

Home-brewed alcohol as a public health problem in Greater Tzaneen  
Municipality, Mopani District of Limpopo Province: A social work  
perspective

By

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RESEARCH THESIS

Submitted in fulfilment of the requirements for the degree of

**DOCTOR OF PHILOSOPHY**

in

**SOCIAL WORK**

in the

**FACULTY OF HUMANITIES**

**(School of Social Sciences)**

at the

**UNIVERSITY OF LIMPOPO**

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## **DECLARATION**

I Masenyani Reckson Manganyi hereby declare that this document is my own work and that all the sources I have used and quoted have been acknowledged by means of complete references.

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**Masenyani Reckson Manganyi**

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**Date**

## **DEDICATION**

This thesis is dedicated to the heroes and heroines in my life:

- Pastor Joylene and Apostle Strike Manganyi for giving me and my family hope, unwavering support and continuous encouragement.
- My two late sisters and a brother – Hlamalani Hilda Manganyi, Kholani Sylvia Manganyi and Moshe Manganyi, who passed on much earlier than anticipated for having touched, influenced and enrich my life in a special way.
- My brother Promise Manganyi, for caring and always being there for our father when my studies consumed me.
- My father and mother – Gezani George Manganyi and Sophy Mamaila Manganyi for the love and the life they blessed me with, I will forever love and cherish you.
- My wife – Virginia Lessah Manganyi for love, and much love, for being there and for believing in me and in us.
- My two sons – Matimu and Mkatoko Manganyi for in you two, I am well pleased.

Because of your continuous encouragement and support, what appeared only as a dream came to life and lived, this research project is dedicated to you all with much love.

## **ACKNOWLEDGEMENTS**

Balancing good family life and full-time career particularly in the academic setting is very demanding, and when this is combined with post graduate studies, the experience can at times be overwhelming. I will forever be grateful to colleagues, friends and family who have provided me with much support and encouragement when I needed it the most. To my promoters, Dr Jabulani Calvin Makhubele and Professor S.L. Sithole who provided me with excellent academic guidance, advice and support, for your availability and willing to go a step further in providing much needed assistance whenever I required it, thank you. Dr Thembinkosi Mabila, from the School of Education for editing my work, thank you. Colleagues who supported and encouraged me though it looked more like I was in charge and taking control over everything, Mrs Tebogo Mahlatjie, Mrs Tiny Mona, Mr Peter Dimo, Mrs Linda Shirindi, Ms Sbongile Gqoboka, Mrs Motshidisi Kwakwa and Ms Phuti Manyelo, you continued to be my pillars of strength. To all my students, all is possible to those who believe; hold on to your dreams and dream more while awake. To my research respondents who made this research succeed, thank you very much for your participation.

Finally, I would like to say thank you to my Heavenly Father, Who was, is and is to come and the entire Manna Tabernacle of Witness family for support, guidance and wisdom for the accomplishment of this project.

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Eka Muhlamuri (Mun'wi wa byalwa bya xintu)

Xedulu ya inthavhiyu leyi nga kongomisiwa eka mbuyelo wo karhi

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## **LIST OF ABBREVIATIONS**

GTM	Greater Tzaneen Municipality
HIV	Human Immunodeficiency Virus
ARV	Antiretroviral
AIDS	Acquired immune deficiency syndrome
JCAHO	Joint Commission on the Accreditation of Healthcare Organisations
VCT	Voluntary counselling and testing
STI's	Sexually Transmitted Infections
WHO	World Health Organisation
TREC	Turfloop Research and Ethics Committee
PEMS	Paris Evangelical Missionary Society
TBC	Thaba-Bosiu Centre
IVR	Interactive Voice Recognition
APA	American Psychiatric Association
AUDIT	Alcohol Use Disorders Identification Test
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
DOTS	Daily Observed Treatment
TB	Tuberculosis
DALYs	Disability Adjusted Life Years
PLWHA	People Living with HIV/AIDS
GEAR	Growth, Employment and Redistribution Strategy

GGP	Gross Geographic Product
SDI	Spatial development Initiative
IDP	Integrated Development Plans
SMME	Small, Micro and Medium Enterprise
GDP	Growth and Domestic Product
SAMHSA	Substance Abuse and Mental Health Services Administration
ASAM	American Society of Addiction Medicine
CSAT	Centre for Substance Abuse Treatment
MRC	Medical Research Council
DSM	Diagnostic and Statistical Manual for Mental Disorders
NACA	National Association for Children of Alcoholics
NIDA	National Institute on Drug Abuse
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NRC	National Research Council
NASW	National Association for Social Work
DWAF	Department of Water Affairs and Forestry
VIP	Ventilated Improved Pit latrines
SDF	Spatial Development Framework
LED	Local Economic Development Strategy

## **ABSTRACT**

The study aimed at exploring and describing the effects home brewed alcohol has in the impoverished rural communities. The researcher has envisaged that the study would create a dialogue as well as awareness among consumers, brewers and the entire general public on the effects home brewed alcohol has on its users. Eco-systems theory was applied to explore the relationship and link the environment has on consumers and the brewers. The theory assisted also in clarifying the benefits each derived from this mutual relationship.

With regard to methodology, exploratory-descriptive design was implemented to both guide and facilitates the research project. Exploratory research design was helpful in getting much needed information in the home brewed alcohol cycles that has remained unknown for many years, particularly concoctions that are added to the brews to fasten fermentation and increase sharpness of the brews to the users. The population was consisted of brewers and consumers of home brewed alcohol from the Greater Tzaneen Municipality. Judgemental sampling was used for sampling purposes and one-on-one interviews were used for data collection. Literature reviews focused on history and purpose for which home brewed alcohol was initially intended for and the developments up to where we find ourselves today. Literature revealed that the brew which was initially meant for libations for the gods, cultural ceremonies and celebrations after good harvests has turned deadly. Data gathered is presented, analysed and interpreted in its true expressions as derived from the research participants without any alterations.

The study revealed the following:

That there is a strong link between the high usages of home brewed alcohol and poverty. That consumers of home brewed alcohol were those who are economically disadvantaged and with minimal means to make end meet. That for brewers, brewing was an economic activity and a way to fight back poverty lines. That there was a high disregard for general public health by brewers in favour of profit, the study showed. The study shows that areas where brewing occurred were often untidy and brewing equipment never sterilized for hygiene purposes. That the brews were addictive to users. Home brewed alcohol was linked to both domestic violence as well as unsafe and unprotected sexual intercourse.

The study recommends the following:

Appropriate interventions by community structures and policy makers should be launched to address these health and social problems associated with the use and abuse of home-brewed alcohol in various communities. The section concludes with recommendations for future research.

### **Basic preventative premises: brewers**

Given numerous findings on the brewing places and utensils used for the brewing purposes, the following actions are suggested for consideration and future implementation:

Brewers should be identified for possible induction on basic hygiene. Brewers should be registered and trained to meet set brewing standards. An area should be identified to pilot these basic recommendations.



### **Preventive focuses: consumers**

On the basis of the 20 consumers of home-brewed alcohol interviewed for this study, the findings pointed out on the following behavioural, attitudinal and environmental factors that should be closely monitored in the preventative action, and they are:

Users of home-brewed alcohol could be advised to consider either quitting or limit their intake since alcohol is not safe for human consumption. Most consumers were regular drinkers and they could be advised to reduce on their intake. Introducing games which consumers could engage in as they used drinking for leisure and to reduce boredom. Families were economically affected and disrupted by drinking patterns of their spouses, therefore financial planning and advice could be offered to regular drinkers.

### **Recommendations for future research: brewers of home-brewed alcohol**

In considering the positive contributory role to be played by brewers of home-brewed alcohol in ensuring that their brews are harmless to consumers' health and well-being, their significance in the fields of public health cannot be underestimated. With these in mind, the following recommendations are proposed for future research:

Since ingredients of many home brewed alcohol remain obscure, a more intrusive approach such as participation observation is recommended for further research in this area. The alcohol concentration level on home brewed alcohol is largely unknown, making it rather difficult to accurately measure alcohol consumption

level by users. A study to focus on alcohol concentration level on home brewed alcohol is therefore highly recommended. A health committee should be put in place to monitor brewers of home-brewed alcohol. This committee will on the basis of its findings suggest corrective programme to address identified challenges. Special attention should focus on cleanliness of places where home brewed alcohol are produced as well as on the brewing utensils used for preparing the brews.

# **CHAPTER 1**

## **GENERAL ORIENTATION TO THE STUDY**

### **1.1 INTRODUCTION**

Humans discovered alcohol thousands of years ago. Since time immemorial, alcohol has become humankind's most popular drug and it has been used for various reasons and occasions (Graves, 2000). Almost every culture has found a way to produce alcohol. Some people use fruit such as grapes to make wine, while others use grains such as barley or rice to brew beer. As a beverage containing alcohol, beer is consumed as food and is rich with symbolic significance when used within social, cultural, and religious customs and rituals.

Although other ingredients as contained in some alcoholic beverages such as sorghum beer were nutritious, it was also a drug which sometimes could be used as a medicine, and has both important pharmacological and toxic effects upon the mind (Edwards, Marshall & Cook, 1997). Alcohol is extracted naturally and unnaturally during a process known as fermentation. Even if brewed either way the process of fermentation has to take place. During this process, yeast spores or cells in the fruits, vegetables, grains or barley convert sugar into alcohol and carbon dioxide (Graves, 2000; Morris, Levine, Luo & Ashley, 2006).

In many African communities, people produced alcohol using the similar procedure of fermentation. However, this process was very often poorly monitored for quality and strength, resulting in a brew that was frequently contaminated and highly toxic (World Health Organisation, 2004; Haworth & Simpson, 2004; Pitso, 2007).

Previous research therefore, suggest that alcohol produced under unsupervised or unmonitored conditions tended to be highly toxic with alcohol content of approximately 97% (Bobrova, Kurilevitch, Malyutina & Bobak, 2007). At a regional technical consultation on alcohol in Africa which was held by WHO in Brazzaville, Congo, it was agreed that much remains to be known regarding surrogate brews, both in terms of level of consumption and associated problems (WHO, 2009). Alcohol abuse was very often cited as one of the key factors responsible for undertaking risky behaviour (Taiwo & Goldstein, 2006). As a drug, alcohol was also likely to increase aggressive behaviour and could increase crime (Room, Barbor & Rehm, 2005; Parry & Dewing, 2006). Alcohol played a major role in promoting risky sexual behaviours (such as unprotected casual and indiscriminate sexual engagements and unprotected sex with multiple partners), accelerating progression to disease, reducing efficacy of HIV treatment, and reducing adherence to drug regimens. In addition, alcohol abuse was highest in poor communities where potent home-brewed alcohol was cheap and readily available (Morris, Levine, Luo & Ashley, 2006; WHO, 2007).

The growing recognition that alcohol consumption was a significant contributor to the global burden of disease meant that it required greater attention by the public health community than it was receiving at present.

Appropriate policy responses were needed to address the various health and social problems associated with use of and dependence on alcohol (Brady & Rendall-Mkosi, 2005; Morojele, Kachieng'a, Mokoko, Nkoko, Parry, Nkowane, Oshia & Saxena, 2006).

## **1.2 OPERATIONAL DEFINITION OF CONCEPTS**

The following concepts had the following meaning in this study:

### **1.2.1 Home-brewed alcohol**

Home-brewed alcohol referred to brews in households and it was made of brown bread, brown sugar, yeast, pine-apple and water (Makhubele, 2011).

### **1.2.2 Surrogate alcohol**

Surrogate alcohol referred to home-brewed alcohol that was classified as unrecorded because its alcohol content was not measured. In this study, home-brewed alcohol and surrogate alcohol were synonymous and were used interchangeably (Lachenmeier, Rehm & Gmel, 2007: 1).

### **1.2.3 Unorthodox brewing methods**

An unorthodox home-brewing method referred to an unconventional method of home-brewing by putting foreign and hazardous substances in brews to fast track fermentation as well as increase the level of intoxication with the intention of making more money (Pitso, 2007). It was the unorthodox home-brewing process that has led to home-brewed alcohol being referred to as a “concoctions”.

#### **1.2.4 Hazardous use**

Hazardous use was a pattern of alcohol consumption carrying with it a risk of harmful consequences to the drinker. The damage might be to health — physical or mental, or they might include social consequences to the drinker or others (Babor & Higgins-Biddle, 2001). For the purpose of this study, this definition was adopted. The concept of hazardous use was commonly referred to as abuse and also included over-indulgence in the consumption of alcohol.

#### **1.2.5 Indigenous alcohol / Traditional alcohol**

Indigenous alcohol referred to seasonal grain-based beer which Africans use to produce with very low ethanol content for consumption in rural areas during ceremonial festivities (Platt, 1955). For the purpose of this study, indigenous alcohol and traditional alcohol meant the same thing and were used interchangeably.

### **1.3 RESEARCH PROBLEM**

Competitiveness in the brewing of home-brewed alcohol has led many informal “commercial” brewers to utilise unorthodox and poisonous ingredients to hasten fermentation, enhance sales and make their brews more potent (Pitso, 2007). Putting foreign substances to home-brewed alcohol gave it a sharp urge and also increased the quantity produced from minimal main ingredients. Makhubele (2011) has asserted that these were done without taking into consideration the health aspects of the consumers, yet alcohol used wisely could add to enjoyment of life. Since commercialisation of the home-brews, there was evidence that public health

was being damaged as a result of alcohol consumption. Alcohol consumption is a leading contributor to health problems such as cardiovascular disease, liver malfunctioning and pancreatic cancer and associated health challenges such as accidents, homicides, and suicides, amongst others (Graves, 2000). Alcohol as a health risk factor carries an enormous price tag in terms of the toll on life, quality of life, and economic costs. People who drink alcohol risk out-of-control behaviour. This could cause a person to act irresponsibly regarding sex, with possible consequences including pregnancy, STI's or HIV (Graves, 2000; Kalichman, 2010).

Home brewed alcohol when produced specifically for trading purposes was often perceived to be harmful. It was quite often perceived to be contaminated as it was produced under conditions that were poorly monitored or supervised. This is supported by WHO (2004) which found that brewing utensils used for preparing home-made alcohol were often not sterilised, as such, the alcohol produced was frequently contaminated and toxic. In Greater Tzaneen Municipality, specifically in the areas where the study was conducted, there were quite often water related challenges, ranging from poor water supply to water cuts thereby compromising the cleanliness of the brewing utensils and brews produced therefrom.

The World Health Organization (WHO, 2004) estimated that there are about 2 billion people worldwide consuming alcoholic beverages and 76.3 million with diagnosed alcohol use disorders. From a public health perspective, the global burden related to alcohol consumption, both in terms of proneness to sickness and mortality, was considerable in most parts of the world. Globally, alcohol consumption caused 3.2% of deaths (1.8 million) and 4.0% of the Disability-

Adjusted Life Years lost (58.3 million). Overall, there are causal relationships between alcohol consumption and more than 60 types of disease and injury.

Alcohol consumption is the leading risk factor for disease burden in low mortality developing countries, of which South Africa is but one, and the third largest risk factor in developed countries (WHO, 2002). In Europe alone, alcohol consumption is responsible for over 55 000 deaths among young people aged 15 to 29 years in 1999 (Rehm & Gmel, 2002; WHO, 2002; Jenkins, 1998). Besides the numerous chronic and acute health effects, alcohol consumption is also associated with widespread undesirable social, mental and emotional consequences. These are reflected, for example, as abuse in workplaces and in relationships. There have been many instances of poisoning and deaths following the consumption of adulterated liquor (WHO, 2002).

People of the lower socio-economic status sometimes consumed illicit (illegal substances) or home-brewed alcohol because of its low cost, despite its known hazards. Mass casualties as an aftermath of consuming toxic brews are not infrequent. At least 90 Bangladeshis died in 1998, including 70 in Gaibandha, after consuming illegal home-brewed alcohol. In the following year, there was an incident of alcohol poisoning in the north-eastern town of Narsingdi, about 50 miles from the capital Dhaka, where 96 people reportedly died and more than 100 were hospitalized as a result of drinking illegal home-made liquor (WHO, 2004). Such tragedies devastated families who lost productive members of their family. Other than exploring and describing different types of home-brewed alcohol, its accessibility and availability, this study sought to investigate and establish the



exact profile of the brewers of home-brewed alcohol, the hazardous substances they put in the brews to fast track fermentation; and also the risk at individual and public level influenced by home-brewed alcohol.

Most areas as found in the Greater Tzaneen Municipality had a substantial numbers of home-brewed alcohol producers and consumers. The most areas with exceptional high numbers of both brewers and consumers included among others the following areas of interest, Mokgolobodu, two sections in Dan Village famously known as Lusaka and Mbamba Mechisi as well as Khujana village. These areas in turn became the major focus areas for the study. Brewers in the mentioned areas were competing for the same clients hence the ingredients, methods used in the brewing become a very critical concern for the study. The study on home-brewed alcohol as a public health problem in Greater Tzaneen Municipality, Mopani District of Limpopo Province: Social work perspective, aimed to address or facilitate in the finding of solutions to most of the challenges mentioned here and beyond, as the social work process is about investigating a problem, assessing the problem, and finding a solution to the problem.

#### **1.4 RESEARCH QUESTIONS**

The following research questions have been developed for the study:

- What are the various ingredients and methods used in preparing home-brewed alcohol in the Limpopo Province?
- Who are the brewers of home-brewed alcohol?
- What do brewers of home-brewed alcohol have in common?
- Do consumers of home-brewed alcohol eat healthy food?

- Do consumers of home-brewed alcohol practice safer sex?
- Is there a relationship between domestic violence and home-brewed alcohol?

## **1.5 MOTIVATION OF THE STUDY**

Home-brewed alcohol has for many years been used by Africans and non-Africans for various reasons and occasions (Molamu & Manyeneng, 1988; Macdonald & Molamu, 1999). The effects of home-brewed alcohol, either negative or positive were not properly recorded. To this end very little was known on the effects of home-brewed alcohol upon its users. Furthermore, limited information existed on the profile of the brewers of home-brewed alcohol. These concerns and many unanswered questions have motivated the researcher to embark on this research in the quest to find and provide much needed answers to all these uncertainties.

The impact of home-brewed alcohol on public health was undocumented and required research to unfold and interpret, hence this investigation (WHO, 2009). The emergence of new, complex social health concerns demanded that the public health field strengthen its capacity to respond. Academic institutions were vital to improving the public health infrastructure. Social work and public health share a social justice mission to improve, defend, and enhance the well-being of individuals, organizations and departments working together to ameliorate social health problems (Ruth, Sisco, Wyatt, Bethke, Bachman & Piper, 2008).

## **1.6 THE AIM AND THE OBJECTIVES OF THE STUDY**

### **1.6.1 Aim of the study**

This was a baseline study aimed at exploring and describing the effects of home-brewed alcohol on public health in Greater Tzaneen Municipality of Mopani District, Limpopo Province.

### **1.6.2 The objectives of the study**

The objectives of the study were as follows;

- to describe various ingredients (some of which are lethal) and methods (some of which are unhygienic) which are used in the preparation of home-brewed alcohol,
- to profile the brewers of home brewed alcohol,
- to establish from consumers whether they know of healthy dietary practices,
- to explore the type of physical activities that consumers of home-brewed alcohol indulge in,
- to investigate the extent to which consumers of home-brewed alcohol practice protected and safer sex,
- to establish the existence of a relationship between domestic violence and home-brewed alcohol; and
- to mobilize stakeholders in rural communities to help improve the condition and context of production of home-brewed alcohol.

## **1.7 ETHICAL CONSIDERATIONS**

Richard and Grinnell (1998) stated that ethical acceptability was a primary issue in any research. According to Strydom in De Vos *et al.*, (2003), ethics are a set of moral principles that were suggested by an individual or group, and were subsequently widely accepted and they offer rules and behavioural expectations about the most correct conduct towards research subjects, other researchers, and research assistants. For the purpose of this research, the researcher ensured that every ethical consideration was dealt with in accordance with the agreement and expectations as put down by the Turfloop Research and Ethics Committee (TREC). Furthermore, the researcher is the registered social worker with South African Council for Social Service Professions who has to comply with the professional ethical codes of practice

### **1.7.1 Informed consent and voluntary participation**

Social research, according to Babbie (2004), represents an intrusion into people's lives. The researcher as a professional social worker took into consideration the rights of the respondents as he was guided by the values and principles of the social work profession. To demonstrate this element, all participants were requested to sign a consent form. Informed consent referred to the process of telling potential research participants about all aspects of the research (Monette, Sullivan & De Jong, 1994). De Vos *et al.*, (2002) stated that participants should be legally and psychologically competent to consent and that they would be at liberty to withdraw from the investigation at any time.

The participants signed a consent form that explained the purpose of the research, and that participation in the study was voluntary. The respondents had the right to refuse to be interviewed and the right to refuse to answer any question. A major tenet of social research ethics is that participation should be voluntary. Women and men who participated in the study were given consent letters to confirm that they were willing to participate. The research aims and objectives were properly explained to them before the commencement of data collection. The ability to participate voluntarily ensured more and accurate results.

### **1.7.2 Confidentiality, privacy and anonymity**

Confidentiality referred to the agreements between persons that limit others' access to private information (De Vos *et al.*, 2002). The information given by the participants was not shared with other people other than the supervisor of the researcher. The researcher ensured that confidential information provided by research participants was treated as such even when such information enjoys no legal protection or privilege, no legal force is applied. Research participants had the rights to remain anonymous. Interviews were held in an excluded room to ensure privacy of the participants. Anonymity meant that no one, including the researcher, would be able to identify any subjects afterwards. Participants were not identified by names, surnames or identity numbers.

Personal details supplied to the researcher for the purpose of follow-up were kept confidential and only the data which were analyzed anonymously were shared with academia (Babbie & Mouton, 2001).

### **1.7.3 Publication of the findings**

The researcher ensured that the investigation proceeded correctly and that no one was deceived by the findings. The researcher was open with the results from the study. He, however, allowed colleagues to vet the research and its implications for academic purposes. De Vos *et al.*, (2002) stated that findings should be released in such a way that utilisation by others was encouraged.

The research findings were made available to the Department of Social Work (Turfloop Campus), the Department of Health and Social Development and Research Office of the University of Limpopo, as well as to all the Funding institutions with vested interest on the findings of the study. The results were published through a PhD thesis which was accessible to the general public and the academia as well as in articles in journals. With speicla reference to participants, the Department of Social Development is using the findings to develop the programmes for the benefit of the people even beyond the researched area.

### **1.7.4 Deception of subjects, avoidance of harm and risks**

Deception was the misleading of subjects about the real purpose of the research or other knowledge that might contaminate the results. Subjects who are unaware of the real purpose of the research will behave more naturally (Burns, 2000). Deception includes withholding information.

The study had little chance for risks, be it physical or psychological and if they were, participants could have been referred to the psychologist for assistance. The researcher explained in writing the purpose of the research and this formed part of the consent form inclusive of possible advantages and disadvantages. All research participants were not be coerced to participate in the study. Voluntary participation was encouraged with informed consent.

In carrying out the study, dangers such as physical, emotional or psychological harm were closely guarded and thoroughly examined and respondents were asked for their genuine assessments. Babbie (2004) indicates that social research should never injure the people being studied, regardless of whether they volunteer for the study or not.

## **1.8 SIGNIFICANCE OF THE STUDY**

According to Brennen (1992) the significance of the study focused on the contribution of the study to the social work profession, on the policy and programme development and to the community where the study was conducted. Existing literature has alluded to the fact that foreign or unknown substances were added in the making of home brewed alcohol to increase its sharpness and toxic levels (Pitso, 2007; Makhubele, 2011; Haworth & Simpson, 2004).

The findings of this study has clearly revelead that most consumers of home brewed alcohol were sickly and have infact been advised to abstain from drinking as the alcohol from this brews were harmful to their health. It is therefore a finding of this study that home brewed alcohol is a threat to the health of the users. Scientific testing however will still have to be done to full affirm and confirm this

research finding. Moreover, it is mandatory that ingredients and preservatives of food and beverages have to be indicated and if possible even the percentages of alcohol content. It was therefore essential that an adult partaking of home-brewed alcohol should know as he made his or her choice to partake of any substance, the extent to which she / he endangered his / her life.

## **1.9 STRUCTURE OF THE THESIS**

This thesis is made up of nine chapters. The chapters are described below:

### **CHAPTER 1: GENERAL ORIENTATION TO THE STUDY**

This chapter focuses on the basis and background of the study; research problem; research questions; motivation of the study; the aim and objective of the study; research methodology; ethical considerations and the significance of the study.

### **CHAPTER 2: THEORETICAL AND CONCEPTUAL FRAMEWORKS**

This chapter provides the theoretical and conceptualization of certain concepts, theories and approaches related to the study of home brewed alcohol. The focus in this chapter is on the ecosystem theory and strengths perspective as a preferred social work approach in substance abuse.

### **CHAPTER 3: THE ORIGIN AND HISTORY OF ALCOHOL WITH AFRICANS**

This chapter looks at the origins and history of alcohol with African people. It lays emphasis on involvement of alcohol during enslavement; home brewed alcohol and cultural ceremonies; nations which pioneered home brewed alcohol in Africa as well as profile brewers of home brewed alcohol.



## **CHAPTER 4: AFRICANS' VIEWS ON DRUNKENNESS AND LIFESTYLES**

This chapter highlights the views of Africans on drunkenness and lifestyles in the area of alcohol. Areas covered on this chapter includes, Basotho and drunkenness; gender and expectancies; theoretical model: expectancies and drinking; alcohol and the incidence of HIV; implications for policy and practice; HIV/AIDS treatment and prevention; dietary preferences and alcohol usage; alcohol use and domestic violence.

## **CHAPTER 5: RISKS AND CONTROL MEASURES IN HOME BREWED ALCOHOL**

This chapter describes the risks involved in home brewed alcohol as well as the control measures available to curb misuse thereof. Areas covered include, risk factors for harmful alcohol use; alcohol control measures in Africa and home brewed alcohol usage and poverty.

## **CHAPTER 6: SOCIAL WORK INTERVENTIONS IN SUBSTANCE ABUSE**

This chapter focuses on social work interventions in the field of substances and in addictions. Focal points include the following, history of social work in addictions; the many problems called addictions; causes of addictions and compulsive behaviours; evidence-based addiction practice; social workers' intervention in the field of public health; impact of social work profession in substance abuse; prevention of substance abuse; treatment of substance abuse; social work assessment; treatment for women; solutions from a social work perspective; support and maintenance; goals of brief intervention and components of brief interventions.

## **CHAPTER 7: RESEARCH METHODOLOGY**

This chapter highlights the research methodology used in the study. It fully describes the area of the study; geographic location and key features in the area of the study; it profile the area of the study; highlight the research design, population and the sampling technique.

## **CHAPTER 8: DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

This chapter is the highlight of the study conducted. It gives account on data presentation, analysis as well as interpretations. Demographics as well as empirical responses from participants are captured.

## **CHAPTER 9: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

This final chapter gives a summary of analyses, discussions as well as expand on certain recommendations and conclusions. The limitations of the study are also highlighted upon. This chapter has put down the structure, framework as well as the overview of the entire study. Chapter two (2) begins to shape-up the study through the orientation of conceptual frameworks used in the study.

# **CHAPTER 2**

## **THEORETICAL AND CONCEPTUAL FRAMEWORKS**

### **2.1 WHAT IS A THEORY, MODEL AND CONCEPTUAL FRAMEWORK?**

The purpose of theories, models and frameworks is to describe, explain or predict. They do this by naming and framing the topic by using concepts and propositions. Conceptual frameworks are descriptive, showing relevant concepts and how they relate to each other. Theories, models and conceptual frameworks are tools to structure thinking and action about a problem. They provide a rationale, to justify decisions and explain findings (Kitson, Harvey & McCormack, 1998).

The use the conceptual framework as a tool considered to be very imperative. It is crucial to adapt and tailor the framework to accommodate the changes in the theories that are to be applied for a specific study. Adaptability offers a mechanism for coping with the uncertainty of system and organisational change. It also facilitates adaptation latitude so that an intervention or how it is implemented can be customised for the context, as appropriate. The conceptual framework methodology has been applied across a broad spectrum of disciplines as a theoretical modelling tool. However, there appear to be as many definitions of a conceptual framework and its uses as there are conceptual frameworks (Rycroft-Malone & Bucknall, 2010; Ovretveit, 2011).

The discussion of conceptual frameworks suggests that they share a number of commonalities, including: establishing a nomenclature for a discipline where none exists (or where a common terminology does exist but is used inconsistently); using relevant literature to develop a model; using diagrams and/or matrix tables to illustrate interrelationships, and; making the implicit explicit. conceptual frameworks are intended to perform any function from simply helping to define a discipline to developing a fully comprehensive, analytical framework for the discipline.

Fawcett (1997) suggests that conceptual frameworks can be used for four purposes: to guide practice; as a basis for research projects; for pedagogic purposes; and in administrative situations. Furthermore, Nye and Berardo (1966) discuss the following advantages of conceptual frameworks. First, the development of a conceptual framework should provide adequate definitions of concepts, and thereby provide adequate measurement. Second, conceptual frameworks facilitate the researcher by providing an array of ideas. Third, it is important that not only are the substantive results of research understood, but also that the essential concepts used are understood by those who are using the results.

Fourth, the development of a conceptual framework allows effective communication between academics, who often speak different languages and make implicit assumptions and concepts unconsciously without consideration of other readers. Lastly, they suggest that conceptual frameworks allow the clarification of assumptions, frames of reference, and implied variables.

Further, conceptual frameworks should not be static, but dynamic, in nature. Also, unless a conceptual framework is tested empirically, it may be inadequate for application in practice, representing a limited, subjective perspective.

In summary, a conceptual framework allows sensible and clear discussion in a particular discipline. The conceptual framework methodology allows the development of taxonomies, allowing clarification of issues. The development of a nomenclature, or common terminology, is important. More advanced conceptual frameworks could generate empirically testable theories which may yield evidence to support or reject the underlying model. Overall, a conceptual framework should make a contribution to the body of knowledge in the discipline. For the purposes of this paper we define a conceptual framework as a methodology used to establish a body of knowledge in a discipline by codifying the literature, and using it to develop a model of reality, often culminating in policy recommendations. This model of reality highlights any problem within a discipline that needs to be addressed by academics, practitioners and even government. The importance of conceptual frameworks in attempting to represent the world in which we live cannot be under-estimated and authors often emphasise this aspect of their theories and frameworks. We consider there are four overriding benefits which derive from the use of a conceptual framework methodology.

Firstly, a conceptual framework can be used for pedagogic purposes as an introduction to a discipline, or subjects within a discipline. The bibliography which flows from the literature review often provides an invaluable source for further investigation.

A common terminology adds to the understanding of the subject by clarifying terms. The model development allows the reader to grasp a reality. A second benefit of a conceptual framework is that it is based on a model which depicts the *status quo*. The model often attempts to make the implicit explicit, thus reflecting an existing reality - the *status quo*. This in turn sheds light on the *status quo* and allows suggestions to be made as to how it may be reformed, hopefully for the better and in the public interest. A third benefit of implementing a conceptual framework is that it leads to the identification of inadequacies within the *status quo*.

The use of a conceptual framework methodology allows foresight to be applied to inadequacies. This suggests that a conceptual framework methodology can be used as a tool in order to investigate inadequacies in any discipline and even allow for problems to be addressed, within such a framework, allowing for possible benefits to arise from such an exercise, thereby improving the *status quo*. A fourth benefit is that the use of a conceptual framework allows sensible debate to take place. The model development leads to academic debate, in terms of the taxonomy, relationship between variables, propositions, and model. A conceptual framework allows clarity to be brought to the debate, with problems addressed in a concise manner. Policy recommendations which may flow from the conceptual framework can therefore also be fully debated in a coherent way.

The potential of conceptual frameworks not only to represent but to challenge the *status quo* is also representative of their usefulness in providing a means of pushing theory and policy forward. Indeed, conceptual frameworks by their nature formalise an image of reality which frequently threatens or contradicts established doctrine in an area and it is an inherent characteristic of this methodology that it may be a vehicle for expressing theories and notions that affect our view of reality and of the world in which we live. Indeed, many theories (which although not described as conceptual frameworks but which may indeed be viewed broadly as conceptual frameworks) have been revolutionary at their time of release into the wider world. They have evoked controversy and have at times even attracted the attentions of the Papal Inquisition.

This chapter brings to life the conceptual tools that were used when the study on home brewed alcohol was conceived and later conducted. A conceptual framework is a set of ideas, whether vague hunches or clearly formulated propositions that guide the way a research project is planned and undertaken. The conceptual framework determines what questions are to be answered by the research, and how empirical procedures are to be used as tools in finding answers to these questions. At the end, a conceptual framework helps to clarify and assist a researcher in explaining the route, approach as well as methods to be followed to achieve the intended objectives. It seeks to alleviate misconceptions and misunderstanding by creating strategies which provides clarity and direction toward the envisaged goals (De Vos, Strydom, Fouche & Delport, 2002; Mouton, 2009; Nkatini, 2005).

In conducting this research project, the eco-system theory, strengths based theory as well as expectance and drinking model were used to describe and explain circumstances and situations relating to alcohol and high risk behaviours as depicted by alcohol users. However, ecosystem theory was used as an overarching framework for the study.

This theory in the context of home brewed alcohol, argues that although brewers of home brewed alcohol make it available to consumers, equally consumers had the will power to choose either to use it or not. The researcher in the study had wished to explore and describe home-brewed alcohol within the context of the rural setting where it was widely brewed and consumed. The eco-system theory is more relevant and appropriate in explaining the relationship between the users of home-brewed alcohol and the environment where the alcohol is brewed. The recipes and brewing methods used in making of the home-brewed alcohol is influenced by both the environment and its inhabitants. Critical and important for this study, is the separate and joint understanding of the two theories, which together constitute the eco-systems theory.

## **2.2 THE ECOSYSTEM THEORY**

The ecosystems theory is comprised of ecological theory and the systems theory, better known as person-in-environment approach. A system is a combination of elements with mutual reciprocity and identifiable boundaries that form a complex or unitary whole.



There is a transaction or reciprocity of person-in-environment relationship in which each influences the other overtime (Young & Smith, 2000). Patterns of communication, individual coping behaviours, interpersonal networks, and characteristics of the physical and social environment which either support, or impede human development are examined in the context of the complex reciprocal interactions between the person and the environment.

It is further argued that there are two major functions of coping which are, problem solving (what needs to be done to reduce, eliminate or manage the stressor) and regulating the negative feelings aroused by the stressor. The two are interdependent functions in as much as each is a requirement of the other, and each supports the other. The ecological perspective is equally concerned with the issue of power and oppression and how these affect the human condition.

For example, social power may be withheld from someone's group on the basis of such characteristics as age, race, ethnicity, gender, religion, sexual orientation, social class, and or variety of physical trades and conditions. The abuse of power by dominant groups related to such societal discourse such as poverty and unemployment and inadequate social support in education, health care and housing (Germain, 1991; Lesser & Pope, 2007). According to Strom-Gottfried (1999) ecological model puts its emphasis on understanding the multiple contextual influences on human behaviour. Ecological model is anchored on improving social support networks such as family, school, neighbours, church, friends, and other service providers.

Every system had boundaries within which there is a great interaction between the members and people outside of the boundary. The ecological model is a holistic, dynamic, interactional systems approach, based on ecology, which in general entail looking at people in relation to their environment and how they interact with them.

This perspective emphasizes the dynamic interactions between individuals, families and communities as well as social systems. The ecosystems theorists maintained the view that substance abusing individuals in isolation from their family and environment ignores the influence of the home in which they learnt to perceive how they fit in the world, as well as the influences others have on their behaviour. Therefore, any risk behaviour an individual might manifest or display, threatens the balance of the family of origin where roles and perceptions were nurtured (Steinglass, 1987). The ecosystems theory was also called the life model, gave the guiding framework for understanding social work practices (Franklin & Jordan, 1999; Karger, 2000). This theory focuses on the mutual relationship between the person and the environment in which each shaped and influenced the other over time. The theory gives an assessment on the negative interactions between people and their physical as well as social environments.

The ecological metaphor helped the social work profession to enact its social purpose of helping people and promoting responsive environments that support human growth, health and satisfaction in social functioning (Germain & Gitterman, 1996).

The ecosystems theory focused on the social and cultural factors with regard to behaviour change and learning about the historical traditions, beliefs and values in a particular environment, and how social and cultural factors influenced an individual's behaviour (Keys, MacMahon, Sanchez, London & Abdul-Adil, 2004 as cited in Tuelo, 2011). It assisted the researcher to grasp the problem of concern within the situation of the person in context and contributed to the problem intervention process. The ecosystems theory asserted that the systems were always sub-systems of the larger systems in an environment, but could, at the same time, be divided into smaller subsystem units. The subsystems influenced each other behaviourally (Potgieter, 1998).

The ecosystem theory suggests interdependence and relationships between different organisms and their various environments (Khumalo, 2007). DuBois and Miley (2005) as cited by Tuelo (2011) state that in using ecosystems theory, social work practice is directed at improving the transactions between people and environments in order to enhance adaptive capacities and improve environments for all who function within these environments. Furthermore, Sheafor, Horesji and Horesji (2000) state that an ecosystems perspective maintains the social worker's focus on the concept of person-in-environment in a practice situation.

Human beings are responsive to their surroundings as well as to systems surrounding them. Khumalo (2007) explains the ecosystems as having layers and each having an effect on the individual. According to Khumalo (2007), the ecosystems theory is used to better understand the way in which people and the environment influence one another.

Therefore, people are not merely a product of their environment, but through interaction with it are capable of influence and change. The researcher used the ecosystems theory to establish the impact of home brewed alcohol on consumers and also to link this impact to the entire functioning of the family, by taking into consideration the consumers' relationships within the families and the community in general.

Families are the primary agents of socialization; hence, consumers and brewers alike learnt most of their behaviours from their parents, and that is how they have been brought up at their early age, and this is what they display today. Also, the environmental systems in which learners live in influence them. The environmental systems in this case refer to the family environments, drinking environments and the community environments. People, who live in an environment where drugs and alcohol are part of their lives, are easily tempted to take drugs and alcohol.

For this study, the ecosystems perspective is paramount as consumers and brewers as well as their families need to adapt in the environments of which they are part. In order to adapt and cope, unwittingly, consumers or brewers may decide to take and brew alcohol. Germain and Gitterman (1980) point out that the adaptive processes, the people and the environment shape each other. Problems experienced by an individual within a family can easily affect the whole family. This is supported by Tshiwula (1998) who notes that the basic premise of the ecosystems theory is that all members of the family participate in the system and therefore carry part of the responsibility for survival, and sometimes their failure results in family dysfunction.

The ecosystems theory did not only fit the situation to be explained in the study, but was more relevant and appropriate in explaining relationship between the users of home-brewed alcohol and the environment where the alcohol was brewed. The recipes and brewing methods used in making of the home-brewed alcohol were influenced by both the environment and its inhabitants thereof.

### **2.3 STRENGTHS PERSPECTIVE AS A PREFERRED SOCIAL WORK APPROACH IN SUBSTANCE ABUSE**

The strengths perspective is a collection of ideas and strategies that seek to develop in clients their natural abilities and capabilities. It is based upon the assumption that clients come for help already in possession of various competencies and resources that may be tapped into that will improve their situation (Saleebey, 2006a). They are thus entitled to dignity, respect, and the responsibility associated with seeking help.

All individuals are seen as having goals, talents, and confidence while all communities contain people, resources, and opportunities (Rapp, 1998). Strengths are viewed as what people have learned about themselves under positive and negative circumstances, even those self-inflicted (Early & GlenMaye, 2000; Saleebey, 1996, 2006b). They also evolve from personal qualities, traits, and virtues, what they have learned about the world around them, cultural and personal stories and lore, their natural source of pride, and the notion that spirituality is understood.

Basic to the strengths perspective is the assumption that all humans are capable of change and growth (Early & GlenMaye, 2000). All must be seen from a viewpoint of their capacities and capabilities, competencies, possibilities, talents, visions, hopes, and values, regardless of how altered and shattered they may have become due to their circumstances, trauma, and oppression (Saleebey, 1996). Even those typically viewed as intractable, hopeless, and resistant to accepting help are seen as capable of making significant progress in facing their difficulties when helped to reawaken their personal abilities (Brun & Rapp, 2001). Practitioners are called to see potential and possibilities rather than problems, options and choices rather than constraints, and wellness, albeit physical health or psychological, social, intellectual, or spiritual well-being, rather than sickness. Clients' strengths, resources, and environment need to remain the central focus of the helping process (Saleebey, 2006).

The strengths perspective is premised upon several basic principles (De Jong & Miller, 1995; Early & GlenMaye, 2000; Kisthardt, 2002; Rapp, 2006); First, practitioners must focus attention upon clients' individual strengths rather than possible pathology. Next, the community is viewed as being a major source of resources, that is, different opportunities to connect with various social support networks. Interventions are individually tailored to the unique needs of each client based solely on self-determination whereby practitioners are to do nothing without their approval. The practitioner-client relationship is primary and essential, one supporting confidence in clients' ability to engage in or cope with the multiple requirements of their surroundings and other people.

Glicken (2004) and Saleebey (2006) state that the strengths perspectives arises from the profession of social work's commitment to social justice, the dignity of every human being, and building on people's strengths, capacities and competencies rather than focusing exclusively on their deficits, disabilities, or problems. The emergence of strengths based theory enable practitioners to shift their focus from medical model to strengths based approach. It alludes to mobilizing people's talents, knowlwdge, capacities, values, experience, and background information and resources in the service of achieving goals of having sustainable better life (Saleebey, 2006; Allison, Stacey, Dadds, Roeger, Wood & Martin, 2003; Greef & Human, 2004). The term strengths perspective denotes the enabling belief system of social work profession in improving the social functioning of people and addressing health and social challenges and pathologies. This approach assumes that the expression and expansion of strengths and resources increases the likelihood that people will reach the goals and realize the possibilities they have set for themselves (Zastrow, 2000; Glicken, 2004; Saleebey, 2006).

According to Hepworth and Larsen (1993), Glicken (2004) and Saleebey (2006), strengths perspective obligates social workers to understand that; however downtrodden or sick, individuals, families, clans and communities have survived for time immemorial. Their cultural values, traditions and customs kept them striving and improved their social functioning and enabled them to address their health and social pathologies, they therefore need to be embroiled and infused in dealing with the current challenge on home brewed alcohol. People have taken steps, summoned up resources to improve their social functioning and managed

those health and social pathologies over the years. Social workers need to establish and know what people have done, how they have done it, what they have learnt from doing it, and what resources were available in their struggle to surmount their troubles. The focus on strengths encourages a person to recognise qualities within himself, his family, clan and community and amplify existing strengths. Strengths-based theory espouses the belief that a person can be more of himself when he becomes freed up from socially conditioned 'negative brainwashing' (Glicken, 2004; Saleebey, 2006).

While not wanting to minimize the complex problems and challenges persons are experiencing, somehow the strengths perspective makes improvement an ever-present possibility. It acknowledges the resilience of people, their ability to endure extreme hardships and to survive seemingly insurmountable problems. Rapp (1998) identified several important functions relevant to the strengths perspective. From the initial interaction, the practitioners' goal must be to begin developing a collaborative helping relationship. In the assessment process, practitioners need to focus upon the clients' current situation, their wants, and information on what worked in the past so as to identify personal and environmental strengths applicable to resolving the present identifying problems.

Regarding treatment planning, practitioners must work towards developing an agenda derived from input from both parties that focuses on achieving clients' self-determined goals, requiring the plan to integrate clients' strengths into all interactions, particularly during goal setting, even for those who suffer from severe mental illness (Brun & Rapp, 2001; Linhorst, Hamilton, Young, & Eckert, 2002). In addition, practitioners must assist in securing the environmental resources the



clients' desire so they may achieve their goals, thus enjoying the full range of their rights and increase their assets. Lastly, practitioners need to strive for collective, continuous collaboration, and gradual disengagement.

Practitioners thus prove to be more interested in the clients' ability to creatively draw upon their own strengths and community resources to cope in ways that promote self-efficacy and community integration. The researcher in this study will effectively use community resources as a best tool to increase community awareness on the health dangers associated with the use of home brewed alcohol.

## **2.4 EXPECTANCIES AND DRINKING MODEL**

Expectancies about alcohol's effects on sexual acts and sexual feelings influence drinking (Leigh, 1990). Expectancies about alcohol's effect may be formed without any prior experiences of drinking, which is why expectancies seem to come first in a more fundamental sense (Leigh & Stacy, 2004). After one has had experiences of drinking alcohol, these experiences may influence one's expectancies about alcohol's effects. This suggests a spiralshaped model in which expectancies and experiences influence each other. Therefore, Leigh and Stacy (2004) argue that age should be introduced into such studies. In the present study, this means that the role that gender and age play in the relationship between expectancies and drinking will also be examined.

### **2.4.1 Gender and expectancies**

Abbey, McAuslan, Ross, and Zawacki (1999); Corcoran and Thomas (1991) conclude that in their study, men were rated as feeling significantly more aggressive and as experiencing significantly higher sex drive when drinking, compared to women. Women, on the other hand, were rated as experiencing more sexual affect and vulnerability to sexual coercion when drinking, compared to men. Hence, study participants in general held “gender role stereotypic” beliefs about alcohol’s effects on others.

As Leigh and Aramburu (1996) point out, men have traditionally been expected to initiate sexual activity and women to limit it. They also acknowledge that while traditional gender roles seem to be changing, this change is “neither quick nor extensive” (Leigh & Aramburu, 1996). Haavio-Mannila, Kontula, Weinberg, & Sprecher (1990) and Wilsnack and Wilsnack (1997); (Klassen & Wilsnack, 1986) have noted that women’s sexual activity is more strictly regulated or suppressed socially and that drinking alcohol therefore may enable women to act more liberally vis-a`-vis a restrictive ideal.

Haavio-Mannila et al., (1990) conclude that in their study, alcohol use was related to liberal attitudes toward sexuality among women but not among men, indicating an emancipation script, while Leigh and Aramburu (1996) conclude that in initiating sexual activity, their results show gender differences, but alcohol effects were weak. They discuss this as possibly related to study design, but also possibly related to the fact that their sample consisted of college students.

In the present study, the fact that people “generally view alcohol as enhancing and disinhibiting sexual feelings and behaviours” (George & Stoner, 2000) is understood as indicating an expectancy: if people hold this view of alcohol as disinhibiting sexual feelings, it is reasonable to think that they will also expect alcohol to have these effects.

Because people in general see alcohol as a sexual disinhibitor, a woman's as well as a man's positive expectancies about alcohol's effect on sexual feelings can be expected to be related to that woman and man drinking more. In line with Haavio-Mannila et al (1990) emancipation script and Wilsnack and Wilsnack's (1997) conclusion that drinking alcohol may enable women to act more liberally vis-a`-vis a restrictive ideal, one can expect women's positive expectancies to be more important for their drinking than men's. We also suggest that alcohol may be used by women as a means to enable them to act in a more sexually liberal way. However, Wilsnack et al., (1997) point out that with increased drinking levels, U.S. men in their sample, contrary to expectations, showed a significantly greater increase than women in the prevalence of perceived positive effects of alcohol on sexual pleasure.

This chapter discusses the theoretical and conceptual frameworks of the study. Emphasis were on the theories as adopted for the study, propositions of the theories with special reference to strengths perspective and the systems theory. The assumptions, applicability and relevance of these theories was adequately addressed.

The presiding chapter focused on the origin and the history of alcohol among the African people. The aim is to discover how far back have African people been involved in either brewing or drinking alcohol with special reference to home brewed alcohol.

## **CHAPTER 3**

### **THE ORIGIN AND HISTORY OF ALCOHOL WITH AFRICANS**

#### **3.1 INTRODUCTION**

Initially, Africans in the United States used alcohol and beer in religious ceremonies and rituals as practiced in Africa (Stuckey, 1987). However, as the numbers of Africans increased, European Americans began passing legislation restricting the use of alcohol by Africans. Restrictions applied to enslaved Africans and free Africans alike. By the middle of the 18th century, colonists had enacted measures aimed at preventing Africans from drinking. In New Jersey, colonial statutes forbade Whites from selling or trading in rum with Blacks. Any person convicted of selling or giving rum or any manner of strong liquor to African Americans became liable to a penalty of 5 pounds by a law in 1692 (Williams, 1970). Such measures were based on the notion that Blacks were too irresponsible to be trusted with the use of alcohol and also on the fear that Blacks would be less accepting of the conditions of their servitude, more difficult to control, and prone to violence when inebriated. After the American War of Independence, slavery was prohibited or nearly abolished in nearly all colonial governments and as a consequence more freedom with respect to alcohol ensued. However, by the beginning of the Civil War, slave-holding states prohibited or controlled the consumption of alcoholic beverages by Blacks (Brown & Tooley, 1989).

The danger of mass drunkenness and potential revolt was heightened following Nat Turner's and Denmark Vessey's revolts (Larkin, 1965). Laws were enacted that placed tighter controls on drinking and even prevented African Americans from owning stills. For example, South Carolina in 1831 passed a law prohibiting any free Black from owning or operating a still. This prohibition became unenforceable during the Civil War, but following the Civil War, African Americans were again prevented from owning alcoholic beverages in the southern states although they had been granted the rights of citizenship.

Although European Americans tightly controlled the use of alcoholic beverages among Africans, enslaved and free, during holidays Africans were allowed to freely drink. Holidays, especially Christmas, were when the greatest amount of drinking was done by enslaved Africans (Johnson, 1937). Enslaved Africans would dance and drink until many of them passed out from drinking. Stroyer (1898) wrote that both masters and the enslaved regarded Christmas as a great day. Africans typically received from 5 to 6 days off. There would be two or three large pails filled with sweetened water, with a gallon or two of whiskey in each; this was distributed to them until they were partly drunk. In his autobiography, Frederick Douglass (1892) described that the days between Christmas and New Year's were allowed as holidays for enslaved Africans. During this time, owners made bets that an enslaved African could drink more whiskey than any other. They encouraged enslaved Africans to get drunk and they discouraged them from doing anything that might be viewed as constructive. Large numbers of enslaved Africans drank until they passed out. Douglass adds that owners used alcohol to subdue and tranquilize enslaved Africans. In this way, Whites hoped to combat

any movement toward insurrection. The use of alcohol accompanied by drunkenness was considered normal on those occasions. Whites had contradictory attitudes toward alcohol and Africans. On the one hand, they believed that alcohol increased the Africans' propensity toward insurrection, for example, Nat Turner must have been under the influence of alcohol. On the other hand, slave owners believed that, by keeping the Africans intoxicated, especially during their free time, enslaved Africans would not have the opportunity to think about their plight and plan a rebellion. To some extent, owners managed to reconcile the two contradicting positions.

European Americans controlled the production and distribution of alcohol among free and enslaved Africans. On holidays, enslaved Africans were able to drink and slave owners would encourage drunkenness. Whites believed drunkenness would prevent Africans from thinking about their plight or doing anything that might lead to freedom. Owners were able to provide a certain amount of surveillance during these times. The use of alcohol during other times was extremely limited and the penalty for drunken behaviour during these times was severe and often harsh. After the Civil War ended in 1865, drinking and drunkenness were features in the lifestyle of the newly freed Africans.

Profuse drinking and public drunkenness were not uncommon in the ranks of the formerly enslaved, but most African Americans practiced moderation (Koren, 1899). The drinking of alcoholic beverages in any amount by Blacks was generally resented in most communities. It was believed that liquor gave Blacks a false sense of being equal or superior to Whites, which was intolerable in the South (Larkin, 1965).

Thus Blacks as a collective exhibited comparatively low rates of alcohol use, drunkenness, and problems due to drinking. In this regard chronic drunkenness was so rare among Blacks that they were thought physiologically immune from prolonged inebriety (Koren, 1899). At the time of the temperance movement of the 19th century African Americans had the lowest mortality rate due to alcoholism of any ethnic group. African Americans during this era tended to support temperance because of the temperance movement stand against slavery (Larkin, 1965). In 1858, John Rock addressed a crowd: "The Negro who hangs around the corners of the streets or lives in the grog-shops is forging fetters for the slave and is a curse to his race" (Rock, 1988). The platform of the temperance movement shifted from the northern abolitionists to poor rural southerners. Prohibitionists urged protection of Whites, particularly White women, from the drunken debauches of half-crazed men. Blacks detached themselves from the temperance movement and headed north to avoid the violence (Herd, 1983). Thus, at the turn of the century when African Americans migrated from the South to the North, occasions for alcohol consumption were similar to that of precolonial Africa.

Alcohol consumption among African Americans was low when compared to other groups and drunken behaviour was rare. African Americans used alcohol for ceremonial celebrations. Blacks migrated in mass from the South to the North to escape from Jim Crowism and economic and political exploitation. However, African Americans encountered hostility and discrimination. The North turned out not to be the "promised land." They were crammed into inadequate living quarters and unable to find work. Also, taverns, as social outlets, began to take on greater significance in northern African American communities than in the South. The



patterns of alcohol use among African Americans began to shift. Since the late 1950s, there has been a rapid annual increase in the frequency of cirrhosis of the liver as a cause of death in Blacks (Herd, 1985). Cirrhosis of the liver is not always caused by excessive use of alcohol, yet it does provide a crude measure of alcoholism. Between 1950 and 1973, liver cirrhosis among Caucasians increased by 60% and the rate among African Americans rose 242% (Herd, 1985). Since 1973 the liver cirrhosis rates have leveled off, yet the rate among African Americans is still disproportionately high (Herd, 1986).

### **3.2 INVOLVEMENT OF ALCOHOL DURING ENSLAVEMENT**

In the United States slavery is usually associated with the southern region. The rigorous climate in New England, the character of the settlers, and their political views served to discourage the use of Africans as slaves. New England's role in slavery lies not in its use of Africans as slaves but in the fact that New Englanders were the traders in enslaved Africans for the new world. Crucial to the "slave trade" and to New England's economy were rum and molasses. Rum was New England's largest manufacturing business before the Revolutionary War (Greene, 1942). New England furnished enslaved Africans to the other colonies (DuBois, 1896). Rhode Island and Massachusetts respectively had more than 22 and 63 stills and these two states became the leading importers of Africans and the leading exporters of rum (DuBois, 1896).

In 1770, New England exports of rum to Africa represented more than four fifths of the total colonial export of the year (Williams, 1944). Rum, which is distilled from molasses, was an essential part of the cargo of the slave ship, particularly American slave ships. No slave trader could afford to leave the New England dock

without a cargo of rum aboard the ship (Greene, 1942). The rum trade on the coast became a virtual monopoly for New England. Owners of slavers carried Africans to South Carolina and brought back to New England naval stores for their shipbuilding, or to the West Indies and brought back molasses. The molasses was made into the highly prized New England rum and shipped in hogsheads to Africa for more human cargo (DuBois, 1896). Thus the American involvement is often referred to as the triangular slave trade.

Twenty gallons of rum could purchase a muscular young man (Larkin, 1965). It was profitable to spread a taste for liquor on the coast. The African dealers, supplied with rum, were induced to drink until they lost their reason; then the bargain was struck. One African dealer, his bag full of the gold paid to him for the capture of Africans, accepted the captain's invitation to dinner. He was made drunk and awoke the next morning to find his money gone and himself stripped, branded and enslaved with his own victims, to the great mirth of the sailors (Williams, 1944). As can be clearly seen, alcohol was intricately tied to the "slave trade." Alcohol was used to the benefit of enslavers to aid them in the captivity of Africans and, consequently, New England prospered. As a result of the triple processes of centuries of colonization, decades of industrialization and the recent globalization along with liberal liquor control measures in individual countries, the illicit brewing industry has also seen its highs and lows. Most often the clandestine cottage industry preparations are made in unhygienic environments; the additives to the deadly mix enhance the hazard (Perera, 2004).

The majority of contemporary brewers of home brewed alcohol still use traditional local ethnic names for their beverages, while utilising unorthodox and poisonous ingredients to make their brews more intoxicating. Expedient commercial motives dictate that a lot of what is included in the home-brewed alcoholic beverages is of poor quality, often contaminated and toxic (Pitso, 2007). During precolonial Africa, beer and wine played prominent roles in religious and secular ceremonies. Palm wine and beer made from barley, guinea corn, or millet were used widely. The alcoholic content of these beverages is less than 3% (Umunna, 1967). For the most part the drinking of beer and wine was one of acceptance without moral or immoral implications. Responsible alcohol use was the rule in precolonial Africa. Cultural norms set the standards that directed alcohol consumption (Heise, 1992). In some cultures, those who did not drink or at least take a ritual sip were viewed with unhealthy suspect (Umunna, 1967).

### **3.3 HOME BREWED ALCOHOL AND CULTURAL CEREMONIES**

Traditionally, the pattern of ceremonial festivities and drinking occasions rotated around the agricultural cycle. Many family and community celebrations, such as weddings and puberty rites, would have been deliberately scheduled to take place in the post-harvest period when the availability of ingredients for alcohol production was assured. A successful grain harvest was a cause for celebration and the giving of thanks to the ancestors. Alcohol could appear out of season at other occasions, such as funerals. Given alcohol's close association with ancestors, it was not surprisingly a feature of wakes (WHO, 2007).

The availability of the "*marula*" and the prickly pear too is seasonal and brews from these fruits are seasonal. However, due to contamination of the traditional home-

brews, all varieties of home-brewed alcohol are now available at all times. Furthermore, WHO (2007) indicated that traditionally, alcohol drinking to the point of intoxication was considered primarily the privilege of male elders, who held the highest status in Africa's rural communities. The drinking of low-ethanol alcohol, which was woven into special community-wide ceremonies and occasions marking life-cycle passages, constituted an intensely social event. Fermented alcoholic beverages also provided basic food and drink. Men were more likely to consume their grain intake in the form of beer than women and children. However, traditional forms of thick, cloudy sorghum and millet beers veer toward the boundary between alcohol and nutritional gruel.

Women and children drank the nutritious gruel. Furthermore, these beverages provided liquid refreshment in places where the water supply was unsafe (WHO, 2007).

- **Social life**

In some villages the people held beer parties. Men would gather together to discuss the news and events of the village while drinking. Generally, beer parties were for men. Such beer parties served to foster a sense of community solidarity among the men of the village (Sangree, 1962). Alcoholic beverage is used as a sign of hospitality and friendship among the Onitshas of Nigeria in West Africa (Umunna, 1967) and the Tiriki (Sangree, 1962). Onitshas and Tiriki would offer their guests kola nuts, then food and beverage. The Onitshas would serve drinks according to age.

The oldest person is served first and the youngest in the group is served last, titled before untitled. The eldest man or titled man got the first cup of wine. He would pour libations on behalf of the ancestors and offer prayers for the lives of the living. After the elder offered libations and prayers, the guests would thank the elder and then drink or take a ritual sip. The serving of alcohol and the ritual associated with drinking reinforced the social order of the community, that is, respect for the elders. Achebe (1959) in *Things Fall Apart* describes a scene where the men of two families of two different villages gather to discuss the marriage between their respective son and daughter. The suitor and his family brought wine and the two men and their families sat, drank, and talked.

It was not until they finished drinking did they begin to discuss marriage arrangements.

- **Legal**

Beer and wine were also used to settle minor disputes. Among the Aursaha of Tanganyika (Gulliver, 1963) and the Onitshas (Umunna, 1967), when disputants reached a positive agreement they would drink from one cup in front of the gathered villagers. By drinking together in public they declared the end of any enmity or conflict. Drinking of beer together could be cited in the future as proof that the settlement was mutually agreed on by both sides.

- **Celebrations**

Onitshas widely use drinking in many ceremonies: rites of passages, funerals, and title taking. For example, at the birth of a child, friends and families expect the father to buy wine for a month so they can come pass each day and take a drink. For the most part in Africa, during ceremonies Africans did not drink

enough to produce intoxication; instead, the emphasis was on participation in the ritual rather than on getting drunk.

### **3.4 NATIONS WHICH PIONEERED HOME-BREWED ALCOHOL IN AFRICA**

Studies by WHO (2007) indicate that the indigenous alcoholic drinks of Africa are fermented and usually of low ethanol content, between 2 and 4 percent. The grain-based beer production and consumption in rural areas is highly seasonal in accordance to festivals or traditional ceremonies, whereas the supply of palm wine would have been continuous throughout the year. The consumption of home-brewed alcoholic beverages has a long history in South Africa and in Africa. Indigenous people consumed fermented, intoxicating drinks as an important component of social and ritual gatherings (Schneider, Norman, Parry, Bradshaw & Pluddemann, 2007). The study focused in countries with long brewing traditions which may have directly or indirectly influenced patterns and ways of brewing in South Africa, among namely; Northern region, Southern region, Western as well as the Eastern region.

#### **3.4.1 Northern region of Africa**

According to Platt (1955) there are five main categories of African alcoholic beverages, namely, fermented honey, fermented fruits and juices, fermented sap from various species of palm, drinks from milk and traditional beers. Platt further illustrated the early origins of these beverages in Africa, notably around the Nile Valley and Ethiopia. Home brewed alcohol was used frequently in Africa for libations. The worship of gods and ancestors by libation was quite common and almost universal in Africa. Cultural norms set the standards that directed alcohol

consumption. In some cultures, those who did not drink or at least take a ritual sip were viewed with unhealthy suspect. Africans preferred alcohol because it was stronger than water and they believed that alcohol was surpassed only by blood (Parrinder, 1969; Umunna, 1967; Obot, 2007; Parrinder, 1969; Heise, 1992).

### **3.4.2 Southern region of Africa**

Parry and Bennetts (1998) argued that home-brewed alcohol beverages have featured prominently in South African social and political history. In pre-colonial times, maize was cultivated by women and used in the production of food and beer. Responsible alcohol use was the rule in pre-colonial Africa. Home brewed alcohol played and it still plays an important role in the cultural and religious lives of the black people in South Africa, just as other alcoholic beverages have done in other parts of the world.

Masihleho and Khalanyane (2009) stated that among the Basotho, home brewed alcohol has always been used but was basically meant for elders, given to men while making decisions at “*khotla*” (local court) and used during ceremonies. *Bojalwa* and *khadi* were both home-brewed beer like drinks in Botswana differing markedly with respect to alcohol content, consistency, and taste depending on availability of ingredients such as sugar, sorghum, oranges, and wild berries, as well as methods used for fermentation (Peele & Grant, 1999; Pitso, 2007).

Traditional alcoholic drinks in Namibia include amongst others, *mataku* (watermelon wine) and *walende*, a distilled palm spirit that tasted like vodka. Country wine was made from dried *Eembe* fruit (*Berchemia discolor*) using commercial wine yeast. The fruit produces a wine with 8.6% alcohol content when

no sugar was added. The clarity, aroma, colour and acceptability of the wine are aided by the addition of sulphur dioxide. The addition of sugar to the must produce from the dried fruit increases the alcohol content of the wine. Production of home-brewed beverages was the dominant channel for alcohol availability (MoHSS, 1999). The production of home-brewed alcohol is closely connected to food production in both the urban and rural areas. The producers are heterogeneous group, but many of them are women, particularly widows or divorced older women. The common denominator is the need to provide livelihood. Especially for older women it was largely a question of survival (Parry & Bennets, 1998; Maula, 1997).

### **3.4.3 Western region of Africa**

Home-brewed alcohol beverages have been consumed among the Western African communities for centuries, and western commercial spirits, beer and wine have been available since pre-colonial days. Nonetheless in all instances, it was used as a sign of hospitality and friendship. Basotho of central Africa at harvest time would place beer unrestrained in the most remote corner of the hut, where it would remain all night as a drink offering to the gods. Next morning the worshippers would strain and drink the consecrated liquor and they would give thanks to the ancestral spirits for generosity (Willoughby, 1928; Umunna, 1967; Obot, 2007). Pito was an alcoholic beverage prepared from guinea corn, millet, and other grains through a similar process to the brewing of beer. It is cheaper and more easily obtained than commercially manufactured alcohol and therefore widely and liberally used (Peele & Grant, 1999).



#### **3.4.4 Eastern region of Africa**

In Kenya, millet and sorghum beers were collectively known as pombe. They were brewed by village women for family use, for community celebrations and for sale. Since they were only fermented for a few days, they have a lower alcoholic content than the bottled barley / malt beer produced commercially by Kenya Breweries (Van Esterik & Greer, 1985; WHO, 2004). Tiriki of Kenya in the Eastern Africa believed that the ancestral spirits enjoyed special gatherings of living descendants and a basic concern of ancestral spirits is that they are remembered. Furthermore, they believed that the ancestral spirits have a preference for home brewed alcohol. According to Van Esterik and Greer (1985) in Kenya, millet and sorghum beer was brewed by village women for family use, community celebration and also for sale.

Since the process of fermentation occurs over a few days, the beer has a lower alcohol content than the bottled malt beer produced commercially by Kenya Breweries Ltd (2% alcohol compared to 4%). Traditional beer was often consumed as part of community social occasions in which most family members participate. Thus, even non-drinking family members might benefit from the availability of extra-celebratory food. So, the beer was used to signal the ancestral spirits on special occasions to come and partake in the ceremonies (Sangree, 1962).

#### **3.5 PROFILE OF BREWERS OF HOME BREWED ALCOHOL**

In most rural communities, brewers of home brewed alcohol have been found to be women who used brewing for survival means due to loss of income by their spouses, some widowed and to the vast majority as an income generating activity.

Previous research has found that the majority of brewers of home-brewed alcohol were mainly women ranging from a very tender age of eighteen (18) years to elderly, approximately sixty-five (65) years. Many of the young brewers are trainees and are being taught to brew by their parents as survival skills they could also rely on to support for their families in future. Other studies profiled brewers of home brewed alcohol as single parent or female headed units to who has become a primary source of income and sustenance. Home-brewed alcohol is produced in impoverished rural villages and homes, prompting researchers to conclude that the majority are illiterate and without formal education and this is also supported by many research findings.

Studies from the past also established that these brewers had little regard for the health and well-being of people who buys their brews (Molamu & Manyaneng, 1988; WHO, 2004; Harworth & Simpson, 2004). Nonetheless few men also traded as brewers. The brewers were unemployed breadwinners who after failing to secure jobs in order to support their families, resorted to brewing as means of survival. Their brewing methods were reported to be similar to their female counterparts. Nonetheless, their main focus and interest is profit, hence they would endanger the lives of those who use their produce by using unorthodox and poisonous ingredients to make their brews more intoxicating (Pitso, 2007).

The following chapter seeks to put into perspective the behavioural patterns manifested, observed and also attributed towards drunkenness and lifestyles of alcohol misuse by Africans within their ranks and what the response is against it.

# CHAPTER 4

## AFRICANS' VIEWS ON DRUNKENNESS AND LIFESTYLES

### 4.1 INTRODUCTION

In precolonial Africa, drunken behaviour was not the norm and was generally unacceptable. For example, among the Tikiri, social attitudes and expectancies served to prevent an intoxicated person from losing control or becoming abusive or disruptive (Sangree, 1962). For the Onitshas, relatively few people practice temperance. However, the drunken person is considered less reasonable than someone who is mentally ill. The ideal person is a moderate drinker. In short, the Onitshas did not tolerate drunkenness. A person gains respect if the person drinks moderately or if the individual knows when to quit without becoming a disgrace. Big drinkers may acquire honorific names that show their capacity for drinking large amounts without losing command of themselves. The social obligations of such names, however, restrict the number of people who would like to be so "honored." In *The Hysia*, a translation from ancient Egypt by Karenga (1984), a warning is issued against drunkenness: Do not frequent taverns lest evil words fall from your mouth and you know not what you are saying. If you fall, your limbs may be broken and there will be no one to help you. Even your drinking companions may stand up and say "Put the drunkard out."

If one comes to seek and talk with you, one will find you lying on the ground as if you were a little child. Griaule (1965) conducted an ethnographic study among

the Dogon of Mali in West Africa. Ogotemmeli, a village elder, revealed through conversations with Griaule metaphysical concepts of the Dogons.

These concepts explained the origins of a superior being, people, and their relationship with each other. Furthermore, these concepts shaped the social interaction and the daily lives of the Dogons and defined their relationships with the environment. Griaule noticed that on every market day drunken men reeled words along the streets and grunted meaningless phrases over walls. Most of them were elderly men and few villagers seemed to question their behaviour or visibly react to their remarks. In fact, villagers seemed to regard the drunken elderly men with a certain respect mixed with some apprehension. The drunken men would be shouting, "The dead are dying of thirst." Griaule asked Ogotemmeli to explain the underlying meaning of "the dead are dying of thirst." In *Conversations With Ogotemmeli* (Griaule, 1965) Ogotemmeli explained the meaning. When family members die, social customs dictate that remaining family members perform the necessary rituals so that the dead's soul is at peace. The soul of the deceased person periodically returns to the deceased's home during periods of mourning and does not find peace until the funeral rite is completed. During this time of mourning great amounts of food and drink are provided and masks are made. The relatives are expected to offer the mourners provisions and drink.

Several days after family members have performed all funeral rites and the child whom the deceased designated as the inheritor of the life force has set up the altar pot from which the deceased will henceforth come to drink, the dead person then passes into the category of ancestors. It is to the advantage of the

community that these rituals are performed and carried out to ensure peace and order.

Sometimes, families fail to perform the necessary and often expensive rituals. In fact, families tend to wait until there are several dead before they celebrate the end of mourning and set up the altar pot. In this way the expense is shared, but there are many unsatisfied dead whose condition is unstable and who linger in the world of the living, uncertain and mistrustful. When the dead are left in this state they cause disorder in the village (Griaule, 1965).

Moral insecurity in families concerned hinder the normal course of life. The families are torn between the desire to satisfy the dead and the need to extricate themselves from the difficulties caused by the funeral expenses. During the period of mourning before the deceased's cult has been established, the homeless wandering soul seeks to slake its thirst in the fermenting beer that relatives are preparing for secular and religious purposes. Wherever smoke and steam rise up from the great vats filled with water and millet, there the souls gather. The dead gather on the edge of the brewing vat and impregnate the fermenting liquor with the little force they still have. This force mingling with the millet and water gives the liquor its intoxicating property and is assimilated with the beer by the drinker. It is strong enough to disturb him, but not to the extent of making him impure (Sangree, 1962; Griaule, 1965). A struggle within the elderly drunk occurs between the drinker's own force and the beer. The ferment disorder introduced into the beer by the dead excites the drinker, but the drinker's own forces resist it and he finally rejects what is impure. He casts out the disturbing element by means of words, disordered but effective.

The drinker returns the impurity to the deceased who put it in the beer and also to the villagers who are guilty of keeping the departed waiting too long without altars. These words reach the people responsible for the delay. Even if the words of the drunkard are uttered indistinctly, they are clearly understood by all those villagers whose granaries are full enough to start the rites and by all those poor people whose efforts are in vain. The words the drunkards speak move people to set up altars and that gives satisfaction to the dead. For the old, drunkenness is a duty; it helps to restore order. However, Ogotemmelu quickly points out that drunken behaviour is not acceptable among the young. Ghananians maintain that they have to drink heavily on the passing on of their loved one - a practice still common to this day. In summary, among Africans drunken behaviour was not tolerated. However, beer and wine have always been a part of the landscape. Drinking was associated with rituals and symbolic functions. The community norms dictated who could drink, how much, and under what circumstances (Sangree, 1962; Griaule, 1965).

## **4.2 BASOTHO AND DRUNKNESS**

In 1870, two years after Lesotho was declared a British protectorate, King Moshoeshoe I died and his son King Letsie I took over the chieftainship. A few years later, the British administrators, missionaries and some of Basotho raised concern that the habit of drinking took a different direction. According to Mohapeloa (2002) this habit took root during and after the Gun War – 1880-1881. He shows that before the war, the government took measures against it but because Basotho had virtually become their own masters, they consumed beer freely and the chiefs who ought to have stopped them set a bad example. One of

the reasons is as stated by Sir Lagden (1909), there were no efforts made to suppress brandy canteens in farms of the Free State, from which the Basotho drew supplies of this vile stuff that maddened them. In this way, King Moshoeshoe I law could not simply work. The alcohol consumption in Lesotho then increased, leading to social problems among the Basotho. The Paris Evangelical Missionary Society priests were also shocked at the rate at which Basotho consumed spirituous liquor. In the words of one PEMS missionary consumption of spirituous liquor was one of the “worst aspects by which European civilisation revealed itself to Basotho and abuse of spirituous liquor of European manufacture began to play havoc among them” (Duvoisin, 1967).

What was interesting was that some of the sons of Moshoeshoe I who were chiefs and were supposed to be the custodians of his 1854 *Molao oa Yoala yoa Makhuoa* were the ones who were involved in the trafficking of spirituous liquor.

Smith says “chiefs who had been content to buy a bottle of smuggled brandy now purchased barrels. Drunkenness was rife”. In the 1880s when drunkenness was rife among Basotho, the PEMS missionaries did not stand-by and watch the problem. The first attempt they did was to form an international movement in Lesotho known as Temperance Society, whose sole purpose was to campaign against liquor consumption. Recently, in the 1980s Blue-Cross Lesotho was introduced in Lesotho to deal with alcohol related problems. It is a Christian organisation which is independent of any political tendency or denominational adherence. It was founded in England and was then called HOPE UK.

The objectives of the organisation were: to assist those who are battling with alcohol related problems, using every available modern means; to inform people

about the dangers of alcohol and drugs; to encourage prevention amongst young people, by promoting a drug free lifestyle and to support an alcohol policy, promoting health for all. Thaba-Bosiu Centre was founded in 1989 to implement the objectives of Blue-Cross Lesotho in Lesotho. The centre operates through prevention and treatment programmes and its main objective is “to contribute towards a reduction of alcohol and drug related problems in Lesotho for individuals, families and society as a whole”. The treatment programme initiatives include, treating individuals and families with alcohol and drug related problems, irrespective of religious or political affiliation. The approach was intended to pay attention to individual needs through a family and community based need.

While, the objective of the prevention programme is to educate the community on alcohol and drug related problems. This entails providing education and information to specified target groups in Lesotho through the use of the media, mediating techniques, seminars, workshops, campaigns and other relevant resources available in the society. The programme also helps people to device entrepreneurial schemes to assist them in alleviating the problems that they are experiencing related to making a living and servicing of debts. Therefore, several projects were implemented as alternative livelihoods strategies for people using alcohol and those who brew alcohol for a living. Projects undertaken were, for example, poultry farming, planting and selling of vegetables, and sewing of clothes. They were aimed at reducing the number of people brewing alcohol for commercial purposes. Workshops and training were held for interested participants in ALPs which aimed at providing them with basic skills in engaging in



the alternative livelihoods other than brewing beer. They were also being informed about the social problems associated with abuse of drugs and alcohol.

#### **4.3 ALCOHOL AND THE INCIDENCE OF HIV**

Despite the uncertainty about whether alcohol is a significant contributor to the incidence of HIV on its own, it is still useful to review several studies published since 2006 in order to understand behavioural aspects of the association between alcohol and the acquisition of HIV and also to guide future research efforts in this area. These will be looked at chronologically. Understanding this association may also be useful in guiding policy and practice, even in the absence of *conclusive* evidence of a causal relationship at this time (Morojele, & Kachieng'a et al., 2004). First Morojele et al. (2004) reported on the findings of their household survey of adult, township residents in South Africa. They found that alcohol use frequency, quantities consumed and problem use were significantly associated with number of sexual partners and engagement in regretted sex, but not significantly related to inconsistent condom use (Morojele et al., 2004).

Kiene, Christie, Cornman, Fisher, Shuper, Pillay, Friedland and Fisher, (2006) subsequently reported on the findings of their study conducted among patients living with HIV/ AIDS (PLWHA) in clinical care in KwaZulu Natal province of South Africa. They found that moderate or higher risk drinking before sex (more than 1.8 drinks for women and more than 3 drinks for men) was positively associated with an increased likelihood and number of subsequent unprotected sex acts. The following year Fisher, Bang and Kapiga (2007) published a systematic review and meta-analysis of 20 African studies of the reported risks associated with alcohol

use and HIV. A crude dose-response relationship was observed, with non-problem drinkers (57%), and problem drinkers (104) more likely to be HIV positive than non-drinkers. Men and women had comparable risk estimates, while studies among high-risk groups tended to report greater odds ratios (ORs) than studies of the general population.

That same year Kalichman and colleagues reported on a randomized trial to test a behavioural risk-reduction counselling intervention for use in STI clinics in southern Africa (Kalichman, Simbayi, Jooste, & Cain, 2007). Participants received either a 60-minute HIV and alcohol risk-reduction intervention or a 20-minute education condition. The risk-reduction intervention demonstrated more than a 25% increase in condom use and a 65% reduction in unprotected intercourse over the 6-month follow up period. Unfortunately it was not possible to separate out the impact of the alcohol interventions from the HIV-related interventions.

In 2009 Baliunas, Rehm, Irving and Shuper reported on an investigation to extend prior research involving alcohol-risky sex and alcohol-risky sex-HIV seroconversion associations by conducting a meta-analysis that more clearly tested the *temporal* association between alcohol consumption and HIV incidence. Ten studies were included in their meta-analysis, encompassing three types of alcohol consumption risk: consumption; binge drinking; and consumption prior to, or at the time of, sexual relations. Overall alcohol consumption (any of the three types) increased the (relative) risk of HIV (RR 1.98; 95% CI 1.59-2.47). Alcohol consumers were at 77% higher risk (RR 1.77; 95% CI 1.43-2.19); persons consuming alcohol prior to, or at the time of, sexual relations were at an 87% increased risk of HIV (RR 1.87; 95% CI 1.39-2.50); and for binge drinkers, the risk

of HIV was over double that of non-binge drinkers (RR 2.20; 95% CI 1.29-3.74) (Baliunas et al., 2009). Also in 2009 members of the same team published the results of a parallel study to quantify the relationship between alcohol consumption and unprotected sexual behaviour among PLWHA (Shuper, Joharchi, Irving & Rehm, 2009). Three separate meta-analyses were conducted to investigate associations between unprotected sex and any alcohol use, problematic drinking, and alcohol use in sexual contexts.

They found that there is a significant link between PLWHA's use of alcohol and their engagement in high-risk sexual behaviour, with any alcohol consumption (OR 1.63; 95% CI 1.39-1.91), problematic drinking (OR 1.69; 95% CI 1.45-1.97) and alcohol use in sexual contexts (OR 1.98; 95% CI 1.63-2.39) being found to be significantly associated with unprotected sex in this population. More recently Townsend and colleagues have reported on a study conducted in and around Cape Town that showed that problem drinkers were more likely than non-problem drinkers to report having any symptom of a sexually transmitted infection (STI), not using condoms due to drinking, inconsistent condom use with all partner types, that their most recent once-off partner was unemployed, having met their most recent partner at an alcohol-serving venue, and having had a once-off sexual relationship.

What was new about this study was that it demonstrated the link between the amount of alcohol consumed and the choice of sexual partner (Townsend, Rosenthal, Parry, Yanga, Mathews, & Flisher, in press). Together these and other studies (not reported here) demonstrate a very strong association between alcohol use, and particularly problematic alcohol use, and a variety of HIV risk behaviours

and HIV status itself. As a group they demonstrate several elements that are needed to prove causality (English et al., 1995) such as the consistency of the association across multiple studies, temporality (that is, that alcohol use precedes the sexual risk behaviour), that there is a dose-response relationship (that is, that more drinking increases the risk), and reversibility of effects (that is, that stopping drinking reduces HIV risk).

Other research has shown that alcohol consumption reduces the strength of a person's immune system thereby causing increased biological susceptibility to HIV infection (Friedman, Pros & Klein, 2006). However, as stated earlier, what has not been ruled out is that there are not third variables such as personality factors or psychiatric disorders that underlie both the problematic drinking and the risky sex (Shuper et al., 2010). Nevertheless, given the high levels of HIV in SSA, policy makers and practitioners in SSA and elsewhere need to take cognizance of this strong association between alcohol and the risk of acquiring HIV and should take steps to intervene, while at the same time supporting efforts to fill in some of the gaps in our understanding of the existence (or not) of a causal relationship between alcohol and HIV.

#### **4.3.1 Alcohol and the Progression of HIV/AIDS**

As set out by Shuper, Neuman, and Kanteres et al., (2010) in their systematic review, there is much stronger evidence to demonstrate that alcohol alone is responsible for worsening the disease course (e.g. in terms of death and re-infection) for HIV/AIDS than there is for demonstrating a causal relationship between alcohol and the acquisition of HIV. There are well-established pathways to explain the causal relationship between alcohol use and the progression of HIV

disease, including lower adherence to medications schedules plus a weakening of the immune system. In terms of the former, Hendershot, Stoner, Pantalone, and Simoni (2009) in a review and meta-analysis involving 40 studies found that alcohol drinkers were 50% to 60% as likely to be classified as adherent (OR 0.548; 95% CI 0.490 – 0.612) to HIV medications compared to abstainers or persons who drank relatively less.

They also reported a dose-response relationship indicating that more problematic alcohol consumption and abuse are linked to worse courses in the progression of disease. Effect sizes for problem drinking were greater (OR 0.470; 95% CI 0.408 – 0.550) compared to any or global drinking (OR 0.604; 95% CI 0.531 – 0.687). According to research conducted in South Africa, adherence of less than 80% is associated with significantly lower survival (Nachega et al., 2006). In terms of the biological effect of alcohol on worsening the course of existing infections, it has been demonstrated that alcohol affects the immune system through both impacting on innate immune system deterioration and through impacting on the deterioration of the acquired immune system. Shuper et al. (2010) report that alcohol, among other things, may cause functional abnormalities in T and B lymphocytes, depresses levels of CD4 counts, effect CD8 Tlymphocyte functions, and decreases the ability of lymphocytes to produce inter-leukin 2 and soluble immune response suppressors.

#### **4.3.2 Burden attributable to alcohol use in South Africa with specific reference to HIV/AIDS**

The above sections have highlighted the strong association between alcohol use and the acquisition of HIV and outlined the ways in which alcohol use is causally related to the progression of this disease. The section that follows outlines an attempt to quantify this linkage and how the burden from alcohol in terms of HIV/AIDS compares to that of other alcohol-related conditions in both males and females.

#### **4.3.3 The burden attributable to alcohol use in South Africa (deaths)**

According to Rehm, Mathers, Popova, Thavorncharoensap, Teerawattananon, and Patra (2009), 6.3% of all deaths in South Africa in 2004 can be attributed to alcohol, 10.0% of all deaths in males and 2.6% of all deaths in females. Of all alcohol attributable deaths in males, the largest proportion (34.0%) comes from alcohol-related intentional injuries. Alcohol-attributable HIV/AIDS deaths account for 12.0% of all alcohol-attributable deaths in males. In determining alcohol-attributable HIV/AIDS deaths, only the impact of alcohol on the progression of the disease was taken into account, not the effect of alcohol on contracting the virus, as the causal pathway has not yet been conclusively demonstrated. Of all alcohol-attributable deaths in females, the largest proportion (32.8%) comes from alcohol-attributable HIV/AIDS deaths.

#### **4.3.4 The burden attributable to alcohol use in South Africa (DALYs)**

According to Rehm, Mathers, Popova, Thavorncharoensap, Teerawattananon, and Patra (2009b), 6.3% of all disability adjusted life years (DALYs) lost in terms of years lost through death attributable to alcohol or years lost through living with an alcohol-attributable disability in South Africa in 2004 can be attributed to alcohol, 10.0% of all DALYs lost in males and 2.4% of all DALYS lost in females (see Table 2). Of all alcohol attributable DALYs lost in males, the largest proportion (29.0%) comes from alcohol-related intentional injuries. Alcohol attributable HIV/AIDS DALYs lost account for 9.7% of all alcohol-attributable DALYs lost in males (ranking 5th in terms of the contribution to alcohol-attributable DALYs lost).

In determining alcohol-attributable HIV/AIDS DALYs lost only the impact of alcohol on the progression of the disease was taken into account. Of all alcohol-attributable DALYs lost in females, the largest proportion (27.8%) comes from alcohol-attributable HIV/AIDS DALYs lost.

### **4.4 IMPLICATIONS FOR POLICY AND PRACTICE**

#### **4.4.1 Broad interventions and those targeting high risk drinkers in the general population**

In general, policies that reduce alcohol consumption and especially heavy drinking are likely to impact on the incidence and progression of alcohol-specific infectious diseases, especially those that regulate the availability, price and marketing of alcohol (Rehm, Mathers, Popova, Thavorncharoensap, Teerawattananon, & Patra

(2009). The WHO Global Strategy to reduce the harmful use of alcohol sets out various strategies under each of the areas for which there has been shown to be some evidence of effectiveness (WHO, 2010). For example, under strategies to reduce the availability of alcohol it lists regulating the number and location of on-premise and off-premise alcohol outlets; regulating days and hours of retail sales; establishing an appropriate minimum age for purchase or consumption of alcoholic beverages; adopting policies to prevent sales to intoxicated persons; setting policies regarding drinking in public places; and adopting policies to reduce or eliminate availability of illicit production, sale and distribution of alcoholic beverages as well as to regulate or control informal alcohol (WHO, 2010).

Under pricing policies the Draft Global Strategy proposes strategies such as establishing a system for domestic taxation on alcohol that is linked to the alcoholic content of the beverage; regularly reviewing prices in relation to inflation; banning or restricting discount sales; and establishing a minimum price for alcohol where applicable (WHO, 2010). Regarding restrictions on the marketing of alcoholic beverages, some of the strategies proposed include regulating the content and volume of marketing; regulating marketing in certain or all media; restricting or banning promotions in connection with activities targeting young people; regulating alcohol marketing via social media; developing effective systems of surveillance of marketing of alcohol products; and setting up effective administrative and deterrence systems for infringements on marketing restrictions (WHO, 2010). In addition, consideration should be given to targeted interventions in high risk venues/high risk populations, focusing on persons frequenting drinking venues or persons owning, managing or serving alcohol within such



establishments. The most compelling evidence of intervention efficacy comes from the peereducation (popular opinion leader) model and its variations. Two studies showing efficacy were conducted in the United States, more than a decade ago, with a target population of gay men (Kegeles, Hays & Coates, 1996; Kelly, Murphy, Sikkema, McAuliffe, Roffman, & Solomon, 1997). However, the intervention model proved ineffective in gay bars in Scotland (Flowers, Hart, Williamson, Frankis, & Der, 2002; Williamson, Hart, Flowers, Frankis, & Der, 2001).

Regarding server interventions a link has not been established between server behaviour and behaviour change among patrons among any of the interventions, but Peltzer, Ramlagan, and Gliksman (2006) conducted a server intervention in bars in Cape Town townships which showed some promise. The intervention had positive effects on server knowledge and attitudes, as well as some indications of positive changes in server behaviours, but it did not have positive effects on bar patrons' levels of intoxication. Regarding bar-based brief intervention programmes, Van Beurden, Reilly, Dight, Elayne, and Beard, (2002) conducted a brief intervention study to reduce risky alcohol consumption in bars in Australia, and Kalichman, Simbayi, Vermaak, Cain, Smith, Mthebu, and Jooste (2008) conducted a brief intervention study in bars in Cape Town townships in South Africa to reduce levels of sexual risk behaviour and found it to be effective. Van Beurden and his colleagues showed reductions in alcohol consumption after twelve months.

In summary there does not appear to be any single approach that is effective in reducing alcohol-use related sexual risk behaviours among patrons of drinking

venues. Instead, what is likely to be effective is a combined intervention model that would include elements of each of the three intervention approaches, as follows:

- Training of servers to encourage responsible drinking and sexual risk reduction, and assisting bar owners/managers to establish physical conditions that foster responsible drinking and risk reduction.
- Identification and training of suitable bar patrons to serve as peer educators or 'change agents'.
- Deploying counsellors to drinking venues to provide education, counselling and selfassessment, and referrals to outside counselling and treatment services. In all cases, the provision of affordable and free condoms in drinking sites would be an important strategy, and the efficacy of the approaches (individually and in combination) would need to be established.

#### **4.5 HIV/AIDS TREATMENT AND PREVENTION**

Early detection and brief interventions are effective methods for the prevention of alcohol-related health problems and the opportunity to provide such services across the primary health care system is within reach (Anderson, Chisholm, & Fuhr, 2009). To specifically address negative health consequences such as alcohol-related risky sex or alcohol-related non-adherence to antiretroviral medications, health personnel working in HIV, TB, and STI clinics should screen their patients for alcohol problems using instruments such as the Alcohol Use Disorders Identification Test (AUDIT) (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001) or the Alcohol, Smoking and Substance Involvement Screening

Test (ASSIST) (WHO ASSIST Working Group, 2003). Patients found to be at low risk should then be given information about drinking risks (if the score is below 8 on the AUDIT) and simple advice (if they score between 8 and 15). Patients found to be at medium risk (e.g. 16-19 on the AUDIT) should then be provided with simple advice, brief counselling and continued monitoring at follow up visits.

Patients at high risk for alcohol problems (e.g. AUDIT scores of 20 and above) should be referred to a specialist for diagnostic evaluation and treatment (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Patients at high risk who are HIV positive should also be referred to active case management to reduce the risk of reinfection or non-adherence to antiretroviral or other medications (if applicable). Regarding strategies to improve adherence, it may even be useful to consider setting up some form of Daily Observed Treatment (DOTS) involving patients' family or friends. Depending on capacity at a country level these kind of interventions could subsequently be rolled out to patients at all primary health care facilities.

Furthermore, alcohol issues need to be included in HIV prevention approaches. This should include taking cognizance of how alcohol affects the immune system, the effectiveness of medications, medication adherence, and sexual risk behaviour. This should be done in such a way as to take to account of the complexity of the relationship between alcohol use and sexual risk behaviour, rather than a simplistic message that alcohol increases sexual risk. It should shown that alcohol use is related to condom negotiation, proper application of condoms, having multiple partners and the choice of partners. Such interventions

should also be sensitive to setting issues (Morojele, Kachieng'a, Mokoko, Nkoko, Parry, Nkowane, Oshia, & Saxena, 2006).

The contextual factors within which alcohol and sexual behaviours intersect are critical to our understanding of how alcohol influences HIV risks. The environments of drinking establishments are multifaceted and serve multiple functions, including being a place for recreation, fostering socially sanctioned drinking, facilitating social relationships, and providing opportunities to meet sex partners. Multiple studies over the time have documented the strong relationship between alcohol and high-risk sexual behaviour (Assefa, Damen & Alemayehu, 2005; Davis, Hendershot, George, Norris & Heiman, 2007; Geibel, Luchters, Kingola, Esu-Williams, Rinyiru., & Tun, 2008; Shuper, Joharchi, Irving & Rehm, 2009; Weiser et al, 2006; WHO, 2005; Zablotska, Gray, Serwadda, Nalugoda, Kigozi, Sewankambo, Lutalo, Mangen, & Wawer, 2006).

Concurrency of sex partners within and outside of drinking places is a significant facet of HIV/AIDS in southern Africa (Carter, Kraft, & Koppenhaver, 2007; Mah & Halperin, 2008) and is facilitated by the sexual networks within drinking establishments. Sex partners often meet at informal alcohol-serving establishments that are common throughout Southern Africa, such as private homes where alcoholic beverages are sold and served (Morojele, Kachieng'a, Mokoko, Nkoko, Parry, Nkowane, Oshia, & Saxena, 2006; Weir, Pailman, Mahlalela, Coetzee, Meidany, & Boerma, 2003). Taverns and '*shebeens*' establishments amplifies HIV transmission risks by providing a place where sex encounters occur with rapid turnover of partners (Fritz, Woelk, & Bassett, 2002).

These establishments are often themselves sex venues, where back rooms, back corners, and adjacent buildings or shacks offer locations for sex (Morojele et al., 2006). Alcohol use is associated with risks for sexually transmitted infections (STIs), including HIV/AIDS. People met new sex partners at bars and other places where alcohol was served, and drinking venues facilitated STI transmission through sexual relationships within closely knitted sexual networks (Kalichman, 2010).

Alcohol abuse is associated with high-risk sexual behaviours and intravenous drug use which are two major modes of HIV transmission. In persons already infected, the combination of heavy drinking and HIV has been associated with increased medical and psychiatric complications, delays in seeking treatment (Samet et al., 1998), difficulties with HIV medication adherence (Cook, Sereika, & Hunt, 2001; Wagner, 2001), and poorer HIV treatment outcomes (Lucas, Gebo, Chaisson, & Moore, 2002). High-risk sexual behaviours, included multiple sex relationships, unprotected intercourse, sex with high-risk partners (for example., injection drug users, prostitutes), and the exchange of sex for money or drugs (Windle, 1997; Avins, Woods, Lindan, Hudes, Clark, & Hulley, 1994; Boscarino & Steinber, 1995; Malow, Edwards, & Marzec, 2001). There might be many reasons for this association. For example, alcohol could act directly on the brain to reduce inhibitions and diminish risk perception (MacDonald, Kazantzis, Fleet, Long, & Miller, 2000; Fromme & Corbin, 1999; Cooper, 2002).

Reduced sexual inhibitions, HIV transmissions and individual behaviour has been demonstrated in numerous studies in both developed and developing world (Cook & Clark, 2005; Klinger, Kapiga, Sam, Aboud, Chen, Ballard, & Larsen, 2006).

Population based evidence also exists for the link between sexual behaviour and alcohol (Chesson, Harrison, & Stall, 2003; Lugalla, Emmelin, Mutembei, Sima, Kwesigabo, Killewo, & Dahlgren, 2004).

A review of the impact of alcohol on health, HIV transmission commissioned by the Agency for International Development, demonstrated that alcohol influences high risk behaviour, such as unprotected casual and indiscriminate sex, sex with commercial sex workers and unprotected sex with multiple partners. Sexual risk-taking behaviours associated with alcohol abuse are highly prevalent in many African countries severely affected by HIV/AIDS (Needle, Kroeger, Belani & Hegle, 2006). Alcohol consumption has been shown to contribute significantly to reduced adherence to antiretroviral drugs (ARVs) and Tuberculosis (TB) treatment in studies from Africa and developed world (Talbot, Kenyon, Moeti, Hsin, Dooley & EL-Halabi, 2002). Chronic diseases such as alcohol dependence and others, such as cirrhosis of the liver are mainly attributable to alcohol, while others, such as breast cancer, are only partly attributable to alcohol (WHO, 2004). Overall, the general risk sexual behaviour as displayed by abusers of alcohol in the secular markets is similar to those shown by abusers of home brewed alcohol beverages. The conclusion that could be drawn is that intoxicants regardless of where they have been manufactured or created have a similar effect upon the users.

#### **4.6           DIETARY PREFERENCES AND ALCOHOL USAGE**

It has generally been proposed that men and women who regularly consume alcohol might have different dietary preferences than non-drinkers and that these preferences might alter their dietary habits. In previous studies, alcohol consumption was inversely related to body mass index in women but this relation

has been less consistently observed in men (Yung, Gordis & Holt, 1983; Jones, Barrett-Connor, Criqui & Holdbrook, 1982). Several studies have reported that drinkers consumed more meat and fewer dairy products, fruits, cereals and sucrose than non-drinkers (Herbert & Kadat, 1991).

#### **4.7 ALCOHOL USE AND DOMESTIC VIOLENCE**

The relationship between alcohol abuse and domestic violence was a difficult subject to approach. While substance abuse did not cause domestic violence, regular alcohol abuse was one of the leading risk factors for intimate partner violence. Studies of domestic violence frequently indicated high rates of alcohol and other drug use by perpetrators during abuse (Bennet, 1997).

Chapter five of the study focuses its attention at the control measures already made available to curb the hazardous use of alcohol. Priority is given to available policies as well as legislative framework aimed at regulating the proper and responsible use of alcohol as well as their effectiveness thereof.

# CHAPTER 5

## RISKS AND CONTROL MEASURES IN HOME BREWED ALCOHOL

### 5.1 INTRODUCTION

There is overwhelming evidence backed by existing research which confirmed that most home brewed alcohol is toxic and adulterated thus posing a serious health risk to people who consume them. It was reported that excessive consumption created numerous health problems which included amongst others, perpetual diarrhoea leading to dehydration; nutritional deficiencies; infections due to addiction; and loss of appetite, blindness, and even death. Home brewed alcohol which is produced out of commercial expediency is more likely to expose patrons to negative health risks. There are many reports and known cases of negative health consequences related to harmful impurities and adulterants (WHO, 2004; WHO, 2005; Parry, 2005; Odejide, 2006).

In many instances, home brewed alcohol resulted in long term hospitalisations, blindness, and even death. Users of certain types of home brewed alcohol such as *“thothotho”* are easily identifiable with their red lips. They look twice their age; they have big tummies and have no buttocks; they have blood shot eyes and if a person was originally light in complexion, becomes charcoal black; users are simply turned into moving corpses by this drink, and it is highly addictive (Haworth & Simpson, 2004; WHO, 2004).



## 5.2 RISK FACTORS FOR HARMFUL ALCOHOL USE

The post-colonial era has evidenced a marked change in patterns and quantities of alcohol consumed (Odejide, 2006; Parry, 2005). Many researchers identified the causes of such changes to include urbanization, the commercialization of the production and consumption of alcohol, the weakening of cultural controls that used to limit the quantities and frequency of alcohol consumed, and reductions in social cohesion. Participants from various parts of the region identified stress, conditions of work, and financial and family problems as psycho-social risk factors for harmful alcohol use. Just recently in Tripoli, Libya, 79 people reportedly died from drinking home-made alcohol, suspected of containing poisonous methanol (Times LIVE, 2013/03/13). According to the report, those who survived were blinded, and others went into comas or suffered kidney failure.

Nonetheless, the economic increase in value of home brewed alcohol, has influenced the inclusion of solvents and sulphuric acid from motor vehicle batteries to enhance their capacity to intoxicate. Home brewed alcohol is made into more lethal brews with toxic substances such as battery acid, pool chemicals, tobacco and even old shoes. In other African countries, there are examples of health consequences related to harmful impurities and adulterants of these traditional forms of alcohol (WHO, 2004). In Kenya, for instance, 140 people died while many went blind and hundreds were hospitalised after consuming illegally brewed and poisonous liquor called "*kumi kumi*". This is a concoction of sorghum, maize, or millet, methanol and other dangerous addictive such as car battery acid and formalin.

In Namibia, seven workers died at the Omuramaba Hunting Lodge after consuming a concoction of unorthodox “*khadi*” which contained swimming pool cleaner, battery acid, and other corrosive substances. Although there were existing cases of negative health consequences related to harmful impurities and adulterants, users prefer to ignore existing danger in favour of these brews (Inambao, 2000; Mureithi, 2002).

The health effects of alcohol have been observed in nearly every organ of the body. In fact, a number of disease conditions are wholly attributable to alcohol. However, little or no research has been undertaken in South Africa to directly link any of these diseases to home-brewed alcohol specifically hence the need in part to conduct this research in order to begin a dialogue to address any health related challenge posed by either the use or abuse of home-brewed alcohol beverages (Mureithi, 2002). The consumption of home-brewed beer has been associated with dietary iron excess and a high incidence of oesophageal cancer in Transkei, South Africa. To date, this is only health condition that has directly and scientifically attributable to use or abuse of home-brewed alcohol (Mureithi, 2002).

The quality of home brewed alcohol has been a source of concern for some time. However, the composition of these beverages remains largely unknown. There have been many instances of poisoning and deaths following the consumption of adulterated liquor. Despite the small shares of production and sale of alcoholic beverages in the national products of most countries, the severe health-related and socioeconomic consequences of alcohol consumption make it a unique, and often controversial, consumer good.

While the benefits of moderate drinking to health, social networking and labour productivity have been recognised, excess drinking is associated with a long list of problems including lost productivity, crime, and neglect of family responsibilities, disability, personal deterioration, diseases and death (Cook & Moore, 2000; USDHHS, 1994).

Alcohol has both beneficial and harmful effects on health. Literature suggests that, on the whole, the health impact of alcohol consumption is negative (Cook & Moore, 2000; USDHHS, 1994). A prime target for the toxic effects of alcohol is the liver. Chronic alcohol abuse can result in alcoholic cirrhosis, predisposing people to infections. Misuse of alcohol during pregnancy can result in brain damage to the foetus, causing long-term developmental and social consequences. An example of a harmful effect of alcohol consumption on chronic diseases is the increased risk of high blood pressure. Although the health effects as alluded to here above, refers to alcohol in general, other forms or type of home brewed alcohol such as *thothotho* or *skopdonorr* have been reported to have similar effects upon its users. *Thothotho*, which got its name from its distillation process whereby alcohol is filtered through a pipe and dripped and drop in a vapour form after a vigorous heating process, whereas *skop en donorr* is a form of alcohol which result in its users appearing and looking more like they have battered as a result of knocking down objects emanating from heavy drinking (WHO, 2004; WHO, 2005).

Although physical evidence exists which link home-brewed alcohol to as many social and health risks, available literature to support these claims are very few and insufficient. Production of home brewed beverages is the dominant channel for alcohol availability. Cheap home-brewed alcohol easily finds access to the

market among the low and no income consumers where control is non-existent. Brewing and beer consumption have generally been an integral part of village life while sorghum, a staple food throughout southern Africa, was a primary ingredient in the production of traditional alcoholic beverages (Molamu, 1989; MoHHS, 1999).

The quality of home brewed alcohol in many African countries, such as, Nigeria has been a source of concern for some time. Key to these concerns is and remains the unknown composition of these beverages. In many African countries, traditional spirits are obtained by distillation of fermented local sugary substrates. However, information on these is hard to obtain since the production is illegal in many countries. Since colonial times, the view is that these spirits may contain toxic alcoholic components due to lack of scientific quality control. Earlier research has reported alcohol content often higher than 42%.

Although the alcohol concentrations in these brews were consistent those in modern commercial brewing, it was unexpected and very worrying that such produce were done under uncontrolled and unmonitored environment. Furthermore, some of these brews contained unknown additives which could have harmful consequences (Obot, 2000 & 2007; Odunfa & Oyewole, 1998). The harmful use of alcohol is a global public health problem. The negative health and social impact of alcohol is pervasive and includes loss of income, health inequalities, intentional and unintentional injuries, violent crimes, neuropsychiatric disorders and poverty.

In recent years, there has been growing recognition of the link between harmful use of alcohol and HIV / AIDS and tuberculosis in the African region. These problems are exacerbated by a pattern of consumption characterised by heavy episodic drinking and widespread consumption of beverages produced in the informal sector (WHO, 2004; WHO, 2007; WHO, 2009). The lack of reliable, valid and standardised instruments for measurement of home-brewed beverages alcohol concentration level has made it difficult to accurately measure such alcohol consumption. In addition, a lack of reliable sources of routine facilities-based alcohol data (e.g. from hospitals, and other health care facilities) in many countries prevents the use of such records in surveillance (WHO, 2005).

Alcohol consumption in amounts that significantly increase the chances of health problems is common among patients presenting to primary care, and imposes a significant economic burden on the health care system. The consumption of home-brewed alcohol has been associated with a high incidence of oesophageal cancer in South Africa. The high iron content of the beer and the presence of mycotoxins in the maize used for its preparation have been implicated in the pathogenesis of oesophageal cancer. Locally brewed alcoholic beverages are relatively inexpensive and readily available, making their consumption difficult to limit (Matsha, Brink, Van Rensburg, Hon, Lombard, & Erasmus, 2006).

According to WHO (2009), knowledge and information on home-brewed alcohol is unrecorded. Therefore, these brews are informally produced or illegally produced or smuggled alcohol products, as well as surrogate alcohol that is not officially intended for human consumption and has undesirable health consequences. Poor quality home-brewed beer contributes strongly to alcohol related problems.

Heavy grain beer drinkers were described as suffering from chronic iron poisoning and skin disorders caused by the high iron content of the beer derived from the iron pots used to brew the beer. Iron poisoning was typically characterised by cirrhosis of the liver, damage of the pancreas, scurvy and bone thinning (Seftel, 1972). The readily availability of alcohol as a commodity rather than a libation for the ancestors or as a means of building reciprocity, and the importation of urban drinking habits into the homelands, leads to a widespread increase in regular drinking. These have in many ways taken away the fundamental reason of what home-brewed alcohol stood for and use to represent. These shifts in trends and perceptions need to be understood, but rather be discouraged.

### **5.3 ALCOHOL CONTROL MEASURES IN AFRICA**

Alcohol consumption is associated with a number of health and social problems that increase with the level of intake. World-wide, alcohol consumption accounted for more than 4% of the burden of disease, mostly so in developing countries. Alcohol consumption was also blamed in over 3% of deaths globally. Over the years, alcohol policies have been used as tools to curb the negative impact of alcohol misuse. The effectiveness of these policies have been investigated and consensus has emerged that it is best to target, specifically, the reduction in the total amount of alcohol consumption in the population, but particularly abusive drinking, together with the high-risk contexts and drinking behaviours often associated with alcohol-related problems (WHO, 2000; Bennett, Campillo, Chandrashekar, & Gureje, 1998; WHO, 2008; Rehm, Mathers, Popova, Thavorncharoensap, Teerawttananon, & Patra, 2009; Ludbrook, Petrie, McKenzie,

Farrar, 2012). What is sad though is that home-brewed alcohol is not controlled and measured.

Home-brewed alcohol by and large constitutes a major risk factor for burden of disease globally, with an especially high impact in central Europe (Anderson & Baumberg, 2006). According to Pitso (2007) home-brewed alcohol is usually poorly monitored for quality and strength, as well as frequently contaminated and toxic. Home brewed alcohol is often outside the scope of control by local government authorities, and thereby, largely neglected by the law-makers and research community as well (Haworth & Simpson, 2004; WHO, 2004).

Generally in Africa, both home-brewed (called *umqombothi* in South Africa) and commercially produced alcohol are consumed. In response to the increasing burden of alcohol consumption and misuse in Africa, in 2008, the annual meeting of health ministers from 46 countries, in Cameroon, drew up a ten-point plan to curb harmful drinking of alcohol (WHO/AFRO, 2008).

The points included regulating availability, restricting sale, regulating marketing, increasing taxes and prices, enacting, strengthening or enforcing drinking and driving laws, establishing and strengthening alcohol information and surveillance systems, increasing community action, strengthening health sector response, raising political commitment and building partnerships (WHO/AFRO, 2008). However, the extent to which these points have been implemented is limited to only a few countries in the region including Ghana, Guinea, Tanzania and Uganda.

In South Africa, four policy areas relating to alcohol are operational. These, based on the list agreed upon by African health ministers in 2008, were organised through different government departments. They included placing restrictions on alcohol advertising, regulating retail sales of alcohol, imposition of alcohol taxes and controlling the packaging of alcohol. There has been however, a lack of an integrated and comprehensive strategy that draws on the social, economic and psychological aspects of alcohol consumption and misuse. Alcohol abuse and its effects have not been reduced significantly through these endeavours', partly because change requires more than just a policy. The behaviour and perception of users would have to be modified and their attitude influenced differently to begin to perceive the harm caused by alcohol abuse in their lives (Parry, 2010; WHO, 2011). This lack could also be in part because alcohol drinking practices differ considerably both between and within countries. There is therefore a need to develop alcohol policies that are specific to individual countries and to drinkers within countries. One size does not fit all (Essati, Lopez, Rodgers, Vander Hoorn, & Murray, 2002; Aderson, Chisholm, & Fuhr, 2009).

In Sub-Saharan Africa, an estimated 1.8% of the disease burden was attributable to alcohol, and 1.3% is attributable to high-risk drinking (Rehm, Chisholm, Room, & Lopez, 2006). It has been estimated that alcohol contributed 7% to the burden from death and disability in South Africa, and was the third in burden of disease after unsafe sex and interpersonal violence (Schneider, Norman, Parry, Bradshaw, Pluddemann, & the South African comparative assessment collaborating group, 2007).



The Liquor Act 27 of 1989 in South Africa, specifically prohibited the manufacturing, possession, sale and consumption of concoctions brewed by the fermentation of treacle, sugar or other substances and known as *isityimiyana*, *hopana*, *gediviki*, *skokiaan*, *uhali* or *Barberton*” and other similar beverages. A number of provincial legislations likewise have restrictions on the production and sale of concoctions. However, as alluded to before in this chapter, curbing alcohol misuse by alcohol policies was unrealistic and unattainable. In part, this study would need to establish realistic and attainable means through which the abuse of alcohol could be controlled which include one on one debate with users and also making known the ingredients included in the brews.

Until 1993, Government legislation in the Republic of South Africa had strict measures to control sales to black people and areas where liquor could be consumed, even the quantity that could be purchased and the people to whom sales could be approved as well the quality of alcohol available to them. Not surprisingly, brewing and drinking of alcohol in illegal liquor outlets became a form of resistance against the oppressive laws. Whites have commercialised this sector, they have large breweries, distribution points and trucks etc. Blacks on the contrary have no industry and home brewed alcohol is not commercialised.

Brewing is done informally and there is no advertising and marketing of traditional brews. The reverse effect of the South African Liquor Control Laws was the “commercialisation” of home-brewed varieties which soon became contaminated in order to hasten fermentation to within one day, and to produce a large quantity from a smaller amount of ingredients (Schneider, Norman, Parry, Bradshaw & Pluddemann, & the South African comparative assessment collaborating group,

2007). Quality control in these areas remained weak, meaning alcohol content could at times be dangerously high (Mugisha & Zulu, 2004).

#### **5.4 HOME BREWED ALCOHOL ABUSE AND POVERTY**

A strong relationship exists between the abuse of home brewed alcohol and the negative socioeconomic conditions. Previous studies reviewed strongly point to a direct linkage between excessive abuse of alcohol and poverty (Hancock, 1986; Matsha, Brink, Van Rensburg, Hon, Lombard, & Erasmus, 2006). Excessive abuse of home brewed alcohol has both direct and indirect effects on the poverty status of individuals, families, and the entire community. The economic consequences of excessive consumption of home brewed alcohol is particularly severe for the poor. Excessive consumption of home brewed alcohol has negative impacts on the achievement of the key human development outcomes on education, health, and nutrition, and is a key driver of chronic poverty (Lwanga-Ntale, 2006).

Hancock (1986) uncovered a relationship that prevailed between areas where alcohol was misused and poverty. A combination of debilitating socioeconomic factors such as unemployment and lack of basic necessities were found to be major contributors in poverty stricken neighbourhoods to heavy alcohol use. Farmer (1996) indicated that poverty destabilises lives, crushed self-esteem and created apartheid between those who have economic power and those who did not. Farmer further illustrated that these kinds of conditions were fertile and very favourable to high and heavy abuse of alcohol and other related substances. The relationship between these two scenarios was therefore calculated and designed by competing forces at work between the rich and the poor.

The following chapter is devoted on the exploration of different roles that social workers assume in the field of alcohol and substances. Much emphasis is on the interventions strategies they employ and the results achieved through these efforts.

# **CHAPTER 6**

## **SOCIAL WORK INTERVENTIONS IN SUBSTANCE ABUSE**

### **6.1 INTRODUCTION**

According to Galvani and Forrester (2008); Galvani and Hughes (2008) people use substances for a range of positive and negative reasons. Usually the use of alcohol and other drugs does little or no harm, however the excessive use of substances can cause harm both to the individual and those around them. Social workers are on the front line of responding to social harms and providing support and interventions to protect and safeguard children and adults. Evidence shows that social workers from a range of specialist areas of practice are increasingly encountering problematic alcohol and other drug use among their service users but they have rarely received the training to equip them to intervene.

Complementing a political shift of focus to the social harms of substance use, consultations with newly qualified and experienced social workers have identified areas of training need and lack of confidence among social workers when approaching substance related issues. Quite often, social workers are the first service providers to come into contact with substance abusers in the various service delivery systems, including child welfare, employee assistance programmes, hospitals, schools, programmes for elderly people, and community-based services.

Social workers often provide key assessment and referral services in an array of health and mental health care settings (Hall, Amodeo, Shaffer & Vander Bilt, 2000). Earlier surveys of various professional groups have indicated that social workers provide services to more individuals with substance use disorders than do other helping professions (Zarin, Pincus, Peterson, West, Suarez, Marcus & McIntyre, 1998). Because social workers are employed in a wide variety of settings that serve individuals with substance use disorders, it is clear that the profession is in a unique position to either provide or arrange for appropriate treatment.

Throughout the 20th century social workers have made significant contributions to the development of treatment responses to the alcohol- and other drug-dependent clients and their families (Straussner, 2001). By the 1990s increasing numbers of social workers were drawn to the addictions field by new job openings. This is prompted, in part, by the field's need to meet new regulatory standards, as managed care often demanded that providers of service have graduate education. In response, agencies hired licensed social workers to supervise the addiction counsellors.

## **6.2 HISTORY OF SOCIAL WORK IN SUBSTANCE USE, MISUSE AND ABUSE**

Social workers in the United States have assisted individuals with addictions and their families since the earliest days of the Charity Organization Societies and the settlement house movement in the late 1800s (Straussner & Senreich, 2002). The public generally considered alcoholism a sin or moral problem. Mary Richmond, a notable Charity Organisation Societies leader, had a more enlightened view.

She referred to “inebriety” as a disease, encouraged early identification and treatment, and developed an alcoholism assessment instrument that contains items that social workers today continue to use. In these early days of the profession, social workers often addressed alcohol problems through the temperance movement and their work in public welfare, child welfare, and the workplace, but few alcoholics received direct help. Many died early or were confined in mental institutions, jails, or prisons because professionals knew little about how to treat them or had little interest in helping them.

The processed food and fast food industries had not blossomed, and the Great Depression limited many individuals’ access to food. In fact, many Americans were poorly nourished and were encouraged to eat more. Though the mutual-help group Alcoholics Anonymous was founded in 1935, there was little focus on specialty alcoholism treatment programmes until the mid-1950s. Among social workers’ most notable accomplishments during the mid-1900s was the work of Gladys Price, Margaret Cork, and Margaret Bailey, particularly in helping families of alcoholics (Straussner & Senreich, 2002).

Developments in the 1970s led more helping professionals to enter the field of addictions. The federal government established the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse, and the agency now known as the Substance Abuse and Mental Health Services Administration (SAMHSA). These agencies lent legitimacy to work on alcohol and drug problems, and federal financial aid became available to students to prepare for careers in the field. The number of hospital- and community-based alcohol and drug treatment programmes grew rapidly. Mental health professionals also began recognizing

impulse-control disorders. Eating disorders like anorexia nervosa and bulimia nervosa are considered mental disorders that social workers also treat, but they are beyond the scope of this chapter. Rather than a mental disorder, obesity is considered a general medical condition. Social workers often address compulsive overeating as well as nicotine dependence in their work with clients who are dealing with depression, stressful events, or other problems. Today's social workers have a growing interest in addictions.

In 1995, NASW established a specialty practice section for its members in the alcohol, tobacco, and other drug field and now offers a specialty clinical credential in this field. The first social work journal on addictions, the *Journal of Social Work Practice in the Addictions*, was established in 2001. Social workers hold some of the top positions in government agencies like SAMHSA. With initiatives like the National Institute on Drug Abuse-funded social work research development programs begun in 1999, social workers have become increasingly involved in conducting alcohol and drug research, especially on preventing and treating these problems.

### **6.3 SUBSTANCE ABUSE AND ADDICTIONS**

Conceivably, an individual could become addicted or habituated to almost anything that seems to make him or her feel better or assuage pain. We now consider some behaviours commonly referred to as addictions.

### 6.3.1 Substance Use Disorders

The American Psychiatric Association (2000) does not use the term *addiction*; instead, it refers to alcohol and drug problems as *substance use disorders*, and more specifically, *substance abuse* or *dependence*. These diagnoses are determined by the effects alcohol and drug use have on an individual's functioning, *not* how much alcohol or drugs one uses or how often. Individuals diagnosed with substance abuse have experienced one or more of four symptoms related to their alcohol or drug use within the past year: (1) failure to meet obligations at work, school, or home; (2) use of alcohol or drugs in hazardous situations, such as driving; (3) legal problems, like arrests for public intoxication; and (4) interpersonal problems, like fights.

In order to be diagnosed with substance dependence, one must have three or more of seven symptoms: (1) use of more of the substance to get the same effect, (2) withdrawal symptoms when one is not using the substance (e.g., shakes, delirium tremors), (3) use of more of the substance than one intended, (4) unsuccessful efforts to cut down, (5) increasing amounts of time spent using and recovering, (6) decrease in usual activities, and (7) continued use despite persistent physical or psychological problems. They probably know someone who has met the criteria for abuse or dependence and suffered consequences like the loss of his or her family or job, serious health problems, or incarceration. Even misuse of alcohol or drugs that does not meet diagnostic criteria can result in life-threatening problems like overdoses or accidents. Social workers are also concerned about alcohol and drug misuse. Alcohol problems are far more common than problems with illicit drugs. Commonly used illicit drugs that can



result in abuse or dependence are marijuana; stimulants, or uppers (e.g., cocaine, including crack cocaine; amphetamines; and methamphetamines); depressants (e.g., heroin and quaaludes); opioids (e.g., heroin, morphine, and codeine); and hallucinogens (e.g., LSD and psilocybin, or magic mushrooms). Many prescription and over the counter drugs can also lead to misuse, abuse, or dependence.

Young people are more likely than older people to experience problems from using inhalants, so-called designer drugs such as Ecstasy, or anabolic steroids. Older adults are especially susceptible to problems associated with prescription drug use because they take more prescribed medications than other segments of the population, and as people age, they generally do not metabolize medications as efficiently as they once did. Medications may have negative interactions with each other, and alcohol can exacerbate this problem. A recent trend is for young people to abuse prescription drugs that are usually obtained illegally, a practice known as “pharming.” They mistakenly believe that this is safer than using illicit substances.

Approximately 9–10 percent of the U.S. population currently meets the criteria for substance abuse or dependence; about 15 million have an alcohol use disorder, about 4 million have a drug use disorder, and about 3 million have both alcohol and drug disorders (Office of Applied Studies, 2005). Most do not receive treatment because they cannot afford it or do not recognise that they have a problem (Office of Applied Studies, 2005). A majority of parents in the child welfare system and incarcerated individuals have alcohol or drug problems, as do about half of individuals with a mental illness and those involved in domestic violence, and nearly a third of those with disabilities (Straussner & Senreich,

2002). It is no wonder that social workers assist so many people affected by alcohol and drug problems. The Betty Ford Clinic in California, perhaps the most famous alcohol and drug rehabilitation program, was named after President Gerald Ford's wife. This first lady was addicted to alcohol and prescription drugs. Her courage in going public and that of many others encouraged others to get professional help.

Social workers work in inpatient rehabilitation programmes, residential programmes like therapeutic communities and halfway houses, outpatient treatment programmes, and addiction programmes located in many jails and prisons. Dependence on nicotine cigarettes and other tobacco products that are smoked, chewed, placed between the cheek and gum, or sniffed generally does not cause legal problems, but it causes great human suffering. The Centers for Disease Control and Prevention (2007) cite tobacco use as the nation's leading preventable cause of death, close to a half million per year. Few social workers are employed in smoking cessation programmes, but all social workers should help their clients quit using tobacco products.

### **6.3.2 Compulsive Eating**

Needless to say, Americans have easy access to fattening foods that many do not eat in moderation. Approximately 61 percent of adults in the United States are overweight or obese, and 13 percent of children and 14 percent of adolescents are overweight (the number of overweight adolescents has tripled in the last two decades) (U.S. Department of Health & Human Services, 2001). Excessive weight

may result in increased risk for type 2 diabetes and coronary heart disease and may exacerbate conditions such as hypertension (high blood pressure).

### **6.3.3 Compulsive Sexual Behaviour**

The DSM describes disorders such as pedophilia, but not compulsive sexual behaviour or sex addiction. The Society for the Advancement of Sexual Health (2007) says that sexual addiction is difficult to define and takes many forms but involves loss of control over some form or forms of sexual behaviour, negative consequences, and constant involuntary preoccupation with the behaviour. Sexual Compulsives Anonymous has devised twenty questions to help people determine if they are sexually compulsive; these criteria include feeling guilt or shame over sexual behaviour and having sex with prostitutes, others one has just met, or people with whom one would not otherwise associate.

Individuals who have sex compulsively may engage in abusive or painful sexual activities and practice unsafe sex, putting themselves and their sexual partners at risk for sexually transmitted diseases. Others may restrict sexual activity to masturbation or other solitary sexual behaviour. The construct of sexual compulsivity or sexual addiction needs more study, but many social workers see clients whose behaviour indicates that they have some form of this problem.

### **6.3.4 Excessive Internet Use and Other Excessive Behaviour**

Some people use the Internet to engage in illegal activities such as viewing child pornography or soliciting sex from minors. Internet use may also lead to

extramarital relationships that may be confined to emotional infidelity or result in sexual infidelity. Excessive Internet use itself can become a problem. People may spend inordinate amounts of time online searching for news, sports, or other harmless information. Internet use becomes problematic when it interferes with relationships, work, and other aspects of everyday life. The same can occur with watching TV or engaging in sports or other activities.

#### **6.4 CAUSES ADDICTIONS AND COMPULSIVE BEHAVIOUR**

The causes of addiction or impulse-control disorders are widely debated (McNeece & DiNitto, 2005). Many people have strongly held views about what causes these problems. Social workers should carefully examine their personal views of these problems before proceeding to help clients. Some people see addictions as moral problems that result from a lack of willpower or the wanton acts of individuals unwilling to change and become responsible citizens. Others see them as a lifestyle or conscious choice and believe that if individuals choose to engage in these behaviours, they can choose to stop. Many individuals with alcohol or drug disorders have a family history of these problems, suggesting a genetic predisposition.

Growing evidence indicates that genetics and abnormal neurotransmitter systems (brain chemistry) play a part in substance use disorders (National Institute on Alcohol Abuse & Alcoholism, 2000). Many report that using alcohol and drugs makes them feel “normal.” Alcohol and drug consumption in sufficient quantities and over a period of time can alter brain chemistry and promote continued use. Abnormal brain chemistry has also been identified in some pathological gamblers (American Psychiatric Association, 2000). Social workers need information about

brain chemistry and medication use in treating these problems. Having parents, grandparents, or other relatives who have had alcohol or drug disorders may suggest a biological predisposition to these problems. It may also mean that using alcohol or drugs to deal with life is a learned behaviour. In addition to learning theory, personality theories have been used to explain substance use and other impulse-control disorders. Some people are thrill seekers, behave impulsively or antisocially, or have unresolved insecurities or immature personalities. Such psychological conditions have all been used to explain why some people develop substance use disorders, gamble pathologically, overeat, or shop compulsively, though proof is lacking. Culture may also play a role in people's development of or protection from addictive behaviours.

Alcohol and drug problems vary across countries and among cultural groups. For example, the French and Irish reportedly have higher rates of alcohol problems than Italians and Jews (Levin, 1989). Though members of some American Indian tribes do not drink, other tribes have high rates of alcohol dependence and fetal alcohol spectrum disorders (physical abnormalities and/or mental retardation in newborns) (National Institute on Alcohol Abuse & Alcoholism, 2000). SAMHSA (2006) reports that Puerto Ricans are more likely to be treated for opiate (heroin) problems than other ethnic groups in the United States. Since genetics or other biological factors do not seem to account for these differences, culture may be an explanation. Gender and sexual orientation may also be factors. Women are reportedly less likely to have substance use disorders. This may be due to the ways problems are identified or measured (e.g., women are less likely to get into fistfights after drinking). Pathological gambling is also more common among men. Research suggests that lesbians have higher rates of alcohol problems than

straight women (Crisp & DiNitto, 2005). Poverty may play a role in alcohol and drug problems. Residents of poor communities have greater exposure to alcohol advertising, bars and liquor stores, and illicit drugs; this, combined with feelings of hopelessness about the future, might promote substance use. Culture may also affect gambling and eating habits. Social workers take into account gender, ethnicity, culture, and class in order to make more accurate diagnoses and better referrals and to improve treatment. Social workers view many problems of the human condition as having a biopsychosocial basis.

Thus, social workers consider whether and how biological, sociological, and psychological factors may contribute to an individual's addictive or impulse-control disorders. Social workers generally reject simple moral explanations for these problems. They believe that human beings prefer to act morally, but due to biopsychosocial risk factors, they may need help in doing what they believe is right. Social workers also generally believe that people should be held responsible for poor judgment or illegal acts, but they are compassionate toward those struggling with addictions or other problem behaviours. Social workers understand that overcoming addictive behaviours is usually a difficult task and often requires professional help. Just think of a behaviour you have tried to change and how difficult it was. Social workers typically take detailed social histories to learn more about factors that may cause, contribute to, or exacerbate a problem. But without proof that biological, psychological, or socioenvironmental factors cause addictive behaviours, social workers utilise what seems to work best for helping people with these problems.

## **6.5 EVIDENCE-BASED ADDICTIONS PRACTICE**

There is a growing number of evidence-based approaches for preventing and treating addictive behaviours. Most are behavioural or cognitive-behavioural interventions designed to change the addictive or compulsive behaviours and cognitions (thoughts and feelings) that precede these behaviours. Social workers try to discern which may be most useful in their practices.

### **6.5.1 Prevention**

Many social workers enjoy working with children. Children are the focus of many efforts to prevent addictive behaviours, and school social workers are often involved in delivering prevention programmes. For example, SAMHSA offers information on evidence-based prevention programmes targeted to children of different ages and ethnic backgrounds. Adults also need prevention or health promotion programmes. Social workers in public health practice and other medical and social service settings help adults recognise early indicators of alcohol and drug problems or overeating before they develop into full-blown problems, encourage them to adopt healthier habits, and instruct them on how to do so. Social workers have become increasingly involved in developing adult prevention programming that is culturally relevant and age appropriate.

### **6.5.2 Brief Interventions**

Brief interventions can take many forms, such as having clients attend one or several short counseling sessions, asking clients to read educational materials and keep logs to monitor their behaviour (e.g., number of drinks consumed;

cigarettes smoked; amount of time or money spent gambling, shopping, or using the Internet), and providing cards to remind clients what to do should alcohol or drug cravings or urges to gamble, eat, or engage in compulsive sexual behaviour occur. Research indicates that brief interventions are often, but not always, effective in reducing risk drinking (National Institute on Alcohol Abuse & Alcoholism, 2000). It may be a sign of the times and current insurance policies that brief interventions are now used to address many problems discussed in this chapter, particularly those that have not reached very serious proportions. One framework for brief interventions is the FRAMES approach, which stands for giving *feedback* to the client on his or her problem behaviour.

## **6.6 SOCIAL WORKERS' INTERVENTION IN THE FIELD OF PUBLIC HEALTH**

Johnson, Renaud, Schmidt, and Stanek (1998) found that social workers who viewed drugs as generally appropriate and necessary for many psychological disorders in children and adolescents were more likely to engage in a collaborative role with families as well as to refer children to physicians and other specialists. Bentley, Walsh, and Farmer (2005) also found a relationship between the reported frequency of social workers' engagement with clients in medication-related activities and their perceived sense of competence in performing these roles, as well as their sense of professional obligation to perform these functions. Social workers are trained to use bio-psychosocial and ecological systems based assessment frameworks. This approach embodied social workers' core worldview that clients' issues were produced by biological, psychological, and social



environmental factors including, but extending beyond, the family systems to the neighbourhood and community.

The traditional addiction counseling assessment framework was focused on the individual client's use of alcohol, other drugs, or both, and the impact of the substance on their individual lives. Although today's best practices in the addiction counseling profession include "brief intervention, brief treatment, motivational interviewing and motivation enhancement techniques, social skills training, contingency management and community reinforcement" (Whitter, 2006), the focus often remains on the individual client. For both social workers and addiction counselors, research has generated numerous valid screening and assessment tools to assist the addiction professional to identify which individuals have "a problem with chemicals or addictive behaviour" (Perkinson, 2008), whether they are motivated for treatment, and the level of treatment needed.

Along with the dramatic rise in the use of psychiatric medication in the past two decades, social workers' involvement in drug treatment has also increased, prompting a call for better education and training in psychopharmacology and mental health advocacy (Olfson, Marcus & Pincus, 1999; Olfson, Marcus & Pincus, 2002; Bradley, 2003; Bentley & Walsh, 2006). The use of psychotropic drug treatment with children and adolescents has seen a particularly sharp increase over recent years. Although the public was still quite hesitant about whether or under which circumstances psychiatric medication ought to be used with children, the reality was on the contrary.

In this ambiguous and changing treatment context, social workers working with youth were in a prime position to help them and their parents negotiate the treatment system and make informed decisions about psychiatric drug treatment (McLeod, Pescosolido, Takeuchi & White, 2004). Although scholars do not always agree on the specific roles social workers should take, there was a general agreement that social workers should be more proactive and engaged in their clients' drug treatment. Some suggest that because of their broader person-in-environment, orientation and more intensive contacts with clients, social workers have important information that was not always available to physicians, and they ought to intervene to improve the quality and humaneness of treatment (Cohen, 1988). Bentley and Walsh (2006) described five different but possibly over-lapping medication-related roles undertaken by clinical social workers, namely; the physician's assistant, the monitor, the collaborator, the educator and the advocate.

## **6.7 IMPACT OF SOCIAL WORK PROFESSION IN SUBSTANCE ABUSE**

According to the Bureau of Labour Statistics report of 2004, employment of social workers is expected to increase faster than the average for all occupations through 2012, and employment of social workers in substance abuse settings will grow rapidly between 2002 and 2012. This projected increase is due to a variety of factors, including placement of substance abusers into substance abuse treatment programmes instead of into criminal justice system; and increased comorbidity of substance abuse disorder with other problems (for example, mental health disorders, HIV / AIDS and other sexually transmitted diseases, child welfare cases. For instance, Hall and colleagues (2000) found that at least half of all hospitalized patients in urban areas have substance abuse-related problems. The

complexity of alcohol-use disorders, particularly gender-related issues, indicates that the need for practitioners' knowledge, insight and compassion is enormous.

Effective screening and intervention requires keen self-awareness and personal commitment to change, the ability to interview without evoking denial and defensiveness, competent topic introduction and state-of-the-art knowledge of gender-specific indicators of alcohol-use disorders. Aspects of personal experience will influence how one screens, assesses, intervenes, and guides women with alcohol-use disorders through an agency's system. Workers are encouraged to engage in an honest self-assessment before working with this population (Finkelstein, 1993; Roth, 1991). Any attitudes and beliefs that interfere with a practitioner's ability and effectiveness in working with women exhibiting alcohol-use disorders must be vigorously challenged. We can optimally make use of agency supervision as a mechanism for addressing these shortcomings as a helper.

## **6.8 PREVENTION OF SUBSTANCE ABUSE**

### **6.8.1 Alcohol treatment and prevention**

Conversely, alcohol and drug prevention workers should be encouraged to include HIV/ AIDS-related issues as part of their prevention activities. Patients in treatment for alcohol problems should be screened to assess for alcohol-related HIV risk and different interventions should be instituted depending on their level of risk. Screening could include asking questions about drinking before/during sex and drinking in high risk contexts, for example., in bars when they are not accompanied by their regular sexual partner. If risk is absent, they should be provided information by brochures and/or given simple advice.

If risk is low-medium then it might be advisable to offer them voluntary counselling and testing (VCT) and to include alcohol-related HIV risk reduction as part of their intervention package. For patients found to be at high risk, then interventions could be the same as for patients at low-medium risk but they may require more active case management to address alcohol-related sexual risk or more intensive treatment for their alcohol problems. If patients report that they are HIV positive, or if they come out with a positive status after being tested, then they should be informed about the ways in which alcohol can affect a person's immune system, medications and medication adherence. If necessary more active case management to ensure ARV medication compliance should be instituted.

#### **6.8.2 Broader policy/systemic issues**

In terms of broader policy and systemic issues, greater emphasis should be given to advocacy around alcohol and HIV. This could include encouraging more articles about the links between alcohol and HIV-related sexual risk behaviours and around alcohol's effect on HIV medications and adherence to such medications to be written in publications with a broad readership such as medical and nursing journals and popular magazines. Ministries/departments of health should also prepare pamphlets on this to be distributed as part of continuing education efforts. Consideration should also be given to better integration of alcohol and HIV and TB services over time to reduce the vertical nature of programmes and to ensure that patients can be seen in a 'one-stop' service.

Staff working in health care settings, particularly HIV, STI and TB clinics and staff working in alcohol and drug treatment settings, including mental health in and out-

patient clinics and specialist alcohol and drug treatment centres need to be cross-trained in various areas. These include screening for alcohol risk; providing education and brief advice on how to reduce drinking risk and where to make referrals to treatment for alcohol problems in HIV, TB and STI and other health settings; and screening for alcohol-related sexual risk, to provide education and brief interventions to reduce alcohol-related sexual risk and referrals to VCT; and more active case management in substance abuse settings. This could be provided through general training and as part of continuing education programmes. It will also be important to address stigma associated with alcohol misuse in general health settings and with HIV in substance abuse settings.

Despite efforts to prevent substance abuse problems in the United States, a sizable portion of the population aged 12 years and older continues to use illicit and legal substances. Results from the most recent National Survey on drug use indicated that in 2005, slightly more than 8% of the population aged 12 years or older were the current users of illicit drugs. The rates of current substance use ranged from slightly more than 4% for persons aged 12 or 13, increasingly to slightly more than 67% for persons aged 21 to 65, and then dropping to 40% for persons aged 65 years and older. An estimated 6.6% of the population aged 12 and older engaged in heavy substance abuse. The impact of substance abuse is enormous in terms of how it affects individuals, families, and communities (National Institute on Drug Abuse, 2007).

Social work has a long history of working with persons with substance abuse problems. Whereas the early focus of practitioners typically involved the provision of treatment services, the profession has since expanded its involvement to also

include involvement in research, administration, policymaking, and programme development domains. However as statistics from surveys conducted revealed, only 16% of social workers and less reported being involved in substance addictions work, with only 3% stating substance addictions were their primary practice areas (Straussner, 2001; Smith, 2005).

Although indications were there that social workers did some work with clients with alcohol abuse issues in a variety of organizational and practice settings, there were questions as to whether social workers were adequately trained to address e abuse. Although more than 75% of social workers received some substance abuse specific training in their lifetimes, only 3.8% did so in the past 12 months. Social workers acknowledged these deficiency and also agreed with the recommendations that more training related to substance abuse was needed if impact was to be made in the prevention of substance abuse (Smith, 2005; Hall, Amodeo, Shaffer, & Vader Bilt, 2000). Potentially even more troubling was the concern that social work education and practice did not pay a similar attention to substance abuse issues in non-substance-abuse practice areas despite the fact that substance abuse problems permeate the social systems and client populations that social workers serve.

In non-substance-abuse practice areas such as child welfare, family services, employee assistance, schools, and geriatrics, where substance abuse problems are prevalent, social workers are often the first service providers to work with persons who might have a substance abuse problems, yet the workers often have received little or no training in the delivery of substance abuse services (National Association for Children of Alcoholics, 2006; Hall et al., 2000).

In a study of the development of a measure of potential barriers that social workers might experience in discussing substance abuse with clients, Hohman, Clapp and Carrillo (2006) identified three factors, namely, attitudes, worker-client relationship skills, and knowledge that could affect how social workers work with clients who might have substance abuse problems. The growing recognition of these deficiencies led to efforts beginning in the late 1990s to increase social workers' knowledge and skills in dealing with substance abuse problems.

For example, the National Association of Social Work (NASW) began to offer a specialty practice section on alcohol, tobacco and other drugs in 1996. Despite these initiatives, there was a question as to whether the social work profession needed to be more proactive in responding to the potential for substance abuse problems in non-substance-abuse practice settings. For example, the Institute for Medicine has suggested that the screening for potential substance abuse problems be expanded to also include areas where the probability of problems with alcohol and other drugs was high to most, if not all of which, are common areas of social work practice (NACAO, 2006).

### **6.8.3 Prevention Substance Abuse In The Workplace**

Workplace programmes designed to prevent and reduce alcohol problems could potentially benefit the employee, the employer, and society in general. Substance abuse could be associated with multiple negative workplace outcomes, including absences from work, accidents, turnover, and arguments and fighting at work, sleeping on the job, and other sources of productivity loss. The workplace offers many advantages as a setting for preventing alcohol problems. For example, full-

time employees spend a significant proportion of their time at work, increasing the possibility of exposure to preventative message or programmes offered through the workplace.

Workplace interventions could be accessed by specific groups that would otherwise be difficult to reach and, because most people were employed, reach large population. Employers have a vested interest in keeping their employees healthy and productive. They could therefore use their influence to encourage employees to participate in prevention programmes. Many employers offer employee assistance programmes to help employees deal with personal problems, including substance abuse, that might adversely affect their work (Substance Abuse & Mental Health Services Administration, 2009; Frone, 2006; Harwood, 2000). The approaches to be focused on here include strategies based in health promotion, social health promotion, and brief intervention, including web-based feedback interventions, all of which focus on changing individual behaviour, as well as environmental interventions, which seek to reduce risk factors by changing the work environment.

As the state of the science for workplace prevention is relatively young, the authors present a model that gives equal weight to different approaches until comparative studies examine their relative effectiveness (Naimi, Brewer, & Chattopadhyay, 2006).

## **6.9 TREATMENT OF SUBSTANCE ABUSE**



Despite the historically limited focus on addictions training in schools of social work, social workers in the United States have always worked with addicted individuals and their families (Amodeo & Litchfield, 1999; Googins, 1984). As early as 1917, Mary Richmond, one of the major contributors to the professionalisation of social work, rejected the moral of alcoholism of her day with its characteristic portrayal of alcoholics as sinners. In her ground breaking book, *Social Diagnosis*, published in 1917, Richmond stated that inebriety is a disease and went on to provide a description of this disability that is entirely consistent with the disease model of alcoholism as described almost half a century. Based on her clinical observations, Richmond (1917/1944) stated the following;

- That the disease of inebriety differs from excessive drinking of those individuals who still have power of will to remain sober if they choose to exercise it, that is, those whom today we label as alcohol abusers,
- That the diagnosis of this disease should be based both on a physical and mental examination,
- That this diagnosis applies to individuals who are habitually overcome by alcohol and unable to take it at all without taking it to excess, that is, those who cannot drink without losing control,
- That this disease is not curable since those who have it will relapse if they drink again,
- That better success is achieved if the malady is dealt with when its manifestations first appear, that is, chances of recovery are better during the early stages, and

- That the inebriate is a patient and not a culprit; he cannot be blamed for his disease any more than someone with tuberculosis can be blamed for his. Success in treatment, however, does depend upon the patient's co-operation.

Social workers continued to play an important role in the treatment of alcoholics and their family members in the years following the repeal of Prohibition in 1933 and during the Second World War and its aftermath. Social workers were an integral part of the interdisciplinary team at the Yale Plan Clinics in New Haven and Hartford, Connecticut that began in 1944. In 1955, the Yale (now Rutgers) Summer School of Alcohol Studies began its first formal training seminar for social workers. However, during the 1980s, with the escalation of cocaine and poly-substance abuse, the philosophies and staffing patterns of both alcohol and drug treatment programs began to converge, with social workers assuming increased treatment, programmatic and administrative responsibilities (Straussner, 1993). Currently, social workers played a pivotal role in therapeutic communities and recovery homes and as staff members in methadone maintenance programs. Furthermore, social workers were intrinsically involved in the proliferation of treatment programs for clients with co-existing psychiatric and substance use disorders, commonly known as MICA programs. Moreover, social workers were providing innovative brief treatment to numerous individuals with substance abuse problems and their families, and were in the forefront of awareness of ethnic and cultural aspects of addictions treatment. Social workers were also involved in the provision of services to individuals and families impacted by process, as opposed to chemical, addictions and compulsive behaviours such as eating disorders,

sexual addiction and gambling (Straussner & Zelvin, 1997; Amodeo & Jones, 1997; Berg, 1995; Philleo & Brisbane, 1995; Straussner, 2001).

Most recently, social workers were beginning to play a greater role as researchers on various aspects of alcohol and other drug treatments and as players in the federal and state policies and grants arenas (Zweben, 1997). As the twenty-first century begins, social workers are a significant presence in the field of addictions. The social work profession's unique bio-psychosocial perspective, its flexibility in adapting to new streams of thought and incorporating them into practice, its ability to integrate disparate programming into a systemic whole, make it a profession extremely well suited to the ever changing field of addictions. It was time that the important role of social workers in addictions, both past and present, was more widely recognized and that social workers be encouraged to further contribute to this field in the future (Straussner, 2001).

### **6.9.1 Social Work Assessment**

Social workers in nearly all practice areas need skills to screen for the problems discussed in this chapter and refer to treatment providers. Screening tools are generally short questionnaires administered by the social worker or completed by the client. There are many alcohol and drug-problem screening tools. For example, the CAGE is a four-item screening device for alcohol problems that social workers can administer in less than a minute (Ewing, 1984). But helping requires more than asking clients questions about whether they have tried to reduce their drinking or have felt guilty about their drinking. Developing rapport, asking questions in a nonjudgmental way, and ensuring confidentiality (to the

extent possible) are also important. Social workers also use questionnaires or inventories based on *DSM* criteria, such as the South Oaks Gambling Screen, to help screen clients for gambling problems (Lesieur & Blume, 1987). Social workers assess the validity and reliability of screening and diagnostic tools and select those appropriate for their clientele based on age, gender, ethnicity, and whether the client has a disability. For example, the South Oaks Gambling Screen has adult and adolescent versions. The Problem Oriented Screening Inventory for Teenagers screens for alcohol and drug problems as well as social, behavioural, and learning problems (Winters, 1999). The Alcohol Use Disorders Identification Test is available in several languages and can be adjusted for drinking norms in different cultures (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001).

One can search the Internet to learn about tools for helping people consider whether they are overeaters, sexually compulsive, or have other problems, but they may not have been subjected to reliability and validity testing. Screening may suggest an individual has a particular problem, but the social worker needs additional knowledge and skills to support or confirm a diagnosis. Social workers must usually have a master's degree and credentials such as a clinical license to make diagnoses. A clinical license may also be required to obtain payment for making diagnoses and providing treatment. Social workers in nearly all practice areas need skills to screen for the problems discussed in this chapter and refer to treatment providers. Screening tools are generally short questionnaires administered by the social worker or completed by the client. There are many alcohol and drug-problem screening tools. For example, the CAGE is a four-item screening device for alcohol problems that social workers can administer in less

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The Problem Oriented Screening Inventory for Teenagers screens for alcohol and drug problems as well as social, behavioural, and learning problems (Winters, 1999). The Alcohol Use Disorders Identification Test is available in several languages and can be adjusted for drinking norms in different cultures (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). Accurate and comprehensive assessment of client behaviour and functioning related to alcohol consumption is the foundation of effective social work treatment for Alcohol Use Disorder. Compatible with the traditional person-in-environment perspective of social work, both psychosocial and behavioural assessment methods provide information necessary for effective treatment planning and intervention. The length and depth of the assessment process would vary depending on the severity of the alcohol problem, clinical setting, and client progress throughout treatment (Sobell, Toneatto & Sobell, 1994).

Comprehensive assessment of alcohol abuse and dependency might be divided into a series of consecutive steps, including structured or unstructured interviews, standardized self-report, biochemical measures of alcohol use, symptomatology, and assessment of client functioning (Allen & Mattson, 1993; Dodgen & Shea, 2000). These steps might include and not limited to the following, screening; diagnosis; assessment of severity; assessment of withdrawal; assessment of situational characteristics related to drinking behaviour; psychosocial assessment; and assessment of current and past use. All of these steps come highly recommended for social workers in the practice fields of alcohol use disorder and in research setting.

The assessment process is the key to developing a helping alliance between clients and practitioners. Problematic alcohol or drug use can be defined as when one's consumption 'repeatedly interferes with occupational or social functioning, emotional state, or physical health' (Maxmen & Ward, 1995). This definition focuses on the impairments and consequences rather than frequency and quantity of their substance use. It is also important to recognise that substance use disorders fall along a continuum ranging from simple problematic behaviour (minimal consequences) to hazardous (that which increases risk of psychological or medical problems), to harmful (psychological or medical problems), to abuse and dependence (physical, psychological, or both) according to DSM-IV-TR (American Psychiatric Association, 2000).

This continuum has been supported by CSAT (1999), the Institute of Medicine (1990), and the US Preventive Services Task Force (1996) and is consistent with harm reduction's assumption that human habits fall along a continuum of

detrimental consequences (Roberts & Marlatt, 1999; Tatarsky, 2002). Practitioners must suspend all judgment associated with alcohol and drug use. Most importantly, eliminate all negative words and phrases, that is, denial, resistance, unmotivated, uncommitted, and labels associated with these disorders (Miller & Rollnick, 1991, 2002). For example, reframe defense mechanisms as care strategies (D'Angelo, 1982). Frame substance use in a positive light (Tatarsky, 1998); a care strategy they learned to help deal with life that is no longer working. Also, for most clients, treatment will not be about rehabilitation; rather, it is about habilitation. Rehabilitation suggests that earlier in their lives they learned more appropriate coping skills. However, it can be easily argued that most of those affected have not learned these skills, but are capable of doing so over time. This follows the assumption that all clients possess various competencies and resources they may tap into (Saleebey, 2006a).

Conveying this to clients offers hope and provides many with the initial motivation to fully engage in the treatment process. Clearly, offering hope and reframing that allows for the development of attitudes and language about the nature of opportunity and possibility are key components of the strengths perspective (Saleebey, 1996, 2006a). The assessment process 'provides an early and ongoing opportunity for the client/social worker partnership to name and rename the problem, shifting perspectives from deficit to strengths and providing the client opportunities to have voice in shaping the method for problem remediation' (Cowger & Snively, 2002). When possible, open the conversation with, 'The proverbial question in therapy is "Why Now – What causes you to seek help

now?” This allows clients to test practitioners’ reactions while initially presenting their story in their own words.

Next, conduct a thorough assessment and assure clients this process is only to learn about possible impairments and consequences associated with their substance use and its level of severity (Brown, 1995; Miller & Rollnick, 1991; Straussner, 2004). The assessment explores alcohol and drug use, the longest period of abstinence, psychiatric history, family history of substance use and psychiatric problems, and medical, social, employment, and legal problems associated with their substance use.

Practicing social workers have long embraced and promoted empowerment processes and clients’ strengths to motivate them to take control of their lives, even while in difficult situations. The harm reduction approach has only recently been added to the arsenal of tools useful in helping clients, particularly for those afflicted with substance use disorders (MacMaster, 2004). To better serve the needs of this population, it is advantageous to combine these approaches. This article has provided various strategies for practitioners to consider integrating into their clinical practice. It has been argued that social workers should play a role in drug work and yet many emphasize the difficulties of integrating drug treatment approaches with, for example, child protection or mental health risk assessment.

In contrast to specialist drug treatment workers who will focus on drug use as the primary problem, social workers often see drug use as one of a range of difficulties experienced by clients: it may be understood as a cause or a consequence of other problems, but is most likely to be seen as interacting with them and aggravating the problematic situation as a whole (Keene, 1997). This well-



established social work understanding of the complexity of interacting psychological and social variables is complemented by basic principles underlying social work, for example, that interventions do not necessarily lead to individuals making fundamental changes to themselves or their lifestyles.

The emphasis on psychodynamic therapy and personal change has become largely redundant in many countries, to be replaced by an emphasis on support and maintenance, particularly among the mentally ill, disabled, those with learning difficulties and parents. Instead of attempting to 'cure' clients, social workers find ways to improve social and individual circumstances, to support clients, reduce risks and maintain quality of life. It is hardly surprising, then, that social workers are often unsure about whether and when to recommend treatment as an option, or how to take it into account when assessing and working with drug users. The level of addiction or dependency is crucial to a disease model or medical understanding of drug use, which presumes patterns of drug use that are consistent and regular over time. In contrast, the significance of different patterns and types of drug use and their respective problems is crucial to social work assessment, as these are the factors that will determine whether there will be social and psychological problems. It is only when clients take drugs in a chaotic or hapazard way that it becomes problematic in social work terms.

For example, problems caused by excessive intoxication, such as accidents caused by slower reaction time and disorientation, blackouts, unconsciousness, overdose and sickness can all aggravate adult problems and affect child care. These short-term physical risks are also often complicated by the psychological problems of intoxication, including anxiety, paranoid states and hallucinations,

which are accentuated for clients who have mental problems or who are socially isolated. Alternatively, those clients who come from deprived groups may find that the most serious difficulties arising from drug use are social problems such as the inability to hold down a job or the debt, intimidation and violence that can arise from involvement in the illicit drug market.

### **6.9.2 Treatment for Women**

For various reasons, not all practitioners were emotionally stable enough to work with this population. Data have shown that large numbers of helping professionals were themselves children of alcoholics (COAs) (Kinney, 1996). This exposure might affect how practitioners interact with their clients by clouding their judgment concerning expectations and prognosis. Others might support the societal biases that women with alcohol-use disorders were simply more deviant than men, morally weak, or helpless and hopeless. Many practitioners have negative feelings and attitudes towards women with alcohol-use disorders. From a treatment perspective, women who were affected invariably have an exaggerated sense of guilt and shame (Morell, 1997). Their defense mechanisms, or what this author referred to as care strategies (as termed by D 'Angelo, 1982), were sharply honed. Clients were amazingly quick to pick up on any negative feelings directed towards them by practitioners, whether intentional or not.

Offering hope was a diverse undertaking. The practitioner needed to let the client know that she was capable of recovery even if she did not believe it was possible. To this end, the worker could utilise a core value that was embedded within social work, which emphasized that all people were capable of change. Next, the worker

would need to continually reiterate that recovery was possible. Having recovering women available as references and guides through the recovery process should she desire assistance would help overcome this hurdle. As a social work practitioner, one should help the client to know that one would support her throughout the recovery process. Make oneself available as a safe supportive ally in whom she could confide at any time. Coordinating services and facilitating change help the client realize you would there for her and would be prepared to advocate on her behalf. The early recovery from alcohol-use disorder required having such safe, supportive people being available.

Practitioners need to avoid emotionally charged terms during the interview. Avoid asking if she abused alcohol or had a problem with it. Never refer to her as an alcoholic. Labeling of any kind during the interview would only cause her to immediately shut down. Once this shutting down occurs, it will be most difficult to re-engage her in the interview process.

## **6.10 SOLUTIONS FROM A SOCIAL WORK PERSPECTIVE**

As social work problem definition differs from that of treatment theorists, so social work solutions are often different from treatment solutions. Whereas social workers can play an active therapeutic role in client change, they more commonly offer support and maintain clients as part of preventive strategies; offering practical crisis intervention help when necessary. Generic social workers are not trained to provide drug dependency treatment, but this option is not necessarily better than the care they can themselves provide. In other words, although treatment is useful for some types of drug user, inappropriate drug treatment may

cause more harm than good for some clients and social work models of intervention may be more effective for a wider range of clients

It is suggested that, when working with drug users, social workers should adhere just as closely to their own professional perspective and skills as they would when working with non-drug-using clients. The first step is therefore to make accurate assessments of problems and needs within the context of the clients' personal and social resources, including social and life skills and social support from family or friends.

## **6.11 SUPPORT AND MAINTENANCE**

Social work skills have evolved over many years to include support, maintenance and crisis intervention. In this way, much social work serves to prevent conditions deteriorating, reduce unnecessary risks and help clients maintain their quality of life. These aims, objectives and methods stand in contrast to those of drug dependency treatment and the aims of therapeutic change and abstinence. A large proportion of work with drug users is not concerned with dealing with dependency, rather with the long-term support necessary to prevent risky or erratic patterns of use.

Research indicates that clients benefit if this type of support is given to them at critical times in their lives (Catalano et al., 1990, 1991). The relationship between social work and drug treatment is often predicated upon the dominant treatment orthodoxy of a particular country. However, it has been argued that a social work perspective leads to different priorities and different interventions from that of treatment models as a whole as they all have an implicit, if not explicit, model of

illness (Turk et al., 1986). Consequently, the priorities of social workers and the needs of their clients can be seen to be different from the priorities of treatment providers and the needs of dependent drug users in treatment.

While therapeutic models may be useful for detoxification and to bring about significant changes in personality or behaviour for some drug-dependent clients, it can be seen that the social work approach is ideally suited to working with a wider range of drugs problems, as social workers have several roles to play as alternatives to, or long side, treatment providers: first, in providing appropriate help to the huge majority of drug users who are not dependent and do not need treatment, in order to reduce drug-related harm and to prevent their drug use escalating when under stress; second, in providing help for those who are dependent, but who will not or cannot comply with treatment conditions; and third, in helping those who have completed treatment programmes, by dealing with the psychological and social problems that lead to relapse.

Though social work interventions contributed immensely in the war against alcohol and substance abuse, limitations for social workers working with drug users still exist. The wider question of whether a social work perspective is better than a treatment perspective for most drug users forever remains relevant. That is, should we make work with drug users overall more like social work and less like medical treatment? Perhaps what is critical is for every profession to play its meaningful role instead of competing with others for recognition and power.

## **6.12 GOALS OF BRIEF INTERVENTION**

The basic goal for a client in any substance abuse treatment setting is to reduce the risk of harm from continued use of substances. The greatest degree of harm reduction would obviously result from abstinence, however, the specific goal for each individual client is determined by his consumption pattern, the consequences of his use, and the setting in which the brief intervention is delivered. Focusing on intermediate goals allows for more immediate successes in the intervention and treatment process, whatever the long-term goals are. In specialised treatment, intermediate goals might include quitting one substance, decreasing frequency of use, attending the next meeting, or doing the next homework assignment. Immediate successes are important to keep the client motivated. Setting goals for clients is particularly useful in centers that specialise in substance abuse treatment.

Performing brief interventions in this setting requires the ability to simplify and reduce a client's treatment plan to smaller, measurable outcomes, often expressed as "objectives" in the Joint Commission on the Accreditation of Healthcare Organizations' (JCAHO) language of treatment planning. The clinician must be aware of the many everyday circumstances in which clients with substance abuse disorders face ambivalence during the course of treatment. The key to a successful brief intervention is to extract a single, measurable behavioural change from the broad process of recovery that will allow the client to experience a small, incremental success. Clients who succeed at making small changes generally return for more successes. The clinician should temporarily set aside the final goal, for example., accepting responsibility for one's own recovery, to focus on a single behavioural objective. Once this objective is established, a brief intervention can be used to reach it. Objectives vary according to the client's stage

of recovery and readiness to change, but brief interventions can be useful at any stage of recovery. The following are suggested goals for brief interventions according to the client's level of consumption.

#### **6.12.1 Abstainer**

Even though abstainers do not require intervention, they can be educated about substance use with the aim of preventing a substance abuse disorder. Such prevention education programs are particularly important for youth.

#### **6.12.2 Light or Moderate User**

The goal of a brief intervention with someone who is a light or moderate user is to educate her about guidelines for low-risk use and potential problems of increased use. Even light or moderate use of some substances can result in health problems or, in the case of illicit substances, legal problems. These users may also engage in binge drinking, that is, five or more drinks in a single occasion. Clients who drink should be encouraged to stay within empirically established guidelines for low-risk drinking (no more than 14 drinks per week or 4 per occasion for men and no more than 7 drinks per week or 3 per occasion for women (ASAM, 1994).

Brief interventions can enhance users' insight into existing or possible consequences or draw attention to the dangers associated with the establishment of an abusive pattern of substance use. For example, a woman who drinks moderately and is pregnant or who is contemplating a pregnancy can be advised to abstain from alcohol in order to prevent fetal alcohol syndrome. Brief interventions can also educate clients about the nature and dangers of substance abuse and possible warning signs of dependency. Older adults who take certain

medications and use alcohol, even at this level, may be at risk for problems due to the interaction of medications and alcohol (CAST, 1990).

### **6.12.3 At-Risk User**

This group includes those whose use is above recommended guidelines for alcohol use or whose use puts them at risk for problems related to their consumption or at risk for meeting the criteria for a substance abuse disorder, for example., people who may be able to report the requisite number of symptoms of a substance abuse disorder may not have three or more symptoms within a 12-month period. Brief interventions with this group address the level of use, encourage moderation or abstinence, and educate about the consequences of risky behaviour and the risks associated with increased use. Brief interventions can help users understand the biological and social consequences of their substance use.

### **6.12.4 Abuser**

These are clients with a substance abuse disorder as defined by the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) (APA, 1994). The goal of intervention with this population, depending on the clinician's theoretical perspective and the substances used, is to prevent any increase in the use of substances, to facilitate introspection about the consequences of risky behaviour, to encourage the client to consider assessment or treatment, and to encourage moderation or abstinence. There is mixed evidence on whether persons who meet criteria for substance abuse can successfully reduce their use to meet lower-risk guidelines or if abstinence is the only reasonable goal.



Both research and clinical experience have produced varying results regarding this issue. From a clinical standpoint, however, some clients who meet abuse criteria may not achieve abstinence but might benefit from a positive, nonjudgmental approach to change their behaviour over time. For example, after working with a clinician to monitor problems associated with the substance abuse, a client might agree not to drive after using substances or might consider quitting. Goals of brief interventions with hazardous drinkers who are not alcohol dependent have been flexible, allowing the individual to choose drinking in moderation or abstinence. In such cases, the goal of the intervention is to motivate the problem drinker to change his behaviour, not to assign blame. Helping clients to recognise the need for change is an essential step in this process.

#### **6.12.5 Substance-Dependent User**

Intervention at this level of use may focus on encouraging users to consider treatment, to contemplate abstinence, or to return to treatment after a relapse. The goal of intervention for dependent users is to recommend the optimal behaviour change and level of care. In reality, however, the clinician may be able to negotiate a change the client is willing to accept and work over time toward abstinence. For example, if a client resists committing to prolonged abstinence, the provider could negotiate a limited period ending with a "checkup," at which time the client might consider extending abstinence further.

It should be noted that some substance-dependent clients may be in a life-threatening stage in their addiction or risk serious consequences such as losing their jobs, going to jail, or losing their families. For these clients, brief interventions should be linked to a referral strategy in which the goal is a therapeutic alliance

between the client and the referral treatment team. Brief intervention in this context is more like "case management," in which the primary care provider tracks the client's progress with other service providers and determines if the client needs any additional services.

#### **6.12.6 ASAM Criteria**

Under ASAM criteria, brief interventions are aimed at the nondependent user, at level 0.5 or possibly level I. Individuals at level II may be appropriate for a brief intervention if relapse potential and recovery environment are major problems for those with relatively minor physiological and psychological substance problems and high motivation to change. ASAM criteria have been extremely useful for clinical management of persons with substance abuse disorders who require more care than is needed for at-risk drinkers. Brief interventions, whether directed at reducing at-risk use or assisting in specific aspects of the treatment process, can be helpful for clients at every ASAM level and in many treatment settings.

### **6.13 COMPONENTS OF BRIEF INTERVENTIONS**

There is tremendous diversity in the process of recovery from a substance abuse disorder. Clients make changes for different reasons, and an intervention that works well for one client may not work for another. Brief interventions are components of the journey toward recovery and can be integral steps in the process. For some clients, assistance with the decision to make the change will be enough to motivate them to start changing the behaviour, whereas others may need more intensive clinical involvement throughout the change process. Brief interventions can be tailored to different populations, and many options are

available to augment interventions and treatments, such as AA, NA, and medications. It should be noted, however, that brief interventions are not a substitute for specialised care for clients with a high level of dependency.

They can be used to engage clients in specific aspects of treatment programs, such as attending group and AA or NA meetings. Brief interventions can also help potential clients move toward seeking treatment and can serve as a temporary measure for clients on waiting lists for treatment programs. Even clinicians who advocate abstinence as a goal can use brief interventions as tools to help clients reach that goal. A brief intervention consists of five basic steps that incorporate FRAMES and remain consistent regardless of the number of sessions or the length of the intervention:

- Introducing the issue in the context of the client's health
- Screening, evaluating, and assessing
- Providing feedback
- Talking about change and setting goals
- Summarising and reaching closure

Providers may not have to use all five of these components in every session. It is more important to use the components that reflect the needs of the client and her personal style. Before eliminating steps in the brief intervention process, however, there should be a well-defined reason for doing so. Moreover, a vital part of the intervention process is monitoring to determine how the patient is progressing after the initial intervention has been completed. Monitoring allows the clinician and client to determine gains and challenges and to redirect the longer term plan when necessary.

### **6.13.1 Introducing the Issue**

In this step, the clinician seeks to build rapport with the client, define the purpose of the session, gain permission from the client to proceed, and help the client understand the reason for the intervention. *Counseling tips:* Help the client understand the focus of the interview. State the target topic clearly and stress confidentiality; be nonjudgmental and avoid labels. Do not skip this opening; without it, the success of the next steps could be jeopardised.

### **6.13.2 Screening, Evaluating, And Assessing**

In general, this is a process of gaining information on the targeted problem; it varies in length from a single question to several hours of assessment on the targeted topic of change. It could involve a structured or nonstructured interview or a combination of both, coupled with questionnaires or standardised instruments, with the extent of the process determined largely by the setting, time, and available resources

### **6.13.3 Providing Feedback**

This component highlights certain aspects of the client's behaviour using information gathered during screening. It involves an interactive dialog for discussing the assessment findings; it is not just clinician driven. Feedback should be given in small amounts. First, the clinician gives a specific piece of feedback, then asks for a response from the client. Sometimes the feedback is a brief, single sentence; at other times it could last an hour or more.

#### **6.13.4 Talking About Change And Setting Goals**

Talking about change involves talking about the possibility of changing behaviour. It is used with clients in all stages of change, but it differs profoundly depending on the stage the client has reached. For example, in precontemplation, clients are helped to recognise and change their view of consequences; in contemplation, they are helped to resolve ambivalence about change.

In action, the focus is on planning, removing barriers, and avoiding risky situations; in maintenance, the emphasis is on establishing new long-term behaviours. It is important that the clinician assess the client's readiness to change if it is not already known. In talking about change, the clinician often suggests a course of action, then negotiates with the client to determine exactly what he is willing to do. Sometimes, talking about change is premature. In that case, it should be postponed until later in the intervention.

#### **6.13.5 Summarising and Reaching Closure**

This step involves a summary of the discussion and a review of the agreed-upon changes. If no agreement was reached, review the positive action the client took during the session. At this point, it is important to schedule a followup visit to talk about how the client is progressing. The followup could be another face-to-face meeting, a telephone call, or even a voice mail message. The goals of closing on good terms are to arrange another session, to leave the client feeling successful, and to instill confidence that will enable the client to follow through on what was agreed upon.

### **6.13.6 Conducting Brief Interventions With Older Adults**

Older adults present unique challenges in applying brief intervention strategies for reducing alcohol consumption. The level of drinking necessary to be considered risky behaviour is lower than for younger individuals (Chermack et al., 1996). Intervention strategies should be nonconfrontational and supportive due to increased shame and guilt experienced by many older problem drinkers. As a result, older adult problem drinkers find it particularly difficult to identify their own risky drinking. In addition, chronic medical conditions may make it more difficult for clinicians to recognise the role of alcohol in decreased functioning and quality of life. These issues present barriers to conducting effective brief interventions for this vulnerable population (CSAT, 1998).

### **6.13.7 Brief Interventions for At-Risk And Problem Use**

A study conducted in 1983 focused on males in Malmo, Sweden, in the late 1970s (Kristenson et al., 1983). The subjects, advised to reduce their alcohol use in a series of health education visits, subsequently demonstrated significant reductions in gamma-glutamyl transferase levels and health care utilization up to 5 years after the brief interventions. The Medical Research Council (MRC) trial, conducted in 47 general practitioners' offices in Great Britain (Wallance et al., 1988), found significant reductions in alcohol use by the intervention group compared to the control group 12 months following the intervention.

Anderson and Scott identified men and women from eight general practices in England who consumed more than 15 standard drinks (for men) or 9 standard drinks (for women) of alcohol per week (Anderson & Scott, 1992).

These individuals were randomly assigned to receive either no intervention or feedback about the findings from the screening and 10 minutes of advice from the physician to reduce their consumption levels, accompanied by a pamphlet of self-help information. After 1 year, the males in the advice group had significantly reduced their mean weekly alcohol consumption by 2.8 ounces more than those who received no intervention. The females in both groups, however, showed significant reductions in alcohol consumption at the same followup point, with no between-group differences.

In a widely publicised evaluation of brief interventions conducted in health care settings in 10 nations sponsored by WHO, the investigators identified 1,490 nonalcoholic heavy drinkers from eight core sites through a 20-minute health interview (Babor & Grant, 1991; Babor et al., 1994). These participants were randomly assigned to one of four groups: (1) no further intervention, (2) 5 minutes of simple advice about the importance of sensible drinking or abstinence, (3) simple advice plus 15 minutes of brief counseling and a self-help manual that encouraged the development of a habit-breaking-plan, or (4) at five of the sites, extended supportive counseling delivered in three extra sessions following the initial advice and 15-minute session. After 9 months, males who received any intervention, including the 5 minutes of advice, reported approximately 25 percent less daily alcohol consumption--a greater change than was observed in the no-intervention control group. Significantly, the men who showed the greatest response to simple advice had more severe alcohol problems and higher consumption patterns.

Another interesting finding from the WHO study was that female participants in all groups had reduced their drinking at 9 months, regardless of whether they received any intervention. One explanation may be that the female participants were only recruited from two relatively affluent countries--Australia and the United States--thus, the results cannot be generalised to all women (Sanchez-Craig, 1994). Furthermore, the 20-minute comprehensive assessment was sufficiently intensive that some women may have responded to implicit messages of cutting down on consumption without further overt advice, especially considering that only 10 minutes of simple advice or 15 minutes of counseling were additionally provided (Kristen & Osterling, 1994). One successful study demonstrated the efficacy of a brief alcohol intervention in a community-based primary care setting (Fleming et al., 1997).

Project TrEAT (Trial for Early Alcohol Treatment) identified 723 men and women as problem drinkers from 17,695 patients who were screened in 17 community-based primary care practices. The outcomes studied were reductions in alcohol consumption and health resource utilisation. In comparison with a no-intervention control group, the patients who received two 10- to 15-minute sessions of scripted advice (using a workbook that focused on advice, education, and contracting information) showed significantly greater reductions in alcohol consumption at a 12-month followup based on drinking levels during the previous week, episodes of binge drinking over the past month, and frequency of excessive drinking in the previous 7 days.

Males in the study also had significantly fewer days of hospitalisation than counterparts in the control group. Females in the experimental groups reduced



their consumption significantly more than males in the experimental group. This research group (Fleming et al., 1999) also conducted a similar trial with primary care patients over 65 and found significant differences in drinking after 12 months for the experimental group compared to the control group. Miller and colleagues have developed a special form of a brief intervention known as the Drinker's Check-Up (Miller & Sovereign, 1989), designed to evaluate whether alcohol is harming an individual in any way. In the 1989 study, participants were recruited through media advertisements and were asked to come into a neutral setting for the assessment.

As reported by Bien and colleagues, several trials of this approach have demonstrated encouraging results from providing systematic feedback about assessment results and some self-help options (Bien et al., 1993). Compared with a no-intervention group of respondents who had to wait 6 weeks for assessment, the recipients of immediate feedback and brief, empathic assistance showed prompt and persistent reductions (of 29 to 57 percent) in consumption patterns. More empathic counseling, an important component of brief interventions is also associated with larger reductions than the use of the more traditional confrontational styles (Miller et al., 1993).

While the types of brief interventions vary, the basic design of most studies is a randomised controlled trial that assigns clients with hazardous drinking patterns either to a brief intervention (ranging from one to ten sessions) or to one or more control conditions (Anderson & Scott, 1992; Babor, 1992; Babor & Grant, 1991; Chick et al., 1985; Fleming et al., 1997; Harris & Miller, 1990; Heather et al., 1987; Kristenson et al., 1983; Persson & Magnusson, 1989; Wallace et al., 1988).

Overall, the majority of brief alcohol intervention studies have found significantly greater improvements in drinking outcomes for the experimental group compared to the control group; however, most also found significant changes in drinking over time for both the control and brief intervention conditions. Meta-analyses found an effect size of 20 to 30 percent in studies conducted in health care settings (Bien et al., 1993; Kahan, 1985). Trials conducted since 1995 have garnered similar effect sizes with one trial finding a greater effect size for women (35 percent) (Fleming et al., 1997). Women were not always included in earlier trials, but later trials that did include women found that they were more likely than men to decrease their drinking based on brief targeted advice. Because of the success of brief alcohol interventions with adults in opportunistic settings, new trials with special populations (e.g., older adults, injured patients in emergency departments, pregnant women) are now being proposed and conducted. In addition, new technologies are being studied, including computerised real-time tailored booklets for at-risk drinkers, and the use of Interactive Voice Recognition (IVR) for interventions and followup.

These and other technologies, if efficacious and effective, will provide clinicians with new tools to assist them in working with a difficult and important clinical and public health issue.

#### **6.13.8 Brief Interventions for Dependent Use**

Most studies of brief interventions for alcohol use that had the goal of changing drinking behaviour have included only subjects who did not meet criteria for alcohol dependence and explicitly excluded dependent drinkers with significant withdrawal symptoms. The rationale for this practice was that alcohol-dependent

individuals or those affected most severely by alcohol should be referred to formal specialised alcoholism treatment programs because their conditions are not likely to be affected by low intensity interventions (Babor et al., 1986; IOM, 1990). However, there have been positive trials that address this issue specifically.

NIAAA reviewed the studies focused on alcohol-dependent drinkers (NIAAA, 1999). Some of these studies focused on the effectiveness of motivating alcohol-dependent patients to enter specialised alcohol treatment. As long ago as 1962, a nonrandomised study was conducted of alcohol-dependent patients, identified in the emergency department (Chafetz et al., 1962). Of those receiving brief counseling, 65 percent followed through in keeping a subsequent appointment in a specialised alcohol treatment setting. Only 5 percent in the control group followed through with an appointment.

Brief interventions have also been compared to more intensive and extensive treatment approaches used in traditional treatment settings with positive results (Edwards et al., 1977; Project MATCH Research Group, 1997, 1998). In a small study, the effectiveness of a one-session brief advice protocol plus monthly followup telephone calls, focused on the patient's personal responsibility to stop drinking, was compared to standard alcohol treatment for 100 men who were alcohol dependent (Edwards & Orford, 1977). At 1-year followup both groups reported a 40 percent decrease in alcohol-related problems. The study found, at 2-year followup, that the patients with the less severe alcohol problems did best in the brief intervention group. The patients with more serious alcohol-related problems did best in intensive alcohol treatment (Orford et al., 1976). Several similar studies conducted in New Zealand (Chapman & Huygens, 1988), London

(Drummond et al., 1990), the United States (Miller et al., 1980, 1981; Miller & Munoz, 1982); and Norway (Skutle & Berg, 1987) essentially replicated the results of previous positive trials, comparing brief interventions favorably with a variety of extended treatments for problem drinking (including cognitive-behaviour therapies, marital therapy, confrontational counseling, and standard inpatient and outpatient treatment).

Sanchez-Craig and colleagues found that when comparing the 12-month treatment outcomes of severely dependent and nonseverely dependent men receiving brief treatment in Toronto and Brazil, there were no significant differences in "successful" outcomes as measured by rates of abstinence or moderate drinking (Sanchez-Craig et al., 1991). The IOM also noted that rates of spontaneous remission of alcoholism suggest that some portion of the most severe alcoholic population will reduce or discontinue their drinking without formal intervention (IOM, 1990).

The largest multisite NIAAA-sponsored study of treatment matching and outcomes, Project MATCH (Matching Alcoholism Treatment to Client Heterogeneity), compared the effects of treatment type on outcomes for more than 1,500 alcohol-dependent patients (Project MATCH Research Group, 1997, 1998). Treatment types included (1) four 1-hour sessions of motivational enhancement therapy, which is often considered a brief intervention even though it is more intensive than most brief interventions (NIAAA, 1995), (2) 12 sessions of 12-Step facilitation, and (3) 12 sessions of cognitive-behavioural coping skills therapy. At 1- and 3-years post-intervention, all three groups reported improvements including drinking less often and drinking fewer drinks per day. A small successful

application of a brief motivational intervention within a substance abuse treatment setting administered approximately 1 hour of motivational interviewing for problem drinkers (Miller & Sovereign, 1989) to seriously opiate-dependent clients recently admitted to a methadone maintenance clinic (Saunders et al., 1995).

Fifty-seven clients were randomized to the experimental group and were asked to identify positive and negative aspects of their opiate use and to project the consequences into the future. These clients were then asked to think about their use and discuss it at the 1-week followup session. The 65 subjects in the control group received a 1-hour educational intervention covering six substance-related issues such as overdose responses, legal aspects, and referral sources. Followup sessions were held with both groups at 1 week, 3 months, and 6 months. Significantly fewer clients receiving the motivational intervention dropped out of the study at each of the followup points compared with those receiving the educational component. By the 6-month point, the motivational subjects had significantly fewer opiate-related problems than the others.

In comparison with the educational group, the clients receiving the motivational intervention were also more likely to make a positive initial shift on a stage-of-change measure, express a stronger commitment to abstinence, remain in treatment longer, and relapse less quickly if they did drop out. The study concluded that brief motivational interventions strengthened recipients' resolution to abstain from opiate use and participate fully in treatment, and were therefore useful in improving performance and program compliance among clients attending a methadone clinic (Saunders, 1995). This and other studies have found that

compliance with a treatment plan, rather than simply length of treatment, is one of the important factors influencing positive outcomes for clients receiving treatment.

In a study looking at the costs of brief interventions, Holder and colleagues evaluated the evidence of clinical effectiveness and the typical costs of various alcoholism treatment modalities and found brief motivational counseling among the most effective in terms of a combination of clinical and cost effectiveness (Holders et al., 1991). It ranked third among the six highest ranking approaches in terms of weighted effectiveness (based on a total of nine studies conducted between 1983 and 1990).

Brief motivational counseling was also rated the least costly of the six most effective modalities or most cost-effective of 33 evaluated modalities. The authors of this study specifically stated that treatment planning and funding decisions should not be based on this initial effort to make "first level approximations" of cost-effectiveness. Critics have raised concerns that brief interventions could be construed as a treatment panacea for all patients with varying levels of alcohol-related problems and different consumption patterns (Drummond, 1997; Heather, 1995; Mattick & Jarvis, 1994). Although most researchers acknowledge that many clients do not need a protracted and expensive course of individual or group treatment, the literature advocating brief interventions as a treatment for all substance abuse is overstated (Heather, 1995; Mattick & Jarvis, 1994). Caution always needs to be employed in evaluating study recommendations. The clinical trials in this TIP on the use of brief interventions have been specific regarding the targeted population tested and the level of generalisability possible.

## **6.14            METHODOLOGICAL ISSUES**

Issues are frequently raised regarding specific methodological concerns of studies on brief interventions. First, many of the brief intervention studies, particularly those focused on alcohol, rely on self-report data to determine outcomes. The validity of measuring alcohol and other use by self-report is routinely questioned; however, reviewers of relevant literature have concluded that these data are generally valid and reliable (Midanik, 1982; Sobell & Sobell, 1990). Reports from collaterals, such as family members, are not as reliable except for highly visible events, such as drinking-related arrests (Midanik, 1982). Persons with hazardous drinking patterns will provide accurate information about their use, particularly under the following conditions: (1) the setting is a research or clinical one, (2) confidentiality is assured, and (3) the interview is administered when the respondent is sober (Sobell & Sobell, 1990).

Techniques to increase the accuracy of self-reports have been employed in recent studies (Fleming et al., 1997, 1999). These studies use interviewers who fully understand drinking-related questions and can explain confusion about common terms (e.g., "blackouts," "high"). Concerns about the methodological limitations of some trials have included sample sizes that were too small and a statistical power insufficient to reliably detect differences between effects in the groups compared (Bien et al., 1993; Mattick & Jarvis, 1994). There may be differential attrition in groups at followup, and these dropouts can be ignored or excluded from analyses (Bien et al., 1993; Drummond, 1997; Kahan et al., 1995), or there could be contamination because the comparison group could be seeking additional treatment during the course of the research (Bien et al., 1993; Kahan et al., 1995;

Mattick & Jarvis, 1994). Also, randomisation of samples has not always been conducted (Wilk et al., 1997), and some early studies did not have control groups or did not have an adequate comparison group (Bien et al., 1993). Some of the newer brief intervention studies have addressed many of these concerns (Fleming et al., 1997, 1999). These, however, remain issues that must be addressed by new studies of brief intervention techniques with special populations and with new technology.

## **6.15 FUTURE ISSUES IN RESEARCH AND PRACTICE**

The background research in this TIP is based on the most rigorous trials from the 1960s through the 1990s. As study designs have become more sophisticated, many of the earlier methodological issues are being addressed. Questions remain regarding specific levels of abuse and dependence after which brief intervention approaches are less effective and more intensive treatment is required. It is possible that factors such as social stability and support (as indicated in Edwards & Orford, 1977) play a role in improved responses to briefer treatments and that these factors may be more important than the level of substance abuse or dependence.

As secondary analyses are conducted from more recent clinical trials, some of the strongest covariates will emerge. Further research focused specifically on the myriad of issues that could affect outcomes is needed to determine whether brief interventions can be useful for clients with dual diagnoses or whether they always require more intensive treatments because of the complexity of their illnesses. Although there is ongoing research testing the effectiveness of brief interventions with patients who have serious psychiatric illnesses and coexisting substance



abuse disorders, there are no published studies that definitively address this issue. There is strong evidence supporting the efficacy of alcohol screening and brief interventions, in particular (Fleming et al., 1997). However, few studies to date have tested the implementation of brief intervention strategies in community-based medical and treatment settings.

Several new initiatives address this critical next step in the process. Higgins-Biddle and colleagues identified the research base and current applications of screening and brief interventions (Higgins-Biddle et al., 1997). The findings on the effectiveness from clinical trials on screening and brief interventions were found to be encouraging, with risky drinkers reducing their alcohol consumption by 20 percent, on average. Individual study results varied from 15 to 40 percent depending on the population and methodology used. In the next few years, focused work in these areas will inform clinicians regarding optimal brief intervention implementation strategies and provide a bridge from research efficacy to practical application in real world clinical settings.

There is evidence that a variety of brief interventions are effective with at-risk and hazardous substance users, and emerging evidence suggests that brief interventions can be used to motivate patients to seek specialised substance abuse treatment and to treat some alcohol-dependent persons. Clinical evidence also suggests that brief interventions can be used in specialised treatment programs to address specific targeted issues. In sum, the Consensus Panel believes it is critical for policymakers and providers of managed care to understand that brief interventions should never be thought of as the only treatment option for persons with substance abuse problems but as one of a

continuum of techniques for use with a population of clients with substance abuse problems ranging from at-risk to dependent use.

The next chapter discusses the research methodology that was employed in conducting this study.

# **CHAPTER 7**

## **RESEARCH METHODOLOGY**

### **7.1 INTRODUCTION**

This chapter deals with operational framework, which guide and direct the research project which was conducted for this study. The research methodology can best be defined as the methods, techniques, and procedures that are employed in the process of implementing the research design or research plan as well as the underlying principles and assumptions that underlietheir use (Myers, 2009). The most common methodologies in social research involve qualitative, quantitative, as well as participatory research approaches or methods. For the purpose of this study, both qualitative and quantitative methods were used. This chapter further deals with issues realting to the population used in the study, sampling as well as the sampling techniques used in the study. The sample is not only outlined, but the demographic feathers are highlighted too. Ethical issues underlying this research project are discussed in detail to demonstrate that participants in the study were handled in accordance with research expectations.

## 7.2 AREA OF STUDY

The researcher chose Mopani district as the preferred area where the study was conducted. Furthermore, Greater Tzaneen municipality was selected as a focal point for the study.

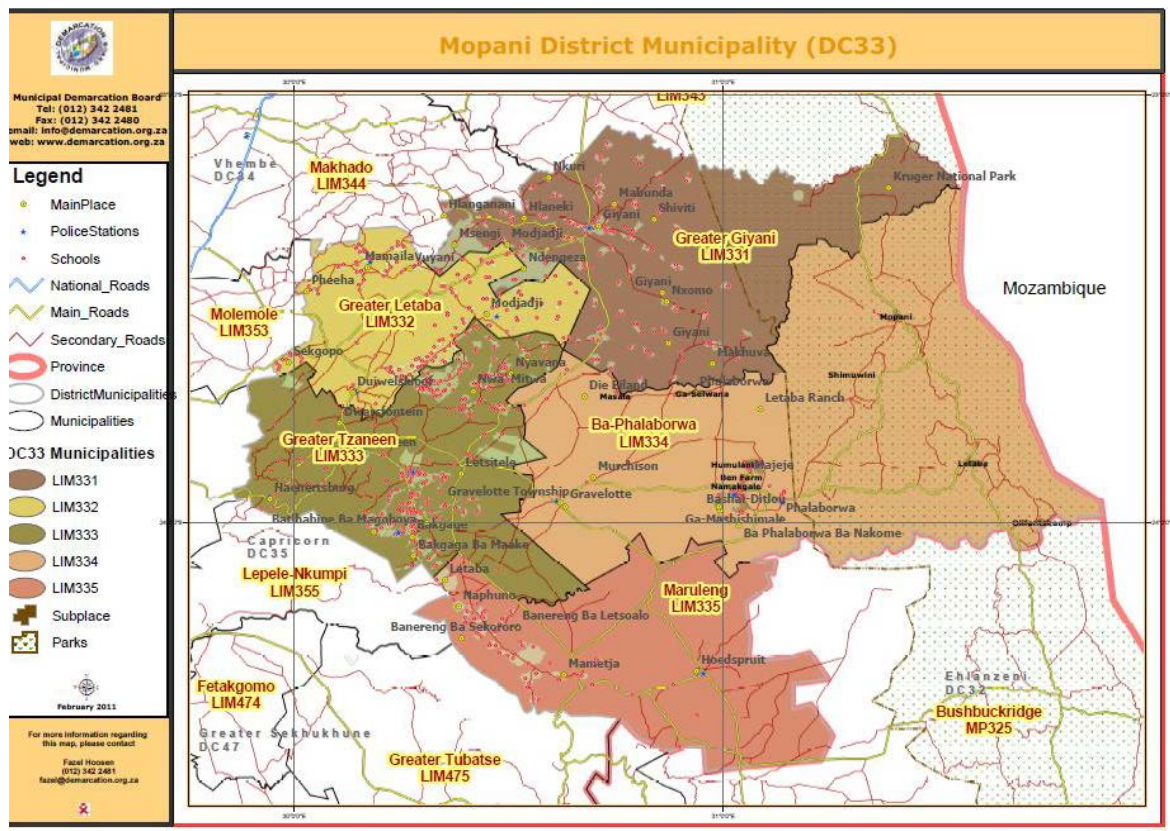


Figure 1: Mopani District Municipality Map

## 7.3 GEOGRAPHIC LOCATION AND KEY FEATURES

The Mopani District municipality is situated in the North-eastern part of the Limpopo Province, 70 km from Polokwane (main City of the Limpopo Province). It is bordered in the east by Mozambique, in the north, by Zimbabwe and Vhembe district municipality, in the south, by Mpumalanga province through Ehlanzeni

district Municipality and, to the west, by Capricorn district municipality and, in the south-west, by Sekhukhune district municipality. The district has been named Mopani because of abundance of nutritional Mopani worm found in the area. The district spans a total area of 2 242 183 ha (22 421.83km<sup>2</sup>), with 15 urban areas (towns and townships), 325 villages (rural settlements) and a total of 106 wards. The Mopani district, by virtue of the Kruger National Park as a District Management Area, is part of the Great Limpopo Transfrontier Park, the park that combines South Africa, Mozambique and Zimbabwe (Mopani District Municipality, IDP 2012/13).

### **7.3.1 Demographics**

The following analogy provides an overview and critique of the important demographic indicators of the Mopani district. It covers the population size, age distribution, unemployment, income generation, educational levels and services backlogs in the district. The socio-economic profile of the district provides an indication of poverty levels and development prospects (Mopani District Municipality, IDP 2012/13).

### **7.3.2 Population**

The reconciled total population of the Mopani district municipality STATSSA community survey of 2007 is 1 068 569. The population for each municipality within Mopani district is presented in the table below.

**Table 1: Estimated Population, StatsSa2007**

Estimated Population						
STATSSA Survey 2007						
Municipality	Area / Extent	Population	Pop. Density per hectare	Rural population	Urban population	Farming population
Greater Giyani	2 967.27km <sup>2</sup>	247 665	22	89.5%	10.5%	0
Greater Tzaneen	3 240 km <sup>2</sup>	349 081	24	82%	10.4%	7.6%
Greater Letaba	1 891 km <sup>2</sup>	247 745	25	94.3%	5.7%	0
Ba-Phalaborwa	3 004.88 km <sup>2</sup>	127 307	25	36.2%	51.0%	12.8%
Maruleng	3 247 km <sup>2</sup>	95 769	16	88.7%	2.3%	9.0%
District Management Area	10 993.98 km <sup>2</sup>	1 002	Nature Conservation area			
Mopani / Total	<b>25 344.13 km<sup>2</sup></b>	<b>1 068 569</b>	<b>23</b>	<b>81%</b>	<b>14%</b>	<b>5%</b>

Out of the entire district population, 81% reside in rural areas, 14% in urban areas and 5% stay on farms. The population densities vary from municipality to another, but the average is 23 people/ ha. It shows that people are sparsely populated with sufficient land around them. The problem of land shortage for economic development is perpetrated by the vast land occupied for dwelling purposes, leaving much little for economic growth. A move towards reduction of stands sizes may need due consideration (Mopani District Municipality, IDP 2012/13).

### **7.3.3 Profile of Greater Tzaneen Municipality**

The Greater Tzaneen Municipality is a Category B Municipality, which operates on the Executive Committee System. The Municipality has been divided into 34 wards, (the 34th ward has been added by the Demarcation board in 2005 in preparation for Local government elections) each ward being represented by a Ward Councilor. There are also 33 Proportionately Representative Councilors. There are seven (7) full-time Councilors, who occupy the positions of Mayor,

Speaker and Executive Committee Member and leading the various clusters (Mopani District Municipality, IDP 2012/13).

#### **7.3.4 Area of jurisdiction**

The Greater Tzaneen Municipality comprises a land area of approximately 3240 km<sup>2</sup>, and extends from Haenertsburg in the west, to Rubbervale in the east (85km), and just south of Modjadjiskloof in the north, to Trichardtsdal in the south (47km). The municipal boundaries form an irregular, inverted T-Shape, which results in certain developmental implications for the Municipality, and more specifically the distance to markets, difficulties in respect of service provision, and constraints to implementing development vision / strategy. The Greater Tzaneen Municipality area encompasses the proclaimed towns of Tzaneen, Nkowankowa, Lenyenye, Letsitele and Haenertsburg. In addition, there are 125 rural villages, concentrated mainly in the south-east, and north-west, of the study area. Almost 80% of households reside in these rural villages.

The municipal area is further characterized by extensive and intensive farming activities (commercial timber, cash crops, tropical and citrus fruit production); Mountainous, inaccessible terrain in the west and south, and un-even topography (gentle slopes) to the north and east; Areas with exceptional natural beauty, with considerable untapped tourism potential (Mopani District Municipality, IDP 2012/13).

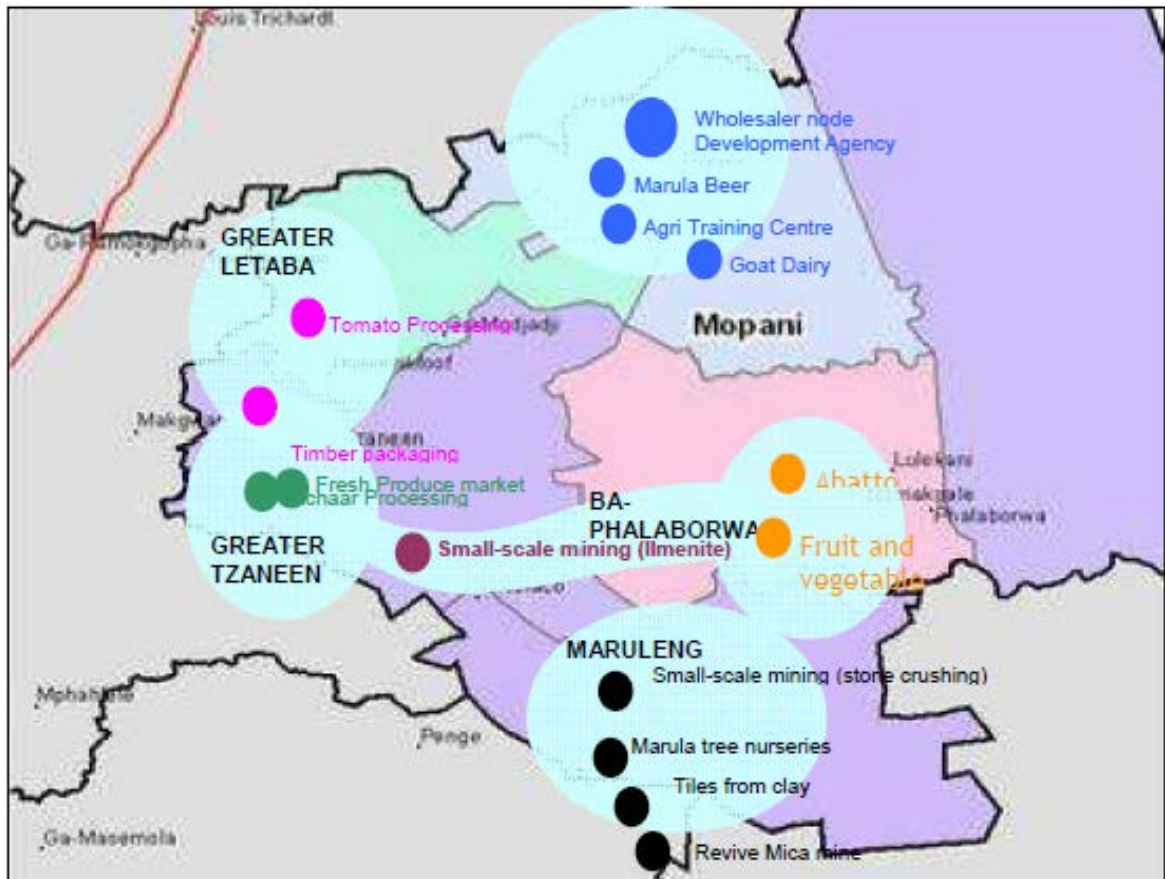


Figure 2: Greater Tzaneen Municipality Map

### 7.3.5 Age and Gender Distribution

An analysis of the demographics of the district indicates that most of the residents are still at a very young age and are female. From the the same age and gender analysis, it is clear that the majority of the people in Mopani live in Greater Tzaneen municipality, while only a limited number of people in Mopani reside in Maruleng. Greater Tzaneen also have the highest population density with 119 people per square kilometer and Maruleng the lowest with only 29 people per square kilometer.

The percentage of females in the district increases along with age, implying that women live longer. In the age group 0-4 years the percentage of males and



females are fairly even, compared to the age group 65 and older where females constitute 69.1% of the population. Mopani district also has very few old people (65 years and older), with the majority of the people being younger than 35 years, with 78% males and 71% of the females being younger than 35 years. This situation could be due to that people who are economically active mostly leave the rural areas to urban centers (Mopani District Municipality, IDP 2012/13).

### **7.3.6 People with disabilities in the district**

There is a considerable number of people with disabilities in the district who are often not considered in the provision of services. Most of the disabled people in Mopani district are physically incapacitated with regard to their sight, 41.9% in 1996 down to 26.8% in 2001. Physically disabled people constitute 27% of the disabled population in 1996 and only 19.5% in 2001. It is further notable that 40% of the people with a physical disability and 42% of people with a sight disability reside in Greater Tzaneen. Further considerable number of disabled people are the deaf. There are 3 special schools in the district that caters for learners with special needs, namely the blind, the deaf and the physically challenged. There are also two flagship lifecare centres in the district, namely Vuxakeni and Shiluvana Lifecares that caters for homeless disabled people and severely disabled people. The major challenges facing people with disabilities in the district ranges from lack of skills, lack of employment opportunities as well as assistive devices like wheel chairs, canes (walking sticks), hearing aids, magnified glasses, etc.

Other relates to lack of capacity within government in handling disability in an integrated manner due to lack of understanding of disability by government employees, lack of Braille resources, lack of sign language interpretation services,

inaccessibility to government buildings and inaccessibility of public transport. The Mopani district municipality is the first to establish the functional disability desk in the province in line with the provincial and national functions located in the Office of the Presidency and Office of the Premier. This function is one of the special programmes in the Office of the Executive Mayor with its major role of coordinating the implementation of the Integrated National Disability Strategy in the district.

The disability desk intends to play advocacy role in highlighting the needs of disabled people with emphasis on the following key area: mainstreaming, capacity building, public education and raising awareness on disability issues. The district municipality does not have a disability policy and strategy (Mopani District Municipality, IDP 2012/13).

### **7.3.7 Level of Education**

The literacy levels in the Mopani district are very low. As much as 37.8% of the adult population (other than 20 years of age) has not received any form of schooling with a further 13.7% only having completed some form of primary education. These figures imply that more than 50% of the adult population can be regarded as functionally illiterate. Conversely, only 12.7% of the adult population in the district has completed their matric and 6.5% any form of higher education. With regard to the teacher pupil ratio for primary schools, Greater Giyani is the lowest with only 34.2 pupils per teacher while Greater Letaba is worse off with 37 pupils per teacher. Greater Tzaneen has the lowest pupil to teacher ratio for secondary schools with only 31.3 pupils per teacher while Greater Letaba is again worse off with 34 pupils per teacher. The learner/classroom ratio, more specifically

the ratio for primary schools, in the district compare very unfavourably to the national norm used by the Department of Education, which is 1:40 for primary schools (40 students per classroom) (Mopani District Municipality, IDP 2012/13).

The learner to classroom ratio for primary schools in the Mopani district 1:45.41, with the lowest ratio in the Ba-Phalaborwa Local Municipality (1:38.15), the only municipality complying with the national norms. The departmental norm with regard to learner to classroom ratio for secondary schools is 1:35 (35 students per classroom). The learner to classroom ratio is above the national norm for all four local municipalities with Greater Tzaneen being 1:38,24 learners per classroom and Ba-Phalaborwa, worse off, with 1:52,23 learners per classroom. The learner to classroom ratios within Mopani are therefore did not comply with the norms of the Department of Education, meaning that there was a serious shortage of classrooms in the four municipalities for both primary as well as secondary schools in 1996. The level of education provides an indication of the degree to which the population is employable in specific sectors of the economy. The Mopani district has a very low, but improving, level of education with 41.9% of the population older than 20 years having no education in 1996, improving to only 37.8% in 2001 (Mopani District Municipality, IDP 2012/13).

This implies that many people in the district have a poor level of education and therefore lack proper skills and knowledge needed in the formal labour market. This has a bearing on their employability, the general economy and their ability to pay for services, etc. (Mopani District Municipality, IDP 2012/13).

### **7.3.8 Employment**

People in the Mopani district are employed in the following sectors: farming, industry, mining, trade, government, transport, manufacturing, construction and energy. The government sector is the largest employer in the district e.g. 39% of the employed in Greater Giyani work for government. The second largest employer in Mopani district is the farming sector with 25.9% of the employed people. This, however, is not the case when considering the municipalities separately with the mining sector employing the second largest portion of the BaPhalaborwa population (19.5%). Greater Giyani has the highest level of unemployment with 36.8% of the population not being employed. The number of people unemployed as a percentage of the total population is the lowest in Greater Letaba with only 28.0%. It is however important to note that of the unemployed people in the district, approximately 60% are women.

**2.3.6. Income Categories**

Income from employment determines the overall living standards of people. By far the majority of people in the district live in rural areas (84.1%) and the majority of these rural residents are poor. Income in rural areas is constrained by the rural economy that is unable to provide people with remunerative jobs or self-employment opportunities (Mopani District Municipality, IDP 2012/13).

It seems the majority of people in the district have no income. It should, however, be taken into account that these figures reflect the total population and not only the potentially economically active portion of the population. This means that the economically inactive, such as, children and pensioners are also included (Mopani District Municipality, IDP 2012/13). It is disturbing to note that, even for the labour

force alone, 89.1% of the population in the Greater Giyani Municipality earns less than R800 per month.

The situation is worse in Greater Letaba where 92.2% of the earning population earn less than R800 per month, while the situation is much better in Ba-Phalaborwa with only 75% of the labour force earning less than R800 per month. This can be attributed to the high level of urbanisation in Ba-Phalaborwa and the presence of mines (Mopani District Municipality, IDP 2012/13).

## **7.4 DESCRIPTION OF THE MUNICIPAL AREA**

The main characteristics of the 5 local municipalities in the district are summarised below:

### **7.4.1 Greater Tzaneen**

The Greater Tzaneen Municipality is situated in the eastern quadrant of the Limpopo Province within the district's area of Jurisdiction, together with Greater Giyani, Ba-Phalaborwa, Maruleng and Greater Letaba. Polokwane to the west, Greater Letaba to the north, Ba-Phalaborwa and Maruleng to the east, and Lepelle-Nkumpi to the south, border the Greater Tzaneen Municipality and Giyani border (Mopani District Municipality, IDP 2012/13).

The Greater Tzaneen Municipality comprises a land area of approximately 3240 km<sup>2</sup>, and extends from Haenertsburg in the west, to Rubbervale in the east (85km), and just south of Modjadjiskloof in the north, to Trichardtsdal in the south

(47km). The municipal boundaries form an irregular, inverted T-Shape, which results in certain developmental implications for the municipality, and more specifically the distance to markets, difficulties in respect of service provision, and constraints to implementing the development strategy of the municipality. The Greater Tzaneen Municipality area encompasses the proclaimed towns of Tzaneen, Nkowankowa, Lenyenye, Letsitele and Haenertsburg. In addition, there are 125 rural villages, concentrated mainly in the south-east, and northwest, of the study area. Almost 80% of households reside in these rural villages. The municipal area is further characterized by extensive and intensive farming activities (commercial timber, cash crops, tropical and citrus fruit production); mountainous, inaccessible terrain in the west and south, and un-even topography (gentle slopes) to the north and east; areas with exceptional natural beauty, with considerable untapped tourism potential (Mopani District Municipality, IDP 2012/13).

#### **7.4.1.1 Settlement Patterns in the District**

The district municipality has approximately 325 settlements, which include 81 first order settlements and 30 second order settlements, 190 third and fourth order settlements. The third and fourth order settlements have 43,6% of the district's population. There is limited accessibility to most villages due to inadequate access to roads and internal street networks (Mopani District Municipality, IDP 2012/13).

The Mopani district is well-served by major arterial routes which links Giyani to Tzaneen, Polokwane, Modjadjiskloof, Phalaborwa and Lydenburg. The settlements identified as District growth points in the area include Namakgale, Gravelotte, Mageva, Kgagapane, Nkowankowa and Lenyenye. The District

Growth Points provide some jobs with various high order social facilities and government offices. These growth points or settlements should include smaller government offices for service delivery. Social facilities such as schools, health facilities and police stations should also be present at a lower level. In order to ensure economic development in these settlements basic services and social services should be improved. Although these settlements are small they play an important role in several sectors such as mining (Gravelotte), retail trade (Namakgale and Kgagapane) and manufacturing (Nkowankowa). Lulekani, Xawela, Senwamokgope, Haenertsburg, Burgersdorp and Letsitele have been identified as municipal growth points in the district (Mopani District Municipality, IDP 2012/13).

The municipal growth points have a relatively small economic sector providing some employment to a smaller number of people. These settlements have very few social services and no government offices. People living in these areas have to travel to larger settlements (provincial and district growth points) to obtain these services. Two of these growth points play an important role in the economy of the area. Letsitele is one of the most important areas where citrus fruit is produced while Haenertsburg and surrounds has been identified as a very important tourism area. Both these sectors demand proper basic services of which roads (transport for fruit and tourist traffic) are the most important (Mopani District Municipality, IDP 2012/13).

The various municipalities responsible for service delivery in these areas should ensure that these basic services are of a good standard to support the various economies. Ten of the sixteen growth points in the district are situated in the

Greater Tzaneen Municipality and the Ba-Phalaborwa Municipality. There are noticeable variations between the municipalities in this regard as 12% of households in Ba-Phalaborwa and 0.7% in Greater Letaba are urbanised. The district is thus largely rural in nature restraining development in the secondary and tertiary economic sectors. The spatial rationale indicates the following tendencies with respect to the settlement hierarchy in individual local municipalities:

- Approximately 68% of the total population of Ba-Phalaborwa Local Municipality are situated within first order settlements (growth points);
- Ba-Phalaborwa Local Municipality has approximately 90% of its total population residing in growth points and population concentration points;
- Greater Tzaneen Local Municipality has approximately 65% of its total population residing in growth points and population concentration points;
- Greater Letaba Local Municipality has approximately 60% of its total population residing in growth points and population concentration points;
- Greater Giyani Local Municipality has only approximately 28% of its total population situated in growth points and population concentration points;
- More than half (55%) of the total population in the district municipality are situated in growth points (Mopani District Municipality, IDP 2012/13).

It is evident from the above that focus should be placed on concentrating economic development within these 16 Growth Points to increase urbanization in



the District. The current dispersed settlements pattern constrains sustainable development in the area. These villages should be linked and economically dependent on each other to create a larger area for economic development. Furthermore, the Phalaborwa Spatial Development Initiative (SDI) is located within the District. The SDI is focused along the main road link from Phalaborwa to Nelspruit in the Mpumalanga Province, where the SDI joins the Maputo Development Corridor. The aim of the corridor was to create better access between the port of Maputo and the mining potential around Phalaborwa. However, all the local municipalities in Mopani district indicated that currently no projects or development initiatives have been implemented within this SDI. The Development Bank of South Africa initially identified potential projects and initiatives in the SDI based on the mining, agriculture and tourism sectors. These initiatives have, however, not been implemented. The district municipality is in the process of developing a land use management system and all the locals are expected to do same (Mopani District Municipality, IDP 2012/13).

#### **7.4.1.2 Land claims and their socio-economic implications**

Land ownership in the district is still a contentious problem in the district. There are a total of 349 land claims have been received in the district. Of the total number of claims received within the 5 local municipal areas, Greater Letaba has by far the majority of these land claims (159) and Greater Giyani the least (11 land claims). It is, however, not the number of claims as such that is very important but the extent of the land claimed as restitution. Approximately 140189ha representing approximately 46,73% of the total local municipal area of Ba-Phalaborwa is subject to land claims. It is followed by Greater Letaba with approximately 91812ha

representing 48,55% of the total area of the municipality which is subject to land claims. Only approximately 6,28% of the Greater Giyani Local Municipality area is subject to land claims, representing 18633ha. In total approximately 298000ha (representing 26,85% of the total area of the Mopani district) is subject to land claims. The extent of land claims in this district and the potential impact it may have depending on the outcome of investigations is quite substantial and may impact heavily on the spatial development framework of the district municipality, and specific local municipalities such as Ba-Phalaborwa and Greater Letaba. On the one hand, land restitution and redistribution processes may result in many people obtaining access to land, resulting in improved living standards and quality of life. On the other hand, it could result in large-scale sterilisation of economically productive land (e.g. high potential agricultural land, mining of certain minerals, nature conservation areas, etc) and consequential loss of job opportunities, if not well planned and managed within the context of a spatial development framework that considers all these factors (Mopani District Municipality, IDP 2012/13).

#### **7.4.1.3 Economic Analysis**

To undertake a proper analysis of the political economy of the district, it becomes important to consider the background of the South African economy in general. Thus, the district economy needs to be viewed as an integral part of the provincial economy that is linked to the national economy. The national economy is part of the Southern African regional economy within the world economy. Thus, Mopani is a constituent to the global economy positioned to take advantage of its comparative strengths in its relation to the other regions of the world (Mopani District Municipality, IDP 2012/13).

#### **7.4.1.4 A Broad Economic Overview of South Africa**

South Africa is a middle-income developing country with an abundant supply of natural resources, well-developed financial, legal, communication, energy and transport sectors, a modern infrastructure, and a stock exchange which rank among the 10 largest in the world. Its economic policy over the past nine years has been shaped by the government's development strategy in areas of education, health, social development, security, land reform and poverty alleviation. The government's policy decisions have been designed to promote sustainable economic growth, and to ensure that the benefits of growth are shared across an increasingly greater spectrum of society.

The country's economic policy is based on the macro-economic policy called Growth, Employment and Redistribution (GEAR) (Mopani District Municipality, IDP 2012/13).

It aims to find a balance between promoting economic growth on one hand, and social service delivery and job creation on the other. Gear combines the goals of deficit reduction, reprioritisation of government expenditure to enhance poverty reduction, and embarking on macro-economic reforms to promote job creation. The social transition that has accompanied the demise of apartheid has seen a vast increase in economic participation. Factors underlying this have included an increase on female participation in the economy, as well as migration to urban areas by the rural poor (Mopani District Municipality, IDP 2012/13).

South Africa also has a dual agricultural economy: a well-developed commercial sector and a predominantly subsistence oriented sector in the traditionally settled rural areas, of which Mopani district is constituted. This is probably one of the

glaring factors that provides for the South African economy as consisting of the first and the second economy. The first and second economy in our country are separated from each other by a structural fault. The second economy emerged during the long period of colonialism and apartheid as a result of the deliberate imposition of social, political and economic exclusion of the African majority by a racist state. Whilst exacerbated by the imperatives of globalisation, the restructuring of the economy also reflect, to some degree the response of capital to the extension of citizenship and economic rights to the previously disenfranchised (Mopani District Municipality, IDP 2010/11). This restructuring has segmented the labour market into three overlapping zones, namely core workforce, non-core workforce and the peripheral workforce:

The core workforce consist of workers that benefit directly from global integration, advances in worker rights and other forms of inclusion in social, economic and political institutions. Formal sector workers are generally highly organised in the trade union movement, although new jobs created in the formal sector tend to be associated with lower levels of worker organisation. Though the size of the formal sector workforce has diminished, it still constitutes more than half of the economically active population. While they enjoy higher salaries, secure employment and good working conditions, growing numbers of people depend on their wages. Men rather than women are more easily absorbed into this core of labour market. The restructuring of the workforce is increasing the levels of atypical employment. This includes casualisation, fixed term contracts and working from home. Those pushed into these more precarious and intensive working conditions become part of non-core workforce. Because of the temporary nature of their work, union organisation is much harder amongst the non-core workforce.

The rights won by workers in the core of the economy are difficult to realize in an environment of poorly organised temporary workers, where women are more likely to find work. The peripheral zone consists of those who have been excluded from the formal economy and engage in informal income generating activities on the margins, or depend on the support of friends and family and /or social grants.

This includes the street traders and hawkers who sell basic commodities to the poor, memorabilia to the tourists and food to urban workers. While some of those operating in the urban economy are able to secure relatively stable niches in markets created by formal sector economic activity, others find themselves excluded from such markets altogether and eke out a survival through dependence on welfare grants and the barter of goods and services (Mopani District Municipality, IDP 2010/11).

#### **7.4.1.5 Locating the Mopani District Economy within the Provincial Economy (Mopani District Municipality, IDP 2012/13).**

Limpopo is the second poorest province in the country. Approximately 77% of the population lives below the poverty income line, and the province also has the lowest HDI (0.485) in the country. Although the number of unemployed people has declined, the percentage of people with no income in Mopani is still higher than that of the Limpopo Province. With regards to education the percentage of people with no education has declined from 30% in 1996 to 22% in 2001 in the Mopani district. The Capricorn and Mopani district are seen as the main economic engines of the province, with Polokwane, Phalaborwa and Greater Tzaneen identified as the principal economic centres. The provincial development strategy, vision 2020, sees the economic heart of the province as formed by the circle of towns

stretching from Mogalakwena, Polokwane, Makhado, Thohoyandou, Giyani, Phalaborwa, Tzaneen, Lebowakgomo and other smaller towns and villages within this circle.

The area covers one quarter of the province, accommodates the majority of the population, and accounts for approximately 80% of the Gross Geographic Product (GGP) of the province. The provincial economic development study of 2000, identified tourism, agriculture, mining and trade and manufacturing as sectors with a potential for growth in the Mopani district. The Mopani district also has a large number and of diverse under exploited tourism assets e.g. the northern portion of the Kruger National Park. A national park, nature reserves and game farms cover almost half of the district, identified as one of the five best conserved ecosystems in the world, providing ample opportunity for Eco Tourism and SMME development. The district also has comparative advantages in agriculture, manufacturing and trade. Hereunder is an analysis of the district economy (Mopani District Municipality, IDP 2007/08).

#### **7.4.1.6 Economic Sector Analysis**

The sector, which contributed the most to the GDP in Mopani district, is the mining sector (30%) followed by the general government services sector (17%) and finance and business services Sector (15%). This shows the same trend as in the Limpopo Province where mining is by far the largest contributor to the GDP. The contribution of agriculture to the GDP has grown more on provincial and district level than on national level. The mining sector has grown on national level as well as on district level while the manufacturing sector has grown slightly less on

regional level. The primary sectors, which include the agriculture and mining sectors, have shown positive growth with regards to GGP contribution to the district (Mopani District Municipality, IDP 2010/11).

The agriculture sector showed the most growth in Greater Giyani (9.6%) and a negative growth rate of -0.6% in Ba-Phalaborwa while there was growth of between 5% and 6% in the Greater Tzaneen, Greater Letaba and Maruleng Municipalities. In Greater Giyani and Ba-Phalaborwa the mining sector both indicated a growth rate of approximately 5% while there was less growth in Greater Tzaneen and Maruleng Municipalities. Greater Letaba was the only municipality with a negative growth rate of -2.6% in the mining sector. The retail sector is one of the most important secondary economic sectors in the District. Retail is especially important in the Giyani area as it serves a large rural area including areas across the district boarder.

It had been indicated in the business surveys conducted in the municipality that there is currently a lack of wholesalers in the municipality. This results in shop owners having to travel to towns such as Tzaneen, Polokwane and even as far as Johannesburg to obtain their stock. Agriculture is the most important economic sector in Greater Tzaneen, Greater Giyani, Maruleng and Greater Letaba. District citrus fruit such as oranges and grapefruit are produced commercially and small-scale in the Greater Tzaneen Municipality. The fruit are either exported out of the in its raw state or sold for further processing into juices, pulp and dried fruit. Furthermore sub-tropical fruit including mangoes, avocados and bananas are grown in the Greater Tzaneen, Maruleng, Greater Letaba and Greater Giyani areas. In Greater Giyani bananas are mostly grown within the Middle Letaba

Irrigation Scheme. These sub-tropical fruits are also either sold to outside markets or used for further processing such as juices, achaar, dried fruit and pulp.

The ZZ2 farms which are located in the Greater Letaba Municipality (Mooketsi area) produce approximately 60% of the tomatoes grown in the county. These tomatoes are exported or processed into juices, puree, paste, etc. Mining is the most important sector in the Ba-Phalaborwa municipality. Copper is mined by the Phalaborwa Mining Company and further processing of by-products and phosphates are undertaken by Sasol Nitro and Foskor. These mining institutions currently employ a large number of the people in the municipality. There exist ample opportunities for small-scale mining of minerals that can be found in the Murchison and Giyani Greenstone Belts. These minerals include Vermiculite, Ilmenite, Gold, Emeralds, etc. Furthermore, the processing of clay and cladding stones also creates the opportunity for economic development and the establishment of SMMEs in the manufacturing sector. The manufacturing sector is mostly focused on further processing of products from the mining and agricultural sectors. Agro-processing creates opportunities for skills developments and also supplies a market for small-scale farmers who currently do not have access to the market. The further processing of tomatoes, fruit and timber are currently practiced in the District although there are more opportunities in this field (Mopani District Municipality, IDP 2012/13).

## **7.5 CONSTRAINTS IN THE DISTRICT ECONOMY**

The tourism sector has become increasingly important in the province as well as in the district. The rich cultural heritage of the area, natural beauty, proximity to the Kruger National Park, large dams, waterfalls and the climate are just some of the



elements that can be utilised to promote and develop tourism in the district. The Municipality of Ba-Phalaborwa especially lends itself to tourism as it is situated next to the Kruger National Park and already hosts a large number of game farms (Mopani District Municipality, IDP 2010/11).

Other attractive areas within the District include the Haenertsburg and Magoebaskloof area and Tzaneen and surrounds. These areas are already focussed on the tourism industry although there are more opportunities for tourism development. Constraints in the Mopani district according to the Limpopo spatial rational (2002), approximately 55% of the 301 settlements in the Mopani district Municipality area are small (Mopani District Municipality, IDP 2007/08).

These settlements are scattered throughout mainly the central, south-western, northern and the north-eastern areas of the Mopani District Municipality. The present scattered settlement pattern (without a proper settlement hierarchy) will never be able to provide a basis for long-term sustainable development to improve the quality of life of all the inhabitants and communities in the district. Problem areas leading to development constraints in each municipality can be summarised as follows:

#### **7.5.1 Greater Tzaneen**

Although most of the people live in and near Tzaneen there are still a large number of people that live in rural areas and scattered settlements. The Manufacturing sector has decreased from 1996 to 2001. This indicates that processing is being conducted outside of the area (Mopani District Municipality, IDP 2007/08).

## **7.6 OPPORTUNITIES IN THE DISTRICT ECONOMY**

Although there are numerous constraints to the development of the district, there are also strong opportunities for economic development. These opportunities include:

### **7.6.1 Greater Giyani**

There has been some growth in the agriculture sector from 1996 to 2001. The most noticeable growth was in the Transport and Communication sector. The GDP percentage grew from 1.12% in 1996 to 12.91% in 2001 in this sector. The population living in urban areas has also increased from 10.1% in 1996 to 13.8% in 2001 (Mopani District Municipality, IDP 2012/13).

### **7.6.2 Greater Letaba**

The GDP of the Agriculture sector including forestry has grown somewhat from 20.81% in 1996 to 21.01% in 2001. Along with this sector the transport and communications sector has also grown from 18.34% to 20.68%.

These are the only sectors in which growth was indicated and is thus the most important economic sectors in the area. The Agriculture sector usually creates opportunities in the Manufacturing sector which might be more exploited in the future (Mopani District Municipality, IDP 2010/11).

### **7.6.3 Greater Tzaneen**

Tzaneen is the municipality with the largest population in the district with 39% of the population residing there. The municipality also has a high percentage of economically active population of 53.1%. Although agriculture is by far the most important sector in this area Greater Tzaneen also has the highest percentage of GDP of each of its sectors, except for mining, of all the municipalities. The GDP in the Agricultural sector has grown from 55.92% to 59% indicating its growing importance. The contribution to GDP from the manufacturing sector has decreased although the agricultural sector has grown. This might be due to the fact that most of the produce is exported out of the area for processing. This creates an opportunity for manufacturing to be exploited in the area (Mopani District Municipality, IDP 2012/13).

### **7.6.4 Ba-Phalaborwa**

Ba-Phalaborwa has the most concentrated economy of all the local municipalities due to its large mining sector. Linked to this sector is also the manufacturing sector which has also grown in contribution to the GDP.

The transport sector grew by 15% in the GDP from 1996 to 2001 and the manufacturing sector grew by 10.8%. The economy of Ba-Phalaborwa is thus very sensitive to changes in the mining sector and all sectors connected to mining should be exploited for development such as manufacturing and transport and communication (Mopani District Municipality, IDP 2012/13).

### **7.6.5 Maruleng**

The Maruleng municipality has large game farms from which the municipality can grow its tax base. It also boasts of the East-gate Airport through which it can promote its tourism status and ensure direct access to other provinces for marketing. The area is also imbued with agro-products across the seasons from which jobs can be created to ensure poverty alleviation. Its strategic local in relation to the Maputo corridor positions it to attract investment in its area (Mopani District Municipality, IDP 2012/13).

## **7.7 INFRASTRUCTURE ANALYSIS**

The success of local economic development is tied to the provision basic and other types of infrastructure to the people. All services under analysis in this section are located in a specific locality (as per SDF) and have potential to boost socio-economic development (as per LED).

Infrastructure analysis focuses on the status quo regarding water supply, sanitation facilities, energy and housing provision, roads and public transport, waste management and telecommunications all of which underpins socio-economic development and determines a people's quality of life. The provision of adequate municipal infrastructure remains a challenge throughout the district (Mopani District Municipality, IDP 2012/13).

### **7.7.1 Water**

The Mopani district is characterised by low rainfall, especially in the lower-lying areas of the district, namely, Greater Giyani and Ba-Phalaborwa. This results in

limited water resources culminating in severe water shortages and regular drought conditions. Subsequently, there is stiff competition between the different water users such as agriculture, mining and forestry. To this end, water use for domestic purposes becomes critical. The main surface water resources for Mopani district are Letaba river catchment and all its tributaries. There is a huge potential for usage of borehole water as an augmentation to the surface water resources. There are over 20 large dams in the district with 9 being used for primary consumption (domestic, industrial and commercial) and most of the other dams are used for irrigation purposes (Mopani District Municipality, IDP 2012/13). Some private small dams also exist and are used for irrigation purpose as well. The total yield from the dams for primary usage is 273 million m<sup>3</sup> per annum. The agricultural sector uses the greatest portion of the available yield in the district, which is estimated at 70%, leaving 30 % for the other water users.

Bulk water supply in Mopani is characterised by numerous surface water schemes in various stages of full development to all consumer points. Water supply scheme clusters are well defined and the service area boundaries are well established. Major upgrading and refurbishment are needed at most localities. The Middle Letaba M Sub Scheme area and Modjadji areas are in need of extensions to the existing bulk supply systems. In general, Mopani district is well provided with bulk water supply infrastructure. However, the reason why the supply of water is below the RDP level (25 litres per person per day) is the shortage of pipeline reticulation within villages (Mopani District Municipality, IDP 2012/13).

Ba-Phalaborwa municipality has adequate reticulation system, followed by Greater Tzaneen Municipality, Greater Letaba Municipality and then Greater Giyani

Municipality. The limited availability in infrastructure in Greater Giyani is attributed to the fact that the villages in the Greater Giyani area are spatially scattered, resulting in difficult and expensive processes to provide water supply pipelines in the villages. It is also deduced that the major factor contributing to shortage of water is related to social aspects. These aspects are mainly vandalism of infrastructure, especially communal boreholes, lack of willingness from the consumers to pay for their water services and illegal (unauthorised) connections of pipelines by communities. These problems are primarily observed in rural areas than the more urban areas (Mopani District Municipality, IDP 2013). High water usage is generally observed in most of the areas, amounting to more than 150 litres per person per day in both towns and rural areas. The majority of households in Ba-Phalaborwa (77.3%) have access to a RDP standard water source with households in Greater Tzaneen at 53.6%, Greater Letaba at 60.7%, Greater Giyani at 57.3%, Maruleng the lowest at 49.9%.

However, taking a look at the households access to the various sources of water per local municipality as a percentage of the district, it becomes clear that the level of services are higher in Ba-Phalaborwa with 35.3% of the households within the district with access to water inside their dwellings residing here, especially when taking into consideration that only 12.9% of the households in the district reside in Ba-Phalaborwa. The smaller population and the absence of many scattered villages in Ba-Phalaborwa, compared to e.g Greater Giyani, probably contributed to this.

All the municipalities in the district are providing free basic water (6000 litres per household per month) with almost none providing free basic sanitation. To

eradicate the water backlog, Mopani district has prioritised water services as the first service among all the other services. The Department of Water Affairs and Forestry (DWAF) is currently commissioning the building of the Nwamitwa Dam and the raising of the wall of the Tzaneen Dam to address the water shortage problem in the district. The optimisation and conservation of existing water resources is one of the greatest aspects to be addressed in the development strategy of the district due to the centrality of water to human well being, agricultural development and economic growth, to mention but a few examples. This means that, although RDP level should be the minimum, the bulk supply design should cater for higher levels to avoid unnecessary reconstruction in future. Thus, sound engineering principles that will be used in the design and implementation of water services in the district should take into consideration future socio-economic developments (Mopani District Municipality, IDP 2012/13).

### **7.7.2 Sanitation**

Lack of access to basic sanitation services has created massive environmental and health problems in both rural and urban areas in the district. The fact that nearly all villages in the district do not have RDP level sanitation constitutes a major risk in terms of ground water pollution. The main types of sanitary systems used in the district are water-borne sewerage (flush toilets), septic tanks, Ventilated Improved Pit latrines (VIP), French drains and ordinary pit latrines to no basic services at all. Water-borne sewerage is mainly found in towns and townships, septic tanks are mainly on privately owned properties like farms, hotels, etc with the rest primarily found in rural areas. Most people in the district use pit latrines, followed by those without any sanitation services at all. The

situation is worse in Greater Giyani with 54% of the households not having access to any sanitation. Greater Letaba has the highest usage of Pit Latrines at 51.5%, while flush toilets are more prevalent in Ba-Phalaborwa with 39.8%, which correlates with the availability of piped water within the houses. The district municipality has the constitutional responsibility to provide access to sanitation services.

To this end the municipality commissioned a study which indicates that R232 million would be required to eradicate the sanitation backlog by 2010. There are many schools and clinics that are without sanitation in the district. Many other schools use pit latrines that are inadequate, dirty and unsafe. This all adds up to a potential health time bomb for the district. DWAF is responsible for dealing with school sanitation (Mopani District Municipality, IDP 2012/13).

## **7.8 ENVIRONMENTAL ANALYSIS**

The Mopani District Municipal area is faced with environmental risks and trends that lead to environmental degradation. The environmental analysis is a key aspect to determine if there is a balance between environmental considerations, social development and economic growth in the district.

The challenge is, therefore, to regulate development in such a manner that the disturbance of eco-system is avoided, or where this is not possible, the disturbance be minimised and remedied. Mopani has not yet commissioned a study for detailed environmental analysis to indicate the environmental conservation requirements, environmental sensitivity index, population pressure on scenic resources, land cover, soil types, irrigation potential, dry land potential and rainfall. However, the spatial development framework and the waste



management plan of the district provides glaring information about the state of the environment, upon which our rural district depends. Hereunder is a synopsis of the environmental situation in the district highlighting existing environmental concerns and risks (Mopani District Municipality, IDP 2012/13).

### **7.8.1 Water pollution**

Water pollution in the district affects most people as many of them stay in the rural areas and depend on river water. The major cause of water pollution is the sewage leakage and release of industrial waste into streams as well as illegal solid waste dumping along the river system. People washing their clothes in rivers using detergents also cause water pollution.

The usage of herbicides and pesticides by farmers results in these chemicals finding their way into rivers and, thus, increase the growth of algae and reduces oxygen levels in water. This negatively affects natural plants and marine/aquatic life and the wellbeing of domestic and wild animals. The lack of water-borne sewerage systems leads to the contamination of ground water. The most noted water pollution takes place in the Murhogolo stream between Giyani shopping complex and government offices, the Thabina river from Mogoboya downstream, at the Klein and Greater Letaba rivers as well as Molotodzi which is highly choked with solid waste. Further information is needed to determine other problem areas (Mopani District Municipality, IDP 2012/13).

### **7.8.2 Informal settlements**

Informal settlements have major negative effect to the environment in that through its practice the vegetation is destroyed when buildings are built. It affects the whole of Mopani district. The major cases of informal settlements are poverty, unemployment, population growth and urbanization. It is clear from the above that Mopani district municipality is faced with many environmental problems. To be successful, development efforts should be cautious not to exacerbate but reduce environmental degradation in the district. There is also a need to establish integrated human settlements with proper basic services and thriving local economies that are able to create jobs (Mopani District Municipality, IDP 2012/13).

## **7.9 SOCIAL ANALYSIS**

The historic imbalances in South African society resulted in the majority of our people living without land and housing, access to safe water and sanitation for all, affordable and sustainable energy sources illiteracy, poor quality of education and training, poor and inaccessible health services. Here is the socio-analytic reflection of MDM (Mopani District Municipality, IDP 2013).

### **7.9.1 Housing**

The housing profile within the district is indicates that just over 61% of all households are residing in houses on separate stands representing a total 133 578 households. The proportion of households residing in traditional dwellings constructed of traditional materials is 31.2% and in informal settlements 3.4%. This implies that the potential housing need within area includes a total 9 277

households residing in informal dwellings either in informal settlements or in backyards and more than 68 000 residing in traditional dwellings. Many of these traditional dwellings are constructed of traditional material and thus do not satisfy minimum housing provision requirements.

Conversely, the widespread occurrence of traditional dwellings within the tribal authority areas within the Greater Giyani Municipality indicates that 53.3% of all households in this area reside in traditional dwellings. The largest number of people residing in informal settlements or in backyards are located in the Greater Tzaneen and Greater Letaba municipalities. Both areas have in excess of 3 000 households falling in this category. Although the proportion of households in the Greater Tzaneen area residing in traditional dwellings is only 27%, it still represent a significant figure of 23 000 households. The comparative figure in the Greater Giyani municipality is 27 848 (Mopani District Municipality, IDP 2012/13).

### **7.9.2 Education**

The information depicted in the table below indicates that there are a total of 413 primary schools within the district municipality with the largest concentration thereof in the Greater Tzaneen local municipality (167). The total number of learners at the primary schools is approximately 194 000 accommodated in 4273 classrooms. This implies a pupil classroom ratio of 45.4. There are a total of 220 secondary schools within the Mopani District Municipality with the majority of these concentrated in the Greater Tzaneen Local Municipality (79). The total number of learners at these secondary schools is just over a 100 000, accommodated in 2476 classrooms. These figures imply a pupil-classroom ratio of approximately 40

in secondary schools within the district. The total number of combined schools is 30.

The pupil-classroom ratio at these combined schools is approximately 35 learner per classroom. There is a serious shortage of schools, and more specifically, classrooms in almost all the local municipality areas for both primary as well as secondary schools. Facilities and more specifically infrastructure such as electricity, water, sanitation is also needed at many schools within the district municipality area. It is indicated that the condition of the buildings of the majority of the primary and secondary schools are in a very poor conditions.

Education investments are crucial for sustained economic growth as it directly contributes to increased work productivity, more rapid technological adaption and innovation, as well as better natural resource management. The key outcomes of education should be the primary school completion rate, gender disparity in enrolment, adult literacy, student learning outcomes and the efficiency of the education provisioning system (Mopani District Municipality, IDP 2012/13).

## **7.10 HEALTH AND SOCIAL DEVELOPMENT**

The challenge of the health sector in South Africa is to develop a unified national health system capable of delivering quality health care to all citizens efficiently and in a caring environment. The provision of health facilities to all settlements in the district is a problem because of the large number of settlements (varying in size), with the majority of them being relatively small and scattered throughout the district. A simplified calculation of the number of people per hospital per local

municipality would not provide a true reflection of the actual situation, as hospitals provide services to communities across municipal boundaries.

The availability of hospitals on a district municipality level for the total population in the district is a better indication of the availability of hospitals. There are 7 district hospitals and 2 regional hospitals, 7 health centres and 93 clinics. Accordingly, there are approximately 99000 people per hospital in the district. The latter does not include private hospitals. If private hospitals are included the ratio will improve, although the majority of people do not have access to private hospitals. The average number of people per clinic amounts to 1 clinic for every 9600 people (Mopani District Municipality, IDP 2012/13).

An analysis of the availability of health facilities per municipality indicates that the Greater Giyani Local Municipality is in the best position as it has 1 clinic for every 8600 people, Ba-Phalaborwa, Greater Tzaneen and Greater Letaba Local Municipalities are in a very similar situation with approximately 1 clinic for every 10 000 people. Maruleng has 1 hospital and 11 clinics in its area of jurisdiction. Serious diseases affecting the Mopani population include HIV/AIDS, Malaria, TB and other waterborne diseases such as typhoid and other diarrheal diseases. There are also mobile clinics based at various sub-districts and have visiting points taking health services to rural areas where there are no clinics. With the incorporation of Kruger National Park the gap on access to Health services has widened. The Annually, initiation schools open and there are often reports of initiates getting mutilated, sick and dying. This issue requires immediate intervention by the relevant government role players (Mopani District Municipality, IDP 2012/13).

- **Greater Tzaneen**

There are a total of 39 health facilities within the area of jurisdiction of Greater Tzaneen Municipality rendering a comprehensive primary health care service. These facilities are supplemented by 314 visiting points, which are serviced by six mobile clinic teams. The municipality is directly responsible for one clinic, which has an average of 2150 visits per month with excursions of up to 300 (Mopani District Municipality, IDP 2012/13).

## **7.11 HIV/AIDS PREVALENCE**

During the past decade, there has been an exponential growth in the number of HIV/AIDS infections in South Africa. This growth has been accompanied by greater visibility of the epidemic, especially owing to the increasing number of AIDS cases and deaths. South Africa now faces one of the world's most severe HIV/AIDS epidemics. Despite the scale of the epidemic, there is relatively limited data on the impact at personal, community, business or national level. One reason for this is undoubtedly the enormous stigma that is still attached to HIV infection.

It should also be noted that the most common method of assessing HIV/AIDS prevalence within the country is by conducting a survey of women attending antenatal clinics (Mopani District Municipality, IDP 2013). In South Africa, such surveys have been conducted by the National Department of Health since 1990 at a sample of public antenatal clinics. These surveys are based on anonymous and unlinked samples accompanied by basic demographic data and are a low-cost tool for regularly monitoring key aspects of the HIV epidemic.

**TABLE 2: HIV/AIDS Prevalence in South Africa per province, 2012**

<b>Province</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
<b>KwaZulu-Natal</b>	39.5%	37.4%	37.4%	114.3%
<b>Gauteng</b>	30.4%	28.7%	29.9%	89%
<b>Mpumalanga</b>	35.1%	36.7%	35.6%	107.4%
<b>Free State</b>	30.6%	32.5%	32.0%	95.1%
<b>Eastern Cape</b>	29.9%	29.3%	29.1%	88.30%
<b>North West</b>	29.6%	30.2%	29.7%	89.50%
<b>Limpopo</b>	21.9%	22.1%	22.3%	66.30%
<b>Northern cape</b>	18.4%	17.0%	17.8%	53.20%
<b>Western cape</b>	18.5%	18.2%	16.9%	53.60%
<b>Total</b>	<b>253.90%</b>	<b>252.10%</b>	<b>250.70%</b>	

The abovementioned table demonstrates that KwaZulu Natal has the highest prevalence rate since 2010-2012. It is noted with regard to Limpopo province that the infection rate has slightly increased from in 2010 to 2012. According to the Provincial Department of Health and Welfare 2010-2012 Summary Report, the Waterberg district has the highest HIV prevalence of 27.3%, with Mopani at 25.0%, Sekhukhune at 23.0%, Capricorn at 22.4% and Vhembe at 17.7%. The prevalence of HIV/AIDS has resulted in the increase of child-headed families without any source of income.

The most urgent health problems in the five local municipalities are Sexually Transmitted Diseases (STDs), Tuberculosis (TB) and HIV/AIDS. The contributory factors for high prevalence of HIV/AIDS and related diseases are indicated as:

- Poverty, gender inequality and orphan-hood;
- Rapid urbanisation and cultural modernisation;
- Cross border gates and national routes;
- Dynamics of a growing economy;
- Increase in the commercialisation of sexual activities;
- High unemployment rate;
- Low literacy rate;
- Alcohol and substance abuse; and
- High crime rate.

Although the epidemic affects all sectors of society, poor households carry the greatest burden and have the least resources available to cope with the impact of the disease. With infection rates on the increase, all institutions (public and private) in the district have to prepare themselves (individually and collectively) to deal effectively with the pandemic so as to maintain high productivity and service delivery levels both in the workplace and in the broader society whilst avoiding discrimination of those infected or affected. Hence partnership between government, private sector and all other stakeholders have to be forged in order to develop and implement policies and programmes that are aimed at combating the spread of the virus and mitigating the impact of the AIDS pandemic.



The following hospitals have been accredited to provide Anti Retroviral Drugs (ARV):

- Nkensani Hospital
- Dr C.N. Phatudi Hospital
- Kgapane Hospital
- Maphuta Malatji Hospital

The prevalence of HIV/AIDS has resulted in the increase of child-headed families without any source of income in the province. However, the Department of Social Development has been proactive in providing child support grants. The Integrated Food Security Programme continues to play a pivotal role by giving families food packages although many families are still left out. The Mopani District Council acknowledges the serious nature of these diseases and has established an institutional HIV/AIDS Committee and developed a draft institutional HIV/AIDS policy to manage these diseases within the Mopani District Council. The District Council has also played a key role in the establishment of Mopani District AIDS Council and the development of a district-wide HIV/AIDS policy and programme to deal with the HIV/AIDS scourge within the district (Mopani District Municipality, IDP 2012/13).

### **7.13 RESEARCH METHODOLOGY**

Having identified a research issue or question, one should select a research strategy and appropriate methodology for collecting information that would illuminate the problem. In this study, the researcher first considered a research strategy and the scientific approach to problem solving which would provide

maximum data on the issue under surveillance. The primary research method used in this study, research design, population and sampling and procedures for data collection and analysis have been discussed in some detail.

#### **7.12.1 Research Design**

Research design is the plan, recipe or blueprint for the investigation, and as such provides a guideline according to which a selection can be made of which data collection methods will be most appropriate to the researcher's goal and to the selected design (Babbie & Mouton, 2001). It may also involve multiple decisions about the way data was collected and analysed. It ensures that the final report answers the initial research question (Blanche & Durkheim, 1999). Thus, in order to answer the research questions in this study, a field approach in the form of mixing different research methods was adopted and this is called methodological triangulation. Therefore, exploratory-descriptive design was used within a mixed-method (qualitative-quantitative approach) paradigm.

In social sciences, triangulation refers to the combination of two or more theories, data sources, methods or investigators in one study of a single phenomenon to converge on a single construct, and can be employed in both qualitative (inquiry) and quantitative (validation) studies (Yeasmin & Rahman, 2012). Simply put, triangulation is a process of verification that increases validity by incorporating several viewpoints and methods.

A scientific analysis conducted by Yeasmin and Rahman (2012) concluded that the origins of triangulation in social work and in the wider social sciences was only metaphorically related to the process in the discipline within the field of geography

concerned with land surveying based on the laws of trigonometry, where the surveyor gets a fix on the position by carrying out three measurements to determine the exact position of a point in the landscape. This states that if one side and two angles of a triangle are known, the other two sides and angle of that triangle can be calculated.

Equally, Tashakkori and Cresswell (2007) further define triangulation as, “research in which the investigator collects and analyses data, intergrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of enquiry”. This implies that triangulation is the combination of two or more methodological approaches, theoretical perspectives, data sources, investigators and analysis methods to study the same phenomenon.

As Maxwell (2010) argues, the real quantitative / qualitative distinction is not between number and text rather between understanding the world by a theory of variance featuring variables and correlations and understanding the world by a theory process in terms of events and interactions. Rather than mixing because there is something intrinsic or distinctive about quantitative data or qualitative data, we mix so as to integrate the two fundamental ways of thinking about social phenomena.

We quantify qualitative data for integration with quantitative data to answer research questions or test hypotheses addressing relationships between independent variable and dependent variable (Sandelowski, Voils & Knafi, 2009), and we quantify the current patterns in qualitative data to “allow analysts to discern and to show regularities or peculiarities in qualitative data they might

otherwise see or to determine that a pattern or idiosyncrasy they thought was there is not” (Sandelowski, Voils & Knafi, 2009).

The use of both qualitative and quantitative methods in recent years in studying the same phenomenon has received significant attention among scholars and researchers. It has therefore become an accepted practice to use some form of triangulation in social research. A more discerning interpretation was rendered by Ivankova and Kawamura (2010) who offered a comprehensive and extensive bibliometric survey of contemporary mixed methods practice. They found a consistent growth in mixed methods research since 2000. Some researchers claim triangulation to be a third research method in addition to qualitative and quantitative research methods.

This approach is moreover referred to in different ways in the scientific literature, for example some of them are multi-strategy (Bryman, 2006), multi-methods (Brannen, 1992), mixed methodology (Tashakkori & Teddlie, 2003), mixed methods (Cresswell, 2003). Denzin (1970) was given credit for the initiation of the mixed method approach when he wrote a justification for it and called it triangulation. There are nonetheless, other authors in other contexts who have used mixed methods research both before and after his summary was written. Some of the benefits of using triangulation as perceived by Mertens (2010) include:

- Triangulation enhances confidence in the results
- Permits the development and validation of instruments and methods
- Provides a comprehension of the domain under investigation which is ideal for intricate social issues
- Allows an improved explanation of divergent results.

Despite the benefits of triangulation, there are challenges faced by researchers using triangulation. Research triangulation also has expense and time implications because the study will be long in duration. Other challenges include the following:

- There is no guarantee of internal and external validity
- This approach may heighten sources of inaccuracy
- The methods selected may not be valid ones.
- The unit of analysis might not apply to all techniques
- It is difficult to offset researcher's bias and;
- Replication of the study is difficult and costly.

In an attempt to minimise these shortcomings in this study, the research questions were plainly focused and the strengths and weaknesses of each method was appraised so that they could supplement each other. These methods were equally chosen in regard to the type of data that was required to answer the research questions. These aspects were continuously monitored and evaluated for consistency throughout the study. Denzin (1978) elevated the usage when he interpreted triangulation as having five types which are methodological triangulation, investigator triangulation, theoretical triangulation, analysis triangulation and data triangulation. This study made use of methodological triangulation which Guion, Diehl and McDonald (2011) defined as using more than one research method or data collection technique. There was use of the combination of two different qualitative data collection methods (in-depth interviews and focus group discussions with both brewers and consumers of home-brewed alcohol.

A research design can be defined as a strategic framework for action, to guide the arrangement of conditions for the collection and analysis of data in such a way that there will be a combination of research questions and the implementation of the research (de Vos, 2005). It is a visualisation of the data and the problems associated with appropriateness and the employability of those data in the entire research project.

It deals with what type of study undertaken in order to provide acceptable answers to the research problem and or questions (Leedy, 1997; Mouton, 2003). In this study, the researcher used the exploratory-descriptive design, which facilitated him to explore and describe his research subjects, and acquire information and learn from needs and problems. Methodological triangulation was also employed in the study for the purpose of data collection as well as analysis in order to simplify and validate research findings. Triangulation is when an investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches in a single study or program of inquiry (Tashakkori & Cresswell, 2007).

The research design entailed procedures to be used to study the population, sampling technique, data collection as well as data analysis and data interpretation.

#### **7.12.2 Justification of the use of Methodological Triangulation**

Triangulation can be something other than scaling reliability and convergent validation. It captures a more complete, holistic and contextual portrayal of the units under study. This is, beyond the analysis of overlapping variance, the use of

multiple measures may also uncover some unique variance which otherwise may have been neglected by single methods. It is here that qualitative methods in particular, can play an especially prominent role by eliciting data and suggesting conclusions to which quantitative methods would be blind. Therefore, the approach of mixing methods was adopted in this study because the researcher felt that it is broader and could also encompass combining different qualitative research methods.

The effectiveness of a methodological triangulation approach rests on the premise that the weakness in each single method will be compensated by the counterbalancing strengths of another. Thus, it is assumed that multiple and independent measures do not share the same weaknesses or potential for bias (Todd, 1979). He further argued that although it has always been observed that each method has assets and liabilities, methodological triangulation approach purports to exploit the assets and neutralise, rather than compound the liabilities. Therefore, the justification is that no individual method of study can provide a satisfactory explanation of the issue being studied.

Leedy and Ormrod (2005) argued that the resulting dialectic of learning thrives on the contrasts between what seems self-evident in interviews, what seems to underlie the discourses, what appears to be generally true in surveys, and which differences arise when comparing all these with official interpretations of the same thing. Therefore, elements of the context are illuminated. In this sense, methodological triangulation approach was used not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge. Therefore, methodological

triangulation was chosen for this study as it enabled the incorporation of a broader study group and contributed a more in-depth investigation of the subjects.

It was accomplished in this study by in-depth interviews with brewers and consumers as well combined focus group with both groups.

### **7.12.3 Population**

Population can best be described as the possible membership of the group to be studied (Wilson & Hutchinson, 1996). It is a set of people or events from which the sample is selected and to which results will be generalised. Populations are often defined in terms of demography, occupation, time and care requirements. In this study population referred to all consumers and brewers of home brewed alcohol as found in Greater Tzaneen Municipality, and also those found in settlements and villages targeted for the purpose of this research.

### **7.13.4 Sampling Technique**

Purposive or judgemental sampling method was used in this study. The sample was comprised of a purposefully selected group of individuals who were involved in the production of home-brewed alcohol. "Purposive sampling is appropriate to select unique cases that are especially informative" (Neuman, 2006). In purposive sampling, cases were chosen because they illustrated some features or process that was of interest for a particular study (Silverman, 2000; Creswell, 1998). Bless, Higson and Kagee (2007) further argued that a sample is chosen according to what the researcher considers to be typical units. The strategy was to select units that were judged to be the most common in the population under investigation. Saunders, Lewis and Thornhill (1997) state that purposive or judgemental sampling enables a researcher to select cases that best enables him / her to



answer research questions and meet objectives. Neuman (1997) agrees with Saunders, Lewis and Thornhill (1997) that a purposive sample is also used when the research is informative and the sample size is small. Saunders, Lewis and Thornhill (1997) go on to mention that under purposive sampling, there is a common strategy called heterogeneous or maximum variation sampling which enables a researcher to collect data in order to describe and explain the key themes under observation. In this case, the research project sought to acquire in-depth information from respondents within a particular context.

The researcher approached and interviewed selected and nominated home-brewers from Greater Tzaneen Municipality whom he knew and those whom he was referred to until saturation level was reached. Producers of home-brewed alcohol were selected based on age and length of time in the home-brewing business as well as types of alcohol they were brewing. Consumers of home-brewed alcohol too were interviewed to provide information on the social and health problems they experienced due to their home brewed alcohol usage. A sample totalling twenty (20) brewers and twenty (20) consumers were selected for the purpose of this study. Targeted villages were selected for participation at the researcher's discretion.

#### **7.13.5 Data Collection techniques**

The researcher applied an in-depth interviews with the participants who were asked to answer questions relating to the research problem (Bless *et al.*, 2006). Each interview conducted lasted between thirty (30) minutes to sixty (60) minutes per participant and the data collection process was done over a period of six (6)

months. Data was collected mainly over weekends where brewing and the consumption is on its peak. The in-depth interviews allowed the researcher to gain a detailed picture of the participants' beliefs about, or perceptions of, home-brewed alcohol in relation to public health (De Vos *et al.*, 2002; Punch, 2005; Sarantakos, 1997; Bless & Higson-Smith, 1995).

#### **7.12.6 Data Analysis**

Data collected through in-depth interviews with home-brewed alcohol brewers and consumers was presented, interpreted and analysed thematically. Data analysis is a process which allowed the researcher to interpret and generalise the findings from the sample used in the research and to the larger population in which the researcher was interested. For the purpose of this study, both qualitative and quantitative data analysis were applied.

According to Bless, Higson-Smith and Sithole (2013) there were specific steps to be followed in qualitative data analysis, and they were; immersion in the data; preliminary coding; coding definitions; coding; inter-coder reliability and interpretation of results.

- **Immersion of data**

This is a process by which the researcher reads and rereads the data collected up to that point. Good qualitative data is rich, complex and typically covers many pages. By repeatedly reading the materials collected, the researcher creates a mental picture of the entire dataset. He or she

knows broadly what is contained within that data set, and what important information might be missing.

Furthermore, some ideas about how to categorise the data should be starting to emerge. Most qualitative researchers keep a notebook close at hand in which they record ideas and questions that occur to them during the immersion phase of the research. When a researcher is immersed in the data, it immediately becomes clear when no new information is being added. Some researchers find that the process of transcription is an important part of this immersion phase and thus prefer to transcribe their own data.

- **Preliminary coding**

A core component of qualitative analysis is the process of coding. This is where the text is broken into fragments which share some common characteristics. Thus codes can be thought of as categories, and the process of coding involves breaking up the original transcripts and classifying all the fragments into these various categories.

Very often qualitative researchers develop the codes by looking for the themes and patterns within the data itself. One way of starting this process is by writing notes with possible codes alongside the original text. As the researcher writes more and more notes and tries out different combinations of codes, the beginnings of a coding system start to emerge. Some the preliminary coding ideas will be refined and developed, others will be discarded. Again, this process might take several cycles through the entire available data set at that time.

As more data gets added to the set, it may be necessary to add new codes or refine existing ones. Eventually, as the data set reaches saturation, the researcher should be able to find a set of codes that fits the data well, and that addresses the research question appropriately.

- **Coding definitions**

At this point the researcher is ready to start defining the codes. Each code must be clearly defined so that the researcher can code consistently, and also explain the coding system to others.

A code definition should include at least a title and a description of what kind of data is to be categorised under that code.

- **Coding**

Once the coding system has been finalised, the researcher is ready to recode the entire data set. This is done by working through the transcripts and breaking up the text into fragments which are then allocated to particular codes.

Different qualitative researchers have different approaches to the actual work of coding. Some prefer to work with the data physically and so will literally cut up printouts of transcripts and write on them with coloured highlighters and pens so as to show the different coding categories.

- **Inter-coder reliability**

One key aspect of the dependability of a qualitative analysis is the question of inter-coder reliability. The researcher trains a colleague on how to code the data, using the coding definitions previously developed. Then that colleague codes part of the data set independently of the researcher and the results are compared.

The degree of agreement between the two codings represents the inter-coder reliability. Qualitative researchers aim to have an inter-coder reliability of at least 0,8.

- **Interpretation of results**

Having completed a careful coding of the entire data, the researcher can begin to interpret the results. How this is done depends on the objectives of the research, and the particular research question. In an exploratory or descriptive study, the researcher is likely to describe the material contained within each of the codes. The range of responses recorded under that code would be described, and the researcher will point out areas of agreement and disagreement between respondents.

For the quantitative data, the Statistical Package for Social Sciences (SPSS) was used to analyse data. The analysis of quantitative data in this research therefore followed a multi-faceted approach. Firstly, information in tables and figures were coded and entered into a computer program and then SPSS was used to analyse the data. The reliability test was conducted, then mainly descriptive analysis of the variables followed. Descriptive statistics were presented in simple descriptive

methods by explaining the trends and levels through frequencies and percentages. Tables and figures were used for further illustrations.

### **7.13 LIMITATIONS OF THE STUDY**

The researcher was aware and mindful of the following limitations to the study:

- There was a limited literature in South Africa that specifically addressed issues relating to home-brewed alcohol as a result, cross-referencing was never possible.
- There was a lack of trust by the brewers and consumers of home-brewed alcohol towards the researcher. The researcher first had to establish rapport with the respondents before data could be gathered. The reception of the researcher and the length time required to establish rapport was rather too long. Nonetheless, once trust was achieved, the data collection process went ahead as planned with minimal disruptions and interferences.

The following chapter is on data presentation, analysis as well as data interpretation.

# CHAPTER 8

## DATA PRESENTATION, ANALYSIS AND INTERPRETATION

### 8.1 INTRODUCTION

In this chapter, data collected from the participants is presented, analysed and interpreted. Data presented in this chapter is divided into two sections, namely, data collected from **consumers** and the **brewers** of home-brewed alcohol. Purposive and snowball sampling methods were used to select participants. The researcher identified few participants and those identified led to researcher to others till saturation was reached at twenty (20) participants per category. Participants in the study were all consenting adults and they were fully briefed on the research procedures and protocol to be followed, and they voluntary participated in the study without any coercion.

Before presentation and analysis is made on the study, it remains rather critical to reflect on the reasons that led to the conceptualisation and undertaking of this study. This study sought to respond and provide clarity on whether home brewed alcohol has a negative contributory role or influence to play in the public health of impoverished rural communities. To this end, in-depth interview schedules were administered to both consumers and brewers of home brewed alcohol to facilitate a study on the afore-mentioned phenomenon.

## **PART ONE: CONSUMERS OF HOME-BREWED ALCOHOL**

### **8.2 DEMOGRAPHIC FACTORS**

In a quest to absolutely understand who the consumers of home-brewed alcohol were, the demographic factors comprising of the following characteristics, including age, gender and marital status, employment status as well as the religious affiliation of the respondents were used as variables and links to explain this phenomenon.

#### **8.2.1 Age Of Participants**

**Table 3: Age of consumers**

<b>Participants' age group</b>	<b>Number of participants per age group</b>	<b>Percentages</b>
25-29	1	5
30-34	2	10
35-39	4	20
40-44	4	20
45-49	6	30
50-54	2	10
55-59	1	5
<b>Total</b>	20	100

The majority of the participants were aged between 45-49 years old of age with a 30% representation, followed closely by participants aged from 35-39 and 40-44 each with a 20% representation.



Given the above presented age groups, the following inferences could be made, namely, that consumers of home-brewed alcohol were fairly matured adults with age groups ranging from significantly from 35-59 years old of age. This finding is backed by earlier research on home brewed alcohol which asserted that historically, home brewed alcohol was consumed by elderly individuals during traditional celebrations and religious customs such as libations which were led and guided by elders in the family and community (Platt, 1955; Umunna, 1967; Parrinder, 1969). Younger audiences who consumed home brewed alcohol back then were doing so to perform ritual obligation or duty. Even non-drinkers were expected to take a sip as dictated by their custom and traditional culture (Heise, 1992; Obot, 2007).

### 8.2.2 Gender Of The Participants

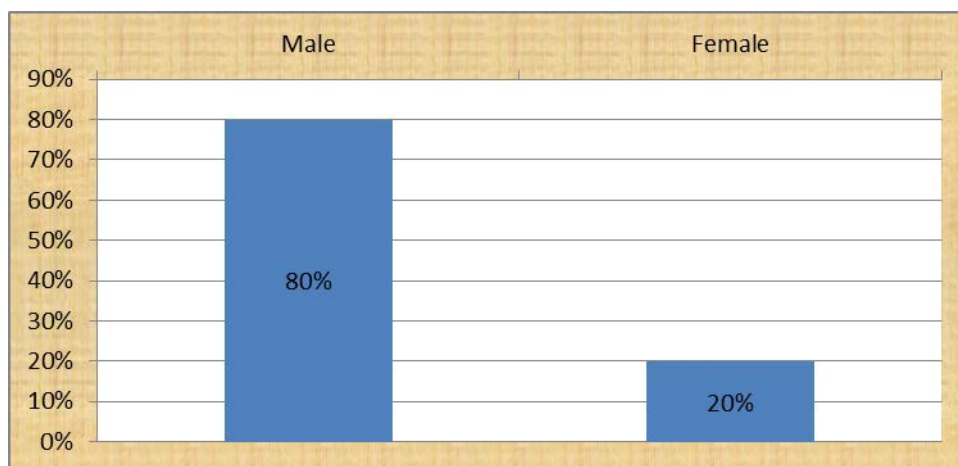


Figure 3: Consumer's Gender

The figure above shows that the majority of respondents were males.

### 8.2.3 Marital status of consumers

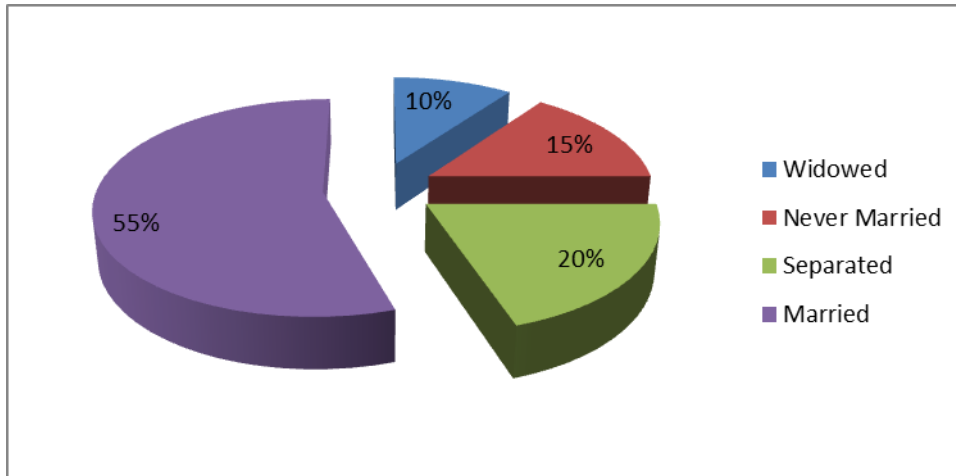


Figure 4: Consumers Marital Status

Married participants were fairly represented in the study at 55%, while those who have separated from their spouses only constituted 20% of the participants. Those who were never married made only 15% of the participants whilst 10% of the participants were those whose spouses were deceased. Utmost, the consumers of home-brewed alcohol were matured married people with families to look-after.

Men were more likely to consume their grain intake in the form of beer than women and children. However, traditional forms of thick, cloudy sorghum and millet beers veer toward the boundary between alcohol and nutritional gruel. Women and children drank the nutritious gruel (WHO, 2007).

### 8.2.4 Religious Affiliation

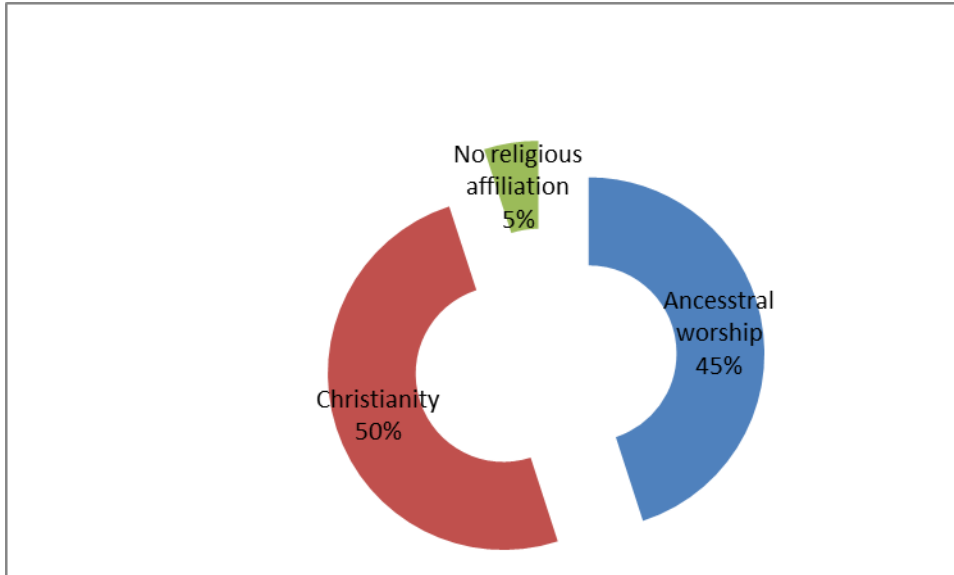


Figure 5: Consumer's Religious Persuasions

The above figure attests that most consumers of home-brewed alcohol were aligned to Christian faith at 55%, with those clinging to ancestral worship coming second at 45% representation. Tiriki of Kenya in the eastern Africa believed that the ancestral spirits enjoyed special gatherings of living descendants and a basic concern of ancestral spirits is that they are remembered. Furthermore, they believed that the ancestral spirits have a preference for home brewed alcohol (Van Esterik & Greer, 1985). Basotho of Central Africa at harvest time would place beer unrestrained in the most remote corner of the hut, where it would remain all night as a drink offering to the gods. Next morning the worshippers would strain and drink the consecrated beer and they would give thanks to the ancestral spirits for generosity (Willoughby, 1928; Sangree, 1962).

### 8.2.5 Status Of Participants Within The Community

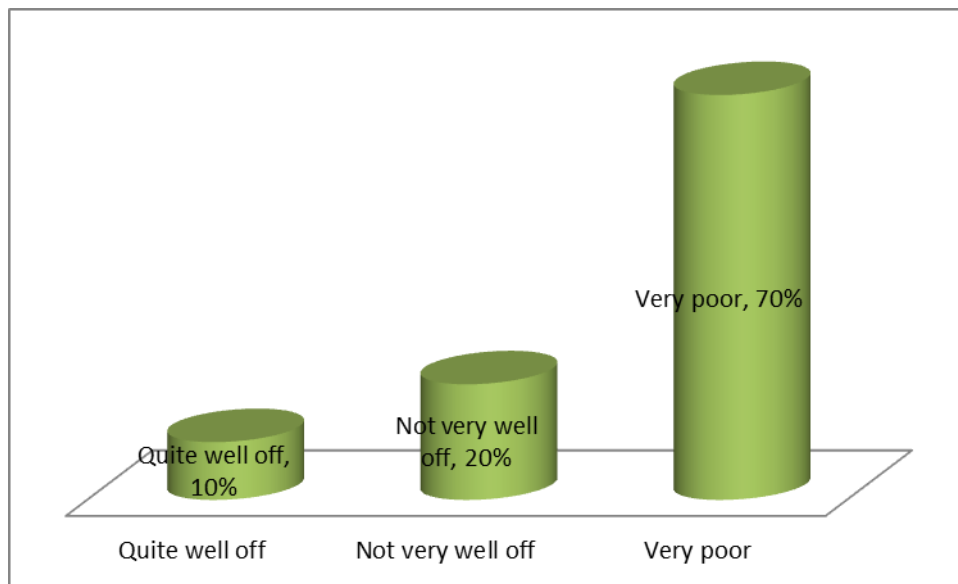


Figure 6: Consumer's Economic Status

The figure on economic status of consumers above clearly showed that home-brewed alcohol fairly targeted poor people who could not afford Western beers, spirits and ciders as well as wines. Parry and Bennets (1998) also argued that home-brewed alcohol beverages have featured prominently in South African social and political history. In pre-colonial times, maize was cultivated by women and used in the production of food and beer. The producers were a heterogeneous group, but many of them were women, particularly widows or divorced older women. Hancock (1986) uncovered a relationship that prevailed between areas where alcohol was misused and poverty. A combination of debilitating socioeconomic factors such as unemployment and lack of basic necessities were found to be major contributors in poverty stricken neighbourhoods to heavy alcohol use.

Locally brewed alcoholic beverages are inexpensive and readily available, making their consumption difficult to limit (Matsha, Brink, Van Rensburg, Hon, Lombard, & Erasmus, 2006).

### **8.3 EMPIRICAL RESPONSES FROM CONSUMERS**

The data on consumers was collected through semi-structured interview schedules with consumers of home-brewed alcohol from villages, farms and informal settlements in the Greater Tzaneen Municipality particularly in outlets where home-brewed alcohol is served. Areas covered in the study among others included the following, namely; farms around Georges' valley and Makgobaskloof, farms around Tarentaal and Letsietele, Mokgolobodu, Dan village, Lusaka, Mbamba michisu, Mariveni, Mhlava Cross and Burgersdorp. These areas were pre-selected for participation in the study due to their high usage of home brewed alcohol influenced by their economic standing in society. The selected communities were predominantly poorer and home brewed alcohol is mostly affordable and accessible to them.

### 8.3.1 Duration Of Consumption Of Home-Brewed Alcohol

**Table 4: Duration of consumption of home brewed alcohol**

<b>Duration of use in years</b>	<b>Respondents in number</b>	<b>Percentages</b>
0-4	3	15
5-9	2	10
10-14	3	15
15-19	4	20
20-24	3	15
25-29	2	10
30-34	0	0
35-39	3	15
<b>Total</b>	<b>20</b>	<b>100</b>

Consumers who have been drinking home brewed alcohol for over ten (10) years and above constituted overwhelmingly 75% of the entire sample in the study. This is indicative that home brewed alcohol users have become loyal and not changed to other forms of alcohol. These could as well suggests that dependency on home brewed alcohol is gradually growing and the everyday users are fast becoming dependable on it. Many participants have reported to have medical conditions which necessitated them to quit, but they simply could not abandoned these brews.

There is overwhelming evidence backed by existing research which confirms that most home brewed alcoholic produce are toxic and adulterated thus posing a

serious health risk to people who consumes them. It is reported that excessive consumption of home brewed alcohol creates numerous health problems which amongst others include, perpetual diarrhoea leading to dehydration; nutritional deficiencies; infections due to addiction; and loss of appetite, blindness, and even death (WHO, 2004; WHO, 2005; Parry, 2005; Odejide, 2006).

### 8.3.2 Health Status Of The Participants

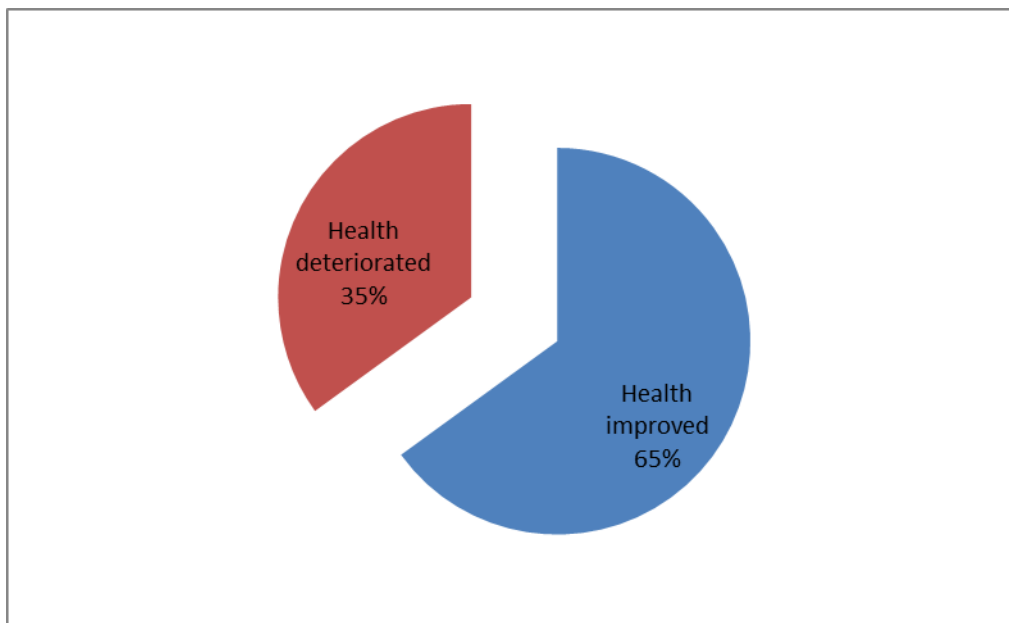


Figure 7: Consumer's Health Status

Although the majority of the consumers at 65% indicated that their health improved with the use of home brewed alcohol, this was contradictory to previous research studies and earlier findings thereof. It is reported that excessive consumption creates numerous health problems which amongst others include, perpetual diarrhoea leading to dehydration; nutritional deficiencies; infections due to addiction; and loss of appetite, blindness, and even death (WHO, 2004; WHO,

2005; Parry, 2005; Odejide, 2006). It could therefore be argued that consumers of home brewed alcohol are creating in themselves false beliefs and benefits which do not necessarily exist as reasons to continue to indulge in home brewed alcohol against proven and known harms the brews are reported to inflict upon the users.

### 8.3.3 Perception Of Participants On Home-Brewed Alcohol

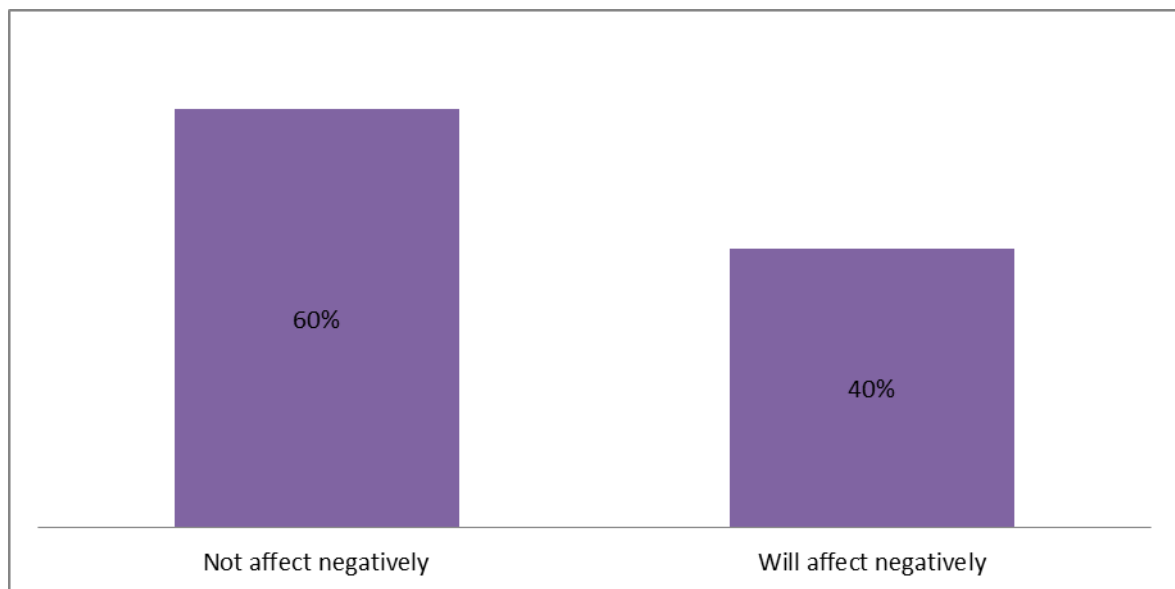


Figure 8: Perceptions on home brewed alcohol

Most consumers never thought that drinking home-brewed alcohol might negatively affect their health and they represented 60% of the participants. It was a mere 40% of the participants who reckons home-brewed alcohol would negatively affect their health. The belief that home-brewed alcohol contribute to improved health of the consumers could best be explained through the faithfulness users have shown in using the brews overtime. On the contrary, there have been many reports of known cases of negative health consequences related to harmful impurities and adulterants. In many instances, home brewed beverages resulted in long term hospitalisations, blindness, and even death. Users of certain types of home brewed alcohol such as *“thothotho”* are easily identifiable with their



red lips. They look twice their age; they have big stomachs and no buttocks; their eyes are red and if a person was originally light in complexion, becomes charcoal black, users are simply turned into moving corpse by this drink, and it is highly addictive (Haworth & Simpson, 2004; WHO, 2004).

While alcohol is reported to boast sexual drive and assists the users to best initiate sexual advances, the negative health effects it has outshine the these positive sentiments. In Kenya, for instance, 140 people died while many went blind and hundreds were hospitalised after consuming illegally brewed and poisonous liquor called “*kumi kumi*”. This is a concoction of sorghum, maize, or millet, methanol and other dangerous addictive such as car battery acid and formalin (Mureithi, 2002). In Namibia, seven workers died at the Omuramaba Hunting Lodge after consuming a concoction of unorthodox “*khadi*” which contained swimming pool cleaner, battery acid, and other corrosive substances. Although there were existing cases of negative health consequences related to harmful impurities and adulterants, users prefer to ignore existing danger in favour of these brews (Inambao, 2000).

### 8.3.4 Food Consumption Before Alcohol Intake

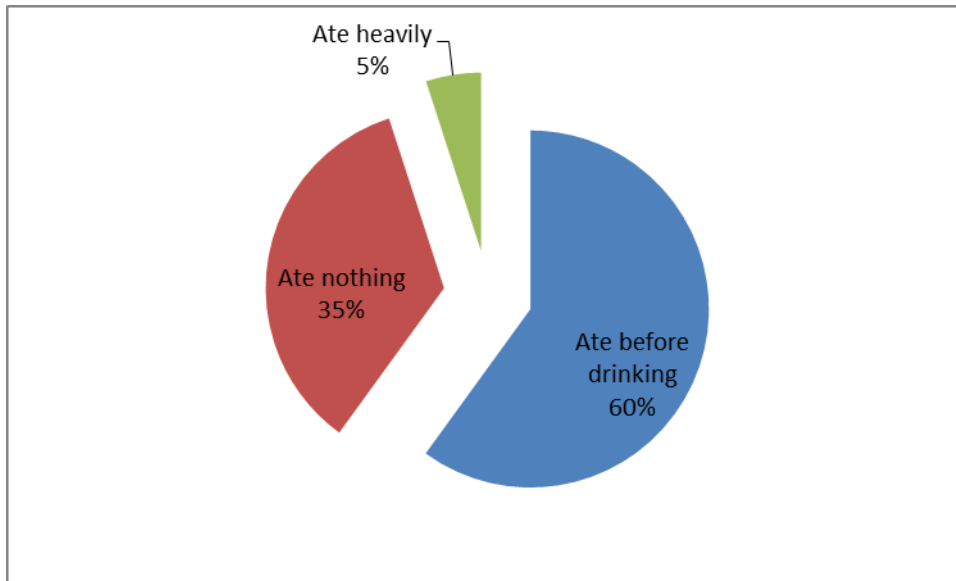


Figure 9: Consumption of food before alcohol intake

Home-brewed alcohol currently in the market is very strong, and when taken on an empty stomach, in other words without sponging, it could have undesirable results. The majority of the participants at 60% indicated that they ate before consumption, while only 35% showed that they do not eat. Critical and very interesting to note was the reason given by the 35% of the participants for not eating. The reasons advanced were ranging from having nothing else to eat to lack of appetite for food. There was equally a very notable explanation given by a fraction of the participants. They were those who reported that they eat heavily a night before they could drink, and only represented 5% of the participants.

### **8.3.5 Type Of Food Consumed Before A Drink**

The list of food eaten by consumers of home brewed alcohol ranged from porridge, meat / chicken and vegetables to fish, chilies and bread. Others to an extent indicated eating cheese and polonies. Most common of all the foods was porridge as it was consumed by 95% of the participants. Nonetheless, the correctness of this input by the participants was questionable since the majority of the users were from very poor to extremely poor households. A strong relationship indeed exists between the usage of home brewed alcohol beverages and the broad socioeconomic conditions. The literature reviewed strongly point to a direct linkage between alcohol use and poverty. Excessive alcohol consumption has both direct and indirect effects on the poverty status of individuals, families, and the entire community (Lwanga-Ntale, 2006). The study also shows how difficult it was for participants to acknowledge their status in community as they would project themselves as well to do while the reality was that they struggled to make end-meet and they were merely surviving.

### **8.3.6 Responses On Whether Do Participants Consider What They Eat Before Drinking Alcohol**

Thirteen out of twenty participants, representing 65% of the participants, considered what they ate as healthy diet despite their food combination being dominated with starch and carbohydrates. These assertions prompted the researcher to think that the participants had no clue when it came to healthy food and healthy diet. Several studies have reported that drinkers consumed more

meat and fewer dairy products, fruits, cereals and sucrose than non-drinkers (Herbert & Kadam, 1991). There have been a general understanding among drinkers that eating meat equal healthy diet, which is incorrect and very misleading drinkers in general and in particular to consumers of home brewed alcohol.

#### **8.3.7 Responses On Whether Participants Eat Healthy Food**

All participants believed very strongly that consumers of home-brewed alcohol should eat healthy food, including fruits and vegetables as well as food that were very rich in calcium, iron and proteins. It has generally been proposed that men and women who regularly consume alcohol might have different dietary preferences than non-drinkers and that these preferences might alter their dietary habits. In previous studies, alcohol consumption was inversely related to body mass index in women but this relation has been less consistently observed in men (Yung, Gordis & Holt, 1983; Jones, Barrett-Connor, Criqui & Holdbrook, 1982).

## 8.4 EXPLORATION OF SEXUAL BEHAVIOUR AND CONDUCT OF CONSUMERS OF HOME-BREWED ALCOHOL

### 8.4.1 Behavioural patterns of the consumers

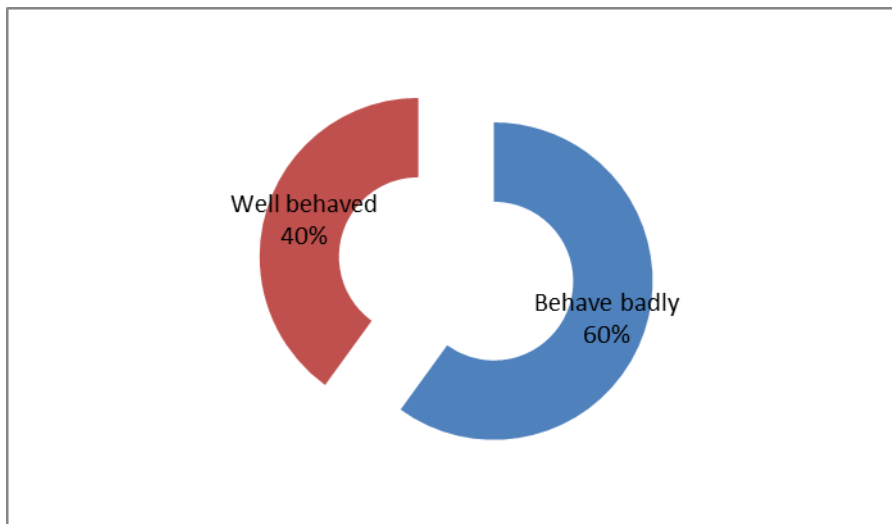


Figure 10: Consumer's behavioural patterns

A substantial number of participants totaling 60% acknowledged that home brewed alcohol made them lose touch with reality. However, 40% reported that they remained unchanged after drinking home brewed alcohol. According to previous research, people who abuse alcohol are more likely to engage in behaviours that place them at risk for contracting or transmitting HIV. Individuals with a history of heavy alcohol use have been linked to a lifelong lifestyle of high-risk sexual behaviours, including multiple sex relationships, unprotected intercourse, sex with high-risk partners (e.g., injection drug users, prostitutes), and the exchange of sex for money or drugs (Windle, 1997; Avins et al., 1994; Boscarino et al., 1995; Malow et al., 2001).

There may be many reasons for this association. For example, alcohol can act directly on the brain to reduce inhibitions and diminish risk perception (MacDonald et al., 2000; Fromme et al., 1999; Cooper, 2002). Some views as expressed by respondents include:

*“Byala i tiyiso byi chichi swiyimo ni ma vonelo. Hambi lexo ka xinga sasekanga xa chichanyana xi languteka. A byaleni ku hava xo biha, swi beja naxo fa tihlo, wa vona kuri pohlo” literally meaning alcohol will indeed influence your attitude and perception. The ugliest of a thing would be turned into something so beautiful.*

#### 8.4.2 Objectivity Level Of The Participants

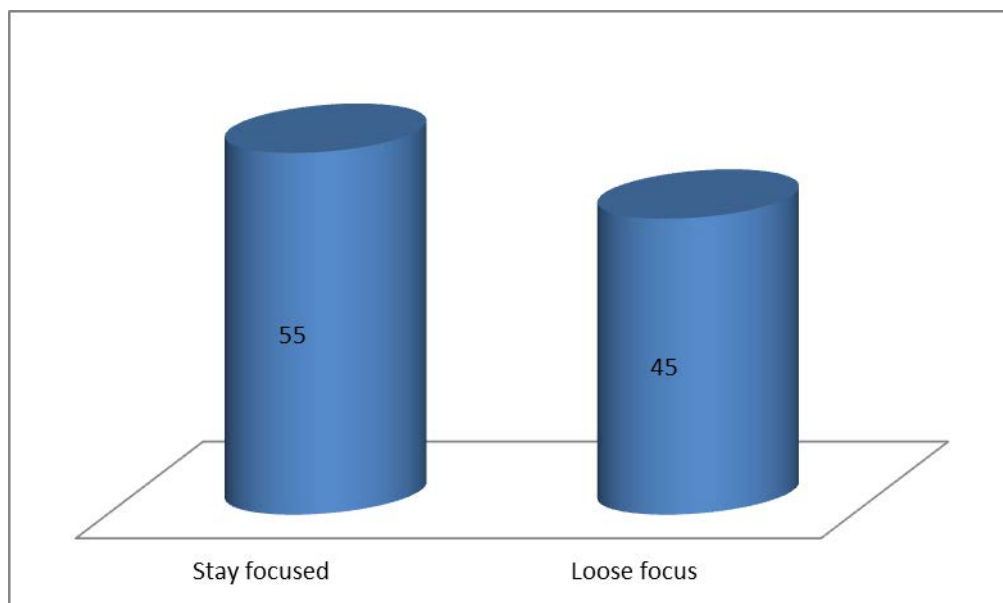


Figure 11: Participants' objectivity level

There was a slight difference between participantss who claimed to stay focused and objective even after consuming home-brewed alcohol at 55% and those who admitted to loosing touch with reality and becoming less objective with 45% representation. Previously studies however, have concluded that users of alcohol and of home brewed alcohol loose objectivity and focus after use. Alcohol consumption has been shown to contribute significantly to reduced adherence to antiretroviral drugs (ARVs) and Tuberculosis (TB) treatment in studies from Africa and developed world.

It also reduces drug compliance and efficacy, harming the patient and breeding drug-resistant strains of HIV (Talbot, Kenyon, Moeti, Hsin, Dooley & EL-Halabi, 2002).

#### **8.4.3 Level Of Consumers Self-Control**

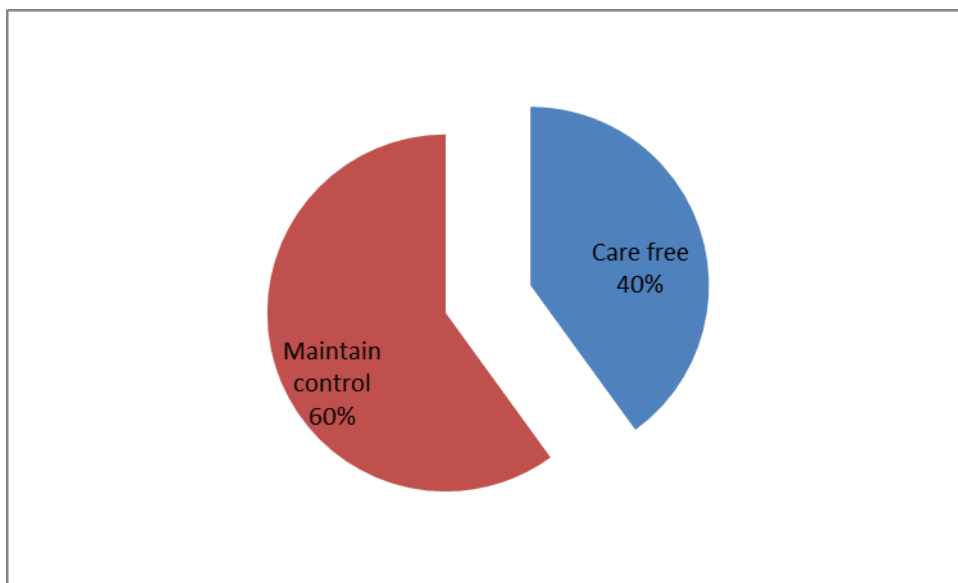


Figure 12: Consumer's self-control

A review of the impact of alcohol on health, HIV transmission commissioned by the Agency for International Development, demonstrated that excessive alcohol consumption influences high risk behaviour, such as unprotected casual and indiscriminate sex. Sexual risk-taking behaviours associated with alcohol abuse are highly prevalent in many African countries severely affected by HIV/AIDS (Needle, Kroeger, Belani & Hegle, 2006).

*“Swale masangwini swiolove ngopfu laha byaleni. Mina na munhu wa mina loko hi twananile ho humanyana kuya exihambukeleni, ivi hifika hi endla swale masangwini. Karhi wun’wana lomu titombhi ta hina titshamaka kona, I kusuhi swinene na lomu hi n’waka kona, se ho milenge mimbirhi hi tlhela hi vuya kuta yisa emahlweni hiti n’wela” literally meaning while drinking, one becomes loose sexually, me and my lover easily and comfortably have sex with little or no concern at all then easily return to continue with drinking.*

## **8.5 RELATIONSHIP BETWEEN CONSUMERS OF HOME-BREWED ALCOHOL AND DOMESTIC VIOLENCE**

### **8.5.1 Relationship Between Home-Brewed Alcohol And Domestic Violence**

The research findings highly revealed a strong link that existed between alcohol use and domestic violence. The overwhelming majority of 75% of the participants as opposed to 35%, acknowledged that they became violent towards their spouses after alcohol use and they labeled the blame squarely on alcohol. While substance abuse does not cause domestic violence, regular alcohol abuse is one of the leading risk factors for intimate partner violence as well as aggressive



behaviour. Studies of domestic violence frequently indicate high rates of alcohol and other drug use by perpetrators during abuse (Bennet, 1997).

This research also revealed that home brewed alcohol abusers would find courage to commit planned violent acts after heavy drinking.

### **8.5.2 Behaviour By Consumers Of Home-Brewed Alcohol**

Listed below are observed behaviours displayed by consumers of home brewed alcohol:

- A physically disabled person violently was pushed off the wheelchair by a group of young adults who were under an influence of alcohol. They started pushing him around though never asked for any help, when he disapproved, they did it even more. The pushing suddenly became violent and the disabled person fell off the wheelchair, left in pain on the ground, the intoxicated young adults continue to push and play with the wheelchair. "I will never forget that experience for so long as I live recounted one the participants".
- Quarrels  
*"A quarrel broke out after one of the consumers forget to return a 'stopie' of cigarette he has asked from a friend to light his own cigarette which he later unintentionally through away. The owner of the stopie felt undermined and humiliated. A very serious quarrel followed as a result. I thought it was funny given the size of the cigarette but hey, these guys almost fought over it."*

- Fist fighting

*“My friends were involved in a fist fighting over a young woman who just happened to be passing-by. When they ultimately stopped fighting, the woman they fought about was not there, and have even forgotten the reason for their fight.”*

- Knife stabbing and bottle stabbing

*“for as long as people drink in the township and village outlets, knife and bottle stabbing will always be there. In days where there would not be any fighting involving some form of stabbing, it feels rather unusual” recalled one participant.*

- Assault for no apparent reasons

*“Alcohol outlets have become synonymous with violence as violence will at times just broke without warning, said one of the patrons.*

- Fighting over alcohol and cigarettes

*“A fight brokeup after a man uninttentionaly stumbled over another’s brew causing it to spill. The owner of the brew was so furious and full of rage. A huge fight then broke loose out of this simple unintended action, mentioned one the participants.”*

- Sexual assaults including rape

*“an intoxicated woman was once gang raped before my own eyes. I was too drunk myself to help, all I could do was to watch, and even entertain a thought of joining them, but I did not participate on the rape” the gang was arrested and charged. They are still paying for the deeds even today.”*

The events reported by consumers of home brewed alcohol were consistent with previous research findings and studies. The negative health and social impact of alcohol is pervasive and includes loss of income, health inequalities, intentional and unintentional injuries, violent crimes, neuropsychiatric disorders and poverty. These problems are exacerbated by a pattern of consumption characterized by heavy episodic drinking and widespread consumption of beverages produced in the informal sector (WHO, 2004; WHO, 2007; WHO, 2009).

### 8.5.3 Relationship Between Home-Brewed Alcohol And Partners' Assaults.

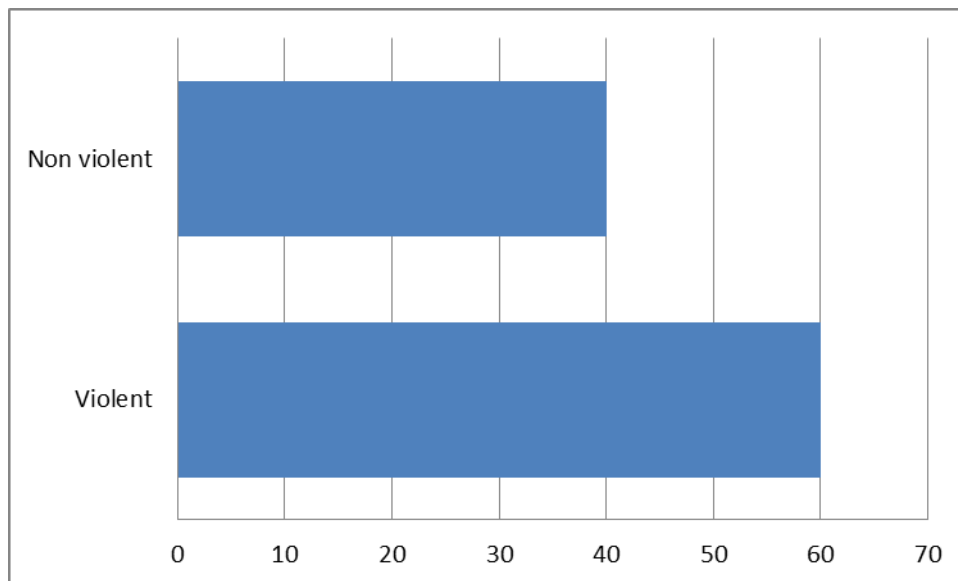


Figure 13: Consumer's aggression level

While 60% of the participants said home-brewed alcohol does not cause them to fight or assault their partners, 40% reported that at times their drinking led to unwarranted fights resulting in assaults and violence. The view expressed by the participants was consistent with known effects as reported by previous studies on similar research. While the benefits of moderate drinking to health, social networking and labour productivity have been recognised, excess drinking is associated with a long list of problems including lost productivity, crime, and neglect of family responsibilities, disability, personal deterioration, diseases and death (Cook & Moore, 2000).

*“Byala a byina xihoxo hambu xiri xin’we. Vanhu hakanyingi vo endla manyala va vuya vamatumbeta hi byala. Lava lwaka kumbe ku ba varhandziwa wa vona, va endla tano hi kokwalaho ka ku biha ka vona, ku ngari ku biha ka byala. Mina pfuka ndzi sungula ku n’wa byala, nghamu a nga ritivi rigombo ra mina, ho tshama hiti tsakerile”* literally meaning alcohol does not do anyone any harm, however the users are to be blamed for all

*the mischieves influenced by their uncontrollable behaviours after alcohol use.*

#### **8.5.4 Home-Brewed Alcohol And Partners' Relationships**

While 50% of the participants reported that home-brewed alcohol caused their relationship to prosper and to improve, only 45% saw their relationships levels deteriorate. Studies in several countries have shown an association between harmful consumption of alcohol, health and social consequences, including death from road traffic accidents, domestic violence, HIV infection, and disorders requiring demand for treatment (Obot, 2006; WHO, 2004; WHO, 2005; Parry, 2005; Odejide, 2006).

*“Mina loko ndzi byi dyile, ndzi suka tingana. Ndzi tshama ndzi titsakerile na murhandziwa wa mina. Byala byi endla leswaku vunghana bya mina ni nghamu byi tiya no navetisa” literally meaning that after alcohol use, I cease to be shy. I stay and remain happy with my lover. Alcohol enhance and revitalizes my relationship with my lover.*

### 8.5.5 Treatment Of Spouses By Consumers

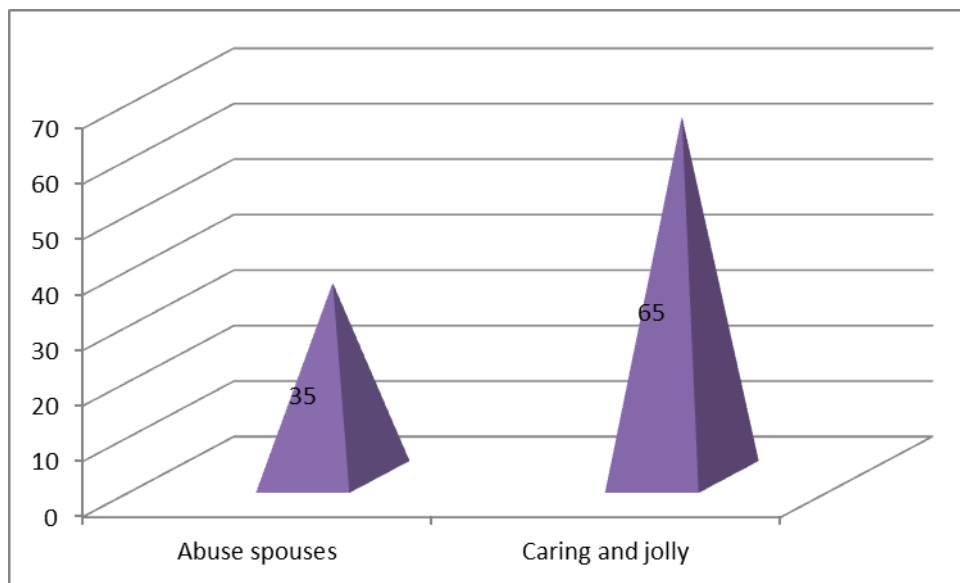


Figure 14: Consumer's behaviour towards their spouses

Victims of domestic violence estimated that 45% of perpetrators had been drinking and 17% were under the influence of drugs at the time assault (Flood-Page & Taylor, 2003). Mirrlees-Black (1999) also found evidence that the risk of violence to victims increased as their own drinking increased. If the same question was redirected to partners of the participants, one doubt if the response would have been mutual, prompting the researcher to believe that the participants were either on denial about their actual behaviour or afraid to reveal the truth about themselves and their manifesting conduct after alcohol consumption.

## 8.6 ENGAGEMENT IN EXTRAMURAL ACTIVITIES

### 8.6.1 Frequency Of Alcohol Intake

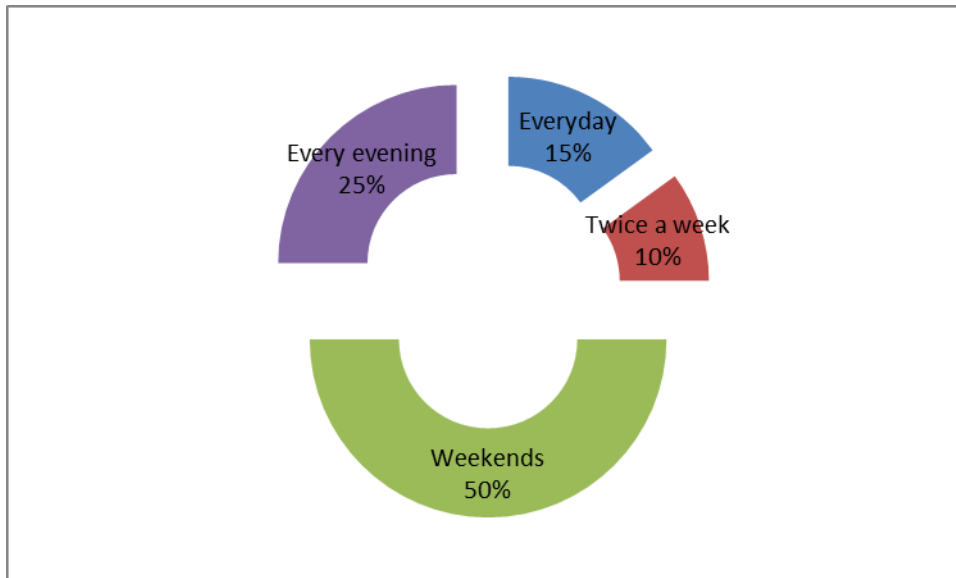


Figure 15: Frequency of alcohol intake

The study revealed that home brewed alcohol was mostly consumed more over weekend than any other time of the week. This is supported by previous research which found that home brewed alcohol was used as a form of relaxation in townships and rural communities (Parry, 2005).

### 8.6.2 Physical Activities Engaged By Participants

The responses from participants were equal at 50% on this point. The common physical activities participants engaged in included jogging, walking and cycling. There was a general understanding among all users of alcohol that physical exercising boosts their immune system and muscles thereby enabling them to stand and walk even after a night of heavy drinking without staggering. This is

supported by earlier studies which assert exercising allows one to become a little less stupid as a result of heavy drinking (Reynolds, 2011).

*“Mina ndzi rhandza ku tshama ndzi endla vutiolori, leswi swiendla leswaku ndzi tiyela no tiya. Ndzi loko ndzi byi dyile, hayi, akaya kona ndza fika handle ko lava ku pfuniwa kumbe ku yisiwa ekaya hiva nghana. Vutiolori byi endla leswaku byala byi nga hatli byi ndzi tekateka” literally meaning that I do physical training or exercises to ensure that I do not easily get drunk and struggle to walk as many alcohol users do.*

## PART TWO: BREWERS OF HOME-BREWED ALCOHOL

### 8.7 DEMOGRAPHIC FACTORS

#### 8.7.1 Age Of Participants

**Table 5: Age categories of brewers**

<b>Brewers' age group</b>	<b>Number of participants per age group</b>	<b>Percentage of participants</b>
20-25	1	5
26-30	3	15
31-35	5	25
36-40	4	20
41-45	3	15
46-50	2	10
51 and older	2	10
<b>Total</b>	<b>20</b>	<b>100</b>



The majority at 20% and 25% were aged between 31 and 40 years of age. Especially for older women it is largely a question of survival (Parry & Bennets, 1998; Maula, 1997) as they are breadwinners in their respective families. The current research also found that age-wise, more younger women were entering the trade, the reasons for doing so remained unchanged, that is, the provisioning of livelihood to themselves and their immediate families.

#### **8.7.2 Gender Of The Brewers**

All brewers who participated on the study were females. The brewers were in this trade for financial gains, they were all unemployed and brewing a possible means available to provide for their families. Moreover, women in poor rural communities have been in the forefront in pushing back the frontiers of poverty lines within their communities. In fact, poverty was mostly felt in deep poor rural communities than in the urban cities (Maula, 1997).

### 8.7.3 Marital Status Of The Brewer

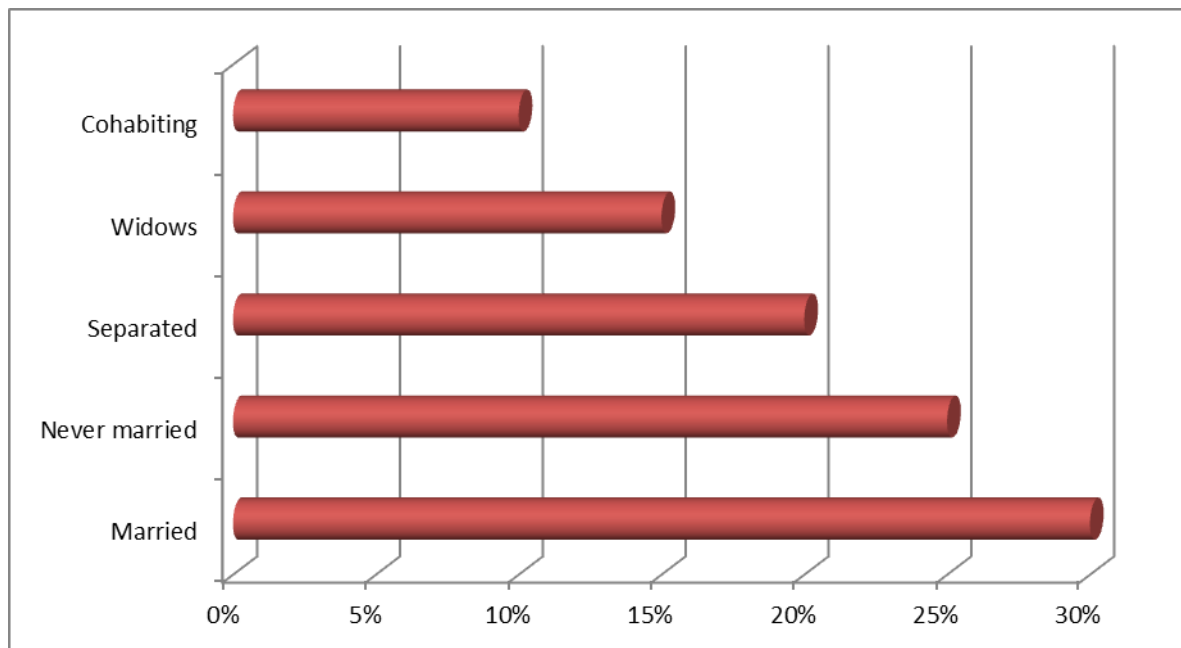


Figure 16: Brewer's marital status

The researcher observed during the enquiry that spouses of married brewers were also unemployed, thus, they similarly brewing to provide for their families the same way as those who were separated from their spouses or never married. The researcher has equally noted that existing literature and previous research in this area of study was in not readily available resulting in same sources being over used or used repeatedly.

#### 8.7.4 Religious Affiliation Of The Brewers

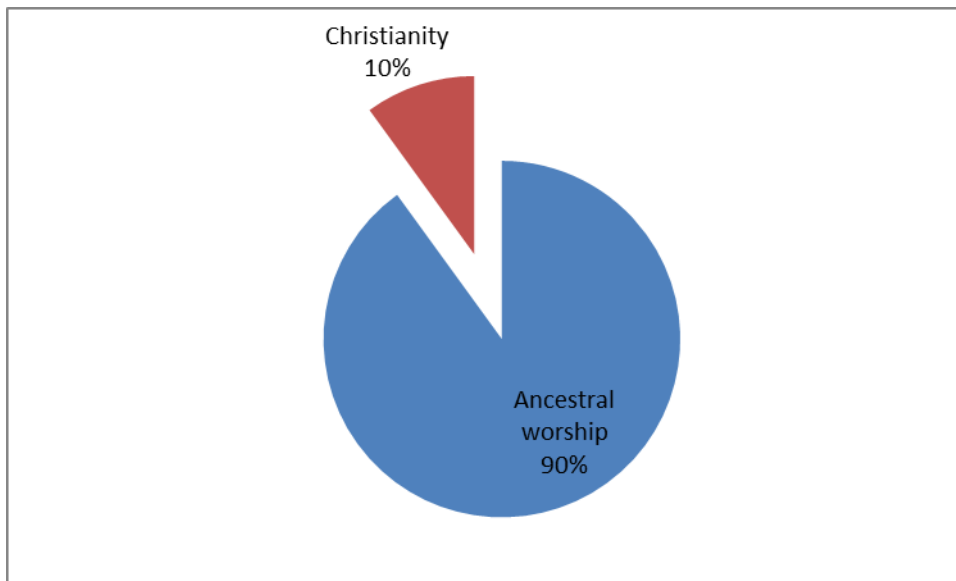


Figure 17: Brewer's religious affiliation

Although today's brewing is closely associated with business and livelihood, yesterday's brewing was more cultural and religious inclined. The worship of gods and ancestors by libation was quite common and almost universal in Africa (Parrinder, 1969). Cultural and religious norms dictated standards that directed alcohol consumption (Heise, 1992). It is therefore not surprising that the overwhelming majority of brewers practice ancestral worship.

#### 8.7.5 Economic Status Of The Family

All brewers who participated in the study reported their economic status as very poor, brewing only to make ends-meet. These statements are equally supported by previous research findings. The brewing of home-brewed alcohol was the only economic activity with possible positive outcomes in impoverished rural communities, infact, brewing appeared to be at times the only appropriate and

decent job these elderly women can perform to support their families in their hostile and at harsh environment (Maula, 1997).

## **8.8 HOME-BREWED ALCOHOL AS A PUBLIC HEALTH PROBLEM**

### **8.8.1 Brewing Process**

The process and the ingredients followed and widely used by different brewers were similar. The major difference was on the recipes, contents as well as quantities of ingredients used when brewing. The most common brew made by all participants in this research project was 'pine-apple alcohol' locally known as '*xipayoni, muphayini, or byalwa bya xihenge*'.

The following ingredients were used when 'pine-apple alcohol' was made:

Pine-apple, Brown bread, Brown sugar, Yeast and Water.

The process of brewing the pine-apple alcohol was as followed:

- Pine-apple was cut into small pieces, with its yellow ruff skin or cover not pilled-off. Others crushed it instead, with its yellow thorny ruff cover not pilled-off,
- Brown bread was broken into small pieces,
- Brown sugar was poured into boiling water and was cooked until it dissolved,
- Pine-apple, brown bread and sugar were put into a fifty (50) litre container, which was then filled with cold water. Yeasts were then added on. The container was then covered with a lid. The pine-apple alcohol would then

be ready for consumption in twenty four hours' period or less depending on the weather at that given time. The covered container with alcohol would at most be kept outside to enable it to receive direct sunlight which assists in fasttraking fermentation.

With regard to recipes used to making the beer, these differed from one brewer to the other. While all used a fifty litre container, some would use one pineapple, when others used three to four pine-apples on the same quantity and these would be repeated with brown sugar, brown bread and yeasts. Pine-apple used ranged from one to four per fifty liter, brown bread ranged between three to five, brown sugar ranged between 1kg to 4kg, while yeasts ranged between two and four packets per 50 liters. The difference in contents and quantities of ingredients was a very strong determining factor when it came to the strength of the beer.

The duration of fermentation ranged between eight (8) hours to twenty four (24) hours, with the weather being the main determining factor in terms of duration of fermentation.

#### **8.8.2 Enhancing Of Sharp Urge**

All the brewers reported that they were not putting any additional ingredients in their brews except those already mentioned. They nonetheless confirmed that they have heard of brewers in their neighboring communities who were putting additional foreign substances such as battery acid, methylated spirit and benzene to enhance their brews. Makhubele (2011) also enchoed that brewers were putting unfamiliar substances in the quest to their brews a sharp urge.

### **8.8.3 Reasons For Infusing Toxic Substances**

All respondents indicated that they were not putting any toxic substances in their brews. Research conducted by Pitso (2007) however shows that these are done to give their brews a sharp urge over others. The brewers main focus and interest was profit, hence they will endanger the lives of those who use their produce by using unorthodox and poisonous ingredients to make their brews more intoxicating.

### **8.8.4 Information On Recruitment To Brewing As A Trade**

All the brewers were introduced to the brewing by either their mothers or in-laws, with an exception of one who was taught by her grandmother. The reasons given by all were very identical.

To 70% of the participants, the skill was imparted as a survival skill when life and its challenges increased, while 25% only acquired the skill as they observed either their mothers or mother-in-law brewing.

Previous research has found that the majority of brewers of home-brewed alcohol were mainly women ranging from a very tender age of eighteen (18) years to elderly, approximately sixty-five (65) years of age depending on the location where they operated. Other studies profiled brewers of home brewed alcohol as single parent or female headed units to who has become a primary source of income and sustenance (Molamu & Manyaneng, 1988).

### 8.8.5 Responses On When Brewers Started Brewing

**Table 6 : Information on when brewing was started**

<b>Brewing experience in years</b>	<b>Number of brewers</b>	<b>Percentage of brewers</b>
1-10	6	30
11-20	7	35
21 and above	7	35
<b>Total</b>	<b>20</b>	<b>100</b>

Information gained from participants were evenly spread in terms of when they started brewing, ranging from those who only started just over a year ago to those who have been in the brewing fraternity for more than twenty years.

Brewers who participated in the study had no intentions to leave their trade now or in the future (Molamu & Manyaneng, 1988). This also confirms that brewing to the participants has now become work and means to sustain their livelihood.

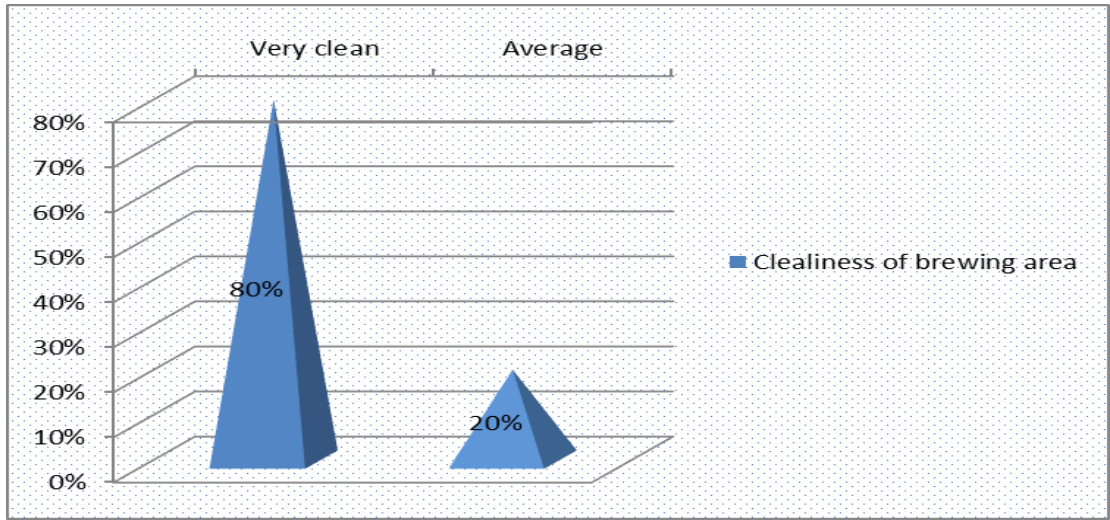
## 8.9 THE ENVIRONMENT AND CONDITIONS UNDER WHICH HOME-BREWED ALCOHOL IS PRODUCED

### 8.9.1 Brewing Place For Home-Brewed Alcohol

There was a substantial number of brewers, accounting for 60% who indicated that they brew outside on the open so as to allay fears and allegations that they put dangerous stuff in their brews. There were however those that were brewing in some made-shift brewing halls, mostly consisting of mud and thatched structures who accounted for 40% of the participants. Most of the places as observed by the

researcher were so untidy to say the least. Studies from the past also established that these brewers had little regard for the health and well-being of people who buys their brews ((WHO, 2004; Harworth & Simpson, 2004). Furthermore, the respondents seemed unaware of the health risks they were exposing to the lives of those who used their produce.

**8.9.2 The Cleanliness Of The Brewing Place**



**Figure 18: Cleanliness of the brewing place**

Although 80% of the brewers reported their place of brewing as clean, observations by the researcher revealed the opposite. The places where brewing occurred, were mostly dirty to the extreme and unsuitable for food preparations.

In one household, there were even dogs’ droppings on the ground not very far from the brewing place. Studies from the past also established that these brewers had little regard for the health and well-being of people who buys their brews (WHO, 2006). Individual and community education becomes a necessity if the lives of the community is to be impacted positively as advocated upon by the strengths perspective.



### **8.9.3 Sterilisation Of Utensils**

Brewing utensils were never sterilised. Pure water was used, with only few instances where sunlight liquid dishwasher was applied to clean the utensils used for brewing purpose. It therefore do not come as a surprise that there are negative health reports emanating from the consumption of home brewed alcohol, given the status of the brewing utensils.

### **8.9.4 Information On The Environment Under Which They Produce Home-Brewed Alcohol**

Almost all the participants at 80%, indicated that they were very conscious about the environment under which they brew however, most of these places looked very deserted, dirty and looked so untidy and unhealthy. Few brewers at 20%, did not seem aware of the implications of brewing under an unhealthy environment. They saw nothing wrong with their actions. The observations on how they presented themselves, their responses were justifiable.

This is confirmed by previous studies which attest that, these brewers had little regard for the health and well-being of people who buys their brews. Their main focus and interest was profit, hence they will endanger the lives of those who use their produce by using unorthodox and poisonous ingredients to make their brews more intoxicating (Pitso, 2007).

#### **8.9.5 Information On The Safety Where Home-Brewed Alcohol Is Made.**

All the participants asserted very strongly that the conditions upon which they brewed were safe. Nonetheless these were contrary to the visible conditions upon which brewing occurred. Some places were simply a health risk to say the least. They were just untidy. Home-brewed alcohol was produced in impoverished rural villages and homes, prompting researchers to conclude that the majority were illiterate and without formal education (WHO, 2004; Harworth & Simpson, 2004). The participants simply knew very little when it came to safety and healthy environments to say the least. This was evident from my enquiries on all health and safety measures

#### **8.9.6 Information On The Improvement Plan Upon The Brewing Conditions**

The participants saw no reason to improve their environment and conditions because they believed all was well. They had no improvement plan or immediate plan to change anything. If there is one thing brewers want to improve is their sales, hence previous studies highlighted that, their main focus and interest was profit, hence they will endanger the lives of those who use their produce by using unorthodox and poisonous ingredients to make their brews more intoxicating (Pitso, 2007; Murethei, 2002; Makhubele, 2013).

### **8.10 Summary Of Findings**

The following is a summary of findings:

- Majority of brewers are female
- They brew for livelihood

- They put concoctions to enhance the sharp urge of their brews
- The brewing place is untidy
- Consumers are involved in high risk behaviour such as unprotected sex
- Consumers perceive consumption of home brewed alcohol as healthy style
- Home brewed alcohol is consumed daily by the users

The final chapter of the study presents summary of major findings, conclusions and recommendations.

## **CHAPTER 9**

### **SUMMARY, CONCLUSIONS AND IMPLICATIONS FOR PRACTICE**

#### **9.1 INTRODUCTION**

In this chapter, the problem statement, aim and objectives as well as the research questions of the study have been restated. Summary of the major findings are presented. Conclusions are drawn from both the literature and the empirical findings of the study. The chapter concludes with a discussion on the implications of the findings for social work interventions. The researcher has made recommendations drawn from the major findings and conclusions that will hopefully be considered by policy-makers when policies and regulatory systems on home brewed alcohol beverages are conceived.

#### **9.2 RE-STATEMENT OF THE PROBLEM**

Competitiveness in the brewing of home-made alcohol has led many brewers to use unorthodox and poisonous ingredients to hasten fermentation, enhance sales and make their brews more potent (Pitso, 2007). Putting foreign substances to home-brewed alcohol gives it a sharp urge and also increases the quantity produced from minimal main ingredients. Makhubele (2011) has asserted that this is done without taking into consideration the health aspects of the consumers, yet alcohol used wisely can add to enjoyment of life. Since commercialisation of the home-brews, there has been evidence that public health is being damaged as a result of alcohol consumption.

Alcohol consumption, which also includes home brewed alcohol, is a leading contributor to health problems such as cardiovascular disease, liver malfunctioning and pancreatic cancer and associated health challenges such as accidents, homicides, and suicides, amongst others. Alcohol as a health risk factor carries an enormous price tag in terms of the toll on life, quality of life, and economic costs. People who consume alcohol risk out-of-control behaviour. This could cause a person to act irresponsibly regarding sex, with possible consequences including pregnancy, STI's or HIV (Graves, 2000; Kalichman, 2010).

Home brewed alcohol when produced specifically for commercial usage is seldom in its purest form as foreign objects are added to increase its sharp urge. It is often contaminated as it is produced in conditions that are poorly monitored or supervised for quality. Brewing utensils used for preparing home brewed alcohol are often not sterilised, as such, the alcohol produced is frequently contaminated and toxic (WHO, 2004). In Limpopo Province where the study was conducted, there are very often water shortages thereby compromising the cleanliness of the brewing utensils. The World Health Organization (WHO) estimates that there are about 2 billion people worldwide consuming alcoholic beverages and 76.3 million with diagnosed alcohol use disorders.

From a public health perspective, the global burden related to alcohol consumption, both in terms of proneness to sickness and mortality, is considerable in most parts of the world. Globally, alcohol consumption causes 3.2% of deaths (1.8 million) and 4.0% of the Disability-Adjusted Life Years lost (58.3 million).

Overall, there are causal relationships between alcohol consumption and more than 60 types of disease and injury.

Alcohol consumption is the leading risk factor for disease burden in low mortality developing countries, of which South Africa is but one, and the third largest risk factor in developed countries (WHO, 2002). In Europe alone, alcohol consumption was responsible for over 55 000 deaths among young people aged 15 to 29 years in 1999 (Rehm & Gmel, 2002; WHO, 2002; Jenkins, 1998).

Besides the numerous chronic and acute health effects, alcohol consumption is also associated with widespread social, mental and emotional consequences. These are reflected, for example, as abuse in workplaces and in relationships. There have been many instances of poisoning and deaths following the consumption of adulterated liquor. People of the lower socio-economic status sometimes consume illicit (illegal substances) or home-brewed alcohol because of its low cost, despite its known hazards and times due to ignorance.

### **9.3 RE-STATEMENT OF THE AIM AND OBJECTIVES OF THE STUDY**

#### **9.3.1 Aim of the study**

This was a baseline study aimed at exploring and describing the effects of home-brewed alcohol produce on public health in Greater Tzaneen Municipality of Mopani District, Limpopo Province.

### **9.3.2 Objectives of the study**

The objectives of the study were as follows:

- To describe various ingredients (some of which are lethal) and methods (some of which are unhygienic) which are used in the preparation of home-brewed alcohol. This objective was achieved and supported by findings as reflected on sub-sections 5.8.2 and 5.8.3 which explained that all brewers reported not to be putting any additional ingredients in their brews except those already mentioned. Nonetheless brewers indicated that they have heard of brewers in the neighbouring communities who put foreign substances such as battery acid, methylated spirit and benzene to enhance their brews. To this end, brewers included in their brews dangerous addictive such as car battery acid and formalin (Mureithi, 2002).
- To profile the brewers of home brewed alcohol. The objective was well accomplished through sub-sections 5.7.3, 5.7.4 and 5.7.5 which asserted that brewers were mainly and mostly women, ranging from those that were married, separated, cohabiting and widows as well as the divorced.
- The participants' religious affiliation was mostly ancestral worship that stood at 90% compared with other competing religions.
- To establish from consumers whether they know of healthy dietary practices. This objective too was achieved through sub-sections 5.3.5 and 5.3.6. The list of food eaten by consumers of home brewed alcohol ranged from porridge, meat / chicken and vegetables to fish, chilies and bread. Others to an extent indicated eating cheese and polonies. But the most

common of all the foods was porridge as it was consumed by 95% of the participants. The participants believed very strongly that consumers of home-brewed alcohol should eat healthy food, including fruits and vegetables as well as food that were very rich in calcium, iron and proteins. It has generally been proposed that men and women who regularly consume alcohol might have different dietary preferences than non-drinkers and that these preferences might alter their dietary habits. In previous studies, alcohol consumption was inversely related to body mass index in women but this relation has been less consistently observed in men (Yung, Gordis & Holt, 1983; Jones, Barrett-Connor, Criqui & Holdbrook, 1982).

- To explore the physical activities that consumers of home-brewed alcohol indulge in. This objective was successfully achieved through sub-section 5.6.2 which confirmed that there was a general understanding among all users of alcohol that physical exercising boosts their immune system and muscles thereby enabling them to stand and walk even after a night of heavy drinking without staggering. This is supported by earlier studies which assert exercising allows one to become a little less stupid as a result of heavy drinking (Reynolds, 2011).
- To investigate the extent to which consumers of home-brewed alcohol practice protected and safer sex. This objective was achieved through sub-sections 5.4.1, 5.4.2 and 5.4.3 which stated that a substantial number of participants totaling 60% acknowledged that home brewed alcohol made them lose touch with reality. People who abuse alcohol are more likely to engage in behaviours that place them at risk for contracting or transmitting



HIV. Individuals with a history of heavy alcohol use has been linked to a lifelong lifestyle of high-risk sexual behaviours, including multiple sex relationships, unprotected intercourse, sex with high-risk partners (for example., injection drug users, prostitutes), and the exchange of sex for money or drugs (Windle, 1997; Avins et al., 1994; Boscarino et al., 1995; Malow et al., 2001). There may be many reasons for this association. For example, alcohol can act directly on the brain to reduce inhibitions and diminish risk perception (MacDonald et al., 2000; Fromme et al., 1999; Cooper, 2002).

- To establish the existence of a relationship between domestic violence and home-brewed alcohol. This objective was attained through sub-sections 5.5.1, 5.5.2, 5.5.3 and 5.5.4 as well as 5.5.5. The research findings highly revealed a strong link that existed between alcohol use and domestic violence. The overwhelming majority of the participants acknowledged that they became abusive towards their spouses after alcohol use and they labeled the blame squarely on alcohol. While substance abuse does not cause domestic violence, regular alcohol abuse is one of the leading risk factors for intimate partner violence. Studies of domestic violence frequently indicate high rates of alcohol and other drug use by perpetrators during abuse (Bennet, 1997). This research also revealed that alcohol abusers would find courage to commit planned acts after the intake, especially if it they had been one too much consumption.

## 9.4 FINDINGS OF THE STUDY

A summary of major findings from this study is presented as follows:

### 9.4.1 Various ingredients and methods used in preparing home brewed alcohol

The process followed and the ingredients used by different brewers were widely similar in most instances. The major difference was on the recipes, contents as well as quantities of ingredients used when brewing.

The most common brew made by all who participated in the study was '*pine-apple alcohol*' locally known as '*byalwa bya xihenge*'. The '*pine apple beer*' was made out of the following ingredients:

- Pine-apple
- Brown bread
- Brown sugar
- Yeast and
- Water

The process of making the '*pine apple beer*':

- Pine-apple is grained or smashed, with its yellow ruff-thorny skin or cover not pilled-off. Others crush it instead, with its yellow thorny ruff cover not pilled-off.
- Brown bread is also broken into small pieces
- Brown sugar is poured into boiling water in a small pot to cook till it is dissolved.

- Pine-apple, brown bread and sugar are put into a fifty (50) liter container, which is then filled with cold water. Yeasts are then added on. The container is then covered with a lid. The pine-apple beer would then be ready for consumption in twenty four hours' period.

With regard to recipes used to making the beer, these differed from one brewer to the other. While all used a fifty liter container, some would use one pineapple, when others used three to four pine-apples on the same quantity and these would be repeated with brown sugar, brown bread and yeasts. Pine-apple used ranged from one to four per fifty liter, brown bread ranged between three to five, brown sugar ranged between 1kg to 4kg, while yeasts ranged between two and four packets per 50 liters. The difference in contents and quantities of ingredients was a very strong determining factor when it came to the strength of the beer.

#### **9.4.2 The brewers of home-brewed alcohol**

All brewers who participated on the study were females. The brewing of home-brewed alcohol was closely connected to food production in both the urban and rural areas. The common denominator was the need to provide a livelihood, especially for older women it was largely a question of survival. Most of the brewers indicated that they started their brewing trade at the tender age of fifteen under the guidance of either their parents or grandparents. The skill was passed on as a heritage as well as a survival mechanism.

#### **9.4.3 The socio-economic background of brewers**

- The majority of brewers were from poor households with little or no skills to survive in the ever demanding job markets.
- They were illiterate and from poorer communities associated with lack of economic opportunities.
- The brewers were mostly women, particularly widows or divorced older women.
- The brewers were unemployed breadwinners who after failing to secure jobs in order to support their families, resorted to brewing as means of survival.
- Home-brewed alcohol was produced in impoverished rural villages and homes, prompting researchers to conclude that the majority were illiterate and without formal education.
- Brewers had little regard for the health and well-being of people who buy their brews.
- The brewers' main focus and interest was profit, hence they would endanger the lives of those who use their produce by using unorthodox and poisonous ingredients to make their brews more intoxicating.

#### **9.4.4 Dietary styles of consumers of home brewed alcohol**

There was a general understanding and belief among users and consumers of home brewed alcohol that eating meat and starch equals healthy diet which was not far from the truth. This was evident from the responses they gave on their eating habits and styles. An overwhelming 65% of the participants in the study proudly indicated they ate meat and porridge before engaging on their drinking adventures. Previous studies by Yung, Gordis and Holt (1983); Jones, Barret-Connor, Criqui and Holdbrook (1982) as well as Herbert and Kadat (1991) have however shown that the consumers of home brewed alcohol indulge in were less in nutrients.

They will do well to supplement what they ate by adding good food comprising of fruits and vegetables, as well as foods, which were high on calcium and proteins. Considering the relationship that exists between home brewed alcohol usage and poverty, it comes as no surprise that the staple food for home brewed alcohol consumers is starch and meat. These are common foods accessible and affordable even to the poorer households in society.

#### **9.4.5 Consumers of home brewed alcohol on safer and protected sex practice**

Participants who acknowledged that the consumption of home brewed alcohol resulted on them losing touch with reality to a point of becoming care-free constituted 40% to 65% in the study. The participants reported that many a time engaged in sexual activities without using condoms. They indicated that quite

often they would forget to use it even though they had it in their position. This finding was consistent with and supported by previous studies which concluded that consumers' behaviour, judgement and perception are hugely compromised leading to poor and improper decisions being taken.

#### **9.4.6 Relationship between domestic violence and home brewed alcohol use**

Only 35% of the participants in the study linked home brewed alcohol usage to domestic violence. Nonetheless, the over-whelming majority were of the opinion that home brewed alcohol use was making them happier and jolly, thus de-associating home brewed alcohol use to any form of violence. This finding is supported by previous research which concluded that alcohol had a secondary influential role to play on domestic violence, but not the only major contributor. Other contributory factors included factors such as personality, behaviour and mental status of the user at any given time plus presenting problems against given coping mechanisms.

### **9.5 CONCLUSIONS**

This section discusses the extent, to which the aims and the objectives of the study have been achieved, limitations of the study and its implications for future research and social work intervention.

### **9.5.1 Extent to which the aims and the objectives of the study have been achieved**

Regarding the extent to which the aims and, more particularly, the objectives of the study have been accomplished. Nonetheless, the following imperative issues pertaining to the study have to be noted:

- Various ingredients (some of which lethal) and methods (some of which unhygienic which are used in the preparation of home-brewed alcohol

The goals relating to the above objective was met in that the twenty brewers interviewed for the study:

- Confirmed to using unpeeled pine-apple fruit with its hard thorny yellow cover to prepare their drink. To this end, consumers were warned never to stir their drinks for fear they could swallow the harmful thorny particles settling on the bottom surface of the serving jugs used in serving the home-brewed alcohol produce.
- Therefore, the finding by Pitso (2007) was validated in that home-brewed alcohol produce are usually poorly monitored for quality and strength, and are frequently contaminated and toxic. The deaths of 79 people in Tripoli, Libya recently for reportedly drinking home-made alcohol, suspected of containing poisonous methanol, further illustrated to seriousness and how dangerous home brewed alcohol is.

- **Profile of brewers of home-brewed alcohol**

The study established that the most of the brewers were aged between 26 to 45 years of age. All brewers who participated in the study were females. This however do not suggest that there are no male brewers.

Most of the brewers were widows, divorced and single from poor economic status and background. Previous research showed that brewers were a heterogeneous, but mostly women, particularly widowed and divorced.

- **Dietary practices by consumers of home-brewed alcohol**

Majority of the participants in the study admitted to eating anything they could lay their hands on, this was solely done in order to avoid drinking on an empty stomach. Those observed by the researcher took bread, samba chips and atchaar just before they could start with their drinking. Other food produce used by the consumers of home-brewed alcohol included porridge, meat and lot of chilies. Several studies have reported that drinkers consumed more meat and fewer dairy products, fruits, cereals and sucrose than non-drinkers (Herbert & Kadat, 1991).

- **Physical activities indulged in by consumers of home-brewed alcohol**

Although users of home-brewed alcohol were not renowned sport personalities, they frequently participated in extra-mural activities that included among others running and playing soccer, but not competitive soccer. They alluded to the fact that exercising was helpful to boosting their immune system



and muscles, thereby enabling them to stand and walk even after heavier drinking.

- **The extent to which consumers of home-brewed alcohol practice protected and safer sex**

The researcher noted during the investigation that the subject on sex was openly discussed among consumers and that empty condom packets were noticeable from drinkers and the surrounding areas prompting the researcher to believe that sex was traded in the same place where alcohol was served. Some consumers could easily be noticed departing from their drinking spots for some sex quickies in the some hidden places more especially at night. The sight of women who traded on sex was always present in all places where home brewed alcohol was served. The worrying factor however remained whether consumers upon drinking would be able to properly use condoms for safer and protected sex purpose. Previous studies found that individuals with a history of heavy alcohol use have been linked to a lifelong lifestyle of high-risk sexual behaviours, including multiple sex relationships, unprotected intercourse, sex with high-risk partners, and the exchange of sex for money or drugs (Windle, 1997; Avins, 1994; Malow, 2001).

- **Existence of a relationship between domestic violence and home-brewed alcohol**

There researcher could not find a direct link between home brewed alcohol usage and domestic violence. Intead, majority of the participants in the study

reported that after consumption, they become happier and tolerant towards their spouses. Studies of domestic violence frequently indicated high rates of alcohol and other drug use by perpetrators during abuse (Bennet, 1997).

Acts of domestic violence attributable to home-brewed alcohol included and not limited to the following, fist fighting, knife stabbings, bottle stabbing and sexual assaults including rape as well as quarrels. Participants also expressed view that although not acts of violence could be blamed on alcohol, drinking led to unwarranted fights resulting in assaults and violence.

This view was consistent with previous research studies, which reported that although consumers could benefit from moderate drinking, excess drinking outweighed the benefits derived from drinking (Cook & Moore, 2000; Obot, 2006). There was also evidence to support that risk of violence to victims of domestic violence increased as their own drinking increased (Mirrlees-Black, 1999).

#### **9.5.2 Limitations of the study**

This study was too broad and perhaps the next level of study needs to be more concentrated and only limited to a single community and focused to its inhabitants thereof. The following challenges were noted in conducting this study:

- Fear of disclosure. Some brewers in the study could not disclose in full ingredients used in preparing their produce for fear that such information could be passed to their clients thereby destroying their market and reputation.

- Budgetary constraints also inhibited comprehensive and balanced attention to be afforded numerous brewers who had more information and expertise in brewing home-brewed alcohol but were always busy to grant interviews.

## **9.6 IMPLICATIONS FOR PRACTICE**

This section formulates guidelines for social workers and community health workers regarding prevention of domestic related violence, adherence to healthy styles and responsible drinking habits. The guidelines take cognizance of the previous research findings in the growing recognition that alcohol consumption is a significant contributor to the global burden of disease, which means that alcohol requires greater attention by the public health community than it is receiving at present. That alcohol plays a major role in promoting risky sexual behaviours, reducing efficacy to HIV treatment and reducing adherence to drug regimens.

And these studies conclusively showed that alcohol consumption was highest in poor communities where potent home-brewed alcohol is cheap and readily available (Morris, Levine, Luo & Ashley, 2006; Brady & Rendall-Nkosi, 2005; Morojele, Kachienga, Mokoko, Nkoko, Parry, Nkowane, Oshia & Saxena, 2006).

Appropriate interventions by community structures and policy makers should be launched to address these health and social problems associated with the use and abuse of home-brewed alcohol in various communities. The section concludes with recommendations for future research.

### **9.6.1 Basic preventative premises: brewers**

Given numerous findings on the brewing places and utensils used for the brewing purposes, the following actions are suggested for consideration and future implementation:

- Brewers should be identified for possible induction on basic hygiene.
- Brewers should be registered and trained to meet set brewing standards.
- An area should be identified to pilot these basic recommendations.

### **9.6.2 Preventive focuses: consumers**

On the basis of the 20 consumers of home-brewed alcohol interviewed for this study, the findings pointed out on the following behavioural, attitudinal and environmental factors that should be closely monitored in the preventative action, and they are:

- Users of home-brewed alcohol could be advised to consider either quitting or limit their intake since alcohol is not safe for human consumption.
- Most consumers were regular drinkers and they could be advised to reduce on their intake.
- Introducing games which consumers could engage in as they used drinking for leisure and to reduce boredom.
- Families were economically affected and disrupted by drinking patterns of their spouses, therefore financial planning and advice could be offered to regular drinkers.

### **9.6.3 Implications for future research: brewers of home-brewed alcohol**

In considering the positive contributory role to be played by brewers of home-brewed alcohol in ensuring that their brews are harmless to consumers' health and well-being, their significance in the fields of public health cannot be underestimated. With these in mind, the following recommendations are proposed for future research:

- Since ingredients of many home brewed alcohol remain obscure, a more intrusive approach such as participation observation is recommended for further research in this area.
- The alcohol concentration level on home brewed alcohol is largely unknown, making it rather difficult to accurately measure alcohol consumption level by users. A study to focus on alcohol concentration level on home brewed alcohol is therefore highly recommended.
- A health committee should be put in place to monitor brewers of home-brewed alcohol. This committee will on the basis of its findings suggest corrective programme to address identified challenges. Special attention should focus on cleanliness of places where home brewed alcohol are produced as well as on the brewing utensils used for preparing the brews.

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## ANNEXURE A: DATA COLLECTION TOOL

UNIVERSITY OF LIMPOPO

Turfloop Campus

Department of Social Work



Department of Social Work

Private Bag x 1106

Sovenga, 0727

SOUTH AFRICA

Tel: 015) 268 2600

Fax: 015)268 2866

Email: [Masenyani.manganyi@ul.ac.za](mailto:Masenyani.manganyi@ul.ac.za)

Dear Respondent (Brewer of Home-brewed Alcohol)

### Semi-Structured Interview Schedule

I am Masenyani Reckson Manganyi from the Department of Social Work in the University of Limpopo (Turfloop Campus). I am the Researcher **in Home-brewed alcohol as a public health problem in Mopani District of Limpopo Province.**

The research study is for me and for career persuasions.

As part of the research study, I am expected to collect information from identified participants of this study of which you are one of them. I have chosen you to participate in the study because of your involvement in home-brewing of alcoholic beverages. The information that you provide will be kept confidential and will not be provided to anyone. I further reassure the participants that they will be protected from any kind of harm, be it physical, psychological and/or emotional. The session will take approximately one (1) hour. You are requested to be open and be honest as possible as you can in answering questions. You are also requested to give answers freely and provide information to the best of your abilities. Confidentiality will be preserved at all cost by the researcher. The researcher will be extremely vigilant in respecting your rights to privacy and self-determination.

You have:

- The right to refuse to be interviewed
- The right to refuse to answer any question
- Not be interviewed during mealtimes
- Not be interviewed for long periods

Thanking you in anticipation.

---

Mr. M.R. Manganyi

Researcher

**Section A: Demographic factors**

1. Age: \_\_\_\_\_

2. Gender:

Male

Female


3. Marital status:

Married

Never married

Separated


Other (specify): \_\_\_\_\_

4. Religious affiliation:

Christianity

Muslim

Hinduism

Ancestral worship


Other (specify): \_\_\_\_\_

5. Economic status of the family:

Wealthy	<input type="checkbox"/>
Quite well off	<input type="checkbox"/>
Not very well off	<input type="checkbox"/>
Very poor	<input type="checkbox"/>

**Section B: Home-brewed alcohol as a public health problem**

**6. Identification of various methods and brewing recipes**

- 6.1 How do you prepare your home-brewed alcohol?
- 6.2 What do you put in your brews to ensure that it gives customers a 'sharp urge'?
- 6.3 What are your reasons for putting such toxic substances into your home-brewed alcohol?
- 6.4 Who introduced you to home-brewing of alcoholic beverages and what were the motives?
- 6.5 When did you start home-brewing alcohol beverages?

**7 Understanding the environment and conditions under which home-brewed alcohol is produced.**

- 7.1 Where do you make home-brewed alcohol?
- 7.2 How clean is the place where the brewing is done?

- 7.3 Are the equipment used for brewing often sterilized or are they only washed?
- 7.4 How conscious are you as the brewer about the environment under which you produce home-brewed alcohol?
- 7.5 Do you believe that the conditions upon which home-brewed alcohol is made are safe?
- 7.6 What can you do to improve the environment and condition under which home-brewed alcohol is produced?

Thanks

---

Mr. M.R. Manganyi

Researcher

## **ANNEXURE B: INTERVIEW SCHEDULE**

**UNIVERSITY OF LIMPOPO**

**Turfloop Campus**

**Department of Social Work**



**Department of Social Work**

**Private Bag x 1106**

**Sovenga, 0727**

**SOUTH AFRICA**

**Tel: 015) 268 2600**

**Fax: 015)268 2866**

**Email: [Masenyani.manganyi@ul.ac.za](mailto:Masenyani.manganyi@ul.ac.za)**

**Dear Respondent (Consumer of Home-brewed Alcohol)**

### **Semi-Structured Interview Schedule**

I am Masenyani Reckson Manganyi from the Department of Social Work in the University of Limpopo (Turfloop Campus). I am the Researcher **in Home-brewed alcohol as a public health problem in Mopani District of Limpopo Province.**

The research study is for me and for career persuasions. As part of the research study, I am expected to collect information from identified participants of this study of which you are one of them. I have chosen you to participate in the study because of your involvement in home-brewing of alcoholic beverages. The information that you provide will be kept confidential and will not be provided to anyone. I further reassure the participants that they will be protected from any kind of harm, be it physical, psychological and/or emotional. The session will take approximately one (1) hour. You are requested to be open and be honest as possible as you can in answering questions. You are also requested to give answers freely and provide information to the best of your abilities. Confidentiality will be preserved at all cost by the researcher. The researcher will be extremely vigilant in respecting your rights to privacy and self-determination.

You have:

- The right to refuse to be interviewed
- The right to refuse to answer any question
- Not be interviewed during mealtimes
- Not be interviewed for long periods

Thanking you in anticipation.

---

Mr. M.R. Manganyi

Researcher

**Section A: Demographic factors**

1. Age: \_\_\_\_\_

2. Gender:

Male

Female


3. Marital status:

Married

Never married

Separated

Divorced


Other (specify): \_\_\_\_\_

4. Religious affiliation:

Ancestral worship

Christianity

Hinduism

Islam


Other (specify): \_\_\_\_\_



5. Would you consider yourself?

Wealthy

Quite well off

Not very well off

Very poor


## Section B: Health and dietary aspects

### 6. Description of health and dietary behaviour of consumers of Home-brewed alcohol

6.1 How long have you been drinking home-brewed alcohol?

6.2 Has your health status deteriorated or improved since you started drinking it?

6.3 Have you ever thought that home-brewed alcohol might affect your health?

6.4 Do you eat before you drink?

6.5 What do you eat before you drink?

6.6 Do you consider what you eat before drinking a healthy diet?

6.7 Do you believe that consumers of home-brewed alcohol need to eat healthy food?

**7. Exploration of the sexual behaviour and conduct of consumers of home brewed alcohol**

- 7.1 Does home-brewed alcohol make you to lose touch with reality and yourself?
- 7.2 Do you remain objective and focused after drinking home-brewed alcohol?
- 7.3 Do you become care free or maintain control after consuming home-brewed alcohol?

**8. Exploration about a relationship between consumers of home-brewed alcohol and domestic violence**

- 8.1 Does home-brewed alcohol cause consumers to become violent and aggressive?
- 8.2 What are some violent things you have done or observe others do which you could attribute to home-brewed alcohol?
- 8.3 Does home-brewed alcohol cause you to fight or even assault your partner?
- 8.4 Did your drinking of home-brewed alcohol cause your relationship with your partner to improve to deteriorate?
- 8.5 Does home-brewed alcohol cause the consumers to batter or abuse their partners?

9. **Exploration of engagement in extramural activities (physical activities)**

9.1 How frequent do you take home-brewed alcohol?

Every day	
Twice a week	
On weekends	
Late in the evening after work	

9.2 Do you engage in physical activities?

Yes	
No	

Motivate your response

9.3 What kind of physical activity (ies) do you engage in?

Thanks

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Mr. M.R. Manganyi

Researcher

**XIENGETELO C: XITIRHISIWA XA KU HLENGETA VUXOKOXOKO**

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**Eka Muhlamuri (Muhluti wa byalwa bya xintu)**

***Xedulu ya inthavhiyu leyi nga kongomisiwa eka mbuyelo wo karhi***

Hi mina Masenyani Reckson Manganyi loyi a humaka eka Ndzawulo ya Vukorhokeri bya Vuxaka bya Vanhu (Social Work) eYunivhesiti ya Limpopo (Turfloop Campus).

Ndzi Mulavisisi wa vuxokoxoko bya loko **byalwa bya xintu byi ri xivangelo xa xiphigo eka rihanyu ra mani na mani exifundzheni xa Mopani lexi xi kumekaka exifundzheninkulu xa Limpopo.** Ndzavisiso lowu i wa mina n'wini na ku yisa emahlweni timhaka ta dyondzo. Tani hi xiphemu xa dyondzo ya ndzavisiso, ndzi languteriwile ku hlengeleta vuxokoxoko ku suka eka vanhu lava va khumbhekaka hi dyondzo leyi naswona n'wina mi wun'wana wa vona. Ndzi hlawurile n'wina ku nghenelela eka ndzavisiso lowu hi mhaka ya leswi mi hlutaka byalwa bya xintu. Vuxokoxoko lebyi mi nga ta byi nyika byi ta va xihundla naswona byi nge nyikiwi munhu wun'wana. Ndzi tlhela ndzi tshembhisa lava va nga ta nghenelela eka ndzavisiso lowu leswaku va ta sirheleriwa eka minxaniseko hinkwayo, ku nga va ku xanisiwa enyameni, emiehleketweni na/kumbe emoyeni. Mbhurisano wa ndzavisiso wu ta teka nkarhi wo ringana awara yin'we (1). Mi komberiwa ku ntshuxeka na ku hlamula hi ntiyiso loko mi hlamula swivutiso. Mi tlhela mi komberiwa ku nyika tinhlamulo mi ntshuxekile na ku nyika vuxokoxoko hi xitalu ku ya hi vutivi bya n'wina. Mulavisisi u ta tiyisisa xihundla xa mbhurisano wa n'wina. Mulavisisi u ta va na vurhonwana loko swi ta eku hlonipheni ka timfanelo ta n'wina ta ku va na xihundla na ku tinyiketela ka n'wina.

Mi na leswi landzelaka:

- Mfanelo ya ku ala ku vutisiwa swivutiso (Inthavhiyuwiwa)
- Mfanelo ya ku ala ku hlamula xivutiso xihl kumbe xihl
- Ku va mi nga vutisiwi swivutiso (ku inthavhiyuwiwa) hi nkarhi wa swakudya
- Ku va mi nga vutisiwi swivutiso (ku inthavhiyuwiwa) nkarhi wo leha

Ndzi khensa ntirhisano lowu languteriweke.

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Mr. M.R. Manganyi

Mulavisisi

## Xiyenge A: Vuxokoxoko lebyi khumbhaka vaakatiko

1. Malembe: \_\_\_\_\_

2. Rimbewu: Wanuna

Wansati


3. Xiyimo xa swa vukati: Tekile/Tekiwile

Ku nga tekanga/tekiwanga

Tharile


Swin'wana (Hlamusela): \_\_\_\_\_

4. Vukhongereri bya wena:

Vukreste

Vumuzileme

Vuhindu

Muphahlu


Byin'wana (Hlamusela): \_\_\_\_\_

5. Xiyimo xa swa timali (ikhonomi) xa ndyangu:

Ku fumiwile

Ka antswa

A ku antswi

Ku hluphekiwile ngopfu


**Xiyenge B: Byalwa bya xintu tani hi xivangelo xa  
xiphiqo eka rihanyu ra mani na mani**

**6. Ku lemukiwa ka maendlelo na switirhisiwa swo hluta byalwa bya xintu  
swo hambanahambana**

6.1 Xana mi byi sweka njhani byalwa bya n'wina bya xintu (Munqgombhoti)?

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6.2 Xana mi chela yini ebyalweni bya n'wina ku endlela leswaku tikhasimende ta  
n'wina ti pyopyiwa/nandziheriwa hi byalwa lebyi?

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6.3 Xana hi swihi swivangelo leswi swi endlaka leswaku mi chela swipyopyi sweswo pyopya swonghasi ebyalweni bya n'wina bya xintu?

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6.4 Xana i mani a nga mi dyondzisa/nghenisa eku hluteni ka byalwa bya xintu naswona xikongomelo xa ku endla tano a ku ri yini?

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6.5 Xana mi sungurile rini ku hluta byalwa bya xintu (Munqgombhoti)?

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**7 Ku twisisa mbangu na swiyimo leswi byalwa bya xintu byi endleriwaka eka swona.**

7.1 Xana byalwa bya xintu (Munqgombhoti) mi byi hlutela kwihi?

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7.2 Xana ndhawu leyi byalwa bya xintu byi hluteriwaka kona yi basile ku fika kwihi?

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7.3 Xana switirhisiwa leswi swi tirhisiwaka eku hluteni ka byalwa bya xintu swi basisiwa kangani hi swidlaya-switsongwatsongwana, kumbe swo hlantswiwa ntsena?

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7.4 Tani hi muhluti wa byalwa bya xintu, xana mi ti twa njhani hi mbangu/xiyimo xa laha mi hlutelaka kona byalwa bya xintu?

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7.5 Xana mi na ku tshembha ka leswaku laha mi hlutelaka kona byalwa ku hlayisekile ke?

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7.6 Xana mi nga endla yini ku antswisa mbangu na xiyimo xa laha mi hlutelaka kona byalwa bya xintu?

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Inkomu

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Mr. M.R. Manganyi

Mulavisisi

**XIENGETELO D: XITIRHISIWA XA KU HLENGETA VUXOKOXOKO**

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**rihanyu ra mani na mani exifundzheni xa Mopani lexi xi kumekaka  
exifundzheninkulu xa Limpopo.**

Ndzavisiso lowu i wa mina n'wini na ku yisa emahlweni timhaka ta dyondzo. Tani hi xiphemu xa dyondzo ya ndzavisiso, ndzi languteriwile ku hlengeleta vuxokoxoko ku suka eka vanhu lava va khumbhekaka hi dyondzo leyi naswona n'wina mi wun'wana va vona. Ndzi hlawurile n'wina ku nghenelela eka ndzavisiso lowu hi mhaka ya leswi mi nwaka byalwa bya xintu (munqhombhoti). Vuxokoxoko lebyi mi nga ta byi nyika byi ta va xihundla naswona byi nge nyikiwi munhu wun'wana. Ndzi tlhela ndzi tshembhisa lava va nga ta nghenelela eka ndzavisiso lowu leswaku va ta sirheleriwa eka minxaniseko hinkwayo, ku nga va ku xanisiwa enyameni, emiehleketweni na/kumbe emoyeni. Mbhurisano wa ndzavisiso wu ta teka nkarhi wo ringana awara yin'we (1). Mi komberiwa ku ntshuxeka na ku hlamula hi ntiyiso loko mi hlamula swivutiso. Mi tlhela mi komberiwa ku nyika tinhlamulo mi ntshuxekile na ku nyika vuxokoxoko hi xitalu ku ya hi vutivi bya n'wina. Mulavisisi u ta tiyisisa xihundla xa mbhurisano wa n'wina. Mulavisisi u ta va na vurhonwana loko swi ta eku hlonipheni ka timfanelo ta n'wina ta ku va na xihundla na ku tinyiketela ka n'wina.

Mi na leswi landzelaka:

- Mfanelo ya ku ala ku vutisiwa swivutiso (Inthavhiyuwiwa)
- Mfanelo ya ku ala ku hlamula xivutiso xihi kumbe xihi
- Ku va mi nga vutisiwi swivutiso (ku inthavhiyuwiwa) hi nkarhi wa swakudya
- Ku va mi nga vutisiwi swivutiso (ku inthavhiyuwiwa) nkarhi wo leha

Ndzi khensa ntirhisano lowu languteriweke.

---

Mr. M.R. Manganyi

Mulavisisi

**Xiyenge A: Vuxokoxoko lebyi khumbhaka vaakatiko**

1. Malembe: \_\_\_\_\_

2. Rimbewu:

Wanuna

Wansati


3. Xiyimo xa swa vukati:

Tekile/Tekiwile

Ku nga tekanga/tekiwanga

Hambanyisiwile

Tharile


Swin'wana (Hlamusela): \_\_\_\_\_

4. Vukhonger i bya wena:

Muphahlu

Vukreste

Vuhindu

Vuzilamu


Byin'wana (Hlamusela): \_\_\_\_\_

5. Xana u tivona u ri njhani?

U fumile

U antswa

U nga antswi

U hluphekile ngopfu


**Xiyenge B: Rihanyu na timhaka leti khumbhaka madyelo**

**6. Nhlamuselo ya mahanyelo/maendlelo ya vanwi va byalwa bya xintu loko swi ta eka rihanyu na timhaka leti khumbhaka madyelo**

6.1 Xana u na nkarhi wo leha ku fika kwihi u sungurile kunwa byalwa bya xintu Munqgombhoti)?

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6.2 Xana rihanyu ra wena ri vile njhani endzhaku ka loko u ta va u sungurile ku nwa byalwa bya xintu – U sungurile ku titwa u tiyile kumbe u sungurile ku vabyavabya?

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6.3 Xana u ze u swi ehleketa leswaku byalwa bya xintu byi nga va na mbuyelo wo biha eka rihanyu ra wena?

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6.4 Xana u rhanga u dya u nga se nwa byalwa ke?

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6.5 Xana u dya yini loko u nga se nwa byalwake?

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6.6 Xana u vona onge leswi u swi dyaka u nga se nwa byalwa i swakudya swo aka mirhi ke?

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6.7 Xana wa tshembha leswaku vanwi va byalwa bya xintu va fanela ku dya swakudya swo aka mirhi ke?

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**7. Nxopanaxopo wa mahanyelo/maendlelo ya vanwi va byalwa bya xintu loko swi ta eka timhaka ta masangu**

7.1 Xana byalwa bya xintu byi ku endla leswaku u ti rivala wena n'wini kumbe ku rivala timhaka ta nkoka?

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7.2 Xana u tshama u ri xileswi u nga xiswona na ku tiva leswaku u lava yini evuton'wini loko u nwile byalwa bya xintu ke?

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7.4 Xana a wa ha khathali hi nchumu kumbe wa swikota ku tilawula endzhaku ka ku nwa byalwa bya xintu ke?

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**8. Nxopanxopo wa vuxaka lebyi nga kona exikarhi ka vanwi va byalwa bya xintu na madzolonga ya le mindyangwini**

8.1 Xana byalwa bya xintu byi endla leswaku vanwi va byona va va na madzolonga, nkanu na vurhena?

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8.2 Xana hi swihi swilo swo fambelana na madzolonga leswi u nga tshama u swi endla kumbe u vona van'wana va swi endla leswi swi nga vangiwa hi ku nwiwa ka byalwa bya xintu?

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8.3 Xana byalwa bya xintu byi ku endla leswaku u lwa kumbe ku mbeyetela murhandziwa wa wena ke?

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8.4 Xana ku va u nwa byalwa bya xintu swi endlile leswaku vuxaka bya wena na murhandziwa wa wena byi ya byi tiya kumbe byi tsekatseka xana ke?

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8.5 Xana byalwa bya xintu byi endla leswaku vanwi va byona va sirhelela kumbe ku va xanisa swigangu swa vona ke?

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**9. Nxopanxopo wa ku tinghenelerisa eka migingiriko ya le mugangeni(migingiriko ya vutiolori)**

9.1 Xana byalwa bya xintu u byi nwa kangani?

Masiku hinkwawo	
Kambirhi evhikini	
Hi mahelo ya vhiki	
Namadyambu loko ndzi hetile ku tirha	

9.2 Xana wa ti nghenelerisa eka migingiriko ya vutiori ke?

Ina	
E-e	

Seketela nhlamulo ya wena

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9.3 Xana hi yihi migingiriku ya vutiori leyi u ti nghenelerisaka eka yona?

Inkomu

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Mr. M.R. Manganyi

Mulavisisi

## **ANNEXURE E: TREC CLEARANCE CERTIFICATE**