturally in some plants such as corn, potatoes, and wheat.

Alcohol consumption, refers to an act of ingesting-typically orally- a beverage containing ethanol (Collins and Kirouac (2013).

Young adults, these are young people from age 19-30 years (Coomer & Hubbard, 2009).

1.6 Chapter layout

The primary goal of this study was to assess and describe the knowledge, attitudes and practices towards alcohol use and its effects on their health among young adults age eighteen (18) to thirty (30) in Windhoek. This thesis is partitioned into six (6) chapters.

Chapter 1, presented an overview of the research process. An introduction to alcohol consumption among the youth from a global perspective as well as in the Namibian context. Furthermore, the chapter discussed the problem statement, purpose, objectives and significance of this research.

Chapter 2 literature review, examining what other scholars have done on the same or similar topic.

Chapter 3, covers the research design and methodology of this study. The chapter also gives an overview of the instruments used to collect the data, a description of the sampling method and technique and the analysis used.

Chapter 4, presentation of the study findings.

Chapter 5 presents a discussion of the results, similarities, differences and gaps, which are then compared with the literature review.

Chapter 6 gives the conclusions and recommendations of the study. Limitations of the study are described as well.

1.7 Summary

This chapter presented an overview of the alcohol consumption situation in Namibia and worldwide. It provided background information about the knowledge, attitudes and practices of alcohol use among the youth. The research process covering the statement of the problem, purpose, objectives and the significance of the study have been discussed to provide a further overview of the study. Since there is limited to no documented data found in the Namibian context on the knowledge, attitudes and practices of alcohol consumption among the youth, the statement of the problem thus makes it clear that there is a gap and hence need to investigate. The next chapter is on the literature pertinent to the study.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter discusses the issues related to alcohol consumption as a public health concern based on different scholars. The review of literature includes an overview of the prevalence and effects of alcohol consumption, as well as the KAP thereof. The review is also guided by the relevant theories that provide an understanding of the reasons for alcohol consumption among the young adults.

Alcohol is a drug that has some toxic effects on the human mind and almost every organ and system in the human body. Alcohol use and consumption has been in existence for many centuries (WHO, 2014) and has since been on the increase worldwide (Sherlock & Dooley, 1997). However, there are no found reasons as to why people consume alcohol (Freeman & Parry, 2006) although some theories exist that helps understand reasons for the matter mentioned.

2.2. “Why we drink” theories

2.2.1. Social theory

Social theory by Albert Bandura, suggest that all behaviour is learned through observing the actions of others in an environment. His theory further explains that, just because something has been learned, it does not guarantee a behaviour change. Berkowitz & Perkins, (1986) found that reasons, why people start drinking alcohol, are such as to overcome a poor self-image, relieve stress or simply to just get drunk. Negative social consequences e.g. broken homes, unemployment or poverty are some of the contributing factors to poor self-image.

The theory also explains that behaviour does not necessarily result in change, hence some people who consume alcohol and can recognise when a behaviour (e.g. excessive consumption of alcohol) is destructive can change either change their behaviour or environment and others not (Patock-Packham et al.,2001) in (Essays, UK 2018). This theory assumes that learning is based on responses to environmental and social interaction stimuli.

Interactions of personal factors, certain behaviour and the environment are reciprocal. Therefore, decision-making and actions are influenced daily by people in their environment. Additionally, success in life or failure depends on individuals coping strategies, and self-efficacy will increase resistance towards alcohol consumption or addiction. This can be further associated with alcohol consumption among the youth in a way that explains that

people who have a low-esteem level tend to use drinking as a way of escaping reality (Patock-Peckham., et al 2001) in (Essays, UK 2018). Figure 1 below depicts these reciprocal interactions.

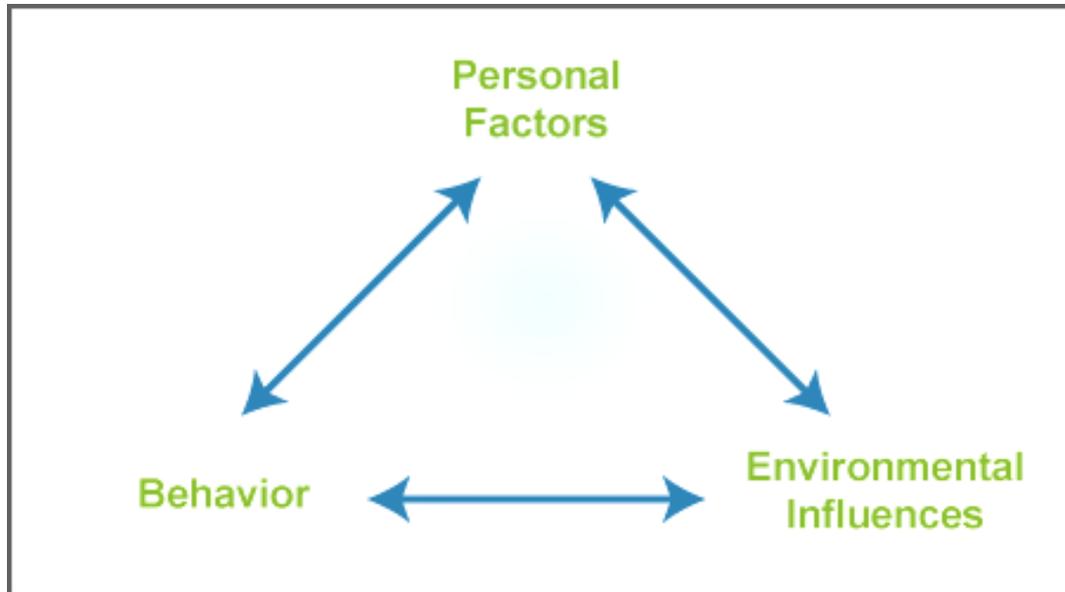


Figure 1: Internal principle of Social Cognitive Learning Theory. (SCLT). Source: *Nabavi (2011 -2012)*

2.2.2. Neurobiological theory

The neurobiological system is a sub-discipline of both biology and neuroscience of which cells are organised into functional circuits that process information and mediate behaviour (Science daily, 2019). Drinking alcohol affects the neurobiological system by generating pleasure in the brain and leads to the desire to continuing receiving such pleasure.

This theory assumes that people become physiologically dependent on the consumption of alcohol because of drinking it. This may, however, result in the need for increasing amounts of alcohol consumption or regular use to feel its effects, despite negative consequences such as health problems and motor vehicle accidents.

2.2.3. Genetic theory

Studies on genetics and alcoholism or alcohol use suggest that relatives of problem drinkers are found to have high rates of alcohol use or abuse (Dick & Foroud, 2015), (Mayfield, Harris, & Schuckit, 2008). However, as much as the theory supports alcohol consumption the amount of alcohol a person can tolerate is highly related to genetics. Developing a tendency

to alcohol consumption although may be genetically passed on, other factors such as social and the environmental surrounding plays a role in leading an individual to consume alcohol. Whereas some individuals never take alcohol despite being genetically predisposed (Mayfield, Harris, & Schuckit, 2008).

2.2.4. Psychological theory

This theory highlights the idea that people consume alcohol to alter their mood by using their emotions, expectations and cognitions. Alteration of moods by individuals may be that one wants to fit into a crowd of peers at a party for example. On numerous occasions, people feel the need to relax after a long or busy day. The theory further outlines that some people consume alcohol to relieve stress when faced with stressful life situations (Grant, Stewart & Mohr, 2009). Literature, however, has not found evidence that proves alcohol consumption and reduction of stress, although a correlation between increased alcohol consumption and increased stress exists.

The theory also explains that behaviour towards alcohol consumption may be linked to the expectations of individuals. For example, an individual may believe to be euphoric after consuming alcohol, especially when feeling emotionally down. Since this individual believes alcohol consumption will restore happiness, they then resort to drinking and this explains the power of expectation in why people consume alcohol.

2.2.5. Behavioural theory

This theory is considered a learning theory based on the idea that all behaviours are learned and occurs due to responses through environmental interactions (Cherry, 2019). Cherry (2019) further mentions that, regardless of genetic background, personality traits or internal thoughts, the response in terms of behaviour towards environmental stimuli only requires the right conditioning.

The theory explains that reasons for alcohol consumption or a dependent thereof happen through a string of behaviours, namely positive attitude, experimental, regular use, heavy use and dependence or abuse. Initially, there should be a positive attitude about alcohol to begin drinking. Teenagers feel the pressure to keep up with their friends to fit in. As an experiment, they may temporary drink to distract themselves from the pressure and worries of life. This however if continued, then develops into regular use of alcohol. As time goes by regular use turns into heavy use. Over time, to feel the same pleasure because of alcohol, dependence or abuse occurs.



Figure 2: The process of becoming dependent on a drug; Behavioural theory. Source: Kring, Johnson and Neale: *Abnormal Psychology*,(2010) 11th Edition.

2.3. Prevalence of alcohol consumption among the youth

Alcohol use being a worldwide problem, not only results in millions of death and diseases but a causal factor to self-inflicted injury and violence as well (World Health Organization, 2004). WHO global status report (2018) states that consumption levels are highest in Europe but African nations suffer the heaviest burden of alcohol-related diseases, injuries and deaths. The report further indicates that from the global population of 15 – 19-year-olds, 26, 5% (155 million adolescents) are current drinkers. In the same study, current drinkers were found to consume an average of 32.8 grams of pure alcohol per day, which is 20% higher (40.0 g/day) in the African Region in comparison to other regions. Globally, there has been an increase in total alcohol per capita consumption (from 5.5 litres of pure alcohol in 2005 to 6.4 litres in 2016).

A survey conducted in American countries, Europe and the Western pacific found that adolescents younger than 15 years were found to be consuming alcohol. The prevalence of alcohol consumption by these 15-year-olds stood at 50 – 70% and a slight difference between boys and girls was observed (World Health Organisation, 2018). Edwards, Marshall, & Cook, (2003) found that extensive research has revealed that a correlation exists between high average consumption of alcohol in a population and incidence of alcohol-related problems. However, (Sherlock & Dooley, 1997) says that not all alcohol abusers develop liver damage. The development of alcoholic cirrhosis in certain people remains unknown. Moreover, liver damage due to alcohol consumption is not related to the type of beverage, but rather due to its content (Sherlock & Dooley, 1997). Therefore, continuous daily intake may be more dangerous than occasional drinking. In a study by (Sommers & Sundararaman, 2007) it has been observed that there is an increase in disability, suicidal incidences, violence and traffic violation among the youth under age 21 who consume alcohol in the United States. The legal age to purchase alcohol is 21; however, it has been found that 20% of alcohol consumed in the U.S is by person's aged 12- 20-year olds. Approximately 5000 young people per annum

age below 21 died as a result of juvenile drinking. The prevalence of alcohol consumption despite having dropped over the years in the U.S, underage drinking remains the prevalent problem than the use of other drugs. In Brazil, 48.3% - 71.4% of adolescents were found to have experienced alcohol use, whereas 27.3% regular users and 8.9% heavy users; despite having a few alcohol prevention programmes in place (Granville-Garcia et al., 2014)

Young adults are more likely to engage in petty crimes and risky behaviours. Alcohol use or abuse mostly tends to be a rising factor in incidences of the aforementioned. (Maciag, 1999) in another study done in the US, cases of criminality and a large portion of AIDS cases are highest reported among young adults, and alcohol-related problems are mostly observed in men (Nolen-Hoeksema, 2004) since woman are found to be drinking less than men. However, both genders may display similar alcohol-related problems.

South Africa (SA) is among the countries from Africa with the highest levels of alcohol consumption in the world, and these levels continue to rise. Initiation of alcohol consumption is from as young as below 13 years old, rating at 12% (Ramsoomar; Morojele, 2012). At 16.6 litres of pure alcohol consumed per drinker per year, 55 billion litres (Seggie, 2012) of alcohol annually in SA, a similar pattern is found in Kazakhstan, Mexico, Russia and Ukraine. The prevalence among the youth age 25 and above stood at 32.8 litres of pure alcohol consumption among males and 19.6 litres of pure alcohol in females. This trend continues to rise. In most developing African countries, high rates of alcohol consumption can be found. Whereas adolescents in Zambia, 40.8% are reported to have consumed alcohol in their lifetime, (Swahn, Ali, Palmier, Sikazwe, & Mayeya, 2011).

Alcohol plays a considerable role in society as it is consumed during special occasions, without thinking of the negative consequences thereof. Although not everyone that consumes alcohol may develop related problems (Sherlock & Dooley, 1997), there are some health benefits (Tampah-Naah& Amoah, 2015) and adverse effects when consumed in excess (/Uiras& /Uirab, 2015; van Heerden, 2017; The Namibian police 2013 in (Kalunta-Crumpton et al., 2018). Heim et al., (2004) mention that besides alcohol use having effects on human health, parental and family relationships and work are disrupted as well. Namibia is one of the top 10 countries with a high alcohol consumption rate and ranking at number 5 in Africa (World Health Organization, 2014a). A report on alcohol consumption levels and patterns in Namibia states that the total alcohol per capita consumption from the age of 15 and above for alcohol drinkers in 2010 stood at 27.7 % (in litres of pure alcohol) for both sexes. There are over 900 registered drinking places found in Windhoek alone (Siiskonen, 1994) thus making

alcohol abuse a major problem in Namibia, where an estimated 53.5% of youths aged 13-30 use alcohol (Barth & Hubbard, 2009). These findings further state that 28.4% of youths use alcohol at least once a week and 6.8% daily. These problems reduce life expectancy, lower productivity; require substantial expenditures for health resources and desolate community life. Despite alcohol burden being a global health problem, there are variations in disease burden between different regions and religions (Babor, 2010).

2.4. Effects of alcohol

The Centre for Disease Control and Prevention, defines alcohol as an organic substance—scientifically named ethanol which is found naturally in some plants such as corn, potatoes, and wheat. Made up of molecular compounds of carbon, hydrogen and oxygen; alcohol is formed when a hydroxyl group is substituted for a hydrogen atom in a hydrocarbon. Ethanol (the type of alcohol used in beverages is derived from fermenting sugar with yeast).

Alcohol remains the main substance abuse in Namibia (World Health Organization, 2014b). Consumption in different amounts has multiple effects on human beings, and every organ of the body can be affected by alcohol (Babor, 2010), (Barclay, Barbour, Stewart, Day, & Gilvary, 2008). These effects may be short-term, long-term, physical or psychological. Although some are not observed immediately, warning signs should not be ignored, as it may be difficult to reverse the complications.

2.4.1. Short-term

Short-term effects associated with alcohol consumption are mostly depending on the amount of alcohol consumed. Slurred speech, lack of coordination, unintentional self-harm, vomiting and driving under the influence of alcohol are some of the short-term effects. Amongst other effects, these can cause extensive harm besides to oneself; there is a direct impact on family, friends and colleagues.

Comprehensive data on alcohol use and problems in Namibia is evident in suggesting that alcohol use is a widespread phenomenon. According to (World Health Organization, 2014b), a survey conducted in Namibia. Questions based on the Alcohol Use Disorder Identification Test (AUDIT) referring to alcohol-related problems; found that nearly half of the male respondents and one-fourth of the female reported having experienced one of the life problems caused by alcohol such as getting injured, breaking up with friends or spouse.

2.4.2. Long-term

Individuals who consume alcohol for a long-term or prolonged period (Babor, 2010) are at risk of developing long-term effects of alcohol. These may include cardiovascular diseases, liver disease, cancers, and nerve damage. The liver is one of the organs most significantly affected, damaged and physically deranged as a result of prolonged use of alcohol (Barclay et al., 2008). Alcohol consumption is the main cause of liver disease in the world; and is responsible for fatty liver, alcoholic hepatitis and cirrhosis (O'Shea, Srinivasan, & Arthur 2010). The severity of liver damage, however, depends on the frequency, strength and dosage of alcohol consumed by an individual, mere consumption does not predispose one to health or social consequences (Tampah-Naah & Amoah, 2015a).

2.4.3. Physical effects

Alcohol consumption and abuse thereof has been linked to physical effects such as domestic violence, injuries related to aggressive behaviour and sexual assault (Ramsay et al., 2012). (Barclay et al., 2008) also mentions that alcohol use is responsible for a considerable amount of effects such as an impaired judgement or dysfunctional behaviour that may lead to impaired interpersonal relationships. Other physical effects that may result from alcohol even in small amounts of consumption (Granville-Garcia, AF; Clementino,MA; Gomes,M; Firmino,RT; Ribeiro,G and Siqueiro,MB 2014) are such as weight gain, increased suicide rates, juvenile delinquency, familial conflicts, increase motor vehicle accidents as a result of drink and driving cases as well as illicit drug use.

2.4.4. Psychological effects

Psychological effects due to alcohol use are determined by the impact on the human brain. The quantity, frequency of consumption, age at which a person begins drinking and how long they continue to drink negatively affects the psychological wellbeing of human. Difficulty focusing, problems with memory, poor or diminished vision and coordination, depression, increase substance uses are some of the results caused by alcohol consumption and increase thereof.

2.5. Knowledge of alcohol use among the youth

Young adults are the future of any nation. With alcohol consumption on the rise globally and its effects significantly evident, young adults are a vital group at which health promotion

strategies are targeted and hence important in determining their knowledge with regards to alcohol consumption.

In a survey conducted in India, China, and Pakistan on alcohol consumption and perception of community responses and attitudes of young people; it was found that religion for one was a predictor for alcohol consumption among the youth. In China, although awareness of alcohol consumption and its effects are made available, alcohol use is not identified as a major public concern (Heim et al., 2004). However, communities in Pakistan ignore or hide aftermath problems from alcohol use and abuse while in India some respondents revealed that several community members had no understanding of alcohol use effects on health.

(Bivol, 2011) observed that age 15 – 24 Moldovan youth consume alcohol, and they do not seem to see a problem with excessive alcohol consumption. This shows that there is low awareness of alcohol use among the youth. Contrary,(Odeyemi, Odeyemi, & Olatona, 2014a) mentions that awareness of alcohol consumption and its effects are known among the youth aged 16 – 30 although some gaps in knowledge exist among some people.

A Nigerian KAP based study on alcohol consumption among medical students revealed that a considerable number (83.3%), the majority of respondents in the study had good knowledge about alcohol. Despite the majority having good knowledge of alcohol, some respondents described alcohol as a stimulant, good for the body and a painkiller. This suggests that there is a need for education to combat alcohol use among the youth. However, a high percentage of respondents reported knowing harmful effects of alcohol such as liver cirrhosis, a risk factor for cancer and 40.4% responded that, regardless of what amount of alcohol is consumed; alcohol remains dangerous to one's life.

Alcohol is widely available in our societies and exposure to young adults is expected to be high. However, their knowledge of the effects thereof may differ based on gender or educational level. The amount of alcohol consumed by young adults may be associated with their level of education although the same cannot be linked to the behavioural outcome. As reported by (Odeyemi, Odeyemi, & Olatona, 2014b), they found an association between the amount of alcohol consumption and the level of education among participants. However, despite senior students displaying better knowledge of alcohol, the highest prevalence of consumption was amongst them. Meanwhile in a study conducted in Zambia. on alcohol marketing,drunkness, and problem drinking among Zambian youth,found that regardless of

alcohol education provided, there was no significant factor related to drunkenness (Swahn et al., 2011).

2.6. Attitudes towards alcohol consumption

Influence from peers plays a role in the attitude of young adults and alcohol consumption. The study conducted in Nigeria on alcohol knowledge and consumption among medical students in Lagos, found that students who consume alcohol had friends who drink as well. While of those that consume alcohol for fun or on an occasional basis, some did so to make self-feel bold and better when depressed (Odeyemi et al., 2014b). Related to the study in Nigeria, another study also indicate that environmental and social factors influence the commencement of alcohol consumption by young adults (Malčić & Kudumija Slijepčević, 2015).

Having a positive or negative attitude towards alcohol or alcohol consumption can determine the behavioural aspects thereof. This can be linked to a study conducted among nursing and mechatronics students. The study found that nursing students showed a much lower interest in alcohol consumption than the mechatronics students did. Mechatronics students, however, were reported to be behaving irresponsibly while consuming alcohol, although displaying a positive attitude towards alcohol / or alcoholics. The study further explains that differences in knowledge with relations to the student's respective fields of study contribute to their behaviour towards alcohol consumption (Malčić & Kudumija Slijepčević, 2015).

2.7. Practices towards alcohol consumption

Effects of alcohol, although known by a percentage of young adults misconceptions are playing a role and affecting alcohol practices. Low-esteem levels play a role in the practices of alcohol consumption. Some studies indicated that some individuals view and describe alcohol as a stimulant, depressant, or painkiller (Odeyemi et al., 2014b). People then use alcohol as a way of escaping reality (Patock-Packham et al., 2001) (Essays, UK 2018). Men have been identified to consume alcohol as a coping response, increase confidence and cope with social demands (Tampah-Naah & Amoah, 2015b). Whereas the same study found that women do so for socializing pleasure with peers.

Another report found that young adults consume alcohol to have fun and escape from stress. This leads to risky sexual behaviours in society among peers and significant others.

Regardless of these young adults knowing the risks associated with alcohol, “they appear to be unable to stop the practice of alcohol use”(Kafuko & Bukuluki, 2008).

Exposure to alcohol marketing through media has been found to affect alcohol consumption practices. In a *Zambian study*, the marketing strategy of providing free alcohol to the youth was found to have a significant influence on the drinking behaviour and alcohol-related problems among the youth (Swahn et al., 2011). Similarly, the marketing of alcohol has been associated with early initiation and higher alcohol consumption among the youth (Jernigan, Noel, Landon, Thornton, & Lobstein, 2017). Contrary, IARD argues that banning alcohol advertisement as evidence in reducing NDCs or harmful use of alcohol is inefficient and does not make a compelling case that advertisement leads to harmful drinking. The ready availability of alcohol plays a significant role in the consumption of alcohol among male and female young adults. This can concur with a study done in *Namibia* that found more than half of the respondents mentioning that alcohol was easily accessible in society (Legal Assistance Centre, 2008).

2.8. Summary

The researcher did not find any literature based on the knowledge, attitudes and practices towards alcohol consumption and its effects on health in the *Namibian context*.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the research methodology used to conduct this study. It covers an overview of areas that are needed to be considered when undertaking research and explains research methods used as well as the rationale for choosing the methodology. The following are defined: research design, study population, sampling, research instruments, data collection, validity, reliability, data analysis and research ethics.

3.2. Research methods and design

The study applied a quantitative approach, using a cross-sectional descriptive design. The chosen design is appropriate because the collection of data was done at one point in time in a specified population (De Vos, Strydom, Fouche, & Delpont, 2011) to assess the knowledge, attitudes and practices of young adults concerning alcohol use and its effects on their health.

3.2.1. Population

A study population is the total number of individuals with similar characteristics with which the research problem is concerned (De Vos, Strydom, Fouche, & Delpont, 2011). However, due to large populations, researchers often cannot test every individual in the population, hence sampling techniques are used.

According to the ‘‘Namibia Statistics Agency 2013’’, the total population of young adults age 18 to 30 years in Windhoek is 108785 with an annual growth of 3.9% for 2018.

Suburbs in Windhoek comprises of: Goreangab, Pionerspark, Eros, Hakahana, Khomasdal, Olympia, Havana, Academia, Ausblick, Cimbebasia, Dorado Park, Hochland Park, Kleine Kuppe, Klein Windhoek, Lafrenz Industrial Area, Okuryangava, Otjomuise, Prosperita, Rocky Crest, Wanaheda, Windhoek (west and north), Brakwater, and Katutura.

This study targeted both male and female in the age group eighteen (18) to thirty (30) years and was conducted in 12 randomly selected suburbs in Windhoek, namely: Academia, Dorado Park, Goreangab, Hakahana, Havana, Hochland Park, Rocky Crest, Khomasdal, Olympia, Otjomuise, Windhoek Central and Pionerspark.

3.2.2. Inclusion criteria

- The study included young adults between the age of 18 and 30 in Windhoek, who were eligible and willing to participate in the study and regardless of whether they consume alcohol or not.

3.2.3. Exclusion criteria

- The study excluded people younger than 18 years and those older than 30 years. Any other eligible person who refused to give their consent. According to the National policy for reproductive health (Coomer and Hubbard) persons from the age of 19 – 30 are considered as the youth, hence those below and above selected age arrange are omitted.

3.3. Sample

Given that financial resources and time was a limitation, sampling was the most feasible way of studying large populations. Sampling is defined as a practical way of collecting data from a smaller portion of the population, which is representative, or having similar characteristics to the defined total population (De Vos, Strydom, Fouche & Delpont, 2011). A sample is a subset of the population, which is considered for the actual study (Creswell, 2009).

3.4. Sample size and methods

Using the Raosoft sample size calculator (Sample size calculator,2004), the sample size for the study was calculated based on the following assumptions: 50% response distribution, 5% margin of error, 95% confidence interval and the total population of young adults age 18 – 30 = 108 785. The response rate is 50% based on the idea that the response rate is unknown and a significance level at 5% was assumed.

The sample size (n) was calculated according to the formula:

$$n = \left(Z^2 * \frac{P(1 - P)}{e^2} \right) / 1 + \left(Z^2 * \frac{P(1 - P)}{e^2 N} \right)$$

Where: Z= 1.96 for a confidence level (α) of 95%, p = proportion (expressed as a decimal), N = population size, e = margin of error.

Z = 1.96, p = 0.5, N = 108785, e = 0.05

$$n = ((1.96^2 \times 0.5(1 - 0.5) \div 0.05^2)) / ((1 + ((1.96^2 \times 0.5 (1-0.5) \div 0.05^2 \times 108785)))$$

$$n = 384.16 / 1.0035 = 382.808$$

$$n = 383$$

A cluster random sampling method was used to select suburbs from which study participants were selected. There are 23 suburbs in Windhoek, those were the clusters. It is estimated that there are 4729 young adults per cluster; which was calculated by dividing the number of clusters from the total population of young adults in Windhoek. To get the number of clusters needed for the study, the estimated sample size was divided from the estimated number of members per suburbs $4729/383=12$. These 12 suburbs were selected randomly. Population members included in the study were obtained using the two-stage method where only some units from a selected cluster were chosen using simple random sampling (32 participants from each of the 12 clusters). Based on the total population of young adults aged 18 – 30 (4727), obtaining the number of participants per cluster was then calculated by dividing the total sample size by the number of randomly selected suburbs ($383/12=32$).

The study concentrated on the knowledge, attitudes and practices of alcohol use and not necessarily on those that use alcohol.

3.5. Research instruments

A structured questionnaire containing closed-ended questions was constructed in English and translated in Afrikaans, and Oshiwambo (on assumption that these are the most spoken and understood languages in Windhoek) and used as the method of data collection through an interview. The questionnaire is divided into two sections as follow:

- Section A consisting of demographic information
- Section B captured the knowledge, attitudes and practices towards alcohol use and its effects on the health of young adults.

The questionnaire was developed based on the Health research board of Irish in collaboration with Ipsos MRBI public knowledge, attitude and behaviour towards alcohol combined with a review of literature from similar studies.

3.5.1 Validity

Content validity was assured by modifying the questionnaire (the questionnaire had ‘ID’ of participants which was removed and the definition of ‘Standard drink’ explained with

examples. As a result from pre-testing the data collection tool to ensure that the content of the questionnaire covers the variables it was designed to measure.

3.5.2 Reliability

Participants were briefed on what the study is about before answering the questions. Accuracy of results was ensured by the supervision of the data collection process. Additionally, the reliability of the questionnaire was assured by designing a closed-ended questionnaire through an interview guide to minimise errors and ensure accuracy.

3.6. Pretesting of the data collection tool

The questionnaire was pretested among 32 participants from a different suburb that was not included in the study. Participants who met the inclusion criteria were questioned. The aim of pre-testing the data collection tool was to identify any relevance and acceptability of the questions and to ensure the validity and reliability of the data before the onset of the data collection process.

Thereafter, the questionnaire was modified and updated for the final data collection process. Changes made were; “ID” was removed from the questionnaire, and the term “Standard drink” was made clear and explained with examples (question 8).

3.7 Procedure

Participants were randomly selected from the randomly selected suburbs. This was done by going to shopping centres, schools, tertiary institutions and gathering places in the selected suburbs. The first participant was selected randomly. Subsequently, participants from each suburb were then selected systematically by selecting every 3rd person in every direction the researcher came across with and that met the criteria for the study until the total number of 32 participants per suburb were met. The purpose of the study was explained to sampled persons partaking in the study by the researcher self. The assurance concerning confidentiality, rights to opt-out of the study was also made. After explanations, the researcher-interviewed respondents using the constructed questionnaire (procedure took about 15 – 20 minutes). The whole process was closely supervised by the researcher to make sure if participants needed any clarification for any question. Interviews provide the researcher with an opportunity to clarify or explain any items that any be unclear to respondents. Response rates from interviews tend to be higher than mailed questioners

(Babbie 2010). The researcher made time during off days from work to go and collect data which took six (6) weeks.

3.8. Data analysis

Data was exported to Microsoft Excel for cleaning and coding i.e. categorical and numerical data. Data analysis was done using the software Statistical Packages for the Social Sciences (SPSS) version 25. Descriptive quantitative statistics were used to analyse and represent demographic information, e.g. age and sex. Results were summarised and presented in frequencies and percentages for categorical variables, means, median and standard deviation for numerical variables, which showed how many participants fell into each category and converted into graphs using Ms excel to show a visual presentation of data.

Questions on knowledge and attitude were given scores. Scores on each question were awarded as follow: 1 for yes and 0 for no and don't know answers. Participants who obtained 5 and above out of 10 were regarded as having sufficient knowledge and those scoring less than 5 inadequate knowledge.

A Likert scale was also used scaled on 5 points and totalling 15 marks. Participants who had obtained 7 and above were regarded as having adequate knowledge and those who obtained less than 7 with inadequate knowledge. Responses for questions based on practices were calculated using frequencies and percentages. Figures were created using Ms Excel.

3.9 Research ethics

Approval to conduct the study was obtained from the University of Namibia and the Ministry of Health and Social Services. Ethical clearance was sought from the School of Public health.

The following ethical considerations were observed:

Principle of justice: Participants were selected randomly, giving each individual an equal and fair chance to be part of the study. The researcher did not use any form of coercion, incentives or bribery to lure participants.

Anonymity and respect for the participant: Questionnaires were based on anonymity, did not require any identity and cannot be traced back to the participant. An informed consent stated that the study is voluntary, participants were not forced to partake against their wish, and they had the right to withdraw from the study at any point.

Principle of beneficence and non-maleficence: The study constitutes non-experimental research, hence no predictable harm or discomfort was inflicted on the participants. Efforts to minimise discomfort by protecting participants' privacy and ensuring anonymity were made.

Informed consent: An informed consent was presented to participants before the study; any clarity concerning the study was done before participating in the study.

Confidentiality: All data obtained from this research is kept confidential and only intended for this study, findings will not be linked to any participants. The information provided by the participant is not available to any third parties either than to the researcher and supervisors.

3.10 Summary

This chapter discussed the research methodology and design used to explore the knowledge, attitudes and practices of young adults on alcohol consumption and its effects on their health. The discussion focused on the population of the study, sampling, research instruments, data collection procedure and the ethical principles that guided the researcher. The next chapter presents the findings from the research.

CHAPTER 4: DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

4.1 Introduction

The previous chapter emphasised the study methodology. This chapter will focus on data analysis, results and findings obtained from the study. Data analysis was done using SPSS version 25, and three hundred and eighty-three (383) participants were interviewed. Results of this study are presented under sociodemographic characteristics, knowledge levels (adequate and inadequate), attitude (good and negative) and practices on alcohol use and its effects on health. Illustrations are done using tables and graphs.

4.2 Sociodemographic characteristics of the study respondents

Sociodemographic characteristics refer to those unique attributes of the respondents, which distinguish them into different sets of categories. In this study, however, the results about demographic characteristics including but not limited to the following presented in Table 1 on the following page.

Female respondents were more than 50%, (53.3%) and males made up 46.7% of the respondents. The mean age of participants was 22.9, ± 40.05 SD.

Most respondents were age group 21- 23 (134) and 11.2% age group 24-26 being the lowest represented among the age groups under study. There was an equal number of participants (32 participants) per suburb (11 suburbs) with one suburb having 31 participants. Out of a total of 383 participants, 110 (28.7%) are unemployed regardless of education levels showing 51.2% of participants having acquired secondary education, 48.0% with tertiary education.

TABLE 1: SOCIODEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Age group (years)	Number of respondents	Percentage
18 - 20	118	30.8
21 - 23	134	35
24 - 26	43	11.2
27 - 30	88	23
Total	383	100
Highest level of education		
Have never been to school	3	0.8
Primary school	0	0
Secondary school	196	51.2
Tertiary	184	48
Total	383	100
Occupational status		
Unemployed	110	28.7
Self-employed	24	6.3
Employed	66	17.2
Student	183	47.8
Total	383	100

4.3 Knowledge of alcohol and its effects on health

Respondents' knowledge about the effects of alcohol on health was tested with a variety of questions that determined the understanding of alcohol and its effects on health. The findings revealed that there were participants who were not aware of the dangers that alcohol may cause. Most prominent was that 259 participants had responded to being aware of any danger that alcohol may have on health. As illustrated in Table 2, the majority of respondents were aware of the dangers that alcohol has on health as well as reducing the chances of becoming affected.

TABLE 2: AWARENESS OF THE DANGERS OF ALCOHOL ON HEALTH

Probing responses	Frequency (N)	Percentage (%)
Yes	259	67.6
No	26	6.8
Don't know	98	25.6
TOTAL	383	100

4.3.1. Some of the known dangers of alcohol on health and means of reducing danger effects caused by alcohol consumption

Following an assessment of respondents' awareness of the dangers that alcohol has on health, respondents were asked to name some of these dangers known to them. The findings revealed some of the health dangers caused by alcohol consumption. The most prominent, with 39% was liver damage and 1% of respondents indicated their awareness on alcohol consumption might cause gastritis. Table 3 below shows these responses.

Although the dangers of alcohol on health may be known, the study further assessed whether respondents knew any means of reducing the chances of alcohol effect on health. More than 65% responded to having awareness of reduction measures.

TABLE 3: DANGERS OF ALCOHOL ON HEALTH

Dangers of alcohol on health	Percentage (%)
Stomach ulcer	7.0
Gastritis	1.0
Liver damage	39.0
Cancer	3.0
HPT	3.5
Mental illness	3.5
Slow response of the nervous system	13.0
Brain damage	12.0
Total	100
Awareness reducing chances of alcohol effects	Percentage (%)
Yes	65
No	14.4
Don't know	20.6
TOTAL	100

Ways of reducing these effects were mentioned as follow: limiting alcohol intake, consume less or abstain from alcohol. Advice peers to stop drinking alcohol and keep track of drinking habits. Consume non-alcoholic drinks, avoid bad company (friends), raise awareness on dangers of alcohol and seek help if cannot stop consuming alcoholic drinks were the means reported by respondents to reduce the adverse effects from alcohol consumption.

4.3.2 Exploring Knowledge of young adults on alcohol consumption and its effect on their health

Figure 3 below shows that 39.4% (151) of the respondents strongly agree with the statement, 33.4% (128) Agree, 7.6% (29) neither agree nor disagree and another 19.3% (74) do not know. The category strongly disagrees recorded 0 percentage (0).

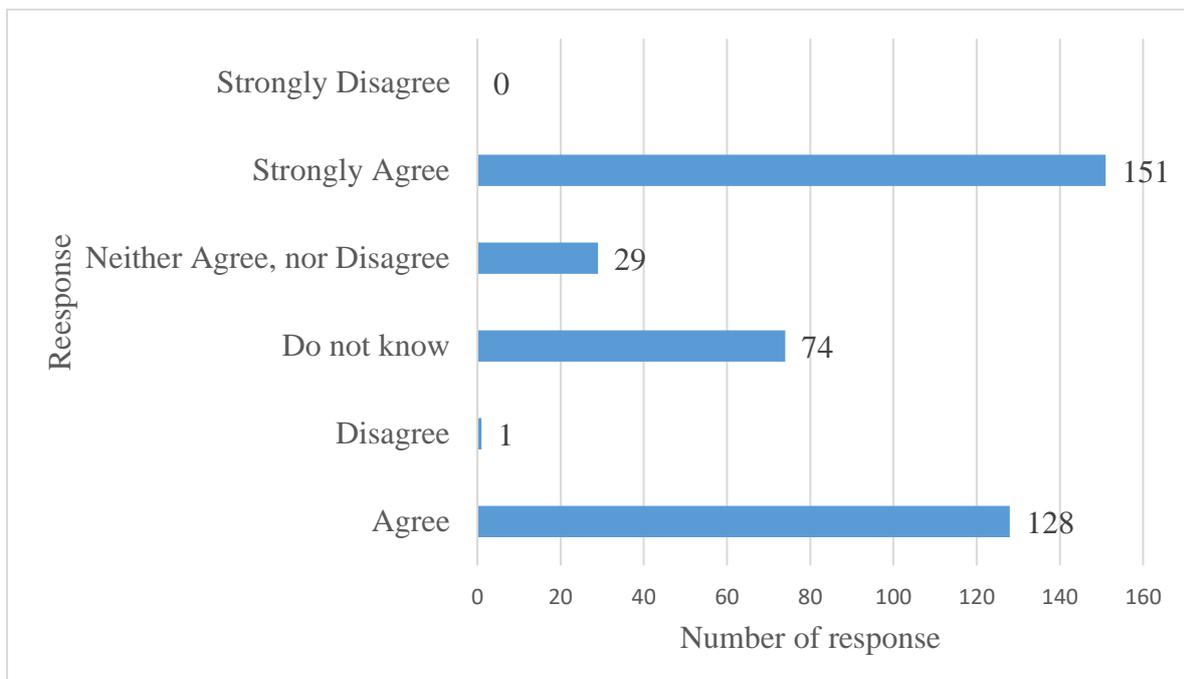


Figure 3: Responses to the statement “in Windhoek, there are high rates of drunkenness on our streets at night”

Figure 4 below shows that 32.4% (124) of the respondents strongly agree with the statement, 43.3% (166) Agree, 9.6% (37) neither agree nor disagree, 14.1% (54) do not know. The category disagrees and strongly disagree with recorded 0.3% (2).

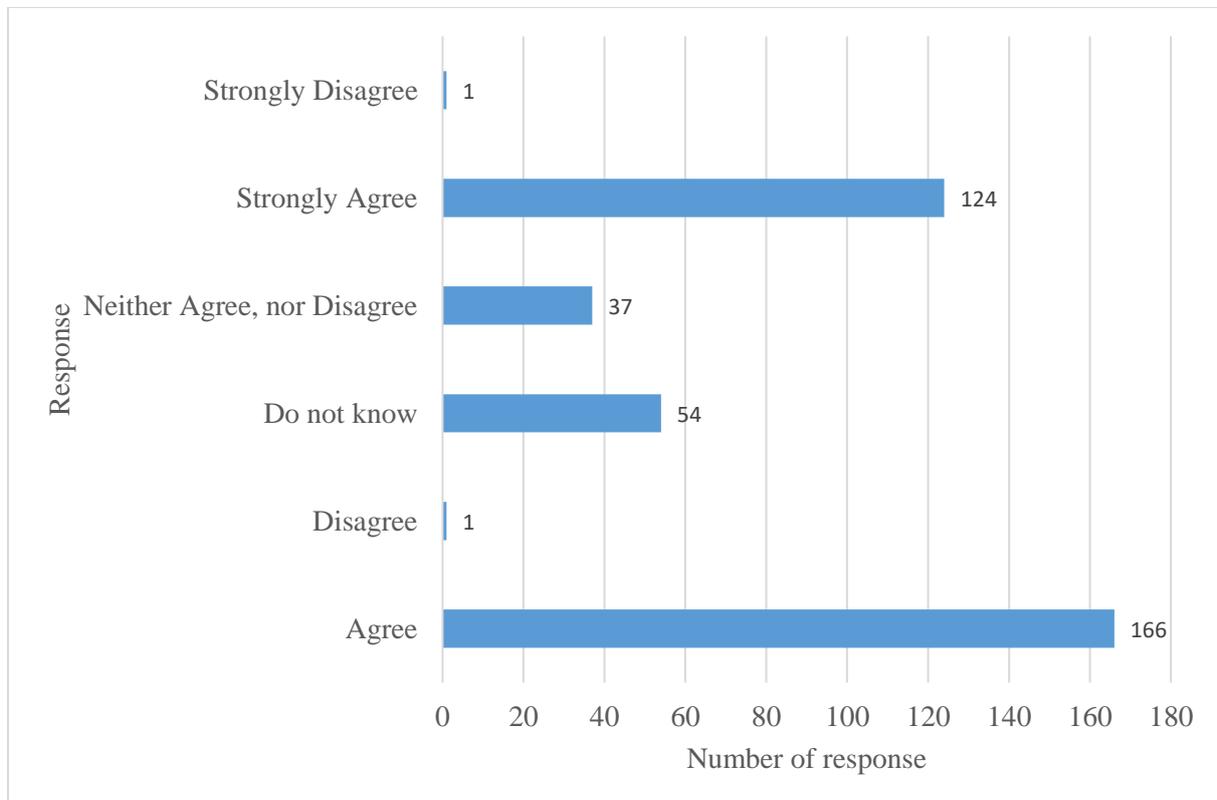


Figure 4: Responses to the statement “the current level of alcohol consumption in Windhoek is on an increase”

Figure 5 below shows that 44.9% (172) and 38.9 (149) of the respondents think the government has a responsibility to implement public health measures to address incidences of alcohol use among the youth. Whilst only about 0.3% (1) and 1.0% (4) disagrees and do not think that the government has a responsibility to implement public health measures to address incidences of alcohol use among the youth.

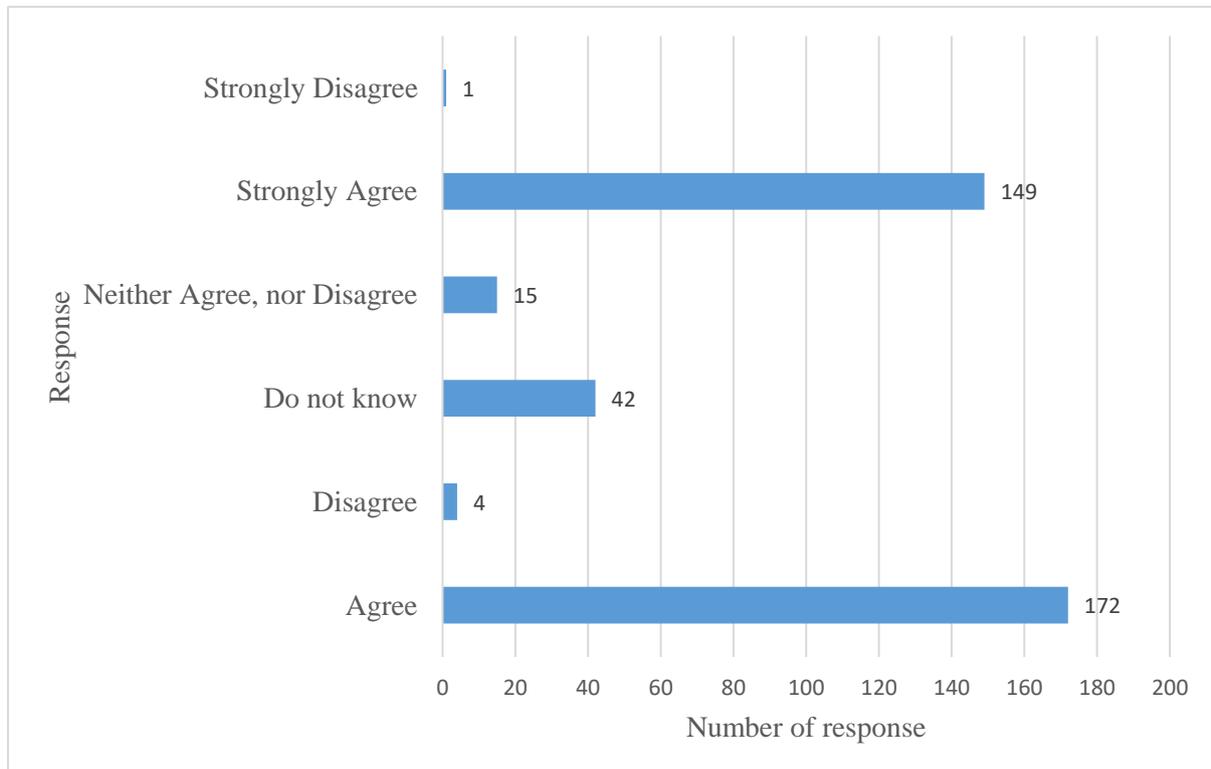


Figure 5: The government and the responsibility to implement public health measures to address incidences of alcohol use among the youth.

Figure 6 below shows that 178 (46.5%) do not think the government is doing enough to reduce alcohol consumption whilst about 115(30%) don't know whether the government is doing enough in reducing alcohol consumption among the youth.

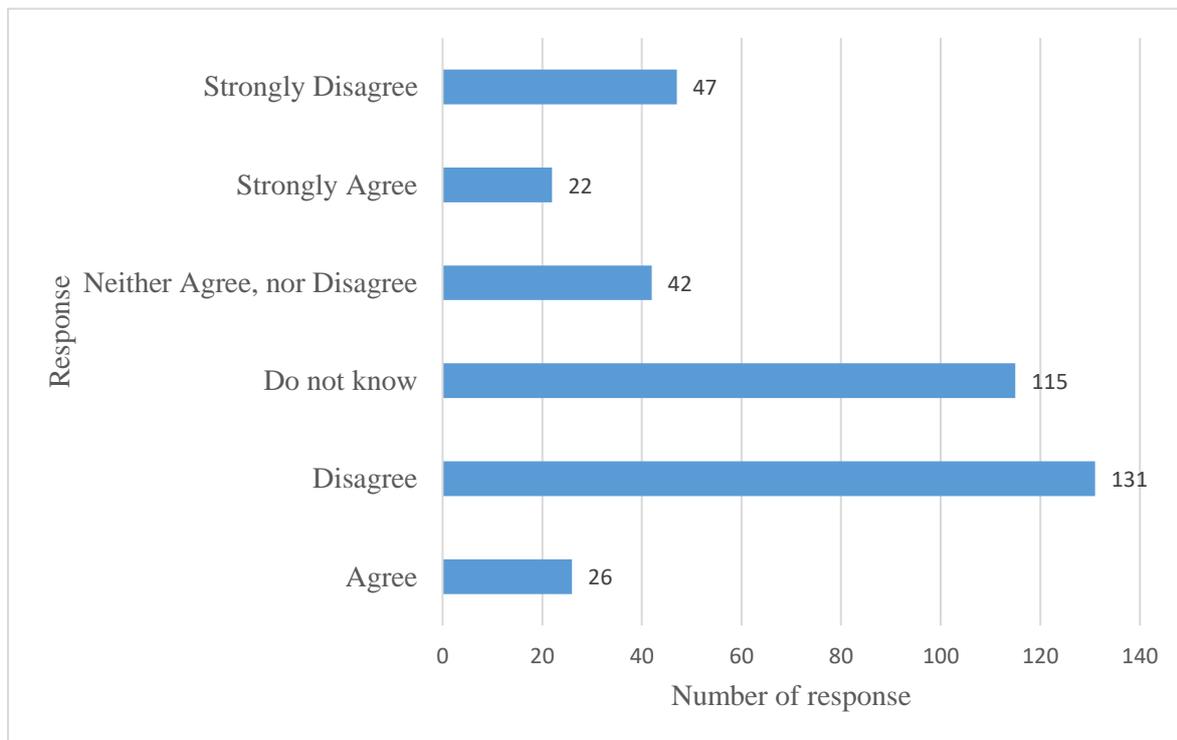


Figure 6: Government and the reduction of alcohol consumption

Figure 7 below shows that 3.7% (14) of the respondents disagree with the statement, 1.6% (6) strongly disagree, 4.4% (17) neither agree nor disagree, 2.6% (10) do not know. About 39.7% (152) agreed and another 48.0 % (184) strongly agreed with the statement.

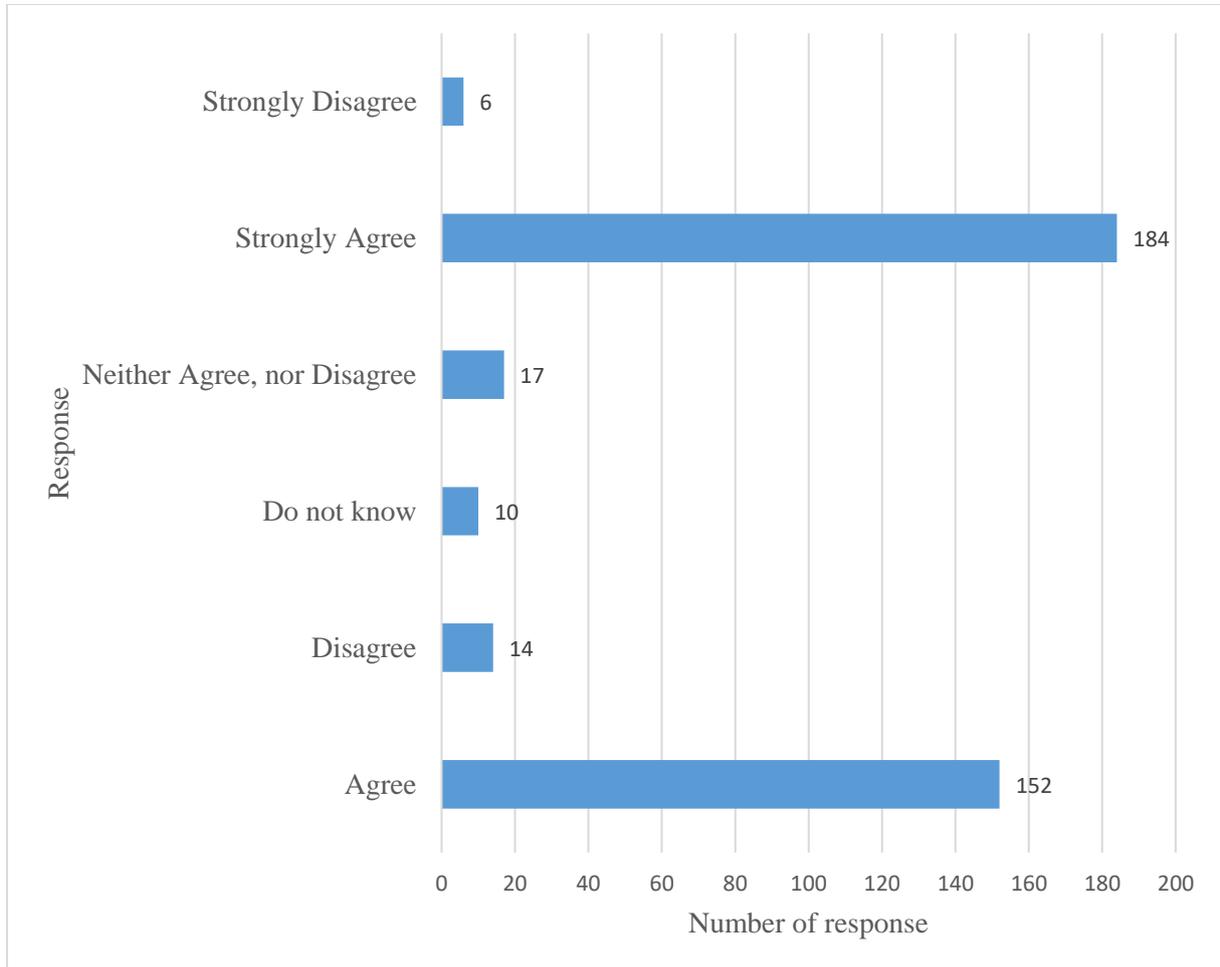


Figure 7: Regulation of the number of outlets selling alcohol

4.3.3 “Standard drink”

Out of 383 respondents, 52 have heard of the term. The remainder of 265 have not heard of the term and 66 respondents don’t know. Of the men who indicated the maximum recommended number of standard drinks considered safe per week, the median number from the responses was 4. Whereas women’s response median was 2.

4.3.4 Knowledge of alcohol and standard drink continues

Table 4 shows that the youth has good knowledge about common diseases that are associated with alcohol intake. These common diseases are such as the effects on the liver, increase the risk of bowel Ca and high MVA incidences. There is limited knowledge about the association between alcohol and high blood pressure, breast cancer, and bowel and alcohol-fatal syndrome in neonates. There is, however, a belief among the population that stomach ulcers are due to high consumption of alcohol.

TABLE 4: KNOWLEDGE OF ALCOHOL CONSUMPTION AND HEALTH EFFECTS

Consuming alcohol more than the recommended number of standard drinks can lead to:	True (%)	False (%)	Don’t know (%)
Liver diseases	85.4	0.0	14.6
Stomach ulcers	89.3	0.0	10.7
High blood pressure	27.2	0.0	72.8
Increase a woman’s risk of breast Ca	35	0.0	65
Increase risk of bowel Ca	95.8	0.0	4.2
MVA	100	0.0	0.0
Alcohol- fatal syndrome	30.3	0.0	69.7

Table 5 shows that the majority of respondents had limited knowledge of whether any public organisations help or deals with nor protects young adults from excess alcohol consumption.

TABLE 5: DISTRIBUTION OF RESPONDENT’S RESPONSES TO ORGANISATIONS DEALING WITH EXCESS CONSUMPTION OF ALCOHOL AND PROTECTION POLICIES TOWARDS YOUNG ADULTS.

Probing responses	Yes(%)	No(%)	Don’t know(%)
Are you aware of organisations dealing with people who consume alcohol in excess	78(20.4)	105(27.4)	200(52.2)
Aware of public policies that protect young people from excess alcohol consumption	0(0)	204(53.3)	179(46.7)

Table 6 shows that there is good knowledge is observed in the above response from participants with regards to alcohol either regarded as a drug and a known cause of 10% of road accidents. However, the majority did not know the relation between alcohol consumption and an increase in body weight.

TABLE 6: KNOWLEDGE OF ALCOHOL AS A CONTRIBUTING FACTOR TO PHYSICAL HEALTH AND TRAFFIC ACCIDENTS.

Probing responses	Yes(%)	No(%)	Don't know(%)
Aware of alcohol consumption contributes to weight gain	119(31.1)	92(24.0)	172(44.9)
Aware that alcohol is a drug	225(58.7)	108(28.2)	50(13.1)
10% of road accidents are alcohol-related	336(87.7)	0(0)	47(12.3)

4.4 Attitudes of respondents towards alcohol consumption and effects on health

As illustrated in Table 7 below, a large proportion of respondents had a positive attitude towards alcohol consumption and its effects. However, there are some negative attitudes found as well.

TABLE 7: ATTITUDES OF RESPONDENTS` TOWARDS ALCOHOL CONSUMPTION

Variable	Good attitude (%)	N	Negative attitude (%)	N
Many people drink to escape from problem, loneliness and depression.	63(16.4)		320(83.6)	
It is safe to drive a car after one or two alcoholic drinks.	346(90.3)		37(9.7)	
All drivers involved in road traffic accidents should have their alcohol levels measured either on the roadside or in the hospital emergency department.	362(94.5)		21(5.5)	

Table 8 below shows responses from 346 participants who indicated that they consume alcohol or have been drinking it for the past 4 months. Apart from having had a hangover, the majority of responses were more than those indicated hence observed as a positive attitude towards alcohol consumption. Furthermore, on probing whether alcohol advertising should be associated with people’s image, 93% felt that advertising of alcohol should only be about the product self, and not be associated with people’s image. The remaining percentage of 3.7% doesn’t know.

TABLE 8: RESPONDENTS FREQUENCY OF OCCURRENCES OF THE FOLLOWING SCENARIOS IN THE LAST 4 MONTHS.

Alcohol use scenarios	Number of responses N	Percentage %
• Had a hangover	210	54.8
• Vomited from drinking alcohol	105	27.4
• Driven a car after having several drinks	37	9.7
• Drinking and driving	10	2.6
• Arrested for driving while intoxicated	0	0
• Got in trouble with the law because of drinking	0	0
• Lost a job because of drinking or missed work or class	0	0
• Got into a fight after drinking	7	1.8
• Thought you might have a problem with your drinking	14	3.7

Table 9 shows an average of 71.3% support for the clinicians asking about alcohol consumption where there is a connection to the condition of a patient. There is however little support for when clinicians are to ask about alcohol-related questions as part of routine history taking.

TABLE 9: APPROPRIATENESS OF THE HEALTHCARE PROFESSIONALS/CLINICIANS ASKING ABOUT ALCOHOL CONSUMPTION

Alcohol and health-related scenarios	Appropriate N (%)	Not appropriate N (%)	Don't know N (%)
If I feel the issue they were dealing with was related directly to the amount of alcohol I drink, e.g. addiction	361 (94.3)	8 (2.0)	14 (3.7)
If they believe the issue they were dealing with could be related to the amount of alcohol I drink, e.g. high blood pressure	258 (67.4)	103 (26.9)	22 (5.7)
If they believe the treatment they prescribed would be affected by the amount of alcohol I drink, for example prescribing drugs that interact with alcohol	257 (93.2)	7 (1.8)	19 (5)
Part of routine history taking	116 (30.3)	240 (62.7)	27 (7.0)

4.5 Exploring the practices of young adults on alcohol consumption and its effect on their health.

A total number of 346 (90.3%) out of 383 respondents reported to have consumed alcohol in their lifetime, and only 37 (9.7%) have never drunk alcohol. Respondents who consume alcohol reported to mostly consume beer, wine, whiskey and ciders.

From the 9.7% of those that have never consumed alcohol, mentioned that their main reasons for not doing so were:

- Lack of interest in alcohol
- Fear of the dangers and alcohol-related effects
- Born-again Christianity

The majority of both male and female reported that the age at which they initially commenced consuming alcohol was at 16 and 18 years.

The majority of the main reason why young adults started consuming alcohol was due to peer pressure, with influence from an adult being the least reported.

TABLE 10: REASONS FOR CONSUMING ALCOHOL

Variable	Frequency	Percentage
Peer pressure	103	29.8
curiosity	257	74.3
Because you felt “like it” (bored)	16	4.6
Influence of an adult	7	2.0

The number of times consuming an alcoholic drink?

Figure 8 below shows that the majority of the respondents (141) indicated that they consume 4 or more drinks containing alcohol in a week and that only 37 of the respondents have never taken a drink containing alcohol.

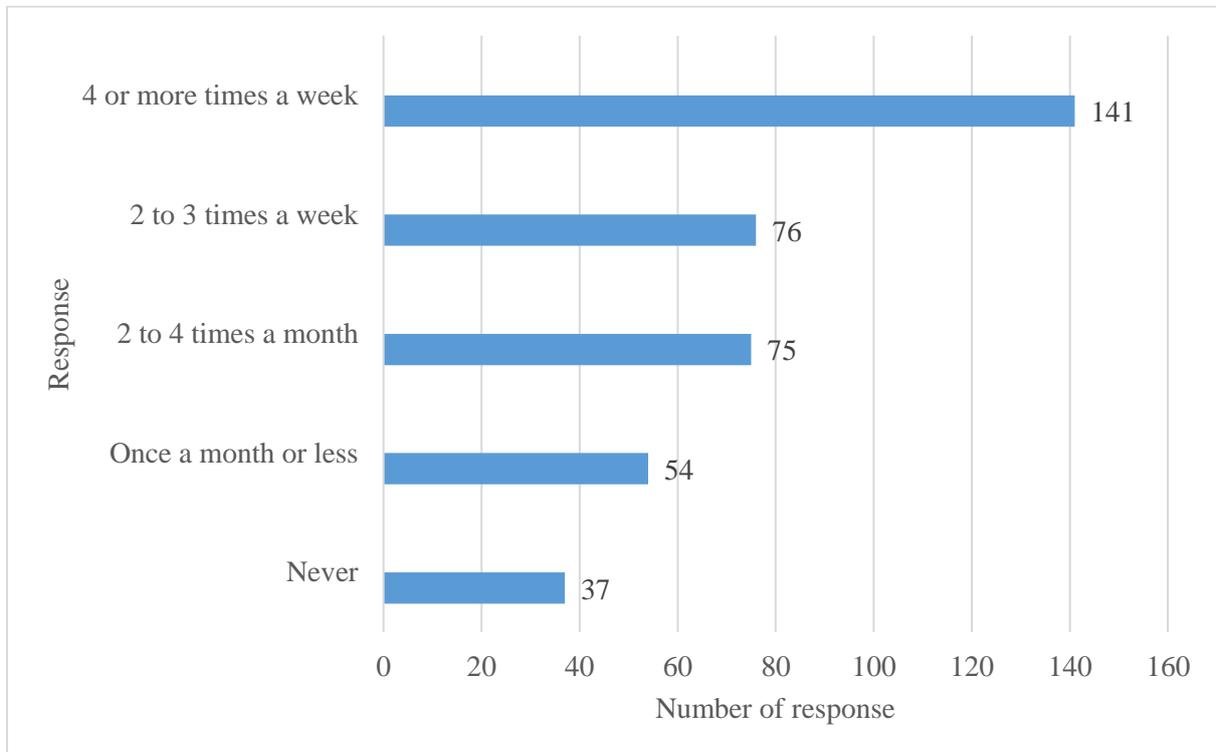


Figure 8: The number of times respondents consume a drink containing alcohol in a week.

Table 11 below shows the practices of alcohol by the respondents. On a typical day, 28.9% indicated that they have 1 or 2 drinks while 8.1% indicate 10 or more drinks. The majority of the respondents indicated that they have six or more units of alcohol on one occasion monthly while the majority of respondents indicated that they drank alcohol at a licenced place in the last four months.

TABLE 11: PRACTICES OF ALCOHOL CONSUMPTION BY YOUTH

Variable	Frequency	Percentage (%)
On a typical day, how many drinks containing alcohol do you have:		
• 1 or 2	100	28.9
• 3 or 4	94	27.2
• 5 or 6	91	26.3
• 7 to 9	33	9.5
• 10 or more	28	8.1
How often do you have six or more units on one occasion:		
• Less than monthly	44	12.7
• monthly	183	52.9
• weekly	58	16.8
• daily	61	17.6
Place where you drank alcohol in the past 4 months		
• in a licenced premise	109	31.5
• restaurant	77	22.3
• club	56	16.2
• field	59	17.0
• home	45	13.0
• elsewhere, where (name place)	0	0

Figure 9 below shows that the majority of respondents (242) indicated that they had purchased alcohol from elsewhere either than from a supermarket.

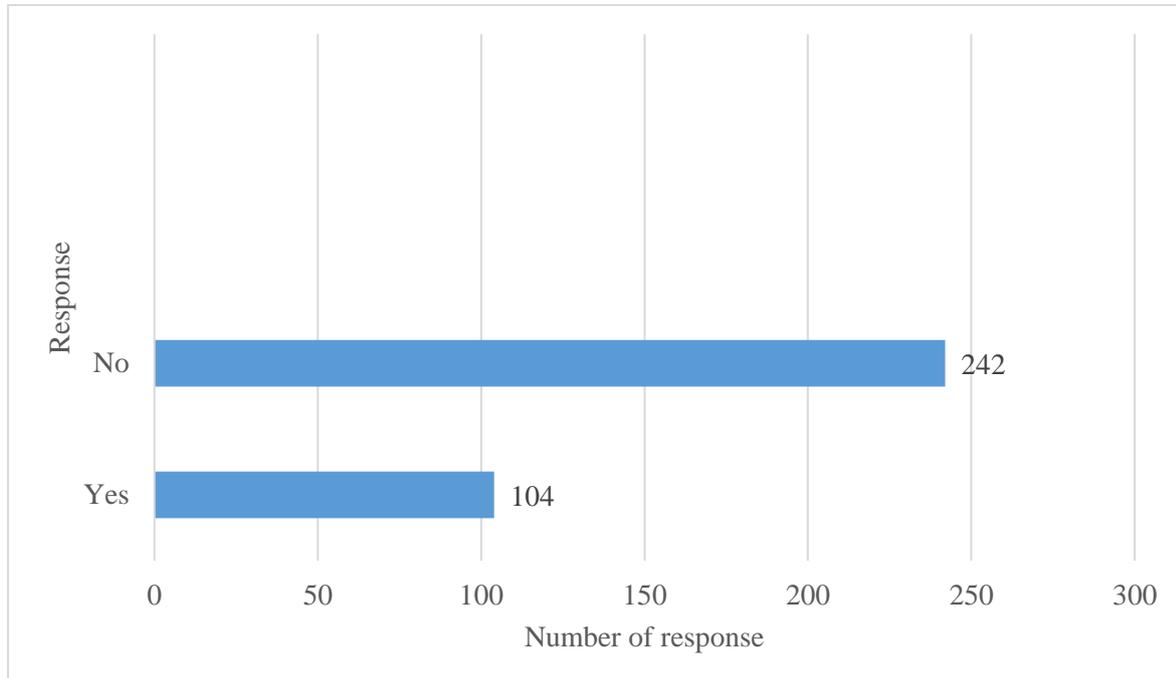


Figure 9: Number of respondents who have purchased alcohol from a supermarket in the last 4 months.

Table 12 below shows that the natural behaviour of purchasing less when prices are higher is followed. This negative relationship is observed in table 4.10 above, as the percentage of alcohol price increase, the purchasing of alcohol decreases. It will take at least a 50% increase in the alcohol price to change the purchasing behaviour of the respondents. About 30.5% of the population would not change their behaviour at a 10% price hike.

TABLE 12: ALCOHOL PRICING AND PURCHASING BEHAVIOUR

Alcohol price cenarios	The amount of alcohol I buy will decrease substantially %	The amount of alcohol I buy will decrease slightly %	The amount of alcohol I buy would not change %	The amount of alcohol I buy would increase by %	Don't know %
If the price of alcohol were to increase by 50%	75.7	24.3	0	0	0
If the price of alcohol were to increase by 25%	62.1	37.9	0	0	0
If the price of alcohol were to increase by 10%	24.8	23.2	30.5	0	21.4

4.6 Summary

This chapter presented the quantitative data generated by the study. Results of the study were presented in the form of tables and figures.

CHAPTER 5: DISCUSSION

This chapter serves to consider the findings of the study outlined in chapter four. The study found that the perceptions, knowledge and behaviours of the youth in Windhoek, Namibia can be described under distinct themes; attitudes, perceived harm, personal knowledge and perceptions of education (awareness). The findings of the survey are generalisable to the population of the youth sampled. The findings will be discussed in this chapter in light of previous research, and relevant literature pertaining to this study.

This study showed new insights into the knowledge, attitudes and practices of young adults on alcohol consumption and its effect on their health in Windhoek. Alcohol abuse is recognised as a widespread problem in Namibia and is associated with various social, economic, and health problems and risks. Alcohol use among youth is common and increases with age for both males and females (Seggie, 2012). A study done by UNICEF (2000) found that early experimentation with alcohol is common in Namibia and that the median age at which Namibian youth (15-24) started drinking was 15 and that three out of 10 young people surveyed had already tried alcohol. Similarly, South Africa has one of the highest alcohol consumption rates per capita of any country in the world (Seggie 2012), In South Africa, 34% of black youth age 10-21 had used alcohol in the previous 12 months (Rocha-Silva,1992) and 27% of school-going youth had engaged in binge drinking in schools in Cape Town (Flisher,1992). The national Global Status Report on Alcohol 2004 reports that 11% of young men between 18 and 24 years old and 2% of young females between 18 and 24 years old are heavy episodic drinkers, consuming five or more standard drinks in one sitting at least once a week (WHO, 2004). The WHO awarded South Africa a score of 4 (drinking 5 or more beers or glasses of wine at one sitting for men, and more than 3 drinks for women) out of 5 on a least risky to most risky patterns-of-drinking scale, whereby, the higher the score, the greater the alcohol-attributable burden of disease for the country (World Health Organization, 2011)

Alcohol is often associated with fun, curiosity and in some instances, peer pressure, home setting, drinking to fit in, ignorance of the effect of alcohol on health, boredom and ignorance are some of the factors that influence the attitudes and use of alcohol by youth. The perceived attitudes towards alcohol are that it has a positive influence on confidence and increase the chances of having fun, and therefore, perceived 'normal' behaviour, which in turn promotes the use by suggesting it is acceptable (SixSmith and Nic Gabhainn 2008). These findings

highlight the normalised attitude towards alcohol use among the youth. However, young people can experience health and social problems, including relationship problems, accidents and involvement in a crime as a result of alcohol use (Kiely and Barry, 2002). Respondents were aware of the impact of heavy drinking on their health.

In the context of the health consequences of alcohol, the study revealed that a large proportion of the respondents who had adequate knowledge of the health hazards of excessive consumption of alcohol were aware that excessive drinking caused dangers to their health with 39% indicating liver damage as one of the dangers. The good knowledge of alcohol by respondents was expected considering that alcohol is widely available and the level of education by the majority of respondents. Similar to studies done in Nigeria and Zambia, good knowledge of alcohol consumption and adverse effects both on health and social aspects have been reported among the youth (Odeyemi et al., 2014b), (Swahn et al., 2011). It would appear that despite the knowledge of the dangers associated with alcohol, the escalating use of alcohol is evident as most of the respondents indicated that they consumed 4 or more alcoholic beverages per week. This links with the health belief model (Becker 1974) where behaviour is dependent upon the perception that it will or will not lead to harm. In 2016, 3 million deaths (5.3% of all deaths) worldwide were caused by the harmful use of alcohol which is more than the deaths caused by diseases such as tuberculosis, HIV/AIDS and diabetes (World Health Organization, 2018). Many did however not know the term “standard drink” as the majority (256) respondents reported they have not heard of the term. According to the IARD, 20g/day for men and 10g/day for a woman is recommended in Namibia as documented by MoHSS – National guidelines for Prevention and Management of NDCs (2013). Whereas, study participants reported; men 4.2 and woman 2 as the mean average recommended standard drinks considered safe weekly. This indicates a poor knowledge about the term “standard drink”. Study participants further acknowledged that consuming alcohol more than the recommended number of standard drinks can lead to various adverse effects such as; liver diseases, stomach ulcers, increase the risk of bowel Ca, as well as lead to MVAs. Poor knowledge was however reported in the increase of blood pressure, risk of breast Ca increase in woman, an alcohol-fatal syndrome in neonates and contribution to weight increase. Furthermore, the use of alcohol can lead to poor judgement and, therefore, poor decision making. Alcohol use and abuse are considered as risk factors for the transmission of HIV For example, a UNICEF study done in 2006 found that drinking alcohol increased the probability of youth having taken one or more sexual risks by a factor

of 3.5 (UNICEF, 2006). Similarly, a study by Parker & Connolly (2007) significantly linked high levels of alcohol consumption to HIV-related risk behaviours. Hospitals in the UK regularly describe patients in their early 20s with alcohol-related hepatitis, and women with cirrhosis by the time they are 30 (Seggie, 2012).

The legal age accepted to purchase or consume alcohol in Namibia is 18 years and above (Legal Assistance Centre, 2008). Although a study by (Barth & Hubbard, 2009) found that Namibians as young as 13 years old were found to be consuming alcohol, other studies have found that earlier initiation of alcohol consumption has been on the increase (Granville-Garcia et al., 2014). The majority of respondents from this study (both male and female) indicated they first consumed alcohol at age 16 and 18. Most respondents cited the location of having consumed alcohol was in a licenced premise (109). The majority (242) however indicated that they had not purchased any alcohol from a supermarket in the past four months. Furthermore, positive practices were recorded as participants responded positively to questions concerning alcohol prices. Namibia has a national Liquor Act 6 of 1998. Which consists of a general regulatory framework that authorises licences for the consumption of liquor on the premises of several different categories of establishments: hotels, restaurants, shebeens, clubs. This act also states that the buying and selling of liquor to persons under the age of 18 criminally punishable. However, the provisions pertaining to underage drinking are scattered throughout the law, making them somewhat difficult to navigate. According to the World Health Organization (2016), the majority of countries in Africa do not have written national alcohol policies. The presence of national alcohol policies is highest among reporting high-income countries (67%) and lowest among low-income countries (15%). Similar to a study in Uganda, these study participants had less knowledge of organisations and public policies that protect young adults from access to alcohol consumption.

In the context of education and awareness, the respondents were aware of the negative effects of alcohol but were however unaware of the recommended number of drinks allowed for male and female per day. This could be attributed to a lack of drugs and alcohol education, and that in some cases that it was either not well delivered or did not meet their needs. The fact that alcohol is easily available to the youth should mean that education on alcohol should too be easily accessible and available. This, however, requires enhancing the capacity of those delivering it to challenge attitudes and move beyond information giving and scare tactics, in line with best practice. This study, therefore, highlights the need for a multifaceted approach to programmes to reduce early alcohol use.

5.1. Summary

The study found that the majority of the respondents were aware of the dangers associated with excessive use of alcohol. However, the use of alcohol among the youth in Windhoek remains a significant problem. It is, therefore, suggested that a new approach and different strategies rather than education alone needs to be introduced to combat the destructive practices of young adults and alcohol use (Swahn et al., 2011).

CHAPTER 6: CONCLUSION, LIMITATIONS AND RECOMMENDATION

6.1 Introduction

In this chapter, the researcher presents the conclusion drawn from the findings of the study. Limitations of the study encountered public health relevance and several viable recommendations also presented in this chapter.

6.2 Conclusion

Many respondents strongly agree that alcohol has adverse effects on health such as stomach ulcers, liver damage and increases incidences of MVA cases. Hence, the need for emphasising education, information and awareness on understanding these harmful effects associated with alcohol.

Although this study did not look into relationships or associations between variables, it can be deduced that regardless of adequate knowledge presented by most of the respondents, there still seems to be a gap between knowledge, attitudes and practices.

Alcohol use is known to be a major problem worldwide and Namibia is no exception; however, literature failed to locate sufficient documented research on KAP of young adults on alcohol use and its effects on their health in Namibia. Previous studies elsewhere beyond Namibia has presented similar findings as found with this study. This study however aimed at providing baseline data for future studies and interventions to combat alcohol-related effects among the youth in our country.

6.3 Limitations

- The study only included young adults aged 18 – 30 (male and female), therefore the views of those younger than 18 and older than 30 were excluded and respondents are not representative of the whole country.
- The study was limited to some suburbs in Windhoek only, therefore only provides baseline data from the sampled areas.

6.4 Recommendations

The study makes the following recommendations:

- MoHSS, MoE, Public health policy developers, and other NGOs to work together and target education, new policy initiatives, and awareness initiatives to emphasise dangers and / adverse effects that alcohol consumption has on society. As well as prevention strategies aimed at both sensible drinking and harmful use of alcohol.
- MoHSS could introduce and implement routine screening for alcohol-related problems as part of routine history taking to help identify any rising addictions or health-related effects.
- More workshops should be conducted to educate students on all aspects of alcohol use and abuse.

6.5 Future research

This study was quantitative and was limited to exploring the KAP amongst young adults and alcohol consumption. No association or relationships between variables was made, hence limited findings regarding factors influencing alcohol use among the youth. Future research could look into exploring a more complex methodology that may address reasons, perceptions and experiences of alcohol use among young adults.

6.6 Summary

The chapter presented conclusions, limitations of the study as well as recommendations from the study findings.

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ANNEXURE A: Ethical clearance certificate from MoHSS



REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

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OFFICE OF THE PERMANENT SECRETARY

Ref: 17/3/3 AN

Enquiries: Mr. B. Tjivambi

Date: 05 February 2019

Ms. Aina N. K. Nghitongo
PO Box 532
Ondangwa

Dear Ms. Nghitongo

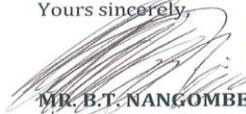
Re: Exploring the knowledge, attitudes and practices of young adults on alcohol consumption and its effects on their Health - Windhoek.

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**
 - 3.1 The data to be collected must only be used for academic purpose;
 - 3.2 No other data should be collected other than the data stated in the proposal;
 - 3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;

FL

- 3.4 A quarterly report to be submitted to the Ministry's Research Unit;
- 3.5 Preliminary findings to be submitted upon completion of the study;
- 3.6 Final report to be submitted upon completion of the study;
- 3.7 Separate permission should be sought from the Ministry for the publication of the findings.
4. All the cost implications that will result from this study will be the responsibility of the applicant and **not** of the MoHSS.

Yours sincerely,



MR. B.T. NANGOMBE
PERMANENT SECRETARY



"Health for All"

ANNEXURE B: Research permission letter by UNAM

CENTRE FOR POSTGRADUATE STUDIES

University of Namibia, Private Bag 13301, Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park
☎ +264 61 206 3275/4662; Fax +264 61 206 3290; URL: <http://www.unam.edu.na>



RESEARCH PERMISSION LETTER

Student Name: Aina Nghitongo
Student number: 200812378,
Programme: Master in Public Health

Approved research title: Exploring the knowledge, attitudes and practices of young adults on alcohol consumption and its effects on their health – Windhoek, Namibia

TO WHOM IT MAY CONCERN

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.

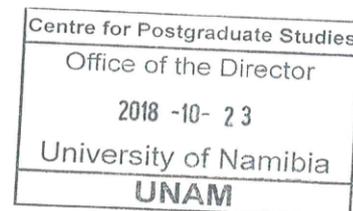
Best Regards

A handwritten signature in blue ink, appearing to read 'Marius Hedimbi', is written over a horizontal dashed line.

Prof Marius Hedimbi
Director: Centre for Postgraduate Studies
Tel: +264 61 2063275
E-mail: directorpgs@unam.na

23 Oct 18

Date



ANNEXURE C: Consent to participate in research

TITLE: ASSESMENT OF THE KNOWLEDGE, ATTITUDES AND PRACTICES OF YOUNG ADULTS ON ALCOHOL CONSUMPTION AND ITS EFFECTS ON THEIR HEALTH – WINDHOEK, NAMIBIA

Researcher: AINA N K NGHITONGO email: ainak3.ndapandula@gmail.com.na

Dear participant

My name is Aina Nghitongo, a Masters' student in Public Health at the University of Namibia (UNAM). For my research project, I am conducting a study on Assesment of the knowledge, attitudes and practices of young adults (age 18 – 30) on alcohol consumption and its effects on health in Windhoek, Namibia. The study will be conducted under the supervision and guidance of Dr Jacob Sheehama as my supervisor (UNAM).

The main purpose of the study is to create knowledge that can help the public in understanding alcohol use and its impacts on health. In addition, this study also aims at creating awareness on alcohol use (and abuse) among young adults in Windhoek and the adverse effects thereof as a health priority and guide in the health care delivery system. This study will also serve as a baseline study and will provide baseline data for further studies.

You were selected to be a possible participant in this study because you meet the criteria for the study scope. Therefore, you are kindly requested to answer a questionnaire form that will take about 15 – 20 minutes to complete. The study is based on anonymity, you are not required to provide your name or contact details. Responses to questions will not be linked to you in any way. The information you will provide will be kept strictly confidential and will only be available to the researcher and supervisor: therefore, you are requested to provide as honest answers as possible. There is no form of payment to you for participating in the study and there will be no predictable harm or discomfort in your participation in this study.

Your response will therefore help develop recommendations to improve public health education programmes and policy development on the use of alcohol among young adults in Namibia. Participation in this study is voluntarily and you may withdraw from the study at any time and stage of the study. You are also free to decline to answer any particular question you do not wish to answer for any reason and there will be no penalties in doing so. Your participation in this study will be highly appreciated. Should you have any questions about the study, you are welcome to contact my supervisors Dr Jacob Sheehama jsheehama@unam.com.na.

Should you agree to partake in the study, please consent to your participation by signing below with full knowledge on the nature and purpose of the study.

If you have any question that needs clarity you are welcome to contact me, details provided with the introduction.

ANNEXURE D: Questionnaire

UNIVERSITY OF NAMIBIA

SCHOOL OF PUBLIC HEALTH

STUDENT NAME: NGHITONGO AINA N K

SUPERVISOR: DR.SHEEHAMA JACOB

TOPIC: ASSESMENT OF THE KNOWLEDGE, ATTITUDES AND PRACTICES OF YOUNG ADULTS ON ALCOHOL CONSUMPTION AND ITS EFFECTS ON THEIR HEALTH – WINDHOEK , NAMIBIA.

Introduction and instructions

Thank you for taking time to complete this questionnaire. This should take you about 15 – 20 minutes. As explained in the consent, you do not need to provide your name or any personal information.

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Gender?

Male

Female

2. Age?

18 – 20

21 – 23

24 – 26

27 – 30

3. Highest level of education?

Have never been to school

Primary school

Secondary school

Tertiary

4. What is your current occupational status?

Unemployed

Self-employed

Employed

Student/Learner

5. What is your residential area? _____

SECTION B: Knowledge on alcohol

6. Are you aware of any dangers that alcohol may have on your health?

Yes	
No	
Don't know	

...if Yes

What are some of the dangers that you know?

...if No or Don't know go to question 7

6.1. Of these dangers, can you reduce the chances of becoming affected?

Yes	
No	
Don't know	

...if Yes, how

7. To what extent do you agree with the following?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
In Windhoek, there are high rates of drunkenness on our streets at night	5	4	3	2	1	0
The current level of alcohol consumption in Windhoek is on an increase	5	4	3	2	1	0
The government has a responsibility to implement public health measures to address incidences of alcohol use among the youth	5	4	3	2	1	0
The government is doing enough to reduce alcohol consumption	5	4	3	2	1	0
The government should reduce the number of outlets selling alcohol	5	4	3	2	1	0

8. Have you heard of the term “Standard Drink”?

Yes	
No	
Don't know	

A “standard drink” is a term used to measure the amount of alcohol in a drink.

- ❖ **Regular beer= about 5% alcohol Malt liquor=about 7% alcohol Wine=about 12%alcohol Shot of distilled spirits (gin, rum, tequila, vodka, whiskey) = about 40% alcohol**

9. What is the maximum recommended number of standard drinks considered safe to be consumed in a week by man and woman?

Man	<input type="text"/>	Don't know	<input type="text"/>
Woman	<input type="text"/>	Don't know	<input type="text"/>

10. For the following statements, can you tell me whether you think they are true, false or don't know?

10.1. Consuming alcohol more than the recommended number of standard drinks can lead to:	True	False	Don't know
.... liver diseases	1	2	0
.... stomach ulcers	1	2	0
.... high blood pressure	1	2	0
.... increase a woman's risk of breast cancer	1	2	0
.... increase the risk of bowel cancer	1	2	0
.... motor vehicle accidents	1	2	0
...alcohol – fatal syndrome in neonates	1	2	0

11. Are you aware of any organisation that helps/deals with people that consume alcohol in excesses?

Yes	<input type="text"/>
No	<input type="text"/>

Don't know	
------------	--

12. Are you aware of any public policies that protect young adults from alcohol access/ consumption

Yes	
No	
Don't know	

13. [Tick (√) in the appropriate box]

13.1. Alcohol consumption contributes to weight increase.

Yes	
No	
Don't know	

13.2. Alcohol is a drug.

Yes	
No	
Don't know	

13.3. About 10% of fatal road accidents are alcohol-related.

Yes	
No	
Don't know	

Attitudes towards alcohol:

14. To what extent do you agree or disagree with the following?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Many people drink to escape from problems, loneliness and depression.	1	2	3	4	5	0
It is safe to drive a car after one or two alcoholic drinks.	1	2	3	4	5	0
All drivers involved in road traffic accidents should have their alcohol levels measured either on the roadside or in the hospital emergency department	1	2	3	4	5	0
It is safe to drink alcohol in moderation even during pregnancy	1	2	3	4	5	0

15. Indicate the number corresponding to the frequency of the occurrences in the box beside if you currently drink alcohol or have been drunk in the past 4 months.

Had a hangover	
Vomited from drinking	

Driven a car after having several drinks	
Drinking and driving	
Arrested for driving while intoxicated	
Trouble with the law because of drinking	
Loss a job because of drinking/ missed work/class	
Got into a fight after drinking	
9Thought you might have a problem with your drinking	

16. In your opinion, should alcohol advertising only be about the product itself or should alcohol advertising be allowed to associate with people's image?

Only about the product	
Allowed to associate with peoples' image	
Don't know	

17. In each of the following circumstances, please indicate if you feel it is appropriate or not for health care professionals to ask you about the amount of alcohol you drink.

	Appropriate	Not appropriate	Don't know
If I feel the issue they were dealing with was related directly to the amount of alcohol I drink, e.g. addiction	2	1	0
If they believe the issue they were dealing with could be related to the amount of alcohol I drink, e.g. high blood pressure	2	1	0
If they believe the treatment they prescribed would be affected by the amount of alcohol I drink, for example prescribing drugs that interact with alcohol	2	1	0
Part of routine history taking	2	1	0

Practices:

18. Have you ever drunk alcohol?

Yes

No

...if Yes

18.1 What kind of alcohol do you have? [More than 1 answer]

...if No,

18.2. What is the main reason?

19. At what age did you start consuming alcohol?

20. Why did you start consuming alcohol?

Peer pressure	
Curiosity	
Because you felt “like it” (bored)	
Influence of an adult	

21. How often do you have a drink containing alcohol?

Never		Skip to question no 27
Once a month or less		
2 to 4 times a month		
2 to 3 times a week		
4 or more times a week		

22. On a typical day, how many drinks (units) containing alcohol do you have?

1 or 2	
3 or 4	
5 or 6	
7 to 9	
10 or more	

23. How often do you have six or more units on one occasion?

Less than monthly	
Monthly	
Weekly	
Daily or almost daily	

24. In which, if any of these places have you drunk alcohol in the past 4 months?

In a licenced premise	
Restaurant	
Club	
Field	
Home	
Elsewhere, where (name place)	

25. Have you purchased alcohol in a supermarket at all in the past 4 months?

Yes

No

26. Can you tell me how much of an impact, if at all, the following would have on the amount of alcohol you currently buy in supermarkets?

Alcohol price scenarios	The amount of alcohol I buy would decrease substantially	The amount of alcohol I buy would decrease slightly	The amount of alcohol I buy would not change	The amount of alcohol I buy would increase	Don't know
If the price of alcohol were to increase by 50%	5	4	3	2	1
If the price of alcohol were to increase by 25%	5	4	3	2	1
If the price of alcohol were to increase by 10%	5	4	3	2	1

The end, thank you!