AN INVESTIGATION INTO THE NATURE AND EXTENT OF SUBSTANCE ABUSE AND PREVENTABLE DISEASES IN NONGOMA, KWAZULU NATAL: IMPLICATIONS FOR SOCIAL WORK

by

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DEDICATION

This study is dedicated to my wife *Grace Busie Ntombencane Mathe and to my late mother, Sibusisiwe Mathe. It* is also dedicated to the fields of Substance Abuse, Health and Welfare.

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SUMMARY

Health is defined by the World Health Organization as not merely the absence of disease or infirmity but as a state of complete physical, mental and social well being. In the concept of Social Health, ill-health is viewed as the interaction of a number of factors, some of which may appear to bear no direct etiological relationship to a morbid condition.

The study was primarily aimed at determining the nature and extent of alcohol and other drugs abuse and common preventable diseases in Nongoma, KwaZulu-Natal.

The objectives of the study were presented as follows:

- To study and review relevant literature pertaining to the historical background and socio-economic and political dimensions of alcohol and other drug use, misuse and abuse in South Africa.
- To conceptualize primary health care (PHC) within a developmental perspective as a theoretical framework for the study.
- To do situation analysis on drug related health and social problems among selected institutions and centres in Nongoma.
- To investigate the nature and extent of use of alcohol, marijuana and their relationship with T.B., HIV/AIDS and mental health among village communities of Nongoma.
- To formulate guidelines for an integrative, intersectoral prevention model of alcohol and other drug abuse and related preventable diseases for Nongoma based on the research findings.
- To make recommendations based on the findings of the current study.

Because of the focus of the study's emphasis on the accumulation of baseline information on the nature and extent of alcohol and other drug use, misuse, abuse and risks for increase in preventable diseases and related problems, a combination of the qualitative and quantitative methodological procedures was adopted for this study. A sample survey was conducted among patients by means of a structured questionnaire as the main data-collecting instrument. Semi-structured interviews were undertaken with key community informants from

government and private institutions in Nongoma. In addition, focus group discussions were held with departmental ward nurses at Benedictine Hospital, and personal interviews were conducted with experts and certain community leaders.

The direct and indirect effects of alcohol and other drugs (particularly-dagga/marijuana) have become one of the major causes of morbidity and mortality among patients on treatment for tuberculosis (TB) and other preventable diseases at Benedictine Hospital and its eleven satellite clinics, as well as among communities of Nongoma. It is particularly significant that alcohol and other drug abuse were found to be fairly high among patients who are still on treatment for TB and other preventable diseases. One of the major findings was the realisation that the problem of alcoholism among the rural communities of Nongoma is deeply embedded in the perception of alcohol (especially home brew beer) as food. This belief has been generalised to all types of alcohol. Change of these perceptions and attitudes is necessary and actually urgent, if substance abuse is to be prevented among high-risk groups, such as patients and young people in Nongoma.

To effectively address the problem of substance abuse in relation to preventable diseases in Nongoma, the study concluded that primary prevention programmes within a developmental framework need to be in place and implemented. However, for prevention programmes to be effective, various disciplines and sectors should be involved. Social workers, in collaboration with these role-players, must be able to identify the specific factors, conditions and situations that contribute to the development of social problems in Nongoma and then select actions and activities that will reduce or eliminate their impact. This conclusion is in line with one of the study's findings that Nongoma rural communities are experiencing a high rate of illiteracy, unemployment, substance abuse, preventable diseases and abject poverty.

On the basis of the major findings and conclusions of this study, guidelines for a primary health care model within a developmental framework have been formulated and recommended for consideration and implementation by the stakeholders in the rural area of Nongoma. Against this background, the study was able to achieve its aim and objectives.

KEY WORDS

1. Alcohol and other drug abuse (substance abuse)
2. Dagga/marijuana/cannabis
3. Primary health care
4. Health
5. Social problems
6. Preventable disease
7. Tuberculosis (TB) multidrug resistance- TB, (MDR-TB)
8. Mental illness (psychiatric syndrome)
9. Poverty
10. Community development

OPSOMMING

Gesondheid word deur die Wêreldgesondheidsorganisasie gedefinieer as nie net die afwesigheid van siekte of swakheid nie maar as die staat van algehele fisieke, geestelike en sosiale welsyn. In die konteks van sosiale gesondheid word swak gesondheid beskou as die interaksie van 'n aantal faktore, waarvan sommige skynbaar geen direkte etiologiese verband met siektetoestande het nie.

Die studie was hoofsaaklik daarop gerig om die verband te bepaal tussen die aard en omvang van alkohol- en ander dwelmgebruik en algemene voorkombare siektes soos in Nongoma, KwaZulu-Natal te ondersoek.

Die studie het die volgende doelwitte gehad:

- Om die literatuur oor die historiese agtergrond en sosio-ekonomiese en politieke dimensies van alkohol- en ander dwelmgebruik en -misbruik in Suid-Afrika te bestudeer en 'n oorsig daarvan te gee;
- Om primêre gesondheidsorg vanuit 'n ontwikkelingsperspektief as 'n teoretiese raamwerk vir die studie te konseptualiseer;
- Om 'n situasie-analise te doen van dwelm verwante gesondheis- en sosiale probleme in geselekteerde instellings en sentrums in Nongoma;
- Om die aard en omvang van die gebruik van alkohol en marijuana en hul verband met tuberkulose, MIV/VIGS en geestesgesondheid onder dorpgemeenskappe van Nongoma te ondersoek;
- Om riglyne vir 'n geïntegrerende, intersektorale voorkomingsmodel van alkohol- en ander dwelmmisbruik en verwante voorkombare siektes vir Nongoma te formuleer op grond van die navorsingsbevindings; en
- Om aanbevelings te maak gebaseer op die bevindings van hierdie studie.

Gegewe die studie se fokus op die versameling van basiese inligting oor die aard en omvang van alkohol- en ander dwelmgebruik en -misbruik en die gevaar van die toename in voorkombare siektes en verwante probleme, is kwalitatiewe en kwantitatiewe navorsingsmetodologie in hierdie studie gekombineer. Die hoof data-insamelingsinstrument was 'n steekproefopname onder pasiënte by wyse van 'n gestruktureerde vraelys. Semi-gestruktureerde onderhoude is gevoer met sleutelinformante van regerings- en privaat instansies in Nongoma. Daaby is fokusgroeponderhoude met departementele wyksverpleegsters by Benedictine Hospitaal gevoer en persoonlike onderhoude met deskundiges en sekere gemeenskapsleiers.

Die direkte en indirekte effekte van alkohol- en ander dwelmgebruik (veral dagga/marijuana) het een van die hoofoorsake geword van morbiditeit en mortaliteit onder pasiënte wat vir tuberkulose en ander voorkombare siektes by Benedictine Hospitaal en sy elf satellietklinieke, asook in die Nongoma-gemeenskappe, behandel word. Die bevinding is beduidend dat alkohol- en ander dwelmmisbruik taamlik hoog is onder pasiënte wat steeds behandeling vir tuberkulose en ander voorkombare siektes ontvang. Een van die hoofbevindings was dat alkoholisme in Nongoma diep ingebed is in die persepsie dat alkohol (veral tuis gebroude bier) voedsel is. Hierdie persepsie het verbreed na alle soorte alkohol. 'n Verandering in hierdie persepsie is dringend noodsaaklik om dwelmmisbruik onder hoërisikogroepe soos pasiënte en jongmense van Nongoma te voorkom.

Om die probleem van dwelmmisbruik en die onderlinge verband met voorkombare siektes in Nongoma op te los, moet daar primêre voorkomingsprogramme in 'n ontwikkelingsraamwerk beskikbaar wees en geïmplementeer word. Die voorkomingsprogramme behoort multidissiplinêr en multisektoraal te wees ten einde doeltreffend te wees. Maatskaplike werkers in samewerking met ander rolspelers moet die spesifieke faktore, toestande en situasies wat bydra tot die ontwikkeling van maatskaplike probleme in Nongoma identifiseer en dan optrede en aktiwiteite bepaal wat die impak daarvan sal verminder of uitskakel. In hierdie proses moet hulle rekening hou met die studie se bevindings dat Nongoma se landelike gemeenskappe 'n hoë vlak van ongeletterdheid, werkloosheid, dwelmmisbruik, voorkombare siektes en volslae armoede ervaar.

Op grond van die hoofbevindings en gevolgtrekkings van hierdie studie is riglyne vir 'n model vir primêre gesondheidsorg binne 'n ontwikkelingsraamwerk geformuleer en aanbeveel vir oorweging en implementering deur belanghebbendes in die landelike gebied van Nongoma. Gegewe hierdie agtergrond kan gestel word dat die studie se doel en doelwitte bereik is.

SLEUTELWOORDE

1. Alkohol- en ander dwelmgebruik (dwelmmisbruik)
2. Dagga/marijuana/cannabis
3. Primêre gesondheidsorg
4. Gesondheid
5. Maatskaplike probleme
6. Voorkombare siektes
7. Tuberkulose (TB), multigeneesmiddel-bestande TB (MGB-TB)
8. Geestessiekte (psigiatriese sindroom)
9. Armoede
10. Gemeenskapsontwikkeling

TABLE OF CONTENTS

Page

CHAPTER TWO: OVERVIEW OF SUBSTANCE ABUSE AND HEALTH RELATED PROBLEMS IN THE RSA

CHAPTER THREE: PRIMARY PREVENTION OF SUBSTANCE ABUSE AND PREVENTABLE DISEASES: AN INTEGRATED THEORETICAL FRAMEWORK

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

CHAPTER FIVE: MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

LIST OF ATTACHMENTS

LIST OF TABLES

Page

CHAPTER ONE

INTRODUCTION AND OUTLINE OF THE STUDY

1.1 INTRODUCTION

The current study explores selected preventable diseases and the extent to which they and drug abuse combine to create health and social problems. Drugs make the sick well and yet make the well sick. Drug abuse is a major problem facing the modern world. The United Nations (UN) accordingly proclaimed the period 1991-2000 the UN Decade against Abuse. The global seriousness of the drug problem has also resulted in the 26th June being declared an annual day against drug abuse and illicit trafficking. It is noteworthy that in this study, the researcher has looked at drugs in general but with a particular emphasis on alcohol. Marijuana (cannabis) has also featured prominently, as it too, is a commonly abused drug in the rural areas of KwaZulu-Natal, where Nongoma is situated. Substance abuse is used to refer to alcohol and other drug abuse. These two drugs will at times be discussed separately to emphasise their specific extent and impact. In the Nongoma region alcohol is the drug that, historically, is popularly abused in this region.

Since alcohol is a licit drug that is easily available and frequently used at social events, it is the most commonly abused drug in South Africa, as in most other countries. McVeigh and Shostak (1978:18) and Plant and Plant (1992:4), remark that people abuse alcohol because they want to be sociable and this kind of drinking is socially reinforced and rewarded. Globally, 140 million people are suffering from alcohol dependence. Alcohol takes a heavy toll. It adversely affects public and private life with traffic fatalities and injuries, home fires, drownings, suicides and violent crimes. It also results in debt problems, ruined careers, divorce, birth defects and children with permanent emotional damage (Brundtland 2001). Conservative estimations indicate that there are over one million alcoholics in South Africa. These statistics are, however, outdated since they relate to the situation in the late 1980s to early 1990s. The current estimates could be much higher. There is no systematized way of keeping a register of alcoholics in this country.

Many alcoholics are viewed merely as a social nuisance and are consequently ignored by friends and kin who are unaware that alcohol abuse is a social illness with medical complications. The social and individual problems are often compounded by the medical complications that accompany alcohol abuse. Many patients who abuse alcohol also suffer from tuberculosis (TB). They drink alcohol and smoke marijuana along with their prescribed drugs, thus rendering the costly drugs administered for treatment ineffective. Schoeman, Parry, Lombard and Klopper (1994:372) argue that TB patients are seldom treated for alcohol abuse and drug dependence. Frequently AIDS victims are issued with death certificates that indicate TB or pneumonia as the cause of death. Interestingly, TB is identified as the most common notifiable infectious disease in South Africa. Statistical records and registers on the extent and nature of the problems are available in most clinics and hospitals. Sociological studies reveal that TB is more prevalent in low-income, densely populated housing areas. These settings are also often associated with high rates of alcoholism. The conditions mentioned above are prevalent in informal settlements and the rural areas of the RSA.

According to Thio (1988: 16), some medical scientists believe that alcoholism is caused by physical problems such as nutritional deficiencies, glandular disorders, innate metabolic dysfunctions and malfunctions of the central nervous system. They argue that each of these biological factors causes an irresistible craving for alcohol that results in alcohol abuse and alcoholism. In rural areas, such as Nongoma, which are characterized by poverty alongside inadequate health and welfare resources, people tend not to be able to meet their basic needs and so often become victims of habit-forming substances.

An extensive immunological literature study has revealed that alcohol has profound effects on the cell-mediated immune function (Macgregor, 1986). Chronic ethanol consumption is known to increase susceptibility to infectious diseases and, in particular, classical tuberculosis and bacterial pneumonia (Bomalaski and Phair, 1982:49 in Jacobson 1992). Numerous studies have noted a direct association between alcoholism and pulmonary tuberculosis (Jacobson, 1992:23). Such apparent susceptibility to TB infection among alcoholics, especially those who are homeless or indigent, can be attributed both to biological and to socio-economic behavioural factors. Kassim, Sassan-Morokro and Ackah (1995) maintain that TB and HIV pandemics are closely intertwined, and that when the paths of

these two diseases cross, the results are disastrous. This issue is discussed more fully in Chapter 2.

The current study aims to build a theoretical foundation upon which to present the accumulated information of various individual researchers about the contentious issue of substance abuse. Seminara, Watson and Pawloski (1989:383) cite other findings indicating that acute and chronic ethanol intoxication develops a susceptibility to infection. Although the focus of the study is on alcohol abuse and TB, cognisance has been taken of other related diseases, such as HIV/AIDS and associated social problems. This study intends to demonstrate the extent to which alcohol abuse and these diseases interfere with the healing process.

1.2 MOTIVATION FOR THE CHOICE OF SUBJECT

The author's interest in the field of preventable diseases (particularly TB) and drug abuse (particularly alcohol and marijuana) arose out of concern over the high number of his clients who suffered from both TB and alcoholism. The futile exercise of trying to help such clients as well as the waste of resources, called for a re-thinking of the strategies used by the helping professions. Effective strategies, can however, only be formulated when the problem to be solved is well understood. Hence the need for an exploratory study to reveal the extent and nature of the problem and to involve the target group in exploring possible solutions to their own problems.

The significance of this study is in line with Grinnell's (1981:35) contention that "a research topic results from a critical review of professional social work activities and the end to which they are directed". Grinnell (1981:35) explains that because of the orientation of the practitioner-researcher, topics for social work research should come from day-to-day activities and intervention. The researcher's background and experience is in the field under investigation.

The author has worked with drug abusers for more than 20 years in the course of which he has witnessed the fatal link between alcoholism and TB. This fatal link occurs in the three

provinces. KwaZulu Natal (where he was born and still resides), Gauteng, (where he has been an employee of the South African National Council on Alcoholism and Drug Dependence) (SANCA), and the Western Cape (where he registered for his Masters degree at the University of Cape Town). His practical work was done at Brooklyn Chest Hospital, in Cape Town. He conducted a case study with TB patients at the hospital in 1982.

The results revealed that nine out of ten patients admitted that they not only consumed alcohol but were also dependent on it. Six of these patients received a government disability grant from the Department of Welfare. In addition the Department of Health bears the cost of medication which is rendered ineffective through substance abuse. This shows the economic impact of drug abuse on the abuser as well as the State.

At the time of the study, the author was an employee of the South African Council on Alcoholism and Drug Dependence (SANCA). Daily he encountered TB patients who had problems of substance abuse and dependence and who were attending treatment programmes at health clinics and/or hospitals. This state of affairs motivated the researcher to carry out research on: '*The relation between substance abuse and preventable diseases in Nongoma-KwaZulu-Natal: a social work perspective.*'

The motive for the study was further encouraged by the Rapid Situation Analysis (RSA), which covered substance abuse and related problems. The study was undertaken on behalf of the United Nations Drug Control and Crime Prevention (UNDCP) in 1999. This project was embarked on in Soweto by a field survey team under the leadership of the author/researcher. Mathe (1999: 24) revealed the extent of drug abuse among the poor. This signalled the need for an in-depth study on the problem of drug abuse and related problems such as crime, unemployment, poverty, ill health and accidents.

Further motivation for the choice of study arose from the personal experience of the researcher as a social worker in health care in the Nongoma district. The researcher's career started at the Benedictine Hospital in 1978 where he had already established links between alcohol abuse and TB among a significant number of patients. This was given further credence from the reports of the Village Health Workers (VHWs) that numerous TB patients

were abusing alcohol while still on treatment as outpatients. This is why Nongoma was chosen as a research area. The VHWs played an important role in identifying the TB patients in the villages, especially those who were abusing alcohol and drugs. Grinnell (1981: 35) believes that research topics can also be generated by examining a single incident or a series of similar incidents from the perspective of expected outcomes, stated goals and objectives, or by studying the effects of applying a guiding principle or theory.

As already stated, the researcher's special interest and extensive experience in the field of alcohol and drug abuse had a bearing on the choice of subject for the study. After he left the KwaZulu government in 1987 and joined the South African National Council on Alcoholism and Drug Dependence (SANCA) in 1989, the researcher has been working mainly in the field of alcohol and other drug abuse. This has sharpened his insight concerning the implications of such abuse for communities on their general health and social problems. In particular rural areas are cause for concern. Rural areas are largely neglected. Alcohol and other drug abuse need urgently to be addressed so as to prevent an escalation of health hazards and the resulting chaos.

1.3 STATEMENT OF THE PROBLEM

National research findings and clinical reports point to a general upsurge of alcohol and drug-related problems among South Africans in urban as well as rural areas, but especially in traditionally African communities (Rocha-Silva 1997:1). It is precisely because of the escalation in these communities that welfare and health agents are increasingly emphasizing the need for primary prevention services. Schoeman *et al.* (1994) state that a spectrum of preventable diseases has been linked to alcohol abuse and drug dependence. It is, however, not implied that alcohol abuse and drug dependence cause these preventable diseases. What is meant is that alcohol abuse, in particular, has been identified as a common denominator in various diseases.

Alcohol and alcohol-related problems affect all sectors of the South African society. The total estimated cost to the South African economy of these problems in terms of lost productivity, damage to health, on-the-job accidents, crime and family disintegration exceeds one billion

Rand annually (Van der Burgh 1992). The current study highlights the negative implications for the economy of the country and the extent to which drug abuse touches on the lives of the abuser and innocent victims, such as his/her family members, especially spouse and children, who are all caught up in the poverty cycle. The latter factor is identified as one of the main co-factors contributing to increased levels of alcoholism and preventable diseases.

Van der Burgh (1992), in an unpublished paper on facts and statistics, mentions that during the early 1990s, South Africa was ranked fourth in the world in respect of malt and sorghum beer consumption. Van der Burgh's study concentrated only on urban areas. If rural areas were also included, South Africa could conceivably have been ranked first in the world in respect of such consumption. The paucity of researched information in the rural areas needs to be rectified. The current study is an attempt to do so.

According to De Miranda (1991), prevention workers should look at the alcohol and other drug problems affecting Africa against the background of the following factors:

- poverty
- malnutrition
- high incidence of TB
- high incidence of infant mortality
- overwhelming spread of AIDS
- unemployment
- sociological chaos—psychiatric syndromes.

The prevalence of these conditions makes a mockery of the World Health Organization's (WHO) maxim of "Health for All in the Year 2000". This noble goal was conceived with good intentions so it is regrettable that the re-emergence and increase in the number of life-threatening diseases is cause for serious concern.

All the problems mentioned by De Miranda have been observed and studied in urban areas. These areas are easily accessible to researchers who find it cost effective to conduct studies where there is infrastructure such as contactable addresses and treatment centres. Rural areas are neglected because of their inaccessibility and lack of infrastructure. South African

researchers are also inclined to refer to informal settlements located in urban areas as rural areas, thus perpetuating the lack of research in deep rural areas. Researchers have to be courageous and venture into the rural areas so as to discover information that will promote the provision of the necessary resources.

TB is said to be the number one infectious disease killer. Ellner, of Case Western University, reports that TB annually kills two to three million people worldwide. The WHO estimates that a third of the world population is currently infected (AIDS Bulletin, 1997). Ellner adds that while there is a 10% risk of developing active TB during an individual's lifetime, this figure increases to an annual risk of 8% in immuno-compromised patients. The report that TB accounts for 40% of deaths in HIV-positive patients highlights the effects of the convergence of diseases.

Alcohol misuse, in particular, has been associated with the development of disease, associated problems, relapse and multi-drug resistance. Renewed worldwide interest in TB has focused on the occurrence of bacterial resistance to the major anti-TB drugs (Parry and Schoeman: 1994:372). Prim, Wohlrabe, Folle and Vrereck (1994), in Parry and Schoeman, emphasize the effects of chronic alcoholism on tuberculosis treatment. Parry and Schoeman (1994:372) state that high rates of alcohol misuse are found in most population groups in South Africa. In a household survey conducted in Mamre in the Western Cape (a community of approximately 5 000 persons), a positive association was found between TB and alcohol related problems.

Alcohol use and misuse significantly inhibits cell-mediated immunity and also compromises the body's defences. Alcoholism, along with other diseases associated with impaired cell-mediated immunity (e.g. HIV infection), increases a person's susceptibility to active TB infection as well as the reactivation of latent diseases. However, researchers have not yet established whether alcohol consumption itself, or the associated liver damage and malnutrition, is primarily responsible for the impaired immunity of alcoholics (Flynn and Bloom 1996).

Any increase in alcohol and drug-related problems will intensify the burden on health and welfare services in South Africa and impede the current government's attempts at improving the quality of life of all South Africans, especially those in rural areas. Appropriate and cost-effective preventive programmes, particularly in rural areas, are urgently needed. However, the detailed information required for mobilizing such programmes is lacking.

In the Nongoma district the villagers believe that alcohol and other drug abuse poses the most serious threat to the already unstable family system. The HIV/AIDS threat in KwaZulu-Natal is well known in South Africa. Everyone fears this disease, yet people prefer to avoid warning one another on the danger of drug abuse for fear of interfering. To abuse drugs is, to an extent, also a choice that each person may make to his/her own peril. Local concoctions are brewed and have become a source of income in rural areas where unemployment is rife. This also poses a serious problem that could be prevented if people were enabled to exercise their choice appropriately. Alcohol and other drug abuse is a threat that undermines the entire fabric of the rural communities. This came out strongly during the feasibility study phase. Home-brewed alcohol concoctions have become a source of income for a huge number of unemployed rural women. In addition, small marijuana plantations help to supplement other illicit substances that are cultivated for the purposes of making ends meet.

Room (in Molamu 1988:117) points out that many patients with alcohol psychoses or withdrawal symptoms fail to relate their symptoms to alcohol. Instead they attribute them to witchcraft or sorcery, spiritual possession and other supernatural causes. Such beliefs tend to be reinforced by traditional healers. Molamu (1988:89) casts light on alcohol related morbidity and mortality, and emphasizes the importance of documenting relevant statistical data in order to obtain a provisional picture of the magnitude of the problem. It is widely accepted that various health problems also constitute indices of alcohol abuse (Plant, 1980:249). These include liver diseases, particularly cirrhosis of the liver, diseases of the nervous, gastrointestinal and respiratory systems, heart and vascular diseases, cancers, metabolic and immune system disorders, endocrine disorders, nutritional deficiencies, poisoning and injuries from motor accidents. They are perceived as being closely related to the overall increase in alcohol consumption by the population.

In the National Drug Master Plan document, (1999:1) President Mandela, in his opening address to Parliament in 1994, specifically singled out alcohol and drug abuse among social pathologies that need to be combated. He says alcohol and other drug abuse (hereafter referred to as substance abuse) is a major cause of crime and, poverty. It reduces productivity and causes unemployment, dysfunctional family life, political instability, the escalation of chronic diseases such as AIDS and tuberculosis (TB), injury and premature death. It's sphere of influence reaches across social, racial, cultural, language, religious and gender barriers and directly or indirectly, affects everyone. Substance abuse is a common factor in a wide variety of health and social problems. What is disturbing though, is the fact that although the substance abuse problem is discussed and defined in detail what people understand amounts to the tip of an iceberg. Srinivasan (1977:105) puts it succinctly: "What the individual sees above the water is the small and easily defined the formal. It is what is not seen, the much larger mass of the organization which lies hidden which can break all too easily and cause a shipwreck."

To reiterate, poverty is one of the main co-factors which tends to increase the level of preventable diseases, including alcoholism. The Daily Monitor – Editorial, 2000, November 6, paints a gloomy picture of the traditional rural poor masses. It points out that the vaunted African extended family system is reeling from unprecedented rates of untimely deaths. There are now many orphans. Communities with endemic poverty should expect an upsurge of HIV/AIDS and TB. HIV and TB infection will exacerbate existing conditions. The Editorial adds that the piggyback effect of preventable diseases' virus on adverse socioeconomic and environmental factors is as deadly as the direct medical effects. Flynn and Bloom (1996:1) state that numerous studies have confirmed a direct association between alcoholism and pulmonary tuberculosis. Jacobson (1992:39-41) explains that such apparent susceptibility to TB infection among alcoholics, especially those who are homeless or indigent, can be attributed both to biological and to social and behavioural factors.

In rural areas such as Nongoma, it's now becoming clear that the problem is far greater than originally imagined. Little is being done in terms of comprehensive prevention programmes. All that is available at present is a small SANCA Alcohol and Drug Help Centre, whose services and resources fall far short of being a viable facility. To make matters worse, the

centre is under- utilized by the local communities, as hospital nurses and doctors rarely refer patients to this facility. Recently, however, SANCA was approached by the health authorities in Nongoma-KwaZulu-Natal to set up a cost-effective alcohol and other drug-related preventive programme in the area. Through this initiative, the basis was laid for developing similar programmes in other rural areas of KwaZulu-Natal. The study findings enabled the researcher to propose guidelines to promote such an accessible preventive primary health care and community programme. Since the VHWs assisted the researcher during the research process, the guidelines can be utilised by them when they put these proposals to the effect. This means that they will be motivated to mobilize the local villagers and make them aware of the services available at the SANCA – Nongoma Alcohol and Drug Help Centre. The villagers themselves, will be prepared to engage in a community education programme about alcohol and other drug abuse, TB and other preventable diseases such as HIV/AIDS. The involvement of VHWs in the research process in their respective villages will help to create awareness on the dangers of using, misusing and abusing substances amongst patients. Flynn and Jacobson (1992: 41) argue that alcoholics may be unlikely to cooperate with treatment if they perceive medical staff as a threat to their drinking.

To summarize then, the role played by substance abuse in complicating and compounding the nature and extent of preventable diseases, especially TB, and social problems among patients undergoing treatment and the community, is significant.

1.4 AIM AND OBJECTIVES OF THE STUDY

1.4.1 Aim

The study was aimed at investigating the nature and extent of substance abuse and preventable diseases in Nongoma, KwaZulu Natal.

Objectives

The objectives of the study were:

- to study and review relevant literature pertaining to the historical background and socio-economic and political dimensions of alcohol and other drug use, misuse and abuse in South Africa
- to conceptualize primary health care (PHC) within a developmental perspective as a theoretical framework for the study
- to do a situation analysis on drug related health and social problems among selected institutions and centres in Nongoma
- to investigate the nature and extent of use and abuse of alcohol, marijuana and their relationship with T.B., HIV/AIDS and mental health among village communities of Nongoma
- to formulate guidelines for an integrated, intersectoral prevention model of alcohol and other drug abuse and related preventable diseases for Nongoma, based on the research findings
- to make recommendations based on the findings of the current study.

1.5 ASSUMPTIONS AND HYPOTHESIS

De Vos *et al.* (1998:115 - 116) states that research always commences with one or more questions or hypotheses and distinguishes as follows between research questions and hypotheses: "Questions are posed about the nature of real situations while hypotheses are statements about how things can be". Bless & Higson–Smith (1995:37) explain that problems are questions about relations among variables and hypotheses are tentative, concrete and testable answers to such problems. According to Kerlinger (in De Vos *et al.*, 1998:116) a hypothesis is a statement between two or more variables that are measurable.

The research design determines whether a study will formulate research questions and or a hypothesis. Due to the explorative and descriptive nature of this study, the researcher formulated research questions as well as a hypothesis.

The research questions which guided the researcher and provided focus and delimitation to the study were:

- Can the impact of alcohol and other drug abuse be ignored if diseases influenced by it (e.g. and HIV/AIDS) are to be treated effectively?
- Are alcohol and other drug abuse both the cause and effect of most problems that assail the poor in rural settings? These problems include crime, violence, accidents, rape, malnutrition, TB and HIV/AIDS.
- Are the (deep) rural people more at risk concerning the consequences of alcohol and other drugs as related to health and social problems due to lack of adequate and appropriate resource centres?

The hypothesis for the study was as follows:

The nature and extent of substance abuse and preventable diseases in Nongoma will determine guidelines for primary health care applicable to the community context.

1.6 RESEARCH METHODOLOGY

1.6.1 Research Approach

Parahoo (1997:143) states that research methodology describes all the strategies, including methods of data collection adopted by the researcher to answer the research questions or test the hypothesis. Here the researcher indicates the approaches that were followed in conducting this type of study.

De Vos and Schulze (2002:79) point out that at present there are two well-known and recognised approaches to research, namely the qualitative paradigm and the quantitative paradigm.

The quantitative paradigm is positivistic, which takes scientific explanation to be nomothetic (based on universal laws). Its aim is to measure the social world objectively, to test hypotheses and to predict and control human behaviour. A quantitative study may be defined, according to de Vos and Schulze (2002:5), as an inquiry into a social or human problem based on testing a theory composed of variables, measured with numbers and analysed with statistical procedures in order to determine whether the predictive generalisations of the theory hold true.

Fouche and Delport (2002:79) mention the contrast between the two paradigms. They argue that the qualitative paradigm stems from an anti-positivistic, interpretive approach which is idiographic and thus holistic in nature. It aims mainly to understand social life and the meaning that people attach to everyday life. The qualitative paradigm in its broadest sense refers to research that elicits participant accounts on meaning, experience or perceptions. It also produces descriptive data in the participants own written or spoken words. The qualitative research is therefore an understanding (verstehen) rather than explanation, a naturalistic observation rather than controlled measurement and the objective exploration of reality from the perspective of an insider as opposed to an outsider perspective which is predominant in the quantitative paradigm. The current study has made use of both research paradigms .

Neuman (2000), in De Vos (2002:341-342), sheds light on the concept of triangulation as follows: "Surveyors and sailors measure distances between objects by making observations from multiple positions. By observing something from different angles or viewpoints, they get a fix on its true location. This process, called triangulation, is used by both quantitative and qualitative social researchers. De Vos (2002:342) points out that triangulation of method means mixing qualitative and quantitative styles of research and data. Most researchers develop expertise in one style, but the two methods/styles have different complementary strengths since there is only partial overlap. A study using both is fuller or more comprehensive.

According to Creswell (1994) (in De Vos, 1998:360) there are three models of combination. The first is a *two-phase model*, in which the researcher conducts a qualitative phase of the

study and a separate quantitative phase of the study. This author calls the second model, the *dominant-less-dominant design* in which the researcher presents the study within a single, dominant paradigm with one small component of the overall study drawn from the alternative paradigm. In the third model, the *mixed methodology design*, aspects of the qualitative and quantitative paradigm would be mixed at all or any methodological steps in the design. Duffy (1993) (in De Vos, 1998:359) refers to methodology triangulation as the use of two or more methods of data collection procedures within a single study. The combination of the two approaches of qualitative and quantitative research can be problematic due to the fact that the research can be expensive, time-consuming and lengthy. It is the opinion of the researcher that a mixed methodology approach is justified in terms of the richness of data.

De Vos (2002:366) explains that the mixed methodology design model represents the highest degree of mixing paradigms of the three designs mentioned above. The chosen and preferred design is because, as pointed out by De Vos (2002:366-367), the researcher would mix aspects of the qualitative and quantitative paradigm at all or many methodological steps in the design. The paradigms may be mixed in the introduction, in the literature review, use of theory, in the statement of purpose and also in research questions. The overall design best mirrors the research process of working between inductive and deductive models of thinking in a research study.

1.6.2 Types of research

Bailey (1994:24) classifies research broadly as pure (also referred to as basic research) and applied research, and adds that pure research may or may not have practical applications to social problems in the future or present time. According to Fouché and De Vos (1998:69) basic research is undertaken when the research goal is to add to the knowledge base of the social work profession.

Applied research is conceptualised by Rothman and Thomas (1994) (in Fouché & De Vos, 1998:69) as intervention research and they distinguish between three main types of intervention research as Intervention Knowledge Development, Intervention Knowledge

Utilization and Intervention Design and Development. These types are all directed towards providing possible solutions to practical problems.

Thomas (1981), in De Vos (2002:394), states that developmental research denotes the development of a technology, or rather a technological item, essential to a profession such as medicine, nursing, psychology or social work. This research model developed because of the need of professions like social work for a technology, as found in engineering, medicine and all other fields dealing with applied and practical matters Thomas (1981), in De Vos (2002:394). In one of his earlier explanations of his developmental research and utilisation model, termed DR&U at the time, Thomas (1981) in De Vos (2002:394), argues that social work research has traditionally been directed primarily at what has come to be known as knowledge development and that this model of research is often referred to as the behavioural science model, because its objective is to make contributions to the knowledge of human behaviour. Its objectives are exploratory, descriptive or explanatory, and its goal is pure or basic research, but also, in some instances, some form of applied research.

Grinnell (1988:18) distinguishes between the goals of pure and applied research, "The goal of pure research studies is to develop theory and expand the social work knowledge base. The goal of applied research studies is to develop solutions for problems and applications in practice. When research results are of immediate use to practice, it is known as applied research (Grinnell, 1988:52). Arkava & Lane (1983), in De Vos (1998:8) see applied and pure research as complementary and state that the advancement of knowledge and the solution of problems are both scientific necessities. Bailey (1994:26) affirms that the ultimate goal is a study that is helpful in solving social problems (applied research study) and at the same time makes a valuable contribution to the theoretical social-science literature (pure research).

Applied research with a development focus was conducted in this study. In this study the relationship between the nature and extent of alcohol and other drug abuse and common preventable diseases, in particular TB, and their impact on patients, families and the community were investigated. In doing so the knowledge base that was developed from the literature study and the research findings, was utilised to formulate practical guidelines for a

prevention model of substance abuse and related preventable diseases in Nongoma. This reflects the development focus of the research.

1.7 RESEARCH DESIGN

Research design entails the collection, arrangement and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. According to Mouton and Marais (1988:32), a research design refers to the arrangement of conditions for both the collection and analysis of data in a manner relevant to the research purpose with economy of procedure. Research design is usually dealt with under a broad classification according to the level of knowledge provided by the study plan. Thyer (1993) in De Vos (1998:77) defines a research design as a "blueprint" or detailed plan for conducting a research study, i.e. operationalizing variables so that they can be measured. The design entails selecting an appropriate sample to study, collecting data as a basis for testing hypotheses and analysing the results. Grinnell (1988:199) states that a research design can be defined as an experiment that helps the researcher to ascertain if there is a relationship between one variable and another. This helps the researcher to discover within a reasonable degree of certainty whether one variable causes another. Every research study uses some form of research design.

Sellits, in Mouton and Marais, (1990) defines the research design as the sequence in which procedures for collecting and analyzing data promote the research purpose. In addition, Grinnell (1988: 225) states that the researcher is only concerned with building a foundation of general ideas and tentative theories that can be explored with more precise and more complex research designs. McKendrick (1987:256) clarifies it all by stating that a research design is an overall plan or strategy by which questions are answered or hypothesis is tested. A research design provides answers to questions such as, what are the means to be used in obtaining all essential data. There are various types of research designs available. These are descriptive historical, exploratory, experimental and explanatory design.

Babbie (1998:91) points out that exploratory studies are quite valuable in social scientific research. They are essential whenever a researcher is breaking new ground, and they can

almost always yield new insights into a source of grounded theory. Grinnell (1988:220) states that the exploratory study was applicable where very little was known about the aspects of the problem. Mouton and Marais (1990:43) cite Selltiz *et al.* (1965), when they emphasise three methods by means of which exploratory research may be conducted. These are:

- a review of related social science and other pertinent literature
- a survey of people who have had practical experience of the problem to be studied
- an analysis of "insight-stimulating" examples

As already stated, exploratory studies usually lead to insight and comprehension rather than the mere collection of accurate and replicable data. These studies frequently involve the use of in-depth interviews, the analysis of case studies and the use of other informants. Finally Babbie (1998:91) explains that the chief shortcoming of exploratory studies is that they seldom provide satisfactory answers to research questions, though they can hint at the answers and can give insights into the research methods that could provide definitive answers.

With regard to descriptive studies, Babbie (1998: 91-92) explains that a major purpose of many social scientific studies is to describe situations and events. The researcher observes and then describes what was observed. Because scientific observation is careful and deliberate, scientific descriptions are more accurate and precise than causal ones. The author further elaborates that many qualitative studies aim primarily at description. Mouton and Marais (1990:43) argue that the spectrum of descriptive studies includes a large variety of types of research. On the other hand, it is possible to overemphasize the in-depth description of a specific individual, situation, group, organization, tribe, sub-culture, interaction, or social object. Mouton and Marais (1990: 43) point to the fact that there is a distinction that may also be drawn between descriptive studies with a conceptual interest and descriptive studies with a more general interest. This distinction is related to the distinction between qualitative and quantitative research. The two authors finally mention that the description of phenomena may also range from a narrative type of description (as in historical analysis) to a highly structured statistical analysis. These include, among others, the use of a systematic classification of variables such as frequency tables, arithmetical means, medians, cross tabulations and so on.

This is in contrast to explanatory studies, which generally attempt to explain a social phenomenon by specifying why or how it happened.

As already indicated, the research design that was used for this study was exploratory-descriptive. According to Arkava and Lane (1983:190): "This sort of investigation becomes necessary when a poorly defined problem confronts the practitioner. Often, he or she initially possesses little objective information about the nature of a problem and possible factors influencing it." Exploratory and descriptive designs help to develop a better insight into the extent of the problem, its causes and nature. The researcher chose this combined design because it provides satisfactory answers to research questions. Rubin and Babbie (1993) state an exploratory design, serves the purpose of examining a new interest and to test the feasibility of undertaking a more careful study. Grinnell (1988:220) affirms that the exploratory design is applicable where very little is known about the problem. The deliberate combination of exploratory and descriptive studies has helped to clarify the research procedure. An exploratory study helps also to determine priorities for future research and to develop new hypotheses about an existing phenomenon.

1.8 RESEARCH PROCEDURE AND STRATEGY

1.8.1 Pilot study

Strydom (in De Vos 1998:179) cites Huysamen (1993:205), who views the purpose of a pilot study as an investigation of the feasibility of the planned project and to bring possible deficiencies in the measurement procedure to the fore. He also cites Babbie (1998:179) who points out the differences between pre-tests and pilot studies. He describes the testing of one or more aspects of a research topic, for example the questionnaire or programme for the analysis of the data, as a "miniaturised walk through the entire study design". He goes on to say that the term "pilot study" is the most appropriate and comprehensive for identifying all four aspects indicated above. Pilot studies are becoming increasingly standard practice in research.

In this research, a workshop was held with 15 clinic nurses which assisted the researcher with the content of the questions for the questionnaire. The main objective of the workshop was to assess the suitability of the questionnaire and to adjust it if necessary.

According to Bless and Higson-Smith (1995:43), it is often very useful to assess the feasibility of a research project, the practical possibilities for carrying it out, the correctness of the concepts, adequacy of the method and measurement instrument by doing a pilot study. The researcher used a pilot study as a way of involving the stakeholders and to provide an opportunity to evaluate the questionnaire and make any required changes.

The pilot test revealed that some nurses needed further orientation and induction in administering the questionnaire. The researcher organised workshops for this purpose.

1.8.2 Literature review

The purpose of a literature study is concisely explained by Turney and Robb (1971:55) as "The major purpose for reviewing the literature is to demonstrate the relationship between the completed research and the topic under investigation." Arkava and Lane (1983) maintain that a literature study improves understanding of the topic, supplies information on the importance of the endeavour and provides the basis for the methodology to be used. Finally, Ary *et al.* (1985: 369) state that a literature study paves the way for the hypothesis of the proposed research.

A literature review:

- demonstrates that the author of the proposed study has reviewed the available literature
- demonstrates similarities and differences between the proposed study and past research findings of similar studies
- discusses how the proposed investigation will contribute to the knowledge base of the social work profession
- supports and interacts with the conceptual framework
- demonstrates the reasons for selecting a particular method.

The researcher was able to consult and utilise a variety of literature. This comprised books, journals, internet, reports, newspapers articles, theses and reports and information gathered from the researcher's work experience.

1.8.3 Consultation with experts

The rationale for consulting experts is aptly explained by De Vos (1998:180). She cites Cilliers (1973) who, argues: "Since the field of social work is already so broad, people automatically specialize. Thus we find an increasing number of persons who have been trained in a specialized area, who have undertaken research or who have been active for many years in that specific area. It is therefore most valuable to prospective researchers to utilize these resources." However Strydom, in De Vos (1998:180), warns against being over zealous in accepting all that is said by the experts, as they do not necessarily shed more light on a subject. Experts may further complicate the conceptualization of a problem and this can lead to confusion in the mind of the researcher. The contributions of experts do not necessarily imply advantages for the prospective researcher. Prospective researchers should already have their ideas in place and should have progressed some distance with the literature study before they consult the experts. Cilliers (in De Vos 1998:180) suggests that the investigator should be selective in his/her choice of experts. Most prospective researchers are already aware of certain experts whom they can contact. The consultants who were approached by the researcher motivated him to undertake the current investigation as he would be able to contribute invaluable qualitative data to this inexhaustible field of study. Cilliers (1973), as cited in De Vos (1998:181), adds a positive note toward the use of experts, as he points out that: "Tapping the experience of experts usually offers many more advantages than disadvantages, and therefore this aspect should be encouraged as part of the pilot study."

In this regard the following experts were initially consulted:

- Professor Prozesky, Medical School Community Health Department, University of Pretoria. He is one of the founder members of the Village Health Workers' programme in KwaZulu-Natal at the Manguzi Hospital in the Ingwavuma District. Since the study has made use of VHWs to gather data, it was proper and essential to consult with him on this matter. The consultation was helpful in confirming that the use of Village Health Workers in participative research would add value to the study:

- Dr Louis Molamu, Department of Sociology, University of South Africa. He has done extensive research work on the use, misuse and abuse of alcohol in Botswana. The purpose of consulting with him was to ascertain how alcohol abuse in rural areas in Botswana compared with the South African situation
- Ms Lee Rocha-Silva, former head of the Centre for Alcohol and Drug Study, Human Sciences Research Council (HSRC). Ms Rocha-Silva has conducted extensive research on alcohol abuse and drug dependence in disadvantaged communities. She was a consultant for the Soshanguve Primary Health Care Research at the clinics. Discussions with her on this topic helped to sharpen the perspectives needed for considering the primary health care focus in the study.

In the current study the researcher found it appropriate to consult first with experts to learn from their experience of the principles which need to be observed in order not to violate human rights whilst gathering information. The Helsinki Report (1964, 1975, 1983 and 1989) and the Belmont Report (1979) contain statements of principles that researchers who work with human beings have to observe. The classic example in reference, in this case, is the fact that medical practitioners take the Hippocratic Oath which binds them to observe principles of respect for human beings.

1.8.4. Overview of feasibility of the study

The above discussion and the consultation with experts affirmed the feasibility of the study. According to Rubin and Babbie (1993:102), many researchers are inclined to formulate idealistic, far-reaching studies and then to become immobilized when they find out how much they must scale down their plans in order to conduct a feasible study. To establish the feasibility of the present study, the researcher first secured approval and support from:

- SANCA National Management Committee's approval for the type of study proposed
- SANCA Nongoma Alcohol and Drug Help Centre's executive committee's approval and promised support to the researcher where necessary (see Attachment A)

- Usuthu District Health Committee in Nongoma. This committee agreed verbally to work closely with SANCA Nongoma and to provide whatever assistance they may be called upon to provide in the proposed study/research programme.
- The Medical Superintendent of St Benedictine's Hospital gave written approval and confirmation (see Attachments B1 and B2) with regard to
  - the TB, psychiatric and surgical wards agreeing to work closely with the researcher
  - the Community Health Department agreeing that VHWs could be used for this study
  - the final approval by the Provincial Department of Health as stated by the Medical Superintendent of Benedictine Hospital.
- Regional Local Tribal Authority gave approval and promised co-operation of all the stakeholders including *amakhosi* (chiefs), *indunas* (headmen) and leaders of civil society in Nongoma (see Attachment C). This approval was secured at a consultation meeting where they participated in analyzing the problems confronting the community and shared a keen interest in planning and implementing a possible solution to these problems. All of them felt that this type of research/study was long overdue because of the complex nature of the problems they experienced and witnessed in their respective villages.
- Department of Education and Culture in Nongoma District Circuit also gave approval and promised to assist where necessary. This approval is mainly pertaining to schools that would be accessed by the researcher and his team of research assistants. The intended research was fully supported by the circuit of Nongoma and that the authorities concerned look forward to hearing the outcome of the research once completed (see Attachment I).

Throughout the world research is a costly exercise. The United Kingdom Anti-Drugs Coordinator's Annual Report (1999/2000:6) revealed that substance abuse and resulting diseases, cost governments a large sum of money. During 1999/2000, the UK contributed an amount of $8.5 million to overseas anti-drug assistance, and $2 million to the work of the UN international Drug Control programme (UNDCP). In the Republic of South Africa, rural communities are seldom subjected to research because there is a lack of infrastructure that

inhibits accessibility. Except for poverty, many of the problems, which plague such communities, are not fully understood. Oetting and Beauvais 1990, in Gullotta *et al.* (1995:123), remarked that rural youth are not protected from drug use or other risky behaviour by their apparent isolation. Rocha Silva and Stahmer (1996:1) observed that the use and abuse of alcohol is associated with other risky behaviour such as unsafe sex which may result in sexually transmitted diseases including HIV/AIDS. Problems of rural communities need to be understood and exposed so that realistic attempts to alleviate them can be made, instead of the common practice of ignoring the rural scenarios for whatever reason.

In spite of lack of infrastructure in this area, the local leadership and the various stakeholders gave unqualified support to this research undertaking. Some of the initial costs were covered by limited bursaries obtained through funding agencies such as the Department of Health. Tremendous work has been done with limited resources.

1.9 DESCRIPTION OF THE RESEARCH POPULATION, DE-LIMITATION/BOUNDARY OF SAMPLE AND SAMPLING METHOD

1.9.1 Population

Arkava and Lane (1983), in Strydom and De Vos (1998:190) draw a distinction between the terms "universe" and "population". According to these authors, universe refers to all potential subjects who possess the attributes in which the researcher is interested. Populations set boundaries to the study units and refer to individuals in the universe who possess specific characteristics.

Strydom and De Vos (1998:190) cite Seaberg (1988) who defines a population as the total set from which the individuals, or units of study, are chosen. "A population is the totality of persons, events, organisation units, case records or other sampling units with which our research problem is concerned". Barker (1995:24) defines population as an aggregate of elements from which the sample is critically selected. For this study, various populations

were targeted. For purposes of clarity, the populations relevant to this study will be indicated under the relevant sampling methods.

1.9.2 Sampling

A sample refers to a smaller group that has been selected from the larger population in a way that ensures that the characteristics under investigation are well represented (Black 1988:43) and involves specific strategies. Graziano and Raulin (1997:114) define a sample as a subset of people drawn from the larger population. Arkava and Lane (1983:27) define a sample as an element of the population considered for actual inclusion in the study. It can also be seen as a subset of measurements drawn from a population that is the focus of the research interest. A sample is studied in an effort to understand the population from which it was drawn. Strydom and De Vos (1998:195) indicate that two major groups of sampling procedures exist, i.e. probability sampling, based on randomisation, and non-probability sampling, which is done without randomisation. The researcher made use of multiple samples for the purpose of ensuring the process of triangulation as explained by Creswell (1994), in De Vos (1998:360) and Duffy (1993), in De Vos, (1998:359). The following participants were included in the sample: village health workers (VHWs) were use for the purpose of getting in the depth of research data as they stay in the villages and as such were trained to undertake this qualitative type of survey. The group of nurses, as research assistants, were used to undertake the structured quantitative interviews with the patients since they were well placed in the clinics where they worked and at Benedictine Hospital. The focus groups which were made of nine nurses who were ward heads at Benedictine Hospital were identified and recruited to participate in the focus groups discussions, hence they form part of the qualitative data which is presented in the study. This includes as well the two expert key informants, on TB treatment programme, and being a doctor and a nurse. The other also included personal interviews with the former dagga dealer and the traditional healer as key community members. Finally, it also included the situation analysis which were conducted by two research assistants (social workers). The main purpose of the latter was meant to gather baseline data on the subject that is under investigation. On the whole, the purpose of including all these categories mentioned above, was to cross check and get into the depth of the problem and as such the intended objective was realized.

In addition to what has been said above, it can be further explained that the purpose with this sample was to determine the nature and extent of substance use, misuse and abuse among patients under treatment at Benedictine Hospital and its satellite clinics in Nongoma.

With regard to the patient population, it included those patients who were receiving treatment for TB, mental illness and other ailments at the Benedictine Hospital and/or its' eleven community health satellite clinics in Nongoma at the time of the study. Out of a population sample of 600 patients, 470 respondents were included in this study, of these the majority were TB patients. The type of sample was purposive. Strydom and De Vos (1998:198) point out that this type of sample is based entirely on the judgement of the researcher, in that a sample is composed of elements which contain the most characteristic, representative or typical attributes of the population (Singleton *et al*; 1988:153, in Strydom and De Vos 1998:198). The selected respondents were mainly TB patients, male and female. This also included other categories of patients like those from the psychiatric ward and male and female surgical wards. The duration of treatment is six months. In this instance, from April 1999 to September 1999. The gender of respondents comprised 29% female and 70% male. (See Chapter 4: Figure 14) The age category ranged between 15 -51 (see Chapter 4: Figure 15). TB patients were targeted since they were known to be abusing alcohol and other drugs especially marijuana.

A total of 573 village people were questioned by fifty VHWs in remote areas of Nongoma. According to the 1996 census, the population of Nongoma is 188,956 people. The 573 respondents was a sample from the households of about 3000 people. This sample was drawn from target sampling. According to Strydom and De Vos (1998:199) the emphasis of targeting sampling is on the investigation of hidden problems in hidden populations. In this case hidden problems were problems that are taken for granted yet have deleterious effect on the family such as alcohol and marijuana abuse. The respondents were selected by the VHWs in their own localities. The basis of selection was the VHWs own knowledge, experience and observations of the problems of local people. The involvement of VHWs as leaders in their community was an attempt to promote participatory research. These people helped in formulating the questions posed to the respondents. The advantage of using VHWs was that they have special and particular knowledge of the area. This sample provided qualitative

information that was invaluable in the exploratory study. VHWs were trained as research aids. The purpose for this sample was to supplement the data from patients living in community. On the other hand, the purpose of including key informants in the study, is to balance the qualitative and quantitative approaches with a view to assessing the nature and extent of the problem on different angles.

People included in the study for their expertise, included:

- nine nurses, who were ward/departmental heads, because of their knowledge of the behaviour of ward patients
- a doctor who has experience in treating patients who abuse alcohol and other drugs
- a nurse for her expertise in dealing with TB patients and especially those who were using, misusing and abusing alcohol and other drugs
- a drug dealer, who indicated that he was no longer dealing in drugs, was interviewed to ascertain the extent of production and trading in marijuana in Nongoma
- a traditional healer for his understanding of substance abuse and TB since he was regularly consulted by villagers
- 72 key community leaders, selected from government and private institutions because of their expertise in rendering community services such as a magistrate, prosecutor, clerk of the court, the police and the social workers in the Department of Population and Development in Nongoma.

1.10 DATA GATHERING METHODS AND ANALYSIS

1.10.1 Data gathering methods

Both qualitative and quantitative methodologies were used in this study. Schurink, in de Vos (1998:242), states that the quantitative paradigm emulated the physical sciences in that questions or hypothesis are stated and subjected to empirical testing to verify them, while the qualitative methodology is dialectical and interpretive. "During the process of interaction between the researcher and the subject, the subject's world is discovered and interpreted by

means of qualitative methods". Meares (1995:7) emphasises the need for this dual approach in social work as he states that "Our profession faces the following challenges: Social Workers must discard the idea that the two paradigms are inherently incompatible or that one is better or more accurate than the other, and must creatively integrate them. The educational preparation of social work practitioners and researchers must include knowledge about both methodologies and the importance of contextual analysis and computer-assisted models of qualitative analysis". In this study, the researcher chose Cresswell's mixed methodology model, which entails the highest degree of mixing different paradigms. The researcher combined aspects of qualitative and quantitative paradigms throughout this study (Cresswell 1994, in De Vos (1998:361) to gather data on the nature and extent of substance abuse in relation to health and social problems.

- **Qualitative data gathering methods**

Strydom and De Vos (1998:199) state that observation, interviews with informants and studying of policy records are ways in which the desired number of respondents can be determined. A variety of data gathering methods ensure that data collection is supplemented and complemented.

In this study, in-depth qualitative data of experts was gathered by the researcher by:

Personal interviews with experts. These included a doctor and nurse, a former marijuana dealer and a traditional healer. 72 key community informants from Nongoma government and private institutions. The semi-structured interview schedule (see Attachment F) was administered by two research assistants (social workers), who were trained on how to administer this type of interview schedule. The interviews were conducted at Nongoma public and private institutions, including the magistrate's office, social work agencies, the traffic department, educational institutions and doctor's private surgeries. Data from these interviews was particularly utilised by means of a situational analysis to compile a profile of Nongoma. Since no research of this nature had ever been conducted in Nongoma, it was essential to commence with a baseline study on the nature and extent of alcohol and other drug use and its risks as well as associated problems.

Focus group discussions with a group of 9 nurses who were ward departmental heads at the Benedictine Hospital and in charge of hospital wards (see Attachment E). On the question of focus groups, Neuman (1997:253) explains that "focus groups are a special kind of interview situation that is largely non-quantitative". Bless and Higson-Smith (1995:113) state "the focus group enables members of a group to share their experiences and to reach some kind of consensus about the topic of research". These authors further state that "this is particularly useful in participatory and action-research where members of communities are equal participants in the planning and implementation of research and where the topic of research is a practical community concern".

At this particular point the VHWs gathered data based on 573 observations. A brief outline of mainly qualitative observations follows. In total, fifty VHWs made observations of 573 respondents through personal visits to families, requesting information on diagnosed illness, conducting skills awareness, as part of their daily jobs, on health, alcohol and other drug issues. This occurred during the four-month period, March to June 2000. (see Attachment D) Some issues were discussed by the village communities experiencing drug-related problems, including difficulties in accessing clinic services.

The researcher also studied seven records of MDR-TB patients at the Benedictine hospital in order to find one case that would supplement the data gathered through the interviews and focus group. As a result of this study of case records, one case was identified for in-depth study. The study of the seven case records was meant to find out whether these MDR-TB cases were using, misusing and abusing alcohol and other drugs. Five of the seven cases whom were known to have been abusing alcohol and other drug, were already deceased. The one of the two MDR-TB cases, who still existed, had to be followed up to ascertain whether he was also using, misusing and abusing alcohol and other drugs. A psychosocial report was compiled on the client's home circumstances to determine the impact of substance abuse on TB patients' still under treatment. In addition a home visit was made. The impact of poverty on the patient's personal and family life was also noted (see Attachment H).

- **Quantitative data gathering methods**

Interviews with patients using an administered structured questionnaire (see Attachment G). Hospital and clinic nurses administered the questionnaires to 470 patients at Benedictine and its 11 satellite clinics in Nongoma. The medium of gathering data had to be formulated in Zulu (vernacular). This enabled the VHWs and respondents to understand what was expected of them.

A high rate of illiteracy meant that, the questionnaire and face to face interviews were the most appropriate way to obtain data.

The procedure and the process of data gathering was quantitative because it was mainly based on testing a theory composed of variables, measured with numbers and analysed with statistical procedures. The questionnaire that was used was adapted from five test theories namely, Khavari Alcohol Test (KAT), Cut-down Annoyance Guilt and Eye-Opener (CAGE), Michigan Alcoholism Screening Test (MAST), Alcohol Users Identification Test (AUDIT) and the Jellinek-Walsh-Ledermann-Khavari formula (JWLK) It must be borne in mind that these tests are only presented here as elements that were used in the compilation and formulation of a structured questionnaire (see Attachment G).

The data collection instruments were similar to those used for data gathering in a related project in Soshanguve PHC clinics (specifically with regard to matters pertaining to the use of alcohol and drugs), namely a questionnaire based on the following tests:

- **Khavari Alcohol Test (KAT)**

KAT is a quantity-cum-frequency index of drug intake, specifically alcohol intake that was developed in the United States of America and remodelled at the HSRC to suit South African circumstances (Rocha-Silva 1987). It is a reasonably refined tool for measuring drug intake (especially alcohol intake).

KAT facilitates detailed, statistical and empirical differentiation of various types of drinkers in terms of the quantity and frequency of intake of different alcoholic beverages, instead of the traditional classification of drinkers into fairly arbitrarily predefined classes, such as light, moderate, and heavy drinkers. KAT provides ample scope for indicating differences in alcohol intake among respondents (variability). It facilitates a beverage-by-beverage analysis of, for example, frequency and volume of alcohol intake. It enables the comprehensive measurement of total alcohol intake (per beverage and/or total alcohol intake).

KAT thus provides an opportunity for exploring in detail whether, for instance, a variation in alcohol intake correlates with inter alia variation in demographic status. In this respect it is important to note that because of the difficulty of measuring volume of consumption with regard to drugs other than alcohol and a cigarette, only the frequency-of-intake concept in KAT was used in the latter case.

- **Cut Down, Annoyance, Guilt and Eye-Opener (CAGE)**

CAGE is widely used as a fairly standard, brief screening test for alcohol-related problems in alcohol-related treatment programmes. It has also been used in research for identifying people who are at risk of or are experiencing bio psychosocial difficulties related specifically to alcohol. Acceptable levels of validity and reliability have been established (Mayfield, Hall and McLeod 1974). CAGE consists of four questions related to bio psychosocial problems experienced during a drinker's drinking life. These are:

- have you ever felt you ought to cut down on your drinking?
- have people ever annoyed you by criticizing your drinking?
- have you ever felt bad or guilty about your drinking?
- have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?

Two or more positive responses were considered as an indication that further assessment was warranted to establish the level and type of problem(s) being manifested. It is important to note that CAGE does not measure the level or the detailed nature of alcohol consumption. A

warning is also issued in terms of using CAGE in a finite (limited) way when screening for problem drinking. Detailed conclusions concerning the presence of alcohol-related problems, or the risk of such problems, cannot be reached on the basis of the responses to the four questions alone. For CAGE to be meaningful, it has to be part and parcel of a comprehensive assessment or screening package.

- **Michigan Alcoholism Screening Test (MAST)**

MAST is an "alcoholism" screening test consisting of a 25-item questionnaire. The questions relate to the personal opinions of the respondent and his/her relatives and friends as to whether bio psychosocial problems (including dependence) are experienced. Pokorny in Barbor *et al.* (1986:29) devised a shortened version of MAST that extracted the ten most discriminating items from the original version. The questions asked focus on alcohol. As in the case of CAGE, the concern is with the drinking life as a whole, of the person concerned. Level of intake is not specifically gauged, especially with regard to the type of beverage used and quantity and frequency of consumption. (The researcher adapted MAST to accommodate drugs other than alcohol as well.)

- **Alcohol Use Disorders Identification Test (AUDIT)**

AUDIT was developed by the World Health Organization (WHO) as a tool for screening persons whose alcohol consumption has become hazardous or harmful to their health, specifically within a PHC context (WHO 1989). This instrument has particular benefits in terms of its implementation as part of a routine alcohol/drug-related screening procedure at PHC clinics, in order to:

- identify problems before serious dependence has developed
- motivate patients to change their drinking patterns
- educate drinkers about the hazards of heavy drinking.

AUDIT focuses on the medical symptoms of alcohol-related problems, but can be adapted or extended to symptoms relating to other drug-related problems.

- **Jellinek-Walsh-Ledermann-Khavari Formula**

The basic components of this formula (Rocha-Silva 1987) were also used in the development of the interview schedule that was used in this study. The Jellinek-Walsh-Ledermann-Khavari formula, to some extent transcends the inherent difficulty found when measuring the magnitude of alcohol/drug-related problems accurately. It is based on the argument that a multifaceted estimation device can partially overcome the intrinsically biased nature of all separate data collection methods or tools.

It is assumed that data collected by independent means and showing similar trends is valid. A variety of multi-source data (e.g. estimates of the incidence of alcohol/drug-related mortalities, admissions to alcohol/drug–related rehabilitation/treatment centres, taxed sales of alcoholic beverages and self-reported level of alcohol/drug-related intake in a community) is scrutinized and particular trends identified.

The formula is particularly useful in longitudinal and cross-action monitoring of the general magnitude of alcohol/drug-related problems in particular settings.

1.10.2 Analysis of data

The data can be analysed qualitatively (expressed as words, pictures, and objects) or quantitatively (expressed numerically). Monette *et al.* (1990:11) state that analysis refers to the process of unlocking information hidden in the raw data and transforming it into something useful and meaningful. It is during the course of data analysis that researchers make use of statistical tools. According to Bailey (1994:62), measurement is "the process of determining the value or level, either qualitative or quantitative, of a particular attribute for a particular unit of analysis. Thus measurement is not confined to numerical or quantitative specification but can be qualitative as well." Bailey (1994) explains that the characteristics of measurement are reliability, validity, utility, directness, reactivity, sensitivity, feasibility and measurability. What is being asked here by Bailey (1994) concerns the two factors that should be considered in selecting a means of measuring data obtained. Is it accurate - does it measure what it intends to measure? Is it consistent/reliable- does it give the same

measurement if the measurement is repeated? In the present study the structured interview schedule, semi-structured schedule and unstructured schedule meet these criteria.

As already indicated, this study seeks to utilize both research methods. Neuman (2000:157) argues that both qualitative and quantitative researchers use careful, systematic methods to gather high quality data. Yet, differences in the style of research and the types of data mean they approach measurement processes differently. The author further explains that qualitative researchers use a wider variety of techniques to measure and to create new measures. Quantitative researchers primarily follow the deductive route. These researchers begin with an abstract idea followed by a measurement procedure empirical data that represents the idea. On the other hand qualitative researchers primarily follow an inductive route. They begin with empirical data, followed by abstract ideas and subsequent processes that relate ideas to data. In both styles of research the process is interactive. Finally, Neuman (2000:158) points out that both qualitative and quantitative researchers use the two processes of conceptualization and operationalization for measurement.

In subjecting the data to analysis, it was possible to produce, tables, charts, pie and bar-charts. Data was compiled using a computer to process descriptive statistics. The programme that was used at one section of analysis was the Chi Squared Automatic Interaction Detection (CHAID). Excel was applied in one section. Analysis in research includes the process of summarizing and making all information collected from literature more communicable and reasonable. Analysis also helps the researcher in seeing and determining whether his work corresponds with findings of other researchers. Erickson (1995) states that analysing qualitative data is done by open coding which is the basis of the "Grounded Theory". The author defines "Grounded Theory" as a general methodology for developing theory that is grounded in the data systematically gathered and analysed. Glaser and Strauss (1967) contend that this focuses on the inductive method of developing theory. A researcher has to make theoretical sense of the vast diversity of data, and at the same time, develop ideas on a level of generality that is higher in conceptual abstraction than the qualitative data upon which the theory is based. Glaser and Strauss (1967) explain that the idea is that theory is grounded in data and evolves during actual research, through continuous interplay between analysis and data collection.

The organisation MarkData assisted with some of the analysis of qualitative research data. However this organisation only assisted with arranging the qualitative data in a more systematic analysis of the mass of data gathered by the VHWs. In the final analysis, both qualitative and quantitative findings were interpreted and compared with literature that has been reviewed.

A brief discussion of ethical issues ensues as a base for acceptable research standards.

1.11 ETHICAL ISSUES

Strydom (2002:63) points out that different authors stress more or less the same aspects when describing the concept of ethics. The following definition is offered: "Ethics is a set of moral principles that are suggested by an individual or group, are subsequently widely accepted, and offer rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students." The author elaborates by explaining that ethical guidelines also serve as standards and as the basis on which each researcher ought to evaluate his/her own conduct. Strydom (2002:63) stresses that this aspect be continuously borne in mind.

Ethical principles should be internalised in the personality of the researcher so that ethically guided decision making becomes part of his total lifestyle (Botha, 1993:3; Bulmer & Warwick, (1983:3-4); Grasso & Epstein, (1992:118); Levy, (1993:1); Loewenberg & Dolgoff, (1988:4); Rhodes, (1986: xii), in Strydom, (2002:63).

The classification of ethical issues as presented by Strydom (2002:63-64) includes harm to experimental subjects and/or respondents, informed consent, deception of subjects and/or respondents, violation of privacy, actions and competence of researchers, cooperation with contributors, release or publication of the findings and the debriefing of subjects or respondents. Neuman (2000:92) presents what he terms as minimal standards. These are to, never cause unnecessary or irreversible harm to subjects, secure prior voluntary consent when possible and never unnecessarily humiliate, degrade, or release harmful information about specific individuals that was collected for research purposes.

The researcher tried his best to adhere to these minimal ethical standards. Written permission for the research was obtained from various institutions, as already indicated in 1.8.4 of this chapter. These included the local leaders of Nongoma, the Nongoma Regional Tribal Authority, the community health clinics and Benedict Hospital. Interviewers were trained to conduct the research in a professional manner. The data gathering processes were kept confidential and respondents could withdraw at any stage.

1.12 DEFINITION OF KEY CONCEPTS

The definition of concepts is essential as it clarifies the meaning of words and their usage and promotes communication.

According to Grinnell (1981:42), concepts are words or ideas that describe some aspect of reality or classify or explain events. The actual meaning will depend on the characteristics the person shares with other individuals and the purposes for which the concepts are formulated.

A distinction needs to be made between a conceptual framework and concepts. Mouton and Marais (1988:136-137) describe a conceptual framework as the structuring of certain statements according to regulative interests or orientations. The most familiar conceptual frameworks are embedded in typologies, theories and models. According to Neuman (1997:39), concepts are the building blocks of theory. A concept is an idea expressed in symbol form or words. It is imperative to demonstrate how concepts are used in a study. Neuman (1997:41) goes on to say: "Researchers define scientific concepts more precisely than those we use in daily discourse. Social theory requires well-defined concepts." The definition of a concept helps to link theory with research.

For the purpose of this study, the following concepts are defined:

1.12.1 Preventable diseases

The operational definition of the concept preventable diseases, in itself, is suggestive of the fact that there are diseases that can be prevented at the primary prevention level. A

preventable diseases is one in which the causal agent can be removed or protected against to stop development or progression to illness. The type of prevention discussed in this current study entails community education. Hewitt (1977:3) states that: "Community education in rural areas should seek to impart the motivation and skills necessary to raise general living standards." The prevention of disease should be planned on the premise and understanding that the eradication of poverty, along with its co-variables, among rural people is urgent. The famous adage, 'prevention is better than cure,' rings true when appropriate prevention strategies are considered. Tuberculosis (TB) disease is one of the main preventable diseases upon which the current study focuses.

- **Tuberculosis**

"Tuberculosis (TB) is a chronic (sometimes acute or sub acute) infectious disease, caused by specific myco-bacteria and characterised by the formation of lesions in any tissue or organ of the body, but mainly in the lungs (Glatthaar 1982:1).

Tuberculosis is a major health problem in many developing countries with a high incidence among lower socio-economic groups. Health facilities in these countries are generally below the level of expectation. The disease is exacerbated by poverty and malnutrition, and the tuberculosis sufferer is often concerned whether his family will care for him or not. (Clarkson 1974:45). Poverty creates an environment conducive to malnutrition which is frequently combined with the effects of the TB virus and HIV infection. In the current study TB patients were identified as a group of people who have propensity to abuse alcohol while still undergoing treatment for the disease.

- **AIDS**

Van Dyk (1992: 5), states that AIDS is the acronym for the Acquired Immunodeficiency Syndrome. The disease is acquired in the sense that the infection is not inherited. It is caused by a virus which enters the body from outside. Immunity refers to the body's natural defence system protecting it against infection and disease. Deficiency indicates that the defence system is inadequate. Syndrome is a group of specific signs and symptoms that occur

together and are characteristic of a particular pathological condition. He explains that the term "disease" is used when talking about AIDS. AIDS is not a specific illness. It is a collection of more than 70 conditions that occur as a result of damage to the immune system and parts of the body that is caused by HIV. Lechman (1990), in Van Dyk (1992:5) says that AIDS may therefore be defined as a syndrome of opportunistic diseases, infection and certain cancers which eventually kill the patient. On the other hand, as AIDS refers only to the last stage of infection, it is more accurate and less confusing to talk about "HIV positive people" or people with HIV (Human Immunodeficiency Virus). The relationship between HIV/AIDS and substance abuse, results in bodily harm. Alcoholism is a "family disease". HIV/AIDS is also referred to as a "family disease" because even though some of the family members may not be infected they are affected, psychologically, emotionally and otherwise.

1.12.2 Dependence

It is reported by Heath (2000:167) that there are certain individuals whose long term drinking has made them "dependent" on alcohol (American Psychiatric Association, 1980; World Health Organization, 1997), meaning that they need it to feel normal, and that it interferes with other areas of their life.

- **Drug dependence and drug addiction**

Brands, Sproule and Marshma (1998:42) state "As suggested by the term "dependence", drug dependence involves a user's need for a drug in order to feel and function in a way that the user considers acceptable. There are two commonly recognized types of drug dependence, reflecting the two spheres of drug effect on the body, physical dependence and psychological dependence."

Physical dependence is a state in which the body has adapted to (or become dependent on) the presence of the drug at a particular concentration, so that when the drug concentration falls (because the user has stopped or has reduced the dose or frequency of use), the user experiences withdrawal signs and symptoms.

Psychological dependence is a state in which stopping or abruptly reducing the dose of a given drug produces non-physical symptoms. Psychological dependence is characterized by emotional and mental preoccupation with the drug's effects and a persistent craving for the drug. Craving is believed to be a major factor governing the continued self-administration of psychoactive drugs. It was once believed that the sleep disturbances and irritability that occur when heavy users stop their drug use were of psychological origin but these symptoms are now widely believed to be subtle withdrawal effects associated with physical dependence.

The essential feature of substance dependence, described by the Diagnostic and Statistical Manual Disorders, Fourth Edition (DSM-IV), is a cluster of cognitive, behavioural, and physiological symptoms indicating that the individual continues to use the substance despite significant substance-related problems. This includes a pattern of repeated self-administration that usually results in tolerance, withdrawal, and compulsive drug-taking behaviour. Jones Shainberg and Byer (1973: 80, in American Psychiatric Association DSM-IV 4th edition, 1994) cite World Health Organization's (WHO,1997) definition of the concept drug dependence as: "state of psychic or physical dependence, or both, arising in a person following administration of that drug on a periodic or continuous basis. The characteristics of such a state will vary with the agent involved, and these characteristics must always be made clear by designating the particular type of drug dependence in each specific case; for example, drug dependence of morphine type or barbiturate type or amphetamine type and others."

A person is dependent on a drug or alcohol when after having taken it regularly for some time it becomes very difficult or even impossible for him/her to stop taking the drug/alcohol without help. Dependence may be physical or psychological or both (World Health Organisation, Geneva, 1986:5). This is the reason why such a person is referred to as a sick person. S/he needs professional assistance (counselling), including medical attention. Those who misuse and abuse alcohol and marijuana (substance abuse) are usually drug dependent people.

The term "addiction" is an old term that has been largely discarded in medical circles. It refers to dependent patterns of drug self-administration, including compulsive drug use, and

was once popularly interpreted to include an overtone of moral weakness. Although once a useful term to describe the situation of chronic users of a specific drug class such as opiates, it is problematic when applied to chronic users of other drug classes, because individuals "addicted" to different drugs have different profiles of physical and psychological dependence.

Therefore it has largely been replaced by the term "drug dependence", often with specific descriptive modifiers indicating the type of drug involved (e.g. amphetamine dependence), and/or the type of criteria met (e.g. physiological dependence).

Drug addiction has been defined by the World Health Organization (1950) as "a state of periodic or chronic intoxication detrimental to the individual and to society, produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include an overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means, a tendency to increase the dose, a psychic (psychological) and, sometimes, a physical dependence on the effects of the drug". In this study the concept dependence/abuse refers only to marijuana and alcohol dependence or abuse, as research into other drugs such as heroin, ecstasy was not done. Jones *et al.* (1973:77), as cited by World Health Organization (1950), argue that theoretically, any drug can be abused. Despite the usefulness of this definition, drug abuse is still a difficult concept to completely and adequately define. The continuum of responsibility from individual to society frequently clouds important scientific and medical debates about drugs. Attitudes toward drug abuse have taken on political significance. This contributes to the scientific confusion.

- **Alcohol**

The concept refers to ethyl alcohol (C2H5 OH), a drug that is "intermediate in kind and degree, between habit-forming drugs and addiction-producing drugs" (Rip 1982:68). It forms part of the composite concept referred to as "chemical substance". The World Health Organization's Committee on Alcohol and Alcoholism (1955) designated ethyl alcohol as a drug. Brands, Sproule and Marshma (1998:262) describe alcohol as a central nervous system (CNS) depressant that is rapidly absorbed from the gastrointestinal tract and metabolized in

the liver. Moderate doses produce disinhibition, while heavier doses produce cognitive and motor impairment and a decreased level of consciousness. Adverse effects of acute intoxication include blackouts, suicide, violence against persons and property, and trauma, including trauma from motor vehicle accidents. The concept alcohol in this study has been used to refer to all forms of alcoholic drinks including the home brewed beer.

- **Alcoholic**

According to Rip (1982:68), an alcoholic is a person who exhibits signs of alcoholism which is defined as "Loss of control over an individual's drinking habits which results in disengagement and disintegration of that individual's patterns of social interaction in personal, occupational and community sectors of his activity." Powell (1993:120) is more specific in his definition "an alcoholic is an alcoholic because he drinks too much."

According to the VHWs, home-brewed alcohol is fast becoming the number one cause of rural people's morbidity and mortality. Some of the home-brewed alcohol is prepared for commercial purposes and lethal ingredients are added to it. These concoctions have a deleterious effect on the health of the individual user. At one time alcoholism was defined as a family illness which an individual could not treat by himself without involving the other family members. The alcoholic's problem was not understood by his family who labelled him/her and this aggravated the situation.

All these definitions emphasize that:

- alcoholism is a disease
- that it affects not only the individual but also the social systems of which he/she is part
- that an individual cannot be treated alone without due consideration of his/her family system or other subsystems.

1.12.3 Psychiatric syndrome associated with alcoholism

Although this study does not investigate types of psychiatric illnesses, the link between mental illness and substance abuse has been touched upon. This is aimed at establishing the nature and the extent of substance abuse as it acts as one of the main contributing factors in the number of in and out patients undergoing treatment programmes.

Gillis (1980:119) maintains that alcohol affects the reticular system, leading to an increase in the excitability of the cerebral cortex, but with increasing amounts of alcohol intake, higher cerebral functions are progressively depressed. Alcohol acts like a general anaesthetic in that the margin between the dose producing anaesthesia and that depressing respiration is narrow. This can result in fatalities and alcoholic coma. Gillis (1980:119) claims that from a psychiatric point of view there are different intoxication syndromes. These he summarizes as:

- normal drunkenness
- Pathological intoxication, which occurs in emotionally unstable people who have drunk an unaccustomed amount. They become confused, disorientated and markedly excited. The patient may become violent and obstructive, finally falling into a stupor
- Alcoholic coma. This is a medical emergency. The big problem is depressed respiration. Only about 10 per cent of ingested alcohol is eliminated by excretion, mainly via the lungs, the remainder being oxidized at a steady rate regardless of its concentration in the body tissues.

Mental defective "A vague general term used to describe a person who is considered to have insufficient mental development to cope with everyday life and needs special care" (Statt, 1981: 80). This highlights the level of negative attitude held by the general public towards the mentally ill people.

- **Substance abuse and mental health**

Witters, Venturelli and Hanson (1992:6) explain that drug abuse is the wilful misuse of either legal or illegal drugs for recreation or convenience. This also includes the use of such

substances as paint thinners and airplane glue, which are inhaled and can alter mood, perception and motor activity. According to Camps in Imlah (1970:1) there are two sides to every problem, nowhere better illustrated than in the use and abuse of drugs. In recent years the use of powerful new drugs has contributed to major advances in the treatment of the mentally ill, although for centuries abuse of drugs has caused an incalculable amount of mental suffering. Camps sums up this situation when he says: "Drugs make the sick healthy and the healthy sick." Like most generalizations, this remark is an oversimplification of a very complicated situation. Psychoactive drugs are classified as either licit (legal) or illicit (illegal). Coffee, tea, cocoa, alcohol, tobacco and OTC (over the counter) drugs are licit or legal substances and when used in moderation are usually socially acceptable. Marijuana, cocaine, and LSD are examples of illicit drugs. In the current study, concepts mentioned refer mainly to alcohol, which is licit and marijuana, which is illicit.

1.12.4 Primary health care

Primary health care (PHC) is one of several strategies adopted for rural development since the mid-1970s. These new strategies represent an attempt to find new solutions to the persistent problems of rural development which previous approaches failed to solve. Coombs (1980:11) qualifies the above statement by arguing on the basis of the present realities that "Recognition of the severe shortcomings of conventional rural delivery systems has led to the demand for a more 'integrated' and more 'community-based' approach to rural development."

Sewpaul (1992:20) has fully documented the fragmentation and inequitable distribution of secondary and tertiary psychiatric/welfare services in terms of the constitutional dispensation. She emphasizes the negative implications of fragmentation for the co-ordination and decentralization of services. Sewpaul (1992) highlights the merits of the primary health care model, as adapted from the World Health Organization's definition of the primary health care concept. She states that primary health care in its narrowest sense means frontline or first-contact care. According to the Alma-Ata Declaration, primary health care is essential care made universally acceptable to individuals and families in the community through their full

participation and at a cost that the community and country can afford (World Health Organization 1978).

Sewpaul (1992:21) defines primary health in terms of the Alma–Ata Declaration which states that primary health "requires and promotes maximum community and individual self-reliance and participation in the planning, organisation, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate" (World Health Organization 1978:4).

In conclusion, Sewpaul (1992:21) cites Lund who maintains that the above statement places primary health care firmly within the domain of community development, where participation and self-reliance are key principles. It respects "indigenous institutions and practices". The input from Sewpaul has given impetus to the formulation of primary health care guidelines using developmental social welfare as a model. This will further be addressed in chapter five.

1.12.5 Prevention

Prevention is a "proactive process that empowers individuals and systems to meet the challenges of life events and transitions by creating and reinforcing conditions that promote healthy behaviours and lifestyles" Centres for Substance Abuse Prevention (CSAP) Kaftarian & Hansen, (1994). For the purpose of this study, it is important to contextualize the concept "prevention" by addressing the focal area. Franklin (1991:19) argues: "Put first things first—prevention may not be your client's top priority. Social and emotional support and concrete help like food, housing, physical safety, stable income, employment must be provided before an individual, a family, or a neighbourhood can hear a prevention or health promotion message." He further explains that prevention programmes often reside in or collaborate with services addressing these primary needs.

Prevention is further defined as: "Prevention is appropriate action to counteract the emergence and/or development of a given phenomenon to offset the risk of its occurrence" (WHO, 1993:2). There are three levels of prevention.

- **Primary prevention**

Prevention targeted at the population as a whole and which acts on the causes of a phenomenon to offset the risk of its occurrence.

- **Secondary prevention**

Prevention targeted at specific at-risk populations and groups. For instance groups that are greatly at risk of falling victim to the phenomenon, or currently experiencing the phenomenon.

- **Tertiary prevention**

Prevention targeted at subjects who have already been affected by the phenomenon, who have overcome it and who do not intend to suffer from it again (often identified with treatment/rehabilitation).

When the researcher refers to prevention in this research report, he includes the various levels of prevention. If alcohol and other drug abuse are to be addressed in South Africa, emphasis must fall on prevention.

1.13 LIMITATIONS OF THE STUDY

- The study was costly and very demanding because of its qualitative nature, size of samples and varied type of data collecting methods.
- The patients (respondents) often had to travel long distances to reach treatment centres. They required money for transport, or were traced by the researcher at a high cost.
- Substance abusers do not readily admit that they have a problem. They tend to overemphasize T.B as their problem. This has a negative impact on the reliability of the data provided by these respondents. The researcher's findings should be interpreted

within the context of the fact that rural people do not easily talk or admit that they abuse alcohol, as they regard it as food.

- The pace of gathering information is dependent upon numerous factors such as values, literacy, culture and interest of the respondent. In rural settings no value is attached to time, and any attempt by a researcher to hurry the process may meet with a resistance to give relevant information. Hence it may be cost effective to observe convention and exercise the utmost patience when conducting research in rural areas.
- The cholera epidemic that afflicted KwaZulu-Natal during the course of the study. The epidemic resulted in diminished participation of respondents and fieldworkers in the clinics of Nongoma. The study was limited because it concentrated only on patients receiving treatment at the clinics and the hospital. Those patients who chose not to go to the clinics and the hospital for treatment, though ill, were not available for this research survey.
- The study focused mainly on black people in the rural village of Nongoma. Asians (Indians), coloured people and white people were excluded as they formed a small minority in Nongoma.

1.14 CONTENTS OF THE RESEARCH REPORT

Chapter One: This chapter provides a general orientation to the study. It refers to the motivation for the study, statement of the problem, aims and objectives, research methodology, ethical issues, definition of concepts, the limitations of the study and finally an outline of the contents of the research report.

Chapter Two: This chapter provides an overview of substance use and health related problems. The focus is on historical perspectives pertaining to the use, misuse and abuse of alcohol and the other drug (marijuana). Health problems associated with substance abuse are also considered. These are an increase of tuberculosis (TB), HIV and other preventable diseases that impact on individuals, families and the community.

Chapter Three: This chapter centres on primary prevention of substance abuse with reference to an integrated approach. This chapter mainly deals with substance abuse prevention strategies in relation to health and social problems. It is therefore a theoretical framework on primary health care contextualised within a developmental social welfare paradigm.

Chapter Four: This chapter presents analyses and interprets the empirical research findings of the study.

Chapter Five: This chapter draws conclusions from the findings and provides recommendations. Guidelines for a model for the prevention of substance abuse in Nongoma (KwaZulu- Natal) will be formulated.

CHAPTER TWO

OVERVIEW OF SUBSTANCE ABUSE AND HEALTH RELATED PROBLEMS IN THE RSA

2.1 INTRODUCTION

In this chapter, the researcher's intention is to give a broad outline of the interconnection between the variables under investigation and which are primary parts of this study. In the first section of the chapter the researcher will explain the role played by alcohol in the lives of different population groups in the Republic of South Africa (RSA). This analysis will focus on the political, economic and social dimensions of alcohol use not only on South Africa but Africa in general. The period under review will extend from the pre-colonial to the post-colonial era. This will serve as a point of departure for a comprehensive investigation of alcohol use, misuse and abuse. Drugs like marijuana will be included. The analysis will also cover health problems associated with substance abuse, such as tuberculosis (TB) and HIV. Poverty is considered to be one of the underlying basic co-factors in exacerbating the problem of alcoholism, drug dependence, disease and social problems. Some insightful discussions will ensue which will pave the way for the subsequent theoretical framework.

2.2 A HISTORICAL BACKGROUND AND SOME PERSPECTIVES ON ALCOHOL

Gumede (1995) in Parry and Bennetts (1998:3) states that alcohol has featured prominently in the country's social and political history. He adds that in pre-colonial times, maize was cultivated by women and used in the production of food and beer. "The culinary skills of a good wife were based on the quality of beer she could produce" (National Sorghum Beer (NSB) advert). For many centuries, traditional African beer played a central role in the cultural and religious lives of the black people of South Africa, just as alcoholic beverages have done in other parts of the world. Gumede (1995) provides information about these rituals, two of which were the Feast of the First Harvest (*incwala*) and the Festival of the

Queen of the Rainbow *(Umkhosi Ka Nomkhubulwana)*. These festivals were celebrated by women after the first rainfall (Gumede in Parry & Bennetts 1998). Such celebrations involved consumption of low-alcohol, nutritious beer. African beer, before the arrival of whites in South Africa, was "a healthy fruity gruel which took a week to prepare, to ensure slow fermentation"(Gumede, 1995). Many traditional festivals in contemporary black culture, particularly in Zululand and Swaziland, strongly feature African beer. The reference to African beer as being "a healthy fruity gruel" makes sense when one hears rural African adults referring to home-brewed beer as "food". It could be why many rural people do not believe that one can become an alcoholic from drinking this beer.

Gumede (1995) in Parry and Bennetts (1998:4), however, points out that drinking norms and controls in pre-colonial times were quite different to those practiced by contemporary black society. In pre-colonial times drinking took place communally and ceremonially. Drinking did not occur daily but only on special occasions such as religious ceremonies, weddings and other celebrations. Colonialism in South Africa included introducing the indigenous Khoikhoi population and slaves from South East Asia to a Christian education, a daily tot of brandy and chewing tobacco (Christies 1987 in Parry & Bennetts 1998:4).

Mager (1999:367-388) gives some insights into the intentions of the colonial masters. She explains that the importation of gin by the colonial authorities in Ghana provided the regime with revenue for administering Nigeria. Elsewhere liquor was used by the state as a means of winning allies among the chiefs. Mager (1999) describes the South African experience as both similar to, and different from, that of West Africa. In the mining regions of South Africa, prior to 1910 (the year of the union of the four provinces) liquor was used as a source of tax and a means of controlling labour.

Mager (1999:368) provides some historical background when she tells of the benchmark legislation of 1928, which prohibited the majority of Africans in South Africa from drinking "European liquor". It restricted ordinary Africans to sorghum beer and permitted only selected categories of Western-educated African men to be issued with permits for "European wine, spirits and malt beer". The prospect of economic and political gain was the reason for ending prohibition and opening up the African market to "European liquor". In 1961 South

Africa became a republic and lost its preferential trade status in the Commonwealth. This posed a major threat to wine and spirits exports. An alternative market had to be found. Wine farmers and liquor producers agitated for lifting prohibition. For the first time in decades, the threatened farmers and producers met with sympathy from government officials who passed the Liquor Amendment Act of 1962. This Act lifted the restrictions imposed on Africans. Mager (1999:369) describes this event: "Liquor freedom was complemented by political repression, the closure of political space was replaced by the opening of drinking space."

According to Mager (1999:370), prohibitionists were supported by organizations outside the townships that claimed to speak on behalf of the Africans of the Western Cape "Africans say that liquor has brought the coloured people to their knees and they, the Africans, don't need it". Their sentiments were captured in the statement "We think this liquor legislation is a political weapon to keep the masses in a stupor where they cannot think for themselves. The Africans needed freedom and not liquor." Whereas in 1959 less than four percent of Africans were convicted for drunkenness, in 1968 this figure had risen to 27 percent in most townships. The Bantu Areas Administration Boards (BAABS), purveyors of liquor in townships, denied that Africans were "naturally" heavy drinkers. Nevertheless, concerned social workers began to draw attention to the problem of African alcoholics in all major urban centres.

The South African National Council on Alcoholism's (SANCA) opening of a treatment centre for African alcoholics in Durban in 1969 was the first public acknowledgement of the problem. Currently, SANCA is operating in all nine provinces of South Africa. Although the acronym SANCA is still the same, drug dependence has become an additional national problem of alarming proportions. SANCA is now referred to as the South African National Council on Alcoholism and Drug Dependence (see the map on the location of SANCA facilities, Figure 1). It should be mentioned, though, that most of the functional treatment centers are located in the metropolitan areas. The rural areas are attended to on an ad hoc basis. The outcome of this study is intended to formulate and recommend guidelines for a primary health care prevention model within a developmental social welfare framework for

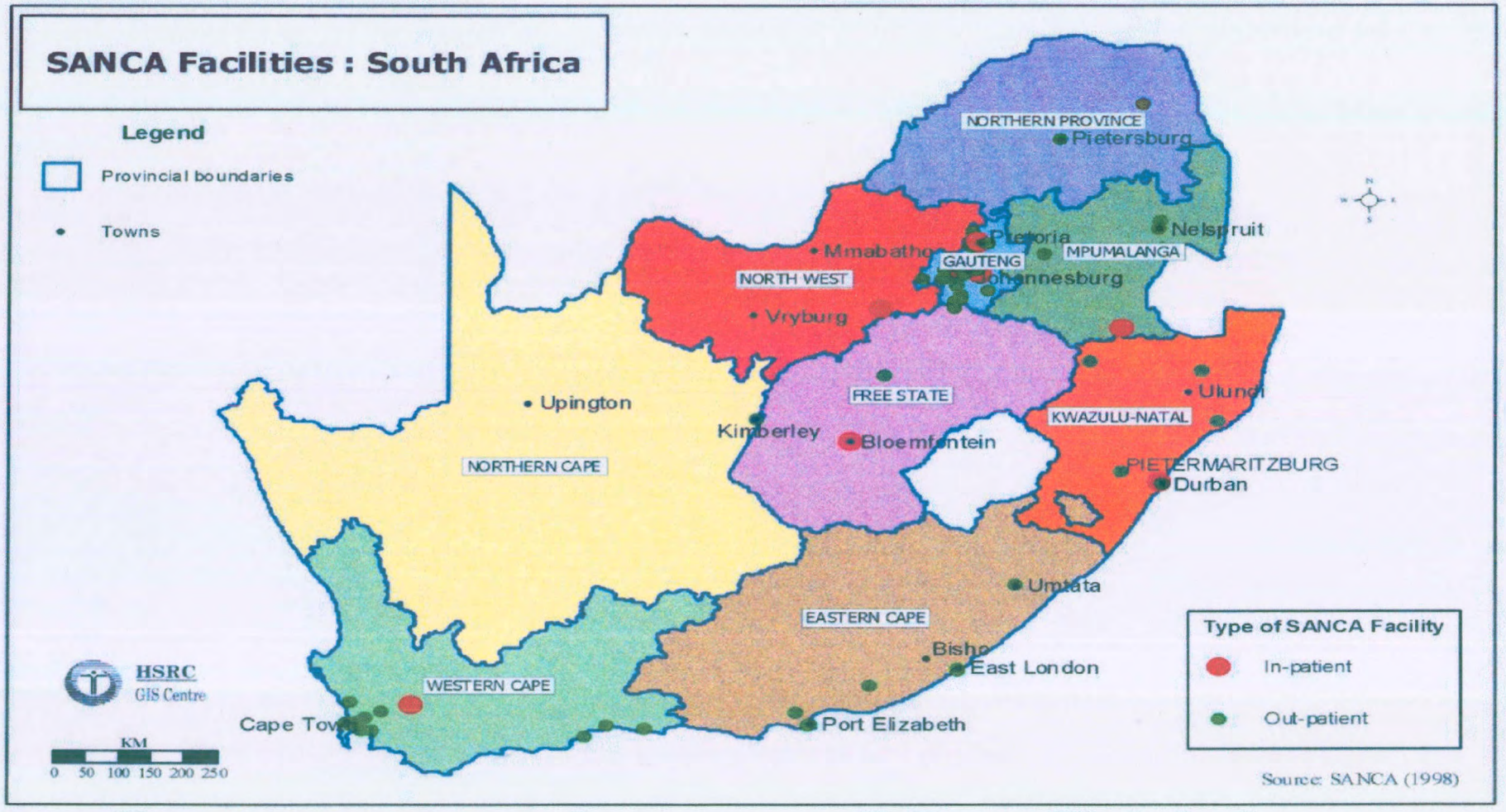

Figure1: Location of SANCA facilities in South Africa

Rural areas and in particular Nongoma in KwaZulu-Natal. Figure 1 illustrates the scarcity of treatment centres for substance abusers, especially in the rural areas.

Historically there is disagreement in African communities about the causes of alcohol abuse. Many Africans among the elite groups subscribe to the World Health Organization's (WHO) definition of alcoholism as a disease.

Beckman (1988:7), citing Kenneth David Kaunda, the former president of Zambia, says that excessive alcohol consumption is known, the world over, to cause health problems. Immoderate consumption also has socio-economic and socio-psychological implications. Kaunda confirms that in traditional African societies, alcohol was served only during special occasions such as communal projects, marriage ceremonies, installation of chiefs and other important cultural events. Since then drinking habits have changed markedly. From being a ceremonial beverage, alcohol has now become a beverage that is used in excess and is no longer held in esteem. Instead it is regarded as the cause of social problems.

The problem of alcoholism is being spelt out in terms of health and social welfare issues. It is interesting to note that in South Africa, it was social workers who identified the problem of alcoholism among black urban dwellers. Rural people are not mentioned at all. Their existence in South Africa is taken for granted. That is why this study focuses on rural people and their alcohol and drug-related problems.

2.3 OVERVIEW OF ALCOHOL AS A DRUG

Heath (2000:37) says there are some societies in which beer and wine are still thought to be a gift from the gods, as was the case in ancient Babylon, Egypt, Greece, Rome and Aztec Mexico. There are some in which alcohol is banned, such as contemporary Saudi Arabia, Afghanistan and Pakistan. The problem of alcoholism has a wide historical background.

Researchers have produced statistics to show that of all the drugs human beings have used and abused in the course of their chequered history, alcohol is almost certainly the oldest. It is also the most widely used because it is so easily available (Bewley 1986:11). Naudé's

(1987:7) appraisal is that since the beginning of known history the majority of people have used alcohol in some form or other and are still doing so. In some isolated instances people may abuse alcohol but they do not manifest the problems associated with alcohol abuse. Naudé (1987) indicates a clear distinction between the use of alcohol and the use of drugs, such as marijuana, cocaine and heroin. He says that the user of drugs easily becomes addicted and so becomes an abuser or drug addict. His assessment of tobacco smoking is that it, too, is addictive.

Naudé (1987) does not consider occasional drinking to be as quickly habit forming as tobacco smoking. He argues that the use of alcohol cannot be categorized as an addiction in a physical sense. He is adamant that alcohol has no addictive qualities at all. It can cause a disorder that is entirely mental in nature. His argument is totally rejected by the present researcher. It is a classic example of the denial of alcohol as a dangerous drug especially when taken excessively.

Wald and Hunt in Weil (1972:115) view alcohol as a drug that can be analyzed in the same way as any other drug, whether licit or illicit mainly affects the central nervous system (CNS). Tolerance of and physical dependence on alcohol can develop. Withdrawal can be a serious clinical condition as the drug (alcohol) causes organic. Alcohol has a potent psychoactive effect and like most drugs, it damage. The interplay of physiological factors and psychological factors involves as many uncertainties for alcohol use as they do for opium use.

Weil (1972) points out that the common distinction between alcohol and "drugs of abuse" is based on the fact that alcohol is a known and culturally accepted drug. Such a distinction is not based on pharmacological considerations. He concludes his argument by pointing out that alcohol is inherently more dangerous than most of the other drugs under discussion.

Irwin in Weil (1972:116) lists the hazards of different drugs and in ranking them, starts with those he considers the most dangerous.

1. Glue sniffing.
2. Amphetamine.
3. Alcohol.
4. Cigarettes.
5. Barbiturates.
6. Heroin and related narcotics.
7. LSD and other hallucinogens.
8. Marijuana.

Significantly, alcohol is ranked number 3 on the list of dangerous drugs. The researcher believes that should the rural home-brew concoctions be taken into account, alcohol would be ranked number one.

Scotch Tagwireyi in the *Mail and Guardian* (1999, September 10-16) writes "when Derickson Mngomezulu was found dead in his shack in Katlehong, two weeks ago, his relatives, neighbours and friends were convinced that beer had killed him". Apparently Mngomezulu had begun drinking heavily two years before his death, when the company he worked for closed down and retrenched its entire staff. He drank mostly home-brew, a cheap but deadly beer brewed in the townships. One of the major ingredients being the contents of used batteries.

Mngomezulu had also stopped eating. Subsequently he lost weight. His complexion darkened. Skin peeled off his face, lips, hands and feet. His hair fell out and he coughed blood. He complained that he had difficulty breathing but refused to go to hospital. Mngomezulu eventually died in agony. The neighbours described the young Mngomezulu in the following words: "He looked far older than his age. You would think he was 60 or 70 years old." This reflects the change in beer-drinking patterns from a ceremonial to a daily activity. In Nongoma in KwaZulu-Natal, the Village Health Workers have voiced serious concern over this type of home-brewed beer.

Besides this lethal brew, which incidentally, serves as a source of income among the unemployed of rural Nongoma, other drugs that are commonly used are amphetamines and

ECTSASY E, XTC, Doves, Burgers	LSD Acid, Trips	SOLVENTS Glue, Aerosols, Gases	CANNABIS Pot, Grass, Wacky Backy, Hash, Dope, Gania	HERION H, Horse, Scag, Smack, Junk	CRACK Rocks, Wash, Base	AMPHETAMINES Speed, Whizz, Amph, Sulph	COCAINE Coke, Charlie	TRANQUILLISERS Valium, Temazepam, Barbitura
Comes in tablet or capsule form which is swallowed. **EFFECTS & SYMPTOMS** Energetic, friendliness, possible sweating, extreme thirst, raised blood pressure, sleeplessnes s, depression and paranoia. **LOOK FOR** Excessive drinking of fluids, especially soft drinks during high, dilated pupils, tablets in various colours. **RISKS** May become anxious	Small squares of impregnated paper with a coloured picture or motif. **EFFECTS & SYMPTOMS** Hallucinogenic, extreme change of perception of sight and sound. Can last between 8 & 12 hours **LOOK FOR** Small tablets or squares of blotting paper, expressions of fear/anxiety **RISKS** Bad trips can result in anxiety, depression and paranoia, flashbacks, accidents whilst under influence, unpredictable drug.	The fumes of which can be inhaled to get high. **EFFECTS & SYMPTOMS** Possible hallucinations. uncoordinated speech and movement, stomach cramps, red eyes, sores around the mouth. **LOOK FOR** Plastic bags with traces of glue strong chemical smell, household aerosol cans. **RISKS** Hallucinations, likelihood of accidents, damage to lungs, heart and kidneys, death by suffocation.	Comes in resinous lumps, leaves, stalks, seeds and concentrated oil, smoked or eaten. **EFFECTS & SYMPTOMS** Sense of relaxation, talkativeness, laughter or drowsiness, lack of concentration, increased heart rate. **LOOK FOR** Butt ends of hand rolled 'joints', large cigarette papers, strong herb- like smell. **RISKS** Accidents likely due to lack of co-ordination, lung damage as with tobacco, use may lead to memory loss.	White/brown powder that can be swallowed, injected, sniffed or smoked. **EFFECTS & SYMPTOMS** Sense of relaxation. drowsiness, small pupils, withdrawal symptoms include sweating, anxiety, muscle cramps, fever. **LOOK FOR** Syringes and needles, blackened tinfoil, tourniquet (belt, tie, string), bent spoons, bottle caps, injection scars. **RISKS** Very addictive, HIV, hepatitis if injected, abscesses, malnutrition, damaged skin/veins, possibility of overdose, may be cut with other matter.	Comes in crystals or lumps like chalk, smoked using pipe. **EFFECTS & SYMPTOMS** Similar to cocaine but more addictive when smoked, agitated/aggressi-ve. **LOOK FOR** Paper wrappers, small plastic bags, pipes (can use drink cans), rocks of cocaine. **RISKS** Highly addictive, potentially fatal if direct toxic action on heart occurs.	Comes in white or yellow powder and tablet form, can be sniffed, swallowed or injected. **EFFECTS & SYMPTOMS** Strong stimulant, wakefulness , very lively, subsequent sense of exhaustion due to lack of sleep and food. **LOOK FOR** Folded 'wraps' of paper made from nightclub leaflets/flyers, needles/syringes. **RISKS** Depression, anxiety and paranoia, toxic psychosis, risks associated with injecting.	Comes in crystalline white powder form, can be snorted or injected. **EFFECTS & SYMPTOMS** Increased alertness – similar to amphetamine, excitement and sleeplessness, effects are short lived. **LOOK FOR** Mirrors, razor blades, straw or rolled bank notes for snorting drug, needles/ syringes. **RISKS** As for amphetamine use, nose ulcers, convulsions.	Misused prescribed medication for depression and stress, comes in tablet form, sometimes injected. **EFFECTS & SYMPTOMS** Sedation, uncoordinated movements,' sleepiness. **LOOK FOR** Tablets, sometimes crushed, injection marks and scars, needles and syringes. **RISKS** Overdose, withdrawal with convulsions, death from barbiturates.

Figure 2: Risks- Symptoms drugs guide

Source: Adapted from: Axis-risks Guide-Leeds (2000)

tranquillizers (see Figure 2.) The impact of various drugs is evident on the AXIS guide on drugs as reflected in Figure 2.

It is important to note that already, among this range of drugs, cannabis, solvents like glue and benzene, are common in Nongoma. New drugs are already circulating in the village. In addition certain vendors sell illicit drugs surreptitiously.

While hard drugs are internationally identified by names such as cocaine, crack, heroine, LSD and ecstasy, in rural areas such as Nongoma users are too illiterate and unsophisticated to differentiate drug names. All drugs are simply known as drugs or "mandrax". In fact the users do not care or even want to know which drug or "mandrax "they are using (Malaka, 2001:1). It is common knowledge that various types of drugs are already sold by vendors, shebeens owners and spaza shop-owners in the rural areas. Drugs are also smuggled out of hospital dispensaries to be sold to the public. The study on Rapid Situation Analysis (RSA), undertaken by the researcher at Umtata, 2000, revealed that drugs are smuggled and to sold to the public in this fashion. In addition drugs, such as tranquillizers, are abused through prescription.

Although very few people know about cocaine, it is available through inconspicuous local drug-dealers. Cocaine, crack and amphetamines are still in the early phases of being introduced among youths, whether in or out of school. Apparently the school dropouts and unemployed youth who have matriculated (Grade 12) are the soft and fertile target of drug syndicates. Most of these young people are already using the easily available and locally cultivated marijuana. Marijuana merits a detailed discussion.

2.4 A BACKGROUND SYNOPSIS AND EXPOSITION OF MARIJUANA

Marijuana, also known as cannabis, pot, grass, dope, zol and a host of other names, is the most commonly abused illegal drug in South Africa. Although often regarded as a "soft" drug, marijuana is in fact a potent hallucinogen that, when abused, can have lasting harmful effects.

It is ranked eighth on the list drawn by Irwin in Weil (1972:116). Some concerned rural community leaders challenge its relegation to eighth position as they are faced daily with serious problems directly linked to the abuse of marijuana by young people of school-attending age. Prolonged marijuana use can lead to an impaired ability to learn, a motivational syndrome and other problems affecting the educational process.

The call for the decriminalization of marijuana is gaining momentum. A vocal group of Rastafarians claim that marijuana forms an integral part of their religious rituals. They demand full legalization of marijuana. Graeme Hosken in the *Daily News* (2001, 4 May) states that recent Interpol reports reveal that South Africa is one of the world's largest cannabis (marijuana) producers. Consumption of cannabis is also the highest of all drugs in this region of Nongoma district in Kwa-Zulu Natal (South Africa). Studies indicate that 50% of recent arrestees had traces of cannabis in their system. It is necessary at this stage, to point out some of the effects of marijuana (cannabis) on human beings. Herrington, Jacobson and Benzer (1986) state that marijuana smoking has been found to affect the cardiovascular system. While intoxicated, the heart rate accelerates to 160 beats a minute. This is accompanied by an orthostatic fall in blood pressure (Petersen 1980). In animals, increased oxygen demand by the myocardium is coupled with decreased delivery of oxygen, leading to an oxygen deficit in the heart. This could theoretically result in angina and possibly myocardial infraction (heart attack) in predisposed individuals.

Herrington *et al*. (1986) add that neurological functions and higher mental activities can be affected. Marijuana has been reported to impair judgment of time and distance. This could cast some light on the increasing accident rate among taxi (combi) drivers as it is alleged that some of them smoke marijuana in order to keep awake when travelling long distances. There are circumstances in which cannabis users may indirectly be referred to Allied Health Professionals (AHPs). These are drug-related arrests, when respiratory diseases require medical attention and/or when parents or school authorities suspect that drugs are implicated in behavioural problems or learning disabilities.

2.5 HISTORICAL PERSPECTIVES OF MARIJUANA USE

Herrington *et al.* (1986:5) state that throughout recorded history, marijuana has been used as an intoxicant. Writings from China, as early as 2000 BC, contain references to marijuana as do early writings emanating from India, Assyria, Persia and Greece. It is also mentioned in the Old Testament and the Arabian Nights (Brecher (1972) in Herrington, 1986:6). Its psychoactive properties were well known during the Middle Ages and Renaissance.

Marijuana was introduced into Africa via the Middle East, Europe, China and India. In Europe it was used primarily for fiber and as medicine. Its intoxicating effects were largely unknown until a group of French writers took the drug and wrote about their experiences. After that it remained a curiosity used by artists and racial minorities in Europe and the United States until the mid-1960s when it became popular among young people in the middle and upper classes.

Marijuana was once recommended for medicinal use. It is still used medically by traditional healers (medicine-men). Patent medicines that were once popular and widely distributed frequently contained marijuana. Sometimes in combination with alcohol. It was listed in the United States Pharmacopoeia as *Extractum Cannabis* from 1850-1942. *Extractum Cannabis* was prescribed for neuralgia, gout, rheumatism, tetanus, hydrophobia, depression, delirium tremens, insanity and internal hemorrhaging (Brecher (1972) in Herrington 1986:6).

How marijuana was regarded then is still a contentious issue today. No less an authority than Sir William Osler, first chairman of the Medicine Department at John's Hopkins University Medical School and "father" of modern internal medicine, advocated marijuana as the most effective treatment for migraine headaches. Several pharmaceutical companies marketed over-the-counter extracts. Special marijuana cigarettes were available for the treatment of asthma.

Marijuana was also used as a recreational drug and its use became glamorized in books and popular magazines. As recently as May 2001, a group of South African cricketers celebrated their resounding win over the West Indies by smoking marijuana in their hotel room. This

incident elicited sharp reaction from the cricket authorities. Disciplinary steps were taken against those who had indulged in the marijuana smoking.

Despite allegations that marijuana could cure certain illnesses, it never gained widespread appeal. Its' use was ignored by the authorities until 1937 when the promulgation of the Marijuana Tax Act effectively made marijuana an illegal drug. This led to a marked drop in marijuana use. Very few people were actually arrested for marijuana related offences as use of the drug remained relatively infrequent and isolated. In the mid to late 1960s, use of marijuana rose dramatically in virtually every subgroup of society. The sharpest increase was among young people. Particularly those in the 18-25 year group.

The debate on the legalization of marijuana tends to focus on the positive outcomes of its use. Little is said about the possible negative consequences of the decriminalization and/or legalization of the drug. Much of this controversy still persists. Some groups support enforcement and strengthening of anti-marijuana laws while others advocate decriminalization and/or legalization of marijuana.

2.6 MAJOR ADVERSE EFFECTS OF MARIJUANA

Herrington *et al* (1986:10) state that dramatic behavioural changes are likely to require intervention and treatment involving AHPs. Several syndromes are identified and discussed below:

2.6.1 Anxiety

A dramatic consequence of marijuana use is panic-anxiety. Most of the signs and symptoms of this reaction are distortions or exaggerations of common but initially mild effects of marijuana, including anxiety and fearfulness. These progress to incapacitating anxiety and panic. Reactions may also include other psychological symptoms such as apprehension, paranoid thoughts, depersonalization feelings, misperceptions, emotionally labile and groundless fears such as losing one's mind.

The physiological symptoms of anxiety may also be present. These include tachycardia, dizziness, hyperactivity, tightening of the chest, a smothering sensation and trembling. Herrington *et al* (1986) explain that many of these symptoms may have begun as part of the usual pattern of marijuana intoxication. There may be complete or partial insight into the causes of these conditions. At times this can be overwhelmed by panic and fear. Orientation and memory remain intact. The reaction is limited, lasting from several minutes to several hours, paralleling the duration of the marijuana intoxication.

2.6.2 Acute brain syndrome

A more serious reaction is marijuana induced, acute brain syndrome. This is a toxic delirium caused by the ingestion of large amounts of the drug. The reaction has been classified under a variety of names, including toxic psychosis, marijuana psychosis, hemp psychosis, acute psychotic reaction and acute schizophrenic decompensate. Herrington *et al* (1986:10-11) conclude by saying that psychotic features such as hallucinations and delusions are typical. The question of marijuana has become a controversial issue among interested stakeholders. Further research is needed before a final decision can be reached on whether to decriminalize, legalize or maintain the status quo in respect of the drug. The elderly find cultural pleasure and euphoria in the use of marijuana. Young people are in a process of experimenting with drugs, especially marijuana but it is also a gateway to hard drugs. For the purposes of this study marijuana is seen as a potent drug and a health hazard, especially for individuals predisposed to illness and disease.

Substance abusers are most vulnerable to personality disorders while their children can become victims of mental retardation and/or the foetal alcohol syndrome. Other health problems are also experienced by substance abusers such as cirrhosis of the liver, mouth and throat cancer as well as TB.

The Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) is used in the assessment of diagnosis of a given psychiatric disorders in South Africa. DSM-IV provides a full listing of a range of alcohol and other substance induced mental disorders. It is

explained that under this section of focus, substances are grouped into 11 (eleven) classes. The broad categories of disorders listed in DSM-IV, with various sub-categories, include:

- Alcohol related disorders;
- Amphetamine or similarly acting sympathomimetics related disorders;
- Caffeine related disorders;
- Cannabis related disorders;
- Cocaine related disorders;
- Hallucinogen related disorders;
- Inhalant related disorders;
- Nicotine related disorders;
- Opioid related disorders;
- Phencyclidine (PCP) or similarly acting arylcyclohexylamines and
- Polysubstance related disorders.

American Psychiatric Association. DSM-IV (1994:175).

There are other disorders refereed to as "Others" or unknown substance–related disorders which include most disorders related to medication or toxins. According to DSM-IV (1994:175), the unknown substance–related disorders include disorders ranging from taking a drug and the side effect of a medication, to toxin exposure.

The DSM-IV classification should be read in conjunction with the AXIS guide on drugs as reflected in chapter 2, Figure 2. This is because Figure 2 in particular gives the whole range of drugs among which are mentioned in the DSM-IV list above. The fourth edition, DSM-IV, has broadened the concept of substance abuse by changing the name of the relevant section from "Psychoactive Substance use Disorders" to substance–related disorders. By so doing, it has taken the position that although most substances- induce disorders result from intentional use of substace, some substance induced conditions occur as a result from unintentional use or exposure to substance, or as side effect of a medication. Such cases would be classified using one of the 'Other (or unknown) substance-related disorders' categories"(P.E.I.). Also, DSM-IV places dependence, abuse, intoxication, and withdrawal syndromes together in a

reformulated substance use disorders: other substance – induced disorders are distributed among other sections containing those disorders with which they share phenomenology (the same description).

Beck, Wright, Newman and Liese (1993:268) describe concomitant personality disorders within the context of the term "dual diagnosis" as it has been used widely to refer to the coexistence of substance abuse and other psychiatric disorders (Brown *et al.*, 1989; Evans & Sullivan's (1990); O'Connell (1990), in Beck, Wright, Newman and Liese (1993:268). The authors argue and discuss the dual diagnosis of substance abuse and major psychiatric syndromes (e.g. depression and anxiety). In their study the authors discuss the treatment of patients with dual diagnosis involving substance abuse and concomitant personality disorders. There have been numerous studies documenting the high prevalence of personality disorders among substance abusers. Several studies conclude that a wide range of personality disorders coexists with substance abuse.

Psychosocial Problems (Primary Care)

The Diagnostic and Statistical Manual of Mental Disorders (4th edition, 1995), emphasises *Primary Care* aspect in this study. It enlightens and explains that the primary care clinician is likely to encounter individuals who have psychosocial problems that are a focus of clinical attention but that are not considered true mental disorders. These problems are related to the mental disorders as stipulated by Beck, Wright, Newman and Liese (1993:268) in one of the following ways:

- the problem is a focus of clinical attention, and the individual has no mental disorder,
- the individual has a mental disorder , but it is unrelated to the problem,
- the individual has a mental disorder that is related to the problem , but the problem is sufficiently severe to warrant independent clinical attention.

It is clear therefore that although the focus of the study is mainly not on studying psychiatric disorders, however the emphasis of the argument is that substance abuse by certain community members has an effect on the incidents of mental illness.

At this stage, the discussion focuses on TB disease.

2.6.3 TB as a major adverse effect of marijuana and alcohol abuse

TB is prevalent in the Nongoma area. One of the assumptions on which this study hinges indicates that there is a link between alcohol abuse and TB.

- **Tuberculosis: an outline**

Gumede (1986), in his unpublished paper delivered at a seminar in Nongoma, says that TB is now regarded as "a socio-economic disease with medical complications". Ways of reducing the problem are the provision of clean water, food, clean air, shelter and employment. TB and poverty are shown to be major adverse effects of both alcohol and marijuana. Gumede (1986) indicated that the effective drugs against the tubercle bacillus are strefilomycin, isomaside, rifampicin and ethambutol. Statistics, as reflected in Tables 1 – 4 indicate that the war against TB is not being won.

Table 1: Total number of TB patients treated in RSA health centres in 1998

Total No. of cases 1998	**110 098**
Cure rate 1997	57%
Clinics with inadequate drug supplies	41%

Source: Directorate: Health Systems Research and Research Epidemiology. Department of Health, 1999.

TB is an opportunistic disease. It manifests itself whenever conditions are conducive for it to thrive. Many people and institutions find it acceptable when TB is recorded as the cause of death even though the actual cause is probably HIV/AIDS or alcoholism. The high incidence of the disease in RSA is reflected in Table 2. The table reflects the number and percentages of new and re-treatment pulmonary TB patients who have undergone the correct laboratory investigations.

Although the table reflects high incidences of TB in the RSA, there is nevertheless, concern about under reporting. According to one of the officials at the Benedictine Hospital there is

also gross under reporting in the rural areas of Nongoma. Consequently, the above figures probably do not reflect the true picture of the TB problem. It is relevant to distinguish race groups in this regard as South Africa has historically been arranged in accordance with racial groups.

Table 2: Reporting rates on TB in the RSA by province

	Reporting rate (%)		Number of PTH cases*		Bacteriological coverage (%) **		Number of new smear + cases	
	1997	1998	1997	1998	1997	1998	1997	1998
South Africa	69	71	108086	110098	85	88	56565	63014
Eastern Cape	58	80	24253	26405	90	89	11999	14174
Free State	99	95	8726	9084	70	77	3437	4564
Gauteng	97	75	14128	10820	78	90	9155	7329
KwaZulu-Natal	66	44	23646	22089	78	82	10734	11707
Mpumalanga	78	64	3174	3462	96	95	2273	2422
Northern Cape	69	54	4431	2690	77	82	1905	1387
Northern Province (Limpopo)	93	89	4738	4833	92	91	3135	3143
North West	93	96	6288	9328	86	81	3839	6237
Western Cape	83	73	18702	21305	93	97	10088	11982

Source: Directorate: Health Systems Research and Research and Epidemiology, Department of Health, 1999.

Table 3: TB by race, 1997

Race	**Incidence per 100 000**
Whites	13,5
Coloureds	44,5
Indians	42,0
Africans	175,0
Total/Average	**177**

Source: South African Health Review, Health Systems Trust, 1998.

A comparison of the incidence of TB on racial lines in the RSA indicates that it occurs mostly among black people. The conditions which are conducive to its occurrence are most commonly experienced by them. Table 4 shows how much it costs to treat one TB patient.

Table 4: TB drug costs per month

Primary health care treatment	R200
Re-treatment for defaulters	R500
Multi-drug resistant TB	R25.00

Source: South African Health Review, Health Systems Trust, 1998.

From Table 4 it is clear that the emphasis should be more on prevention than cure.

In South Africa, the amount spent on clinics with all the available TB drugs was estimated in 1998 at being 59% of the health budget. TB remains a scourge among the poor in developing countries. Yet it has almost totally been eliminated in First World countries where TB centres and sanatoriums are now used as homes for the aged. South Africa is a rich country in terms of mineral resources but the majority of African people are poor.

2.6.4 The Global problem of tuberculosis

The *Economist* (2000) points out that according to a report of the Word Health Organization (WHO), about a third of the world's population is infected with TB. The disease infects two million people a year, 98% of whom are in developing countries. TB has increased in sub-Saharan Africa and Cambodia partly because of their high rates of HIV infection. This predisposes such patients to TB. The disease wreaks havoc in the countries with a high incidence of these diseases. 75% of TB cases occur among economically active 15-54 year olds. Cost-effective therapy is available, namely Dots. This is a system that involves treatment using two cheap antibiotics for up to eight months. The system is supervised to ensure patient compliance. Treatment with the ineffective drugs or irregular supplies of the right ones is leading to a rise of deadly multi-drug-resistant TB. This form of TB is far more costly and time consuming to treat.

Tuberculosis (TB) is a global problem although the high incidence of the disease is commonly found among the poor and indigent masses in under developed countries. This is also the case in the rural area of Nongoma. TB is presented by the WHO (1996) as:

- the leading cause of death among adults

- killing more adults than AIDS and malaria combined
- having infected 300 million people over the past decade whilst 100 million people developed active TB
- a global emergency with the following consequences three million people die annually (expected to increase to four million by 2004)
  - TB is a common co-infection with HIV
  - young adults have the highest mortality rate
  - in South Africa TB is regarded as a killer disease that has not yet been eradicated as
    - South Africa has one of the highest rates of per capita infection in the world
    - in 1996 TB incidence was 326/100 000 of the total population.
    - 27% of TB patients are infected with HIV.

TB is treated with chemotherapeutic drugs. Patients who are treated with these drugs continue to use other drugs such as tobacco, alcohol and marijuana. As a result they often acquire the condition referred to as multi-drug resistant TB (MDR-TB). Farmer (1999/10/29-1-3) spells out that the condition referred to as the MDR-TB pertains to a situation where the TB patient does not respond to the usual drugs prescribed for the disease. It then requires more expensive drugs to treat it. The rising number of MDR (TB) patients who are being attended to in hospitals and clinics, especially in Nongoma, is cause for concern. This should not be interpreted as meaning that substance abuse is the single cause for the development of the MDR-TB. However, it is one of the main co-factors. The following factors in relation to MDR (TB) are an indication of its nature and extent:

- globally there is a rising incidence of MDR-TB
- 50 million people may be infected with MDR strains
- cost of treatment rises to $250 per individual (US figures)
- TB is highly contagious—MDR was one of the reasons for WHO's declaration of an emergency in 1993.

According to Crofton, Chaulet and Maher (1997) there are several factors mostly related to human error, which contribute to drug resistant TB. They point to the following:

- Drug resistant bacilli are the consequence of human error in any of the following:
- prescription chemotherapy;
- management of drug supply;
- case management; and
- process of delivery of drugs to the patients.
- The most common medical errors leading to resistant bacilli are:
- The prescription of inadequate chemotherapy to the multibacillary pulmonary TB cases.
- The addition of an extra drug in the case of failure, and repeating the addition of a further drug when the patient relapses after what amounts to monotherapy.
- Common errors observed in the management of drug supply are:
- Difficulties experienced by poor patients in obtaining all the drugs that they need;
- Frequent or prolonged shortages of anti-tuberculosis drugs (especially in developing countries);
- Use of drugs (or drug combinations) of unproven bioavailability.
- The following are also implicated:
- The patient's lack of knowledge that might be linked to lack of information or inadequate explanation at the commencement of treatment;
- Poor case management, especially when the treatment is not directly observed, especially during the initial phase.

It is significant to note that though the treatment programme appears to be comprehensive as listed above, it nevertheless omits substance abuse prevention as the study has already established that it is one of the main co-factors in exacerbating the problem of MDR-TB.

Chaulet, Raviglione and Bustreo (1996) emphasized the importance of well-implemented and effective national tuberculosis programmes in preventing MDR TB.

When victims of the MDR (TB) are people in the low socio-economic category, treatment of their condition has to be borne by the state. Usually their families become victims as well. TB is contagious and very costly to treat. Breadwinners who are suffering from TB can no longer work. They become dependent on other members of the family, perpetuating the cycle of poverty.

Inspite of what Chaulet's *et al* (1996) emphasis on highly professional plans for treating MDR-TB patients, as long as substance abuse is nog being adressed whithin TB health sector, MDR-TB will definitely increase at alarming proportion.

2.6.5 Poverty as a major co-factor for TB

According to a report by Statistics South Africa (2000), poverty is defined in a variety of ways. In the present study poverty is seen as more than merely low income or low expenditure. The denial of opportunities and choices basic to human development such as to lead a long, healthy, creative life, to enjoy a decent standard of living, freedom, dignity, self-esteem and respect from others not only result in poverty but also substance abuse.

McMurray *et al* (1990:403) mention that primary malnutrition, alcoholism and AIDS are linked by the common themes of wasting away, immune impairment and the increased incidence of tuberculosis (Chaisson & Slutkin 1989; Schieffebein & Snider 1988; Onwubalili & Scott 1988, in McMurray *et al* (1990:403). The importance of tuberculosis as a "malady signal" (syndrome of diseases) in three grave diseases suggests that each may be characterized by similar alterations in immune responses and antimicrobial resistance. Malnutrition, in particular protein deprivation, is a factor in the pathogenesis of alcoholism and AIDS. The study of the impact of protein deficiency on resistance to tuberculosis may contribute to the general understanding of altered resistance in alcoholics and HIV-infected individuals (See Figure 3).

Parry and Bennetts (1998:68), citing the Royal College of Physicians (1991) and the US Institute of Medicine (1994) warn that alcohol also affects the immune system and could therefore increase the risk of someone becoming HIV positive when exposed to the virus. They further report that these institutions indicate that it is also possible that alcohol may speed up the progression of HIV to full-blown AIDS. The diagram in Figure 3 illustrates the relationship between alcohol, HIV and AIDS. Young men and women, who would in a sober state, use protection like condoms, would, under the influence of alcohol or drugs be less inclined to do so.

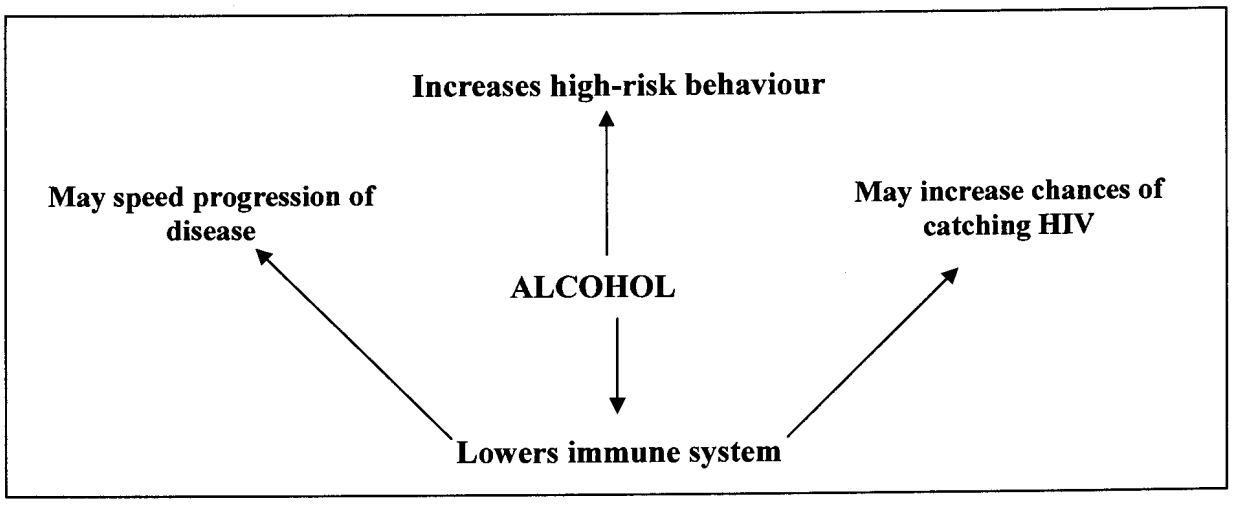

Figure 3: the possible relationship between alcohol consumption and HIV/AIDS

Adapted from Parry and Bennetts (1998:68)

Wake (1992), in Harrison (1996:120), points out that the situation may have improved in the intervening years, however, recent surveys indicate that almost half of all street drinkers still receive less than one meal a day, the remainder having erratic or poor diets. Moore (1987), in Harrison (1996:120), maintains that malnutrition is far more likely to affect homeless heavy drinkers. Consequently it is more difficult to treat such people. Often the problem is not so much food deficiency, but major dietary imbalance (Koegel *et al* (1990) in Harrison 1996:120).

2.7 SUBSTANCE ABUSE AND HEALTH-RELATED PROBLEMS

There are significant indications of a link between primary malnutrition, alcoholism and AIDS. The end result of all these variables is often diagnosed as TB.

The *Daily Monitor* (2000, 6 November) explains that opportunistic infections, sensing the decline of the immune system, eventually kill the individual. This is what is referred to as the piggyback effect of HIV on adverse socio-economic and environmental conditions. This is as deadly as the direct medical effects. There are two primary factors, according to *The Daily Monitor* (2000, 6 November) that both cause and effect substance abuse in Africa. The first factor, poverty, is described as the second cousin of HIV infection and secondly HIV/AIDS, which thrives in the presence of high, rates of sexually transmitted diseases and TB. TB, AIDS and poverty are the so-called triangle of the pandemic. The researcher proposes that alcoholism and drug dependence should be included as well, as they constitute the major part of the interconnection of these variables.

Citing Jewett, Seminara *et al* (1990:57), say alcohol and HIV acutely and chronically affect the immune and the central nervous systems. According to them this parallelism is not surprising if one recalls that parts of the immune system are embryologically derived from neural crest cells.

Central nervous system cells and the immune system have many similar receptor sites. Alcohol can affect the likelihood of becoming infected with HIV by increasing risky behaviour and by reducing immune system functions. Alcohol may also affect the progression of HIV infection by causing changes in the immune system.

Seminara *et al* (1990:57) add that there is a body of literature that suggests that alcoholism is associated with the increased seroprevalence of the hepatitis B virus. Mills *et al* (1981) in Seminara *et al* (1990) report that a study of 250 Caucasian patients living in Glasgow, Scotland, indicated that they had histologically proven chronic liver disease. Alcoholics with cirrhosis, but not those with milder or no liver disease, had a higher prevalence of hepatitis B virus antibodies (34%) than subjects with other forms of liver disease (13%) or no liver

disease (5%). Hislop *et al* (1981) in Seminara *et al* (1990) surveyed 195 patients with alcoholic liver disease living in five cities of Scotland and Northern England. Of these, 15% were hepatitis B surface positive, compared to 2-3% prevalence in a previous general population survey of Scotland. Those with cirrhosis of the liver tended to have a higher hepatitis B seroprevalence, confirming the role of the hepatitis B virus in chronic alcoholic liver disease. Similar data was found in France (Goudeau *et al* 1989, in Seminara *et al* (1990:57) where alcoholics, particularly those with cirrhosis, demonstrated a higher hepatitis B virus seroprevalence.

The Journal of the American Medical Association, (Armstrong,1999:104) discusses the adverse health effects of alcohol. It states:

- heavy drinking increases one's risk of contracting certain disorders, such as liver cirrhosis (damage to liver cells), pancreatitis (inflammation of the pancreas) and certain types of cancers, including cancer of the liver, mouth, throat, larynx (the voice box) and oesophagus
- long-term health consequences of heavy drinking include loss of appetite, vitamin deficiencies, stomach ailments, digestive problems, skin problems, sexual impotence, obesity, heart and central nervous system damage, memory loss and psychological disorders
- heavy drinking also increases the risk of death from car accidents, a higher likelihood of homicide and suicide and harm to the foetus during pregnancy.

Alcoholism and alcohol abuse is a common co-factor across a spectrum of a variety of situations. This can be illustrated by the following synopsis of alcohol related illness admissions to hospitals.

Table 5: Hospital and treatment centre admissions

% of general hospital admissions in South Africa related directly or indirectly to alcohol use.	**Admissions:** 25%-30%
% of substance abuse treatment centre admissions.	64%-68%

Sources: Health System Trust Update 34 (1999) and SACENDU, 1998.

These percentages have been gleaned from the general hospital's records which reflect patients at general hospitals as well as substance abuse clients/patients admitted for treatment at the centre.

A map indicating SANCA alcohol other drug treatment centres in the RSA (Figure 1) reflects the fact that most such centres are found in metropolitan areas. The alcohol and drug treatment centres in rural areas are rendered ineffective by their inadequacy to cater for a vast area.

Table 5 demonstrates the percentages of cases admitted with alcohol related illnesses. This is an underestimation.

Table 6 demonstrates how pregnant women who abuse alcohol will affect the unborn baby. The traditional perception has always been that only men are substance abusers. Foetal alcohol syndrome (FAS) figures indicate that substantial numbers of women abuse alcohol as well.

Table 6: Foetal alcohol syndrome (FAS)

FAS in Cape Town	1 per 281 live births
FAS in other industrial societies	1 per 750 live births
% of women attending antenatal classes in Cape Town drinking at levels high enough to put their babies at risk of FAS	26,4

Source: Health System Trust Update 34, 1999.

Table 6 gives some indication as to what might be ascertained if similar investigations were done in cities and selected rural areas of South Africa.

In Table 7 the percentage of excess blood alcohol level on trauma cases is presented.

Table 7: Association between alcohol and non-natural death

Non-natural deaths	Excess blood alcohol level
All	55%
Drivers	11%
Pedestrians	35%
Homicide victims	27%

Source: Salt River Mortuary, Cape Town, 1998.

Table 7, in reference to all, it therefore encompasses the following percentages of drivers, pedestrians and homicide victims.

The cost of alcohol abuse in South Africa is estimated at over $1, 7 million per year (2% of GNP) (Health Systems trust Update, 34, 1999).

Baker (1977:24) states: "Alcohol deadens the mind to mental pain and the body to physical suffering. The emotions are given free license, but at the expense of the hard won gifts of refinement, poise and purpose. Vision and memory are impaired, the performance of the muscular system is lowered and centres of the brain progressively shut down." In the same vein, Smith *et al* in Milkman and Shaffer (1985:145) state: "Alcoholism as a disease is the country's number one substance abuse disorder, inflicting major economic and health damage on millions of people each year." Herrington *et al* (1986:220) concur that alcoholism is responsible for extensive morbidity and mortality worldwide (Schmidt & Popham, 1976:50).

No human organ is spared the deleterious effects of this drug when it is consumed in excessive quantities. Research has consistently demonstrated that alcohol is directly and indirectly responsible for the hospitalization of as many as 25-30% of the patients in general medical wards (Barchha *et al* 1968:681-684). Yet the diagnosis of alcoholism is consistently under represented in medical records. The complications of alcoholism are assiduously recorded with only infrequent reference to the primary cause, alcoholism itself.

Szasz (1974) in Milkman and Shaffer (1985:157) argues that the disease model diminishes the emphasis on personal responsibility for a person's dysfunctional or antisocial behaviour.

Those who experience problems related to the consumption of chemical substances (e.g. alcohol) are often not held legally or ethically responsible for their actions.

Conversely, those who enjoy the use of other chemicals (e.g. marijuana) in adaptive or recreational ways are often said to have a dangerous social disease that may contaminate others and will lead to catastrophe if left untreated.

The disease model diminishes personal responsibility for criminal acts if perpetrated whilst under the influence of alcohol. The *Sunday Argus* (1`999, 24 October) reported the case of a rapist who allegedly raped his grandmother aged 114 years. The alleged rapist apparently said he was too drunk to remember what happened when he visited his grandmother.

In pursuance of the argument on the disease model, Struening and Padgett's (1990), in Harrison (1996:121), investigation of health status among 1, 152 homeless men and women in New York City, found that there were increasing levels of hypertension, heart and circulatory problems as the severity of the alcohol and drug problems grew. There is some indication that this may have been the case in Harrison and Carr-Hill's study (1992:48) as well. In this study:

> those who described themselves as drinking heavily ('daily or frequent heavy drinking sessions') or problematically ('have sought help') were much more likely to have suffered heart problems in the previous 12 months. Fifteen per cent of current heavy and problem drinkers reported heart trouble compared to 4.5 per cent of the others. This is probably because heavy drinkers are much more likely to be smokers. Smoking is a major cause of coronary heart disease.

The view expressed earlier that alcohol abuse is a social illness with medical complications, is sufficient for the purpose of the present study. There is a tendency to try and minimize harm caused by substance abuse. The fact that the disease model of alcoholism is still being debated hampers the formulation of an appropriate prevention strategy. In spite of all these insightful debates, the overwhelming conclusion is that the disease model definition of

alcoholism and drug dependence portrays similar signs and symptoms to those displayed by the traditional disease definition.

2.8 ALCOHOL AND ITS SIMILARITIES TO CANNABIS

Hall, Solowij and Lemon (1995: xi) says that the major risks of acute cannabis use are similar to those of alcohol intoxication in a number of respects. Firstly, both drugs produce psychomotor and cognitive impairment.

The impairment produced by alcohol increases the risk of various kinds of accidents. It remains to be determined whether cannabis intoxication produces similar increases in accidental injury and death, although on balance it seems that it does. Secondly, substantial amounts of alcohol taken during the first trimester of pregnancy can lead to foetal alcohol syndrome. There is some evidence (not conclusive) that cannabis used during pregnancy may have similar adverse effects. A major health risk of acute alcohol use that is not shared with cannabis is that in large doses alcohol can cause death by asphyxiation, alcohol poisoning, cardiomyopathy and cardiac infraction. There are no recorded cases of such fatalities attributable to cannabis (Hall *et al*, 1995: XI).

2.8.1 Chronic effects of alcohol and cannabis

Hall *et al* (1995: xi) explain the following; "Chronic cannabis use may share some of the risks of chronic alcohol use. Firstly, heavy use of either drug increases the risk of developing a dependence syndrome in which users experience difficulty in stopping or controlling their use of the drug. There is strong evidence for such a syndrome in the case of alcohol and reasonable evidence in the case of cannabis. Secondly, there is reasonable clinical evidence that the chronic heavy use of alcohol may produce psychotic symptoms and psychoses in some individuals."

There is reasonable evidence that chronic heavy cannabis use may produce toxic psychosis, precipitate psychotic illnesses in predisposed individuals and exacerbate psychotic symptoms in individuals with schizophrenia. Thirdly, there is strong evidence that chronic heavy alcohol

use may indirectly cause brain injury known as the Wernicke-Korsakov syndrome. Severe memory defectiveness and impaired ability to plan and organize are displayed. Chronic heavy cannabis use does not produce cognitive impairment of comparable severity but there is reasonable evidence that such use may produce subtle defects in cognitive functioning which may or may not be reversible after abstinence. Fourthly, it is clear that chronic heavy alcohol use produces impaired occupational performance in adults and lowers educational achievement in adolescents. Evidence indicates that chronic heavy cannabis use produces similar, albeit more subtle, impairments in the occupational and educational performance of adults. Fifthly, there is strong evidence that chronic heavy alcohol use increases the risk of premature mortality from accidents, suicide and violence. There is no comparable evidence for chronic heavy cannabis use although it is likely that dependent cannabis users who frequently drive while intoxicated increase the risk of accidental injury or death. Sixthly, alcohol use has been accepted as a contributory cause of cancer of the oropharangeal organs in men and women. It is apparent that chronic heavy cannabis smoking may also be a contributory cause of cancer of the aero digestive tract, the mouth, tongue, throat, oesophagus and lungs. While discussing the similarities between use of alcohol and marijuana, it is necessary to look at the similarities between tobacco and cannabis (marijuana).

2.8.2 Tobacco as a concomitant of cannabis

The major acute health risks that cannabis shares with tobacco are the detrimental effects of cannabis and nicotine on the cardiovascular system. These major health risks were discussed earlier in regard to marijuana.

The other major health risks that continuous heavy cannabis and tobacco smokers have in common, are persistent respiratory diseases such as chronic bronchitis and probably cancers of the aero digestive tract. The increased risk of cancer in the respiratory tract is a consequence of the shared route taken by smoking. Chronic heavy cannabis smoking may also share the cardio-toxic properties of heavy tobacco smoking although this possibility remains to be conclusively proven. These substances interact in the same physiological body of the user. They have similar, if not the same, deleterious effects on the body. There is not

only interconnectedness between substance abuse and physical health, but also between substance abuse and social problems (social health).

2.9 SOCIAL HEALTH AND SUBSTANCE ABUSE

According to the World Health Organization (WHO), as cited by Spencer (1980:10), health is defined not merely as the absence of disease or infirmity but as a state of complete physical, mental and social well-being. The use of the term "social health" is intended to emphasize those aspects of health that relate to the individual as a member of a group, community or society. From the perspective of social health, ill health is viewed as the interaction of a number of factors. Some of which may appear to bear no direct etiological relationship to the morbid condition. The individual is viewed as a complex organism functioning in a complex setting.

Powell (1993:120) maintains that mental health professionals have dealt with substance abuse as if it were a kind of behaviour that will disappear with treatment of the primary problem through psychotherapy, medication and family therapy. According to the Minnesota model and alcoholism treatment field, alcoholism is a primary disease and not a symptom of some underlying disorder, although alcoholism does manifest in other problems and affects all aspects of a person's life and the social environment. Depression, family system issues and early childhood development factors are all aspects related to social health and illness. Alcoholism is regarded as a family disease.

2.9.1 Alcohol as a family disease

Saitoh *et al* (1989:231) maintain that alcoholism affects not only the individual who suffers from it, but also those who live with him/her. Conversely, a dysfunctional family may perpetuate the alcoholism. If the family as an emotionally closed system attempts to keep the problem of alcoholism within the family's boundaries, it may impact be quite severely on family members as well as the alcoholic himself. The more psychologically vulnerable individual members of the family are, the more severely they will be affected by abusive drinking.

The ways in which each member of the family will be affected will differ. They are determined not only by the characteristics of the stress and each member's mode of defence but also by his/her role within the existing family structure. Saitoh, Steinglass and Schucket (1989:231) state that a common way that alcoholism is dealt with in the family is for a spouse to over identify with the abuser and to internalize his/her psychological and behavioural disturbances. This may result in him/her to developing depression and extreme anxiety.

Saitoh, Steinglass and Schucket (1989:203) state that in recent years the systems theory has been widely accepted. It looks at not only a couple's individual personalities and problems but also at their interactional patterns. And the ways these contribute to the overall picture and how the family uses and maintains problem drinking in their relationships. Saitoh *et al* (1989) have observed the manner in which different family members are affected by family problems thus creating a family system network.

Practicing social workers and Alhed Health Professionals (AHPs) should study closely how the family system operates. Saitoh *et al* (1989) state that in the alcoholic family, the spouse and the children share the results of alcohol abuse and contribute to the maintenance of the problem. The children of alcoholic couples learn the mode and style of the interactional patterns of their parents and may, in turn, transmit these patterns to their own offspring.

Wegsheider (1981) and Black (1981) in Wood (1988:7) examine the way in which the children of alcoholics often seem to be trapped in self-destructive patterns that are either prescribed or modelled by their dysfunctional parents. They note that children from alcoholic families defend themselves against the instability and aggression that characterize these households by adopting certain "roles".

These roles serve to bring some resemblance of predictability to the family and to family emotions, which, if openly expressed, might shatter the child's self-esteem as well as the fragile family structure.

Saitoh *et al* (1989:169) argue that current trends in family interaction research into alcoholism reveal that this is a dynamic area of investigation. New treatment methods which

are interactive models of alcoholism are applied. It is also clear that advances in the understanding of the biological predeterminants of at least some forms of alcoholism are benefiting family interaction researchers. These advances help define with increasing accuracy the characteristics of alcoholism that are critical to control in research designs intended to elucidate the interaction between biological and family environmental factors. Systems theory states that each part of a system influences the whole system.

2.9.2 Limitation of a family perspective

Oxford and Harwin (1982:263) argue "The most important limitation on the use of a family perspective upon drinking problems is the very obvious one that not all excessive drinkers live within families. They know that one of the hazards of alcohol abuse is the very risk it carries of family break-up. Equally, there is a small but important group of drinkers who have never married and who have formed only the loosest of social bonds." They conclude that for these groups a family perspective has little to offer.

Oxford and Harwin (1982) add that there is a danger of exaggerating the centrality of the family to the neglect of the wider social determinants of behaviour. Shaw in Oxford and Harwin (1982:263) shows how family drinking habits are inextricably bound up with political and economic pressures. They reflect the vagaries of market forces, the changing role of women in society and policies that restrict or promote access to alcohol. They point out that it is in the sphere of treatment that this broad social perspective has often been neglected. Practitioners have accorded primacy to familial interpersonal relationships, forgetting that hostility and conflict may stem as much from financial hardship, employment and housing difficulties as from any clashes of personality or drinking disputes. These limitations are reasonable responses to the overwhelming field of the systems approach. These limitations do not really affect the present discussion and consequently will not be pursued any further.

More often than not, the drinking husband, as opposed to the drinking wife, is perceived as the culprit. Birchmore *et al* in Robinson (1979:113-116) write: "Societal attitudes towards women drinking may hinder the detection and treatment of the woman alcoholic. While

drinking per se is now more acceptable for women, intoxication is not. Society is more tolerant of drunkenness in men while female alcoholism is often considered a disgrace."

Curlee (1968) in Robinson (1979:114) points out that society is more willing to classify women as mentally ill than as alcoholic, and adds: "One should be aware that doctors are more likely to seek physical factors for emotional stress in men than in women, since they expect women to be more 'emotional' by nature." Fraser (1973) in Robinson (1979), comments that physicians often prescribe medication as the treatment for alcoholic women.

Various studies indicate that a high proportion of female alcoholics have broken marriages. The incidence ranges from 24 to 67 percent (Lisansky in Robinson 1979, in Robinson, (1979). Female alcoholics tend to choose alcoholics as husbands. Rosenbaum (1958) and Kinsey (1966), in Robinson (1979:114) found that 80 percent of women who were married more than once, chose alcoholic spouses in subsequent marriages. While discussing the problem of female alcoholics, the researcher looked at the effects on their unborn offspring; from a literature perspective (see Chapter 2). Women are regarded as role models for their children and the society. It is an unfortunate state of affairs if she is abusing alcohol as this will have a negative impact on her children.

2.9.2.1 Effects of drinking on offspring

"What must become of an infant," Henry Fielding in 1751 asked, as cited by Robinson (1979), "who is conceived in Gin? In the 200 years since Fielding published his social reform pamphlets, medical science has often asked the same question. Jones *et al* (1973) in Robinson (1979:130) rediscovered an effect of alcohol on morphogenesis and called it the "Foetal alcohol syndrome".

Robinson (1979:130), citing Jones *et al* (1973), reports on foetal alcohol syndrome: "Eight unrelated children of three different ethnic groups, all born to mothers who were chronic alcoholics, have a similar pattern of craniofacial, limb and cardiovascular defects associated with prenatal-onset growth deficiency and development delay. This seems to be the first reported association between maternal drinking and aberrant morphogenesis in the

offspring." The effects of alcohol on the offspring have attracted scientific attention. There is also a direct relation between alcohol-abusing parents, in particular their mothers, and child abuse.

2.9.2.2 Alcohol-related child abuse by alcohol-abusing parents, particularly mothers

Downs and Miller (1996:14) argue that violence towards children and alcohol problems are widespread in the USA. In a nationally representative sample of 6 002 families, Straus and Gelles (1990) in Downs and Miller (1996:14) found that 11 percent of children (approximately 6,9 million children) were annual victims of parental violence (defined as being hit with an object, kicked, bitten, punched, beat up, burned, scalded, or threatened or attacked with a knife or gun). From 20 to 30 percent of adult women and from 10 to 15 percent of adult men reported having been sexually abused during childhood (Finkelhor (1979); Finkelhor *et al* (1989).

Downs and Miller (1996:15) maintain that theoretically and clinically, problems concerning alcohol that are associated with childhood violence is an important issue. If children whose parents have alcohol problems have an elevated risk of childhood maltreatment and if childhood maltreatment is then related to the development of alcohol problems for those children in adulthood, there is the possibility of intergenerational transmission of both childhood maltreatment and alcohol problems.

In a study of alcoholism in the general population, Holmes and Robinson (1988) in Downs and Miller (1996) found that parental alcoholism is related to the perpetration of harsh and unfair discipline on their children. Williams and Petersen *et al* (1994), in Downs and Miller (1996), found that drug use is linked to the potential for child abuse among a prenatal group of women. Reider *et al* (1989) in Downs and Miller (1996) found a similar association between both father's and mothers.

Saxon *et al* (1978:167) touch on two hypothetical questions. One is concerned with the extent to which drug abuse, alcoholism and suicide are functionally equivalent behaviours. The second involves the role of drug abuse, alcoholism and suicide as responses to a failure of an

individual's usual coping mechanisms. Saxon *et al* (1978) refer to the empirical research conducted at the Orange County Department of Mental Health, which shows significant suicidal histories in a drug-abusing population.

There are strong indications that alcohol-abusing mothers tend to maltreat their children while under the influence of alcohol. This has been observed by nurses in the children's surgical ward at the Benedictine Hospital (in KwaZulu-Natal) when children are admitted with injuries, burns and kwashiorkor. The researcher will subsequently mention some intervention strategies used by social workers in dealing with clients who are experiencing substance abuse related problems.

2.10 SOCIAL INFLUENCES FOCUSING ON INTERVENTION STRATEGIES

Despite the significant prevalence of clients with alcohol-related problems in the social worker's caseload (Compare: :Abel (1983); Leckie *et al* (1984); Leckie (1990), in Harrison (1996:141). The majority of social workers have confined their professional involvement to supporting family members who are most affected by the drinkers' behaviour and to carry out their statutory child protection role (Isaacs and Moon (1985), in Harrison 1996:141). In a survey involving a cross-section of social workers, Harrison (1996:141) reported that "responses intended to help the problem drinker counter difficulties with drink usually involved bringing in a third party for support". Often this would be the General Practitioner (Isaacs and Moon 1985:38, in Harrison (1996:141). Other sources of help utilized by the social worker like referring clients to alcohol treatment units or to meetings of Alcoholics Anonymous (AA) often elicited hostility. Many clients rejected to being labelled as an "alcoholic" (Shaw *et al* 1978).

Harrison (1996:142) maintains that the movement away from a judgmental approach towards alcoholism as a disease requiring medical attention represented an advance in the societal response to problem drinkers. Harrison (1996:142) goes on to say "Although this view is still widely held (Royal College of Psychiatrists 1979:56) it has been called into question in recent years by those who view alcoholism as an addictive behaviour" (Miller *et al* 1980; Oxford

1985, in Harrison, 1996:143). Oxford in Harrison (1996) argues that continued adherence to the medical model of alcoholism has retarded the understanding of the commonalities that exist between a variety of addictive behaviours. The emphasis the medical model places on the primacy of medical intervention, necessitating the attention of medical specialists, has hampered the development of an effective social work response to the scarcity of alcohol treatment. This whole argument underscores the view that social workers would be able to develop a framework specifying care for problem drinkers in the community.

Burke and Clapp (1997:532) review the role of the social work profession in connection with alcohol and other drug problems. It is stated that the social work profession has a unique role to play in preventing and treating such problems. Magura (1994) in Burke and Clapp (1997:532) states that many social workers are busy in the field of substance abuse practice and related activities. The 1991 NASW membership revealed that about 4 000 members (4,6 percent) indicated substance abuse as their primary area of practice (Gibelman & Scharvich 1993, in Burke and Clapp 1997). A further 3, 600 NASW members indicated substance abuse as their secondary area of practice. It has also been observed that numerous social workers work in settings where alcohol and other drugs problems are likely to affect clients seeking treatment services.

Burke and Clapp (1997) comment that, given the range and scope of involvement of social workers in substance abuse prevention and intervention, social work professionals should be aware of their beliefs on service provision in this arena and how these beliefs affect their professional efforts. Harrison (1996:165) states that improvements in the social milieu of the client appear to be extremely important in securing remission from alcohol-related problems. Social workers already possess many of the skills needed to deliver an effective service to problem-drinking clients Leckie (1990), in Harrison (1996:165). Helping clients who have problems with drug and alcohol use is to be accorded a higher priority as part of the movement towards providing care in the community. Training social workers in this field should be able to make a valuable contribution towards meeting this objective. The social worker has a significant role to play against the background of alcohol (substance) abuse related problems.

2.11 SUMMARY

In this chapter the researcher looked at the historical perspectives of alcohol as a beverage. He argued that prior to 1962, alcohol was used by the state as a political weapon to control the majority of indigenous Africans in South Africa. He also reported that alcohol (gin) was used to enter into contractual agreements with traditional chiefs in Ghana and Nigeria. Prior to 1962 Africans were prohibited from using alcohol. The move to lift the prohibition on the consumption of (European) alcohol by Africans was influenced by economic imperatives which failed dismally. Today, the Africans of South Africa are at the forefront of alcohol and other drug abuse, the ever-increasing problem of alcoholism disease, abuse of marijuana, TB as well as MDR-TB and poverty among individuals, families and the communities.

The researcher also briefly discussed the historical background of marijuana. Alcohol and marijuana play an important role in the lives of many ordinary people in South Africa. Both drugs have a potent effect on the individual when taken in excess. They can have a very deleterious effect on the body system.

In this chapter, the researcher has considered other diseases/conditions that interact with alcohol and drugs, such as TB, HIV/AIDS and malnutrition. It was important to consider these variables as they are crucial co-factors that impact negatively on the individual's socio-economic status and health and can lead to TB infection and other diseases. MDR-TB was also highlighted as a serious problem facing the country. These are some of the dilemmas facing Allied Health Professionals (AHPs) in South Africa.

The discussions explored a wide range of links between alcohol abuse and the emergence of medical complications. This is a vast field of study requiring rigorous investigation. The present study had to balance the various aspects that impinge on the preventable diseases and the implications on wider social problems.

Powell (1993:118) discusses the deleterious consequences of substance abuse. A common denominator for most abusers is the effect that substance abuse has on their lives. Powell regards the consequences of the abuse as a better indicator of the problem than patterns of

drinking, beverage preferences or consumption rates. Substance abuse manifests early in blackouts, strained personal relationships, impaired job performance, legal problems (drunken driving, financial liabilities) and deteriorating health. Other indicators include preoccupation with drinking, occasional loss of control, decreased social contacts and emotional mood swings.

Wallace (1985:10) in Powell (1993) states that not all of these indicators apply to everyone. One encompassing definition is that alcoholic or drug abusers cannot consistently control their drinking, or drug taking over time. They cannot guarantee their personal and social behaviour once they start to drink or take drugs. Chapter 3 focuses on the theoretical framework to contextualize the link between substance abuse and preventable diseases and intervention strategies to health and related social problems.

CHAPTER THREE

PRIMARY PREVENTION OF SUBSTANCE ABUSE AND PREVENTABLE DISEASES: AN INTEGRATED THEORETICAL FRAMEWORK

3.1 INTRODUCTION

In the previous chapter it was ascertained that there is a link between substance abuse and the increasing incidence of preventable diseases among patients undergoing treatment. There is also a link between poverty, malnutrition, tuberculosis, alcoholism, rampant HIV/AIDS as well as a range of other social problems. The Financial Policy (1999) acknowledges that prevention is a viable alternative strategy for addressing the problem of substance abuse. However, it requires planning to implement it in a systematic and holistic way.

The WHO (1996) approved the primary health care approach. This approach embodies several explicit principles and values that provide the philosophical and conceptual foundations for primary health care strategies. These strategies have major implications for the entire health system and entail interaction with the broader economic and social development structures.

The WHO's initial goal was "health for all by the year 2000". This noble goal was conceived with good intent but has not yet been realized. Instead such diseases as HIV/AIDS, tuberculosis and cholera have re-emerged, especially in rural areas. The WHO has therefore formulated a new goal: "Health-For-All in the 21st Century". This new global health policy, aimed at meeting the major challenges to health during the following decades, is being developed by the WHO in consultation with all its national and international partners. These involve, inter alia, the other United Nations organizations, member countries, the regional WHO offices, the academic and research community and a wide variety of non-governmental organizations. The policy for the 21st century has evolved from the Health-For-All policy that has been a common inspirational goal since its inception in 1979.

One of the key focus areas of primary health care is health promotion. Peele and Grant (1999:40) argue that in order to be effective, a health promotion approach must be comprehensive. These authors explain that the world is not amenable to miracle solutions and/or resolutions but rather to comprehensive approaches. A primary preventive programme should adopt an integrated, multisectoral and multidisciplinary approach, which is described by Peele and Grant (1999:40) as "a long-term component". The combined effort includes law enforcement, education and treatment. Social workers in their role as educators cannot be excluded from the primary prevention of substance abuse and HIV/AIDS. Sheafor, Horejsi and Horejsi (2000:59) state that "throughout its history the social work profession has been mostly concerned with addressing and modifying human problems and conditions. In recent years social workers have given greater attention to primary prevention (preventing the development of problems). Such preventive efforts place the social worker in the role of a teacher or even a public educator."

A primary health care focus is relevant for this study. Alcoholism and drug addiction affects the individual's health and well-being. It is related to preventable diseases such as tuberculosis and HIV/AIDS, and are usually embedded in social problems such as poverty, unemployment, physical and emotional abuse and social exclusion.

Mahler (1979) maintains that improving the health of people is fundamental to improving their well-being. The WHO refers to "social health", which Mahler (1979) asserts derives from the fact that health promotes development and vice versa. Mahler (1979) argues that development projects that overlook preventive health care tend to increase the incidence of disease.

In this chapter, the researcher highlights the need to engage in appropriate primary preventive programmes for substance abuse and preventable diseases. The discussion will focus on community strategies involving community development, and adult education and empowerment. The discussion on primary preventive strategies will be embedded in the theoretical framework of developmental social welfare, the primary health care approach and a health promotion focus. Finally, health care prevention models will be discussed within a theoretical framework.

3.2 DEVELOPMENTAL SOCIAL WELFARE AS POLICY FRAMEWORK FOR PRIMARY HEALTH CARE

Following the United Nations World Summit for Social Development (Copenhagen 1995), the White Paper for Social Welfare (1997) charted a new path for social welfare policy in South Africa. Underlying this White Paper is the concept of developmental social welfare that aims to bring about "a just and caring society that upholds human and welfare rights, facilitates the meeting of basic human needs, realizes people's potential and builds human capacity and self-reliance" (White Paper for Social Welfare 1997:15). Midgley (1996:2) affirms that the developmental model of social welfare is attracting growing attention in policy circles today.

The White Paper for Social Welfare (1997:10) explains that the past political dispensation in South Africa enforced the residual social welfare model. This was characterized by fragmentation of services with a focus on rehabilitative services (healing) rather than prevention or development. Potgieter (1998:114) argues that social welfare did not succeed in addressing basic human needs, large-scale poverty and the social development priorities of all people. Midgley (1995:12) links social development with the concept of "welfare" and defines social development as an approach to social welfare that offers an effective response to current problems. He further explains that the term "social welfare" is used to broadly refer to a "social condition" and not to charity given by philanthropic individuals or public assistance provided by government (Midgley 1995:3).

Unlike the residual and institutional models, the development model purposefully links social and economic policies (Midgley 1996:6). Its primary feature is its concern with development. It is "developmental" in that it promotes a dynamic process of growth, change and progressive effectiveness. Potgieter (1998:117) concurs that developmental social welfare is justifiable as it links to social development and economic development and construes welfare as an investment in human capital rather than a drain on limited resources. Gray (1996:10-11) describes the social development model as a macro policy perspective primarily aimed at eradicating poverty in society. It provides the context within which development takes place. She states that it is a multisectoral approach to poverty alleviation and requires that all sectors

of society work together towards social upliftment. Todaro (1977:87) concurs that development should be perceived as a multidimensional process involving the re-organization and re-orientation of the entire economic and social system.

Estes (1995:76-77) explains this model of provision of personal social services as a pattern of social development practice. According to this author, this model "seeks to extend to people everywhere a range of social services that are needed to either restore or enhance their capacity for social formation. Its primary goals are (a) to provide remedial and preventive services to individuals, families and groups whose optimal social functioning is either temporarily impaired or interrupted and (b) to extend social protection to population groups threatened by exploitation or degradation. The model also seeks to ensure increased sensitivity and responsiveness on the part of human service providers to the special service needs of culturally diverse groups."

The assertion that social development means discarding remedial and therapeutic perspectives of social work is unfounded (Neilson & Gray 1997:18). An integrated approach does not necessarily mean abandoning one practice in favour of the other but rather a definite paradigm and focus shift. Within a primary prevention context, the model that is adopted and implemented must be cost-effective and bear positive results in terms of prevention of substance abuse, related illnesses and social problems.

The White Paper for Social Welfare is founded on the Reconstruction and Development Programme (RDP) of 1994. The RDP was initiated to replace the policy of apartheid. Sewpaul (1997:1) asserts that the RDP, as the foundation of national development, can facilitate a social development framework.

The White Paper for Social Welfare and the RDP share non-discriminatory core values by recognizing the worth and dignity of all mankind. The RDP itself emerged from an extensive process rooted in the participatory tradition of the Freedom Charter. The application of this policy hinges on the opportunity for each community to participate and strive toward a common goal. In accordance with the RDP, developmental social welfare has been sanctioned by the White Paper for Social Welfare to include:

- a concern for basic needs;
- equitable distribution of resources and services; and
- participation by beneficiaries.

The present government under the leadership of President Mbeki has introduced the idea of an African Renaissance (re-awakening) that incorporates the core values and principles of the democratic right of the African community to build capacity to fight hunger, poverty, ignorance and disease. The African Renaissance does not encourage individual success but rather group success – *ubuntu.*

Social service and support systems are thus a fundamental prerequisite for upholding section 10 of the South African Constitution (Act 108 of 1996), in which everyone has inherent dignity and the right to have their dignity respected and protected. The individual as a social being does not require fulfilment in isolation but wants to be appreciated by others and wants to belong somewhere, be it family, church or work. It is therefore cost effective to develop a community that will meet the needs of the individual. Economic globalisation and social policy reform: Social Work Curricula in South African context can be explained as follows: That White Paper on Social Welfare is pointing in the right direction of creating opportunities for investment in people in order to realise the potentials of fulfilling the human rights. Debates as to how the opportunities are realisable depends on economic factors such as growth, or lack of it. Development of people is the key, and this is reflected in the outcome of policies that go beyond the economic growth policies of the past.

The focus of social welfare development implies that services should enable people to do far more for themselves than simply obtain "welfare". The focus of development is the prevention of social problems rather than the treatment of symptoms. This requires a holistic approach and recognizes the interaction between social and other causes of social problems. No one sector can achieve sustainable development on its own. Policies, strategies and services must be comprehensive, integrated and multisectoral. Midgley (1992:4) notes that the Social Development Model involves "nothing less than the whole process of change and advancement of a territory".

The link between health care promotion and the developmental approach in social welfare is clear. The Copenhagen Declaration on Social Development (1995:3) identifies economic development, social development and environmental protection as interdependent components of sustainable development. They provide the framework for efforts to achieve a higher quality of life for all people. The primary health care approach is well placed within this social development framework. Dennill *et al.* (1995:54) point out that, as a process of interaction between people to achieve specific goals, it not only gives them the right and opportunity to be involved in decisions that affect their future existence, but also ensures the successful development of the community as a whole. Within this context the concept of "batho pele" – putting people first - is the point of departure for primary health care. The goal of "batho pele" is prevention of all problems that prevent people from reaching the highest possible standard of well-being.

3.3 INTEGRATED APPROACH IN HEALTH CARE PROMOTION

The spectrum of poverty, malnutrition, tuberculosis, AIDS, mental illness and substance abuse has led to the development of a grassroots policy by the Department of Health, namely the White Paper for Transformation of the Health System in South Africa (1997). This White Paper (1997:16) outlines the following objectives:

- promote a healthy environment;
- improve the psychological well-being of people and communities;
- ensure access to health-related information, community support and health services for adolescents;
- reduce alcohol and other drug abuse, with particular emphasis on tobacco, glue, cocaine, mandrax, heroin and marijuana;
- promote healthy behaviour to prevent sexually transmitted diseases (STDs) and HIV transmission;
- prevent the transmission of communicable diseases such as tuberculosis and the development of hypertension and diabetes;

- help the disabled to become independent and reach their potential for achieving a socially and economically productive life; and
- reduce the incidence of intentional and unintentional injuries.

Some of these objectives have a direct and indirect bearing on the focus of the study. In the White Paper reference is also made to the Mental Health and Substance Abuse Directorate. This Directorate is responsible for developing national policies and norms for the prevention and control of mental illness and substance abuse. Since mentally ill patients often engage in substance abuse, a primary health preventive strategy to promote health care must be a comprehensive undertaking that takes cognizance of mental illness as a health issue in relation to substance abuse.

A high standard of health and/or well-being can easily be achieved and sustained in a cost-effective way, if only more people could abstain from pleasures such as alcohol, other drugs and unsafe sex. However, as this seems to be a tall order, Peele and Grant (1998:29) suggest that rather than impeding pleasure and individual autonomy, health promoters should advance genuine, responsible pleasure. The questions asked are: Is health not after all a necessary condition for any really pleasurable life? Is health not the basis upon which both individual and social autonomy are founded? Pleasure, rightly conceived within the confines of health promotion, need not be the enemy of health. Seeking pleasure and the desire to satisfy the need for pleasure are common to all and should be accommodated within the health promotion perspective.

No single profession can deal with the causes and effects of substance abuse, the HIV/AIDS pandemic, poverty and many other problems and diseases. The World Bank (1980:57) regards primary health care as "an integrated approach to health that also spans food production, education, water and sanitation; in addition it emphasizes self-reliance and partnership between communities and governments". The need for a multidisciplinary endeavour to follow an integrated approach in addressing problems means that health-related professions will attend to the biological causes and healing of disease while social scientists will concentrate on the psychosocial impact and causes of disease. The joint efforts of social scientists and other professionals should supplement and complement one another, though. In

this study, the researcher concentrated on the biopsychosocial approach, as social scientists (social workers included) view an individual holistically, as a person who is influenced by his/her past and present experiences as well as his/her future aspirations. The biopsychosocial approach calls for a multiprofessional team of doctors, psychologists, social workers, physiotherapists, nurses and others.

Health personnel, in spite of the multi- and interdisciplinary nature of their work, administer mainly primary health care services. For social workers to be fully accepted by other professionals as co-workers and partners in a multidisciplinary team, they need to be knowledgeable about and skilful in the prevention of substance abuse, tuberculosis, HIV/AIDS as well as accompanying social problems.

The developmental approach mainly utilized by social workers does not hold agencies and professionals solely responsible for solving the community's problems. The community has to be included as an important stakeholder in the solution of its problems, including alcohol and other drug (AOD) abuse, HIV/AIDS and poverty. Thus, agencies and organizations work to facilitate the community's acquisition and effective use of knowledge, skills and resources that are required to fulfil its needs. Community members become the experts, and professionals and agencies work with them to develop a community prevention system that reaches out to and involves all affected groups and ethnic units. This involves all levels of programming and decision making. Community empowerment and cultural competency are advanced in each step of the process. This requires establishing coalitions, partnerships and collaborative efforts. Sensitivity to ethnicity, cultural diversity and competency is required of all preventive systems. Following the social development theory requires a shift of paradigm from a service delivery model to a community empowerment model. This paradigm will provide the means for communities to develop community preventive systems that are owned by and responsive to the needs of the community, and are more cost effective.

This empowerment paradigm is supported by some philosophical assumptions as outlined by Franklin (1991:2):

- To be successful, preventive efforts must address the three factors defined in a Public Health Model of prevention. Preventive efforts must be directed toward potential and

active users (the host); the sources, supplies and availability of the drugs (the agent); and the social climate that encourages, supports, reinforces or sustains the problematic use of alcohol and other drugs (the environment).

- To be successful, preventive programmes must reach 100% of the targeted people. A community preventive system ideally involves, works with and addresses the entire population and all systems of the community.
- Preventive programmes and activities must be ethnically and culturally appropriate.
- Prevention is morally and ethically imperative.
- An effective community preventive system demands mutual respect and equality among all groups, acknowledgement of interrelatedness, a sense of daring and willingness to transcend comfort zones toward positive social change. Credit for success must be shared and the community must be seen as the expert. The community is the best vehicle through which to develop and implement comprehensive preventive efforts.

In short, this perspective emphasizes that health promotion needs to target all population sectors and systems within the target community, must be ethnically and culturally appropriate, effect positive change and be community driven.

Peele and Grant (1999:29) conceptualize health promotion as follows:

- There is increasing scientific agreement about one healthy and rational way to life, referred to in the World Health Organization constitution (1996:1) as "a state of complete physical, mental and social well-being".
- Much disease is caused by unhealthy life choices concerning pleasure and risk, and this can be prevented by appropriate lifestyle and behavioural changes.
- Individuals have a moral obligation to live their lives in accordance with their society's accepted norms of healthy behaviour and so avoid inappropriate pleasures.
- The task of health promotion is twofold – first to disseminate the truth about health, disease, lifestyle and pleasure, and, second, to provide, with the help of the state, the

necessary persuasive mechanisms for changing both individual and societal beliefs and behaviour relevant to health, disease, lifestyle and pleasure.

The researcher concludes that in order for the primary prevention of substance abuse and preventable diseases to succeed, it must involve all affected, such as agencies, individuals, families and the community. It must reflect an integrated, systemic and cost-effective approach, and promote healthy behaviour and lifestyle. Within the primary health care approach, primary prevention is utilized as a strategy to promote health and well-being (Peele & Grant 1999:29).

3.4 PRIMARY PREVENTION AS HEALTH PROMOTION STRATEGY

Miller and Nierenberg (1984:05) argue that, historically, prevention has been neglected in terms of professional interest and federal funding, with treatment policies receiving the largest share of incentives. They acknowledge that recently the trend has changed. An increasing number of professionals are devoting their efforts to prevention rather than cure. These authors make an important statement regarding the necessity of adopting an integrated approach in the prevention of alcohol abuse. They mention that, although treatment efforts are worthwhile, they cannot constitute the only intervention effort if widespread progress is to be made. Tether and Robinson (1986:3) concur by observing that preventive efforts must be used to slow down the constant increase in the number of alcoholics.

The following discussions focuses on the unfortunate part of the fact that the problem of substance abuse is not being perceived as a serious problem by the government leaders.

3.4.1 Primary health care in relation to substance abuse and preventable diseases

Despite daily reports in the media on the contribution of substance abuse to social problems such as violent crime, suicide and drug trafficking, South Africa's Minister of Social Development, in his ten-point plan of the year 2000, did not mention the substance abuse field as a priority concern. Certain experts in the substance abuse field were nevertheless

appointed by the minister to serve on the Central Drug Authority (CDA). This body is expected to oversee drug-related issues and to see that they are addressed in line with Section 2(11)(a) of the Prevention and Treatment of Drug Dependency Act (Act 20 of 1992, as amended in 1999). The CDA also has to see to it that the Drug Master Plan, the current guideline for the implementation of substance abuse programmes, is applied.

The paradox is that there is a strong lobby to have dagga decriminalized and even legalized. Helen Suzman is quoted in the *South African Jewish Report* (2000, July 1-2) as claiming that the serious damaging social effects of the legislation that makes the use of dagga a crime far outweigh its benefits. She argues that the dagga law has resulted in thousands of people being sent to prison and then living with a criminal record for the rest of their lives. Furthermore, Ms Suzman explains that cannabis (dagga) also has many beneficial uses such as to ease pain in illnesses such as multiple scleroses, cancer and arthritis. Finally she states that internationally people, including those in the medical profession, are starting to rethink the matter. Of concern among biomedical and psychosocial scientists is that if dagga (marijuana) is decriminalized, the already high number of abusers will increase alongside the associated problems. The proposed decriminalization and legalization of marijuana need to be prevented. A government is called for that works towards reducing preventable diseases by imposing a restrictive policy on the use of marijuana.

An illustration by Howe (1989:15) shows why the Government is concerned about the consequences of substance abuse on a wider scale on the society. The following focus on Howe (1989:15) is presented here to conceptualize and accentuate substance abuse as a spiral vicious cycle in social situation. Howe (1989) illustrates the wider effects of substance abuse in Figure 4. The interrelatedness of various problems calls for a concerted effort and systematic primary preventive strategy. This is especially so in the case of health care, substance abuse and related social problems. Figure 4 is schematically shown here below as follows:

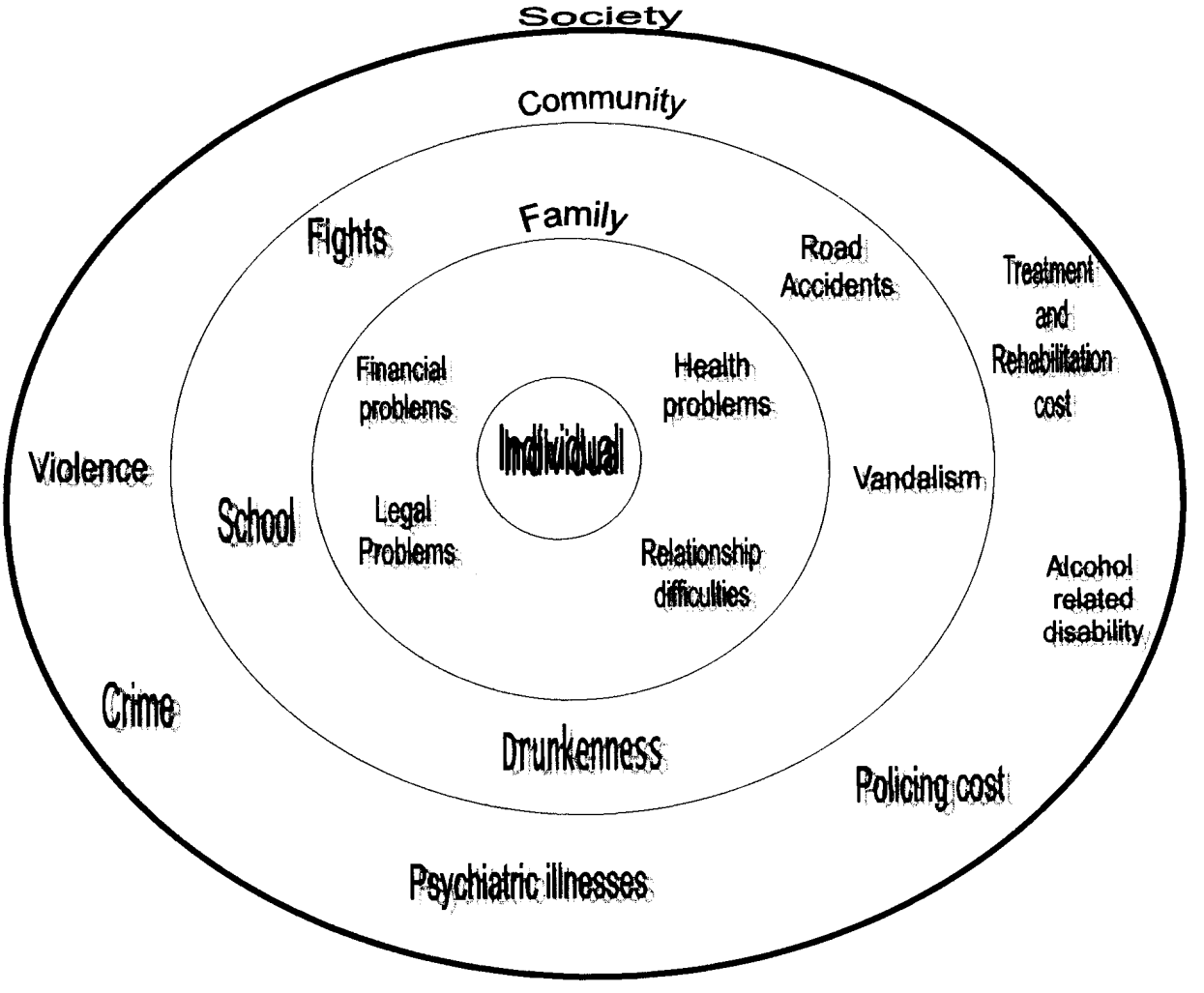

Figure 4: Wider effects of substance abuse as adapted from Howe (1989:15)

Figure 4 gives a clearer picture of the phenomenon of the abuse of alcohol and other drugs. The phenomenon is the common factor or common denominator in a spectrum of social problems and related preventable diseases. This is confirmed by the Draft White Paper for Social Welfare (1996:134) in its recognition of substance abuse as one of the greatest health and social problems in South Africa. It has wide-ranging consequences, which include physical debilitation, chronic impairment, injuries, marital and family problems, child abuse, violence in families and communities, trauma, depression, crime, traffic accidents, work stress, social misery and economic costs.

Caulson, Goldstein and Ntuli (1998:52-53) point to lifestyle diseases that indicate health problems that are especially attributable to individual choices. These include coronary heart

disease, diabetes, diseases caused by smoking and substance abuse, and sexually transmitted diseases. The morbidity and mortality rates associated with these conditions leave health workers gasping. Coulson *et al.* (1998:52-53) further reflect on rhetorical sighs of health workers such as "If only people were educated,' 'If only people would take the health warnings seriously,' 'If only people would do as they are told,' 'The world would be a better place if everyone used condoms, stopped smoking and stopped using drugs." There are many ways besides the use of substances and indulgence in sex in which pleasure may be pursued without people jeopardizing their health. Unfortunately, abuse of substances and unsafe sex seem to be the most accessible means of pleasure. Rauch (2000:1) aptly captures this as he comments that "in Africa, the virus is AIDS. The disease is poverty." Rauch (2000:1) proceeds by comparing past maladies among the poor with the current ones. He comments that "[t]he first great onset of the Black Death in Europe, in the middle of the 14th century, killed perhaps a third of that continent's population and possibly half of England's. The living did not suffice to bury the dead and sheep and cattle wandered about through the fields and among the crops as there was no one to go after them. Now, as if to mock human aspirations for the third millennium, something similar is happening again." The Black Death was the greatest natural catastrophe of the second millennium in Europe, while the scourge of the 21st century is HIV/AIDS in Africa.

The connection between intravenous drug use and HIV/AIDS is obvious, while the link between other drug use and HIV/AIDS is more obscure. Quachenbush and Benson (1992:7) say alcoholics contract HIV in the same ways that other people do, but there are some factors specific to alcohol use that increase the infection risks for alcoholics. One could add here that when a person is not sober and has a strong urge for sexual contact, s/he is unlikely to indulge in safe sex. Those who provide HIV-preventive education must therefore discuss the association between drinking, other drug use and HIV transmission risks with all participants and clients, even those who are occasional drinkers.

Quachenbush and Benson (1992:15) argue that while the quantity of alcohol that a person drinks is important in assessing alcoholic behaviour, the pattern of drinking and the reasons for and consequences of drinking are also relevant. If occasional drinking is associated with life-threatening behaviour, such as having unprotected sexual intercourse with a person who

may be infected with HIV, it can be considered addictive drinking, which requires intervention.

The connection between HIV and the use of alcohol and other drugs was alluded to in Chapter Two of this study. It is imperative to again refer to this interconnection when emphasizing the need for an integrated, preventive strategy. The connection between HIV and alcohol and other drug abuse is not as straightforward as that between HIV and intravenous drug use and/or unprotected sexual intercourse. Alcohol and other drug abuse weakens the immune system's ability to fight infection and causes people to become uninhibited and thus more likely to participate in risky behaviour.

In addition, McMurry *et al.* (1990:403) point out that common themes in primary malnutrition, alcoholism and AIDS are wasting, immune impairment and the increase of tuberculosis. Rauch (2000:1) gives some tangible evidence of the magnitude of the problem faced by the people of sub-Saharan Africa. He says that almost 34 million people in the world today have HIV (the virus that causes AIDS). Seventy percent of those people are in sub-Saharan Africa, which has less than 10 percent of the world's population. Almost 14 million Africans have died so far (as against 450 000 in North America's savage but limited epidemic). Most of the more than 23.3 million Africans now infected will die in the next ten years.

An official involved with development told Rauch (2000) that in Africa, most of the time, at least one of his weekly meetings is cancelled for a funeral. "AIDS takes elites (who are mobile, urban, and sexually active) as well as the poor, and it takes adults in their productive years, when they are raising their children and caring for their parents. The researcher has also established a clear link between poverty and the AIDS epidemic on the one hand, and alcohol and other drug abuse on the other hand. According to Jean-Louis Sarbib, a vice-president for Africa at the World Bank, cited in Rauch (2000:2), the effect of losing breadwinners through AIDS is impoverishment. "The progress that's been made in the second half of the 20th century", he explains, "could simply be wiped out by the AIDS epidemic." Thurman, in Rauch (2000:2), elaborates on this: "If we don't learn our lessons in Africa today, we're going to be facing the same kind of epidemic in India or the former

Soviet Union in 12 or 15 years." He explains that one of the lessons is that aggressive preventive efforts cannot be started too early since "[i]n the third millennium, the great killer of humanity is not disease but poverty".

Stillwagon (2001:1) states that the environment in which any infection is transmitted in poor countries is very different from that of the United States and Europe. It is strongly influenced by poverty, malnutrition and bad water as well as poor preventive and curative care. The standard epidemiological approach to understanding disease is captured by Louis Pasteur's comment, cited in Stillwagon (2001:3): "The microbe is nothing, the terrain everything." In other words, pre-existing health conditions play a key role in susceptibility to disease. Stillwagon (2001) warns that one should expect HIV/AIDS to develop differently in rich and poor countries, just as tuberculosis, pneumonia, measles and nearly all other infectious diseases do. Cohen (2001:3) adds that the characteristics of the poor are well known, as is one of the factors that contribute to a culture of poverty, that is "children of the poor often become the poor of succeeding generations". Cohen (2001) adds that poverty is associated with weak endowments of human and financial resources, such as low levels of education, low literacy rates, few marketable skills, poor health status and, consequently, low labour productivity. It is difficult, if not impossible, to formulate a more formidable preventive strategy for the rural poor, without taking cognizance of the fact that an enormous number of rural people are HIV infected and dying daily of AIDS-related diseases. This signifies that, regardless of the good intentions in respect of the prevention of substance abuse, the priority problems in this country are tuberculosis, HIV/AIDS and related diseases. The HIV/AIDS epidemic is the main problem facing the country, especially among the rural poor. Chapter Two deals with the premise that poverty is the major underlying factor that links alcoholism, tuberculosis and HIV/AIDS, as well as other preventable diseases and related social problems. One of the assumptions of this study is that the causative factors and subsequent intervention cannot be separated from one another.

According to the US Center for Disease Control and Prevention (CDCP), Boyles and Key (1998:1) hypothesized that socio-economic status is responsible for much of the increased tuberculosis incidence associated with race and ethnicity in the United States. They report as follows: "We found that, even after adjusting for age, sex, and country of birth, TB rates

among racial/ethnic minorities were five to 10 times higher than those in whites from 1987 until 1993." Cantwell and colleagues, in Boyles and Key (1998:1), elaborate on the impact of tuberculosis and race/ethnicity in the United States on socio-economic status. Ever since US tuberculosis statistics were first compiled at the beginning of the century, it has been obvious that racial and ethnic minorities in the United States have been affected disproportionately by tuberculosis. According to Boyles and Key (1998:2), several theories have been advanced over the years to explain the disproportionate occurrence of tuberculosis, including physical characteristic differences such as body weight and chest size, ABO blood type, skin colour and absorption of vitamin D, and potential differences in susceptibility to tuberculosis infection.

Cantwell *et al.* (1998), in Boyles and Key (1998:2), mention that "an equally, if not more, plausible explanation, however, is that much of the increased risk of TB among racial/ethnic minorities is due, not to intrinsic genetic differences but rather to confounding by social and economic factors that increase risk of exposure to TB and are more common among these minorities." A similar situation prevails in South Africa, although black people in South Africa are a majority and not a minority as in the United States. The highest rate of tuberculosis in South Africa is found among blacks of a low socio-economic level, especially in the rural and peri-urban areas. Cantwell *et al.* (1998), in Boyles and Key (1998:2) mention that socio-economic status impacts on the incidence of tuberculosis via the strong direct effect of overcrowding as well as the tuberculosis socio-economic status health gradient. They add that socio-economic status accounts for much of the increased risk of tuberculosis previously associated with race/ethnicity. They confirm that, "given the high rates of TB among various sub-populations commonly associated with low socio-economic status, the homeless, alcoholics, intravenous drug users, persons who have been incarcerated and persons living in medically-underserved urban areas, persons with TB have long been assumed to be of relatively lower socio-economic status than their counterparts". They endorse this by saying that "assigning values for their demographic and geographic counterparts, therefore, would tend to, perhaps markedly, underestimate the true magnitude of the association between socio-economic status and TB".

A preventive strategy should also incorporate the dimensions (implications) of substance abuse, mental disorder and violent behaviour. According to Swanson (1993:123), the association between mental illness, alcohol abuse and violence has been examined from a variety of perspectives. Crime statistics and evidence from controlled laboratory experiments have suggested that substance use or misuse is linked to interpersonal or self-destructive violence (Murdoch *et al.* 1990; Collins & Schlenger 1998; Brent *et al.* 1987), in Swanson (1993:123). Since the 1970s, mental health providers have become increasingly aware of the significance that the co-occurrence of substance abuse or dependence with other mental disorders has for treatment outcomes. The DSM-IV has implications for dual diagnosis and for individuals who are abusing substances. Certain infants could be born mentally retarded as a result of foetal alcohol syndrome (FAS). This means that their mothers were abusing alcohol during their pregnancy.

In conclusion, the study is looking at various interconnections between substance abuse and preventable diseases. According to Brundtland (2001), the leading causes of mortality or disability in 1995 were the traditional three - lung diseases, diarrhoea and peri-natal conditions - the same as 30 years ago. The chief risk factors leading to disease are malnutrition, poor water and sanitation, and unsafe sexual behaviour, and these are linked to the spread of HIV/AIDS.

Brundtland (2001) spells out what to expect: an aging global population as well as economic and social changes that will bring about major changes. By the year 2020 the three leading causes of mortality and disability are likely to be heart disease, mental depression and road accidents, unless there are new and unpleasant surprises from the spread of communicable diseases. "Indeed, the populations of some poor countries will, as they develop, face a double burden of disease. They will suffer both the traditional scourges of the poor as well as the lifestyle diseases of the more prosperous." (1999:2) also states that in the next century, the health of everyone across the globe will be even more tightly linked than financial markets are today. An antibiotic resistant strain of tuberculosis can already travel more quickly on an airplane from Africa to California than panicked financial capital can flee from Thailand.

The link between substance abuse, HIV/AIDS and other diseases has been explained. The question now is: How can preventive programmes address related variables such as poverty, substance abuse, HIV/AIDS and tuberculosis in an integrated manner?

3.4.2 Primary health care programmes for substance abuse and preventable diseases

The researcher acknowledges that education towards the prevention of AIDS, poverty, tuberculosis and alcoholism is not enough to address the problem of preventable disease. Cohen (2001:5) argues that programmes that immediately alleviate the poverty of increasingly large numbers of Africans are crucial. Cohen elaborates by giving some direction on programmes that expand employment opportunities as well as access to basic social services. Health, welfare and education are the priorities. Also integral are nutrition and other support programmes for the increasing numbers of AIDS patients, but also for all children who are deprived of the basic necessities of life and social support.

Each primary prevention programme on substance abuse and preventable diseases should be directed at a specific problem or disease. This necessitates an integrated multidisciplinary approach that will include the social work profession. The tendency to treat each aspect of the problem in isolation is neither cost effective nor expedient in studying the whole problem from a single discipline.

Johnson, Davis, & Denniston, (1991:2), argue that preventive approaches attempt to modify or remove the causes of alcohol and other drug (AOD) related problems such as stiffer penalties for AOD crimes and change of the environment that supports AOD use. The American Medical Association (1989) divides preventive programmes into primary, secondary and tertiary programmes and defines them as follows:

- Primary prevention attempts to prevent the new use of illicit drugs. This type of programme is called "preventing initiation".
- Secondary prevention identifies persons who display the early stages of problem behaviour associated with the use of alcohol and other drugs. Secondary prevention attempts to avert the ensuing negative consequences by inducing such persons to cease

their use through counselling or treatment. This type of programme is often referred to as "early intervention".

- Tertiary prevention strives to end compulsive use of alcohol or other drugs and to ameliorate its negative effects through treatment and rehabilitation. This type of programme is most often referred to as "treatment", but also includes rehabilitation and relapse prevention. Long-term studies of chronic period-dependent patients indicate that community surveillance, combined with medical treatment and social rehabilitation, can provide a positive outcome.

Johnson, Davis, & Denniston, (1991:3) argue that reduction in the demand of drugs should be a feature of primary, secondary and tertiary prevention, as they are inextricably interrelated. It has been noted by drug educators that the establishment of alcohol and other drug education (a primary prevention activity) increases the number of people and youth who refer themselves for AOD-related problems or who realize that they live with a drug-dependent family member. Detoxification or treatment of dependence will ultimately fail unless attention is given to the prevention of relapse and the remediation of individual and environmental factors that led to AOD use.

The main targets of preventive programmes are high-risk groups, which are youth, women and children in the case of substance abuse and HIV/AIDS. The individuals who are part of these vulnerable groups all come from families. Hence, if the individual is affected by substance abuse, the whole family network is affected. It would therefore be proper to empower the family members with knowledge and skills on how to be more prepared to face problems of substance abuse as well as accompanying preventable diseases.

The researcher refers once again to the integrated approach in this current study for the purpose of focus and emphasis. The interrelatedness of substance abuse, preventable diseases and socio-economic conditions, including poverty, demands integrated health preventive programmes. Franklin (1991:1) supports an integrated approach and mentions that each programme should be adapted to the needs and lifestyle of each community. She states that although it is important for each community to weave its own unique tapestry, there are two major themes in the integrated approach that should be applied in all prevention efforts:

- Community empowerment, that is "doing with" instead of "doing for". This means the professional should shift the responsibility for planning and decision making from agencies and professionals to the community.
- Cultural competency, which refers to a lifelong process of incorporating, valuing and celebrating the ethnic and cultural diversity of the community.

Franklin (1991:2) further explains this new approach by saying that for community groups to act in ways that meaningfully reflect these themes, each person must be willing to adopt a new way of looking at community prevention. She views this approach as a paradigm shift that entails a change in the way people go about the work of prevention. According to her, "a paradigm is a model or way of looking at the world that governs or significantly influences how people choose to behave". She further alludes to the fact that, in the past, development of preventive programmes and activities was based on an agency-directed service delivery model in which agencies and professionals provided services primarily in response to the needs of individuals. This argument sees the agency as assessing the needs of the client and developing appropriate services to meet these needs. On the contrary, Lombard (1991) and Swanepoel (1997) regard the community as the best vehicle through which to develop and implement comprehensive preventive efforts. Development of any community thus has to start with change of attitude.

The complexity of problems caused by AOD does not fit into the paradigm as proposed by Franklin (1991). AOD problems have multiple interrelated causes, resulting from the interaction of the individual, the drug and the environment. The problems affect all people within the community, and the community problem-solving process.

Within a community perspective people have needs, such as for food, shelter, clothing, health and education, but they also have strengths and capacities. Mydal (1972) argues that any process of growth that does not lead to the fulfilment of these needs, or even worse, which disrupts them, is a travesty of the idea of development. It is important to understand the health needs of a community in relation to other needs (because Maslow refers to other spheres of needs) in order to promote their health through primary preventive strategies and programmes.

Aspire to higher-level needs and their need for sex can be easily fulfilled, the HIV/AIDS pandemic is bound to increase in Nongoma. Moreover, to escape abject poverty, people also sell sex to try to make ends meet. It is therefore clear that Nongoma residents' captivity in the bonds of Maslow's group 1 needs makes them vulnerable not only to the diseases mentioned but also to other diseases. An example is cholera, a waterborne disease that broke out in the rural areas of KwaZulu-Natal in 2000-2001 and hit the Nongoma District Health Region very hard because clean water (drink), a group 1 need, was not available in some of the areas under investigation. It must be noted though, that although the poor people can aspire for higher needs, they are not much concerned about their higher needs if the lower basic needs are not yet met. However, this does not mean that they do not cherish their higher categories of needs.

The utilization of volunteers such as VHWs, youths and peer counsellors, women's organizations and other formal and informal structures is seen as a viable option for the development of health care in KwaZulu-Natal. However, because they are uneducated, this volunteer force is considered unable to effect a significant positive change among and by the rural poor. In addition, rural people's preference for highly trained professionals is not always in their interest. Highly trained professionals usually have no background to rural conditions and living. Chambers (1983:6) says in this regard: "Not only do urban-based professionals and officials often not know the rural reality; worse, they do not know that they do not know." It is therefore important that primary health care programmes reflect understanding of recent trends of rural health care programmes. Figure 5 present such recent trends, as adapted from Mathe (1983:72).

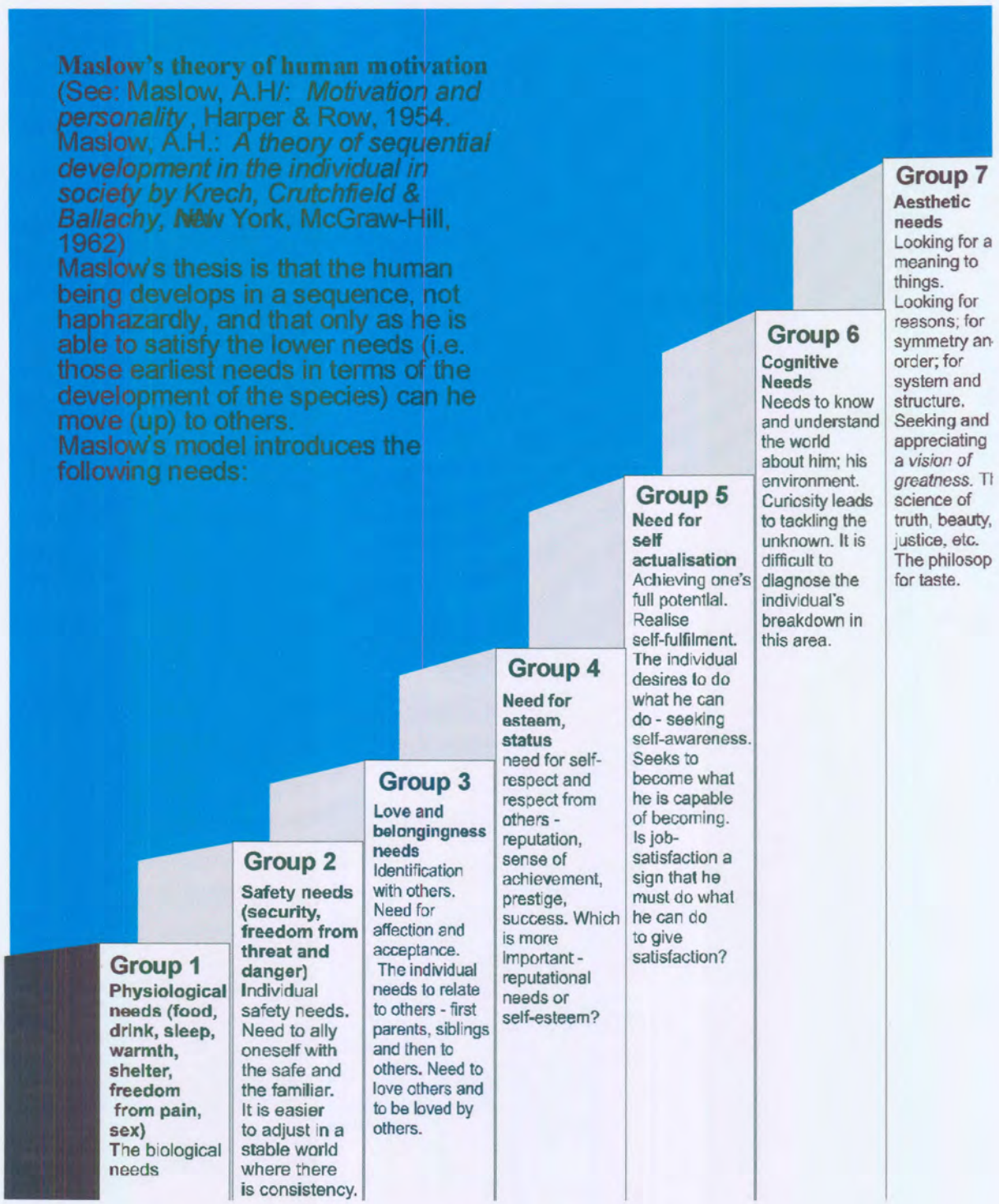

Figure: 5: Maslow's theory of human motivation

RURAL PRIMARY HEALTH CARE PROGRAMMES RECENT TRENDS OF RURAL HEALTH CARE PROGRAMMES

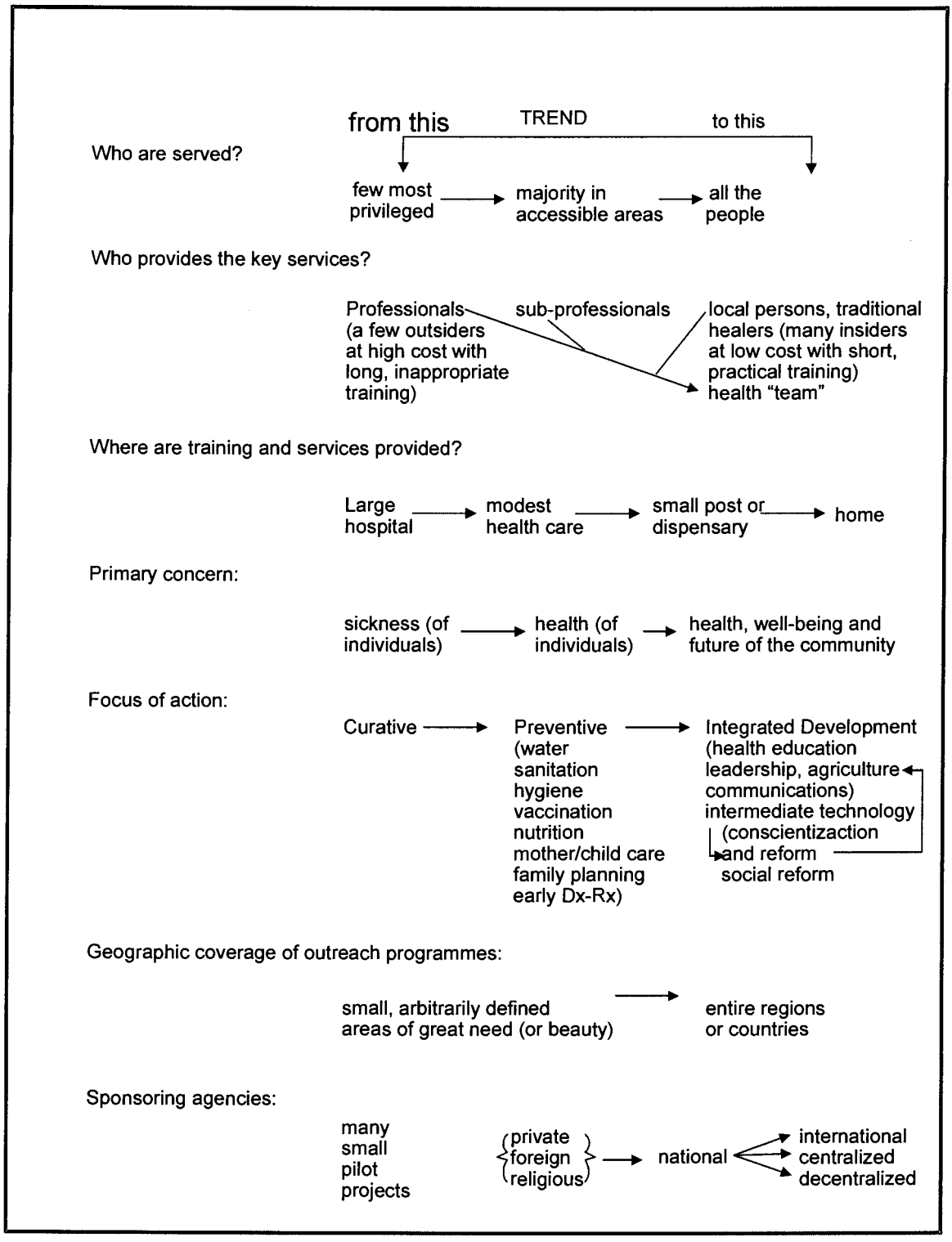

Figure 6: Rural Health Care Programmes

Derived from the Maslow's needs hierarchy and the rural context of the Nongoma community, it is obvious that specific primary health strategies are required to promote health care. In order to achieve health promotion within a developmental context, the WHO (1986) acknowledges that social development can be achieved through a combination of macro and micro level approaches to policies, planning and implementation. This, however, requires continuous monitoring and evaluation of impact efficiency and effectiveness.

To achieve an integrated primary preventive strategy for health promotion, specific intervention strategies need to be in place.

3.5 INTERVENTION STRATEGIES FOR PRIMARY PREVENTION OF SUBSTANCE ABUSE AND PREVENTABLE DISEASES

Developmental social welfare is, according to Midgley (1995:702), implemented through three major intervention strategies of social development, namely individual-, community- and government-focused strategies. These three strategies are closely connected. They focus on two interrelated dimensions. The first is the development of the capacity of people to work continuously for their own and society's welfare; and the second is the alteration/ development of a society's institutions to meet human needs at all levels. Within the theoretical framework of developmental social welfare, these strategies are applicable to primary health prevention of substance abuse and preventable diseases. However, the "putting people first" approach to primary health care can best be achieved through a community.

Caulson et al (1998:22-23) argue that action that focuses on individuals is probably insignificant in a society where individuals have been almost completely powerless. The authors further state that efforts towards building up a community's health should be promoted and, furthermore, should be people driven. It must be noted though that structural factors place limitation on people's lives.

Social work, in particular, endorses the person's worth and ability to take responsibility for his/her own destiny. It emphasizes participation of the individual and significant others in the problem-solving process. Mydal (1972) expounds on this issue of development by saying that the purpose of development should not be to develop things but to develop people. Community participation, involvement and collaboration are the key to micro level approaches (WHO 1986). Professionals should therefore serve as facilitators, enablers and providers of opportunities for development instead of bemoaning lack of resources as the cause of problems.

Midgley (1995:114) states that the view that social development can best be promoted by people working together harmoniously as a local community forms the basis of what may be called the "communitarian approach" to social development. The premise of social development by communities is that "communities have an inherent capacity to organize themselves to ensure that their basic needs are met, their problems are solved and opportunities for advancement are created" (Midgley 1995:114). Midgley refers to three community strategies: community development, community action and women issues (Midgley 1995:114). For the purposes of this study, the community development strategy will utilise community development, adult education and community empowerment in its endeavour.

3.5.1 Community development strategy

Within the context of the Nongoma community, it is appropriate to consider community development in a rural framework. Chambers (1983:147) indicates rural development as "a strategy to enable a specific group of people, poor rural women and men, to gain for themselves and their children, more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas to demand and control more of the benefits and development. The group includes small-scale farmers, tenants, and the landless." Lombard (1991:213) cites Jeppe (1985:38) who confirms the viewpoint that "the social process whereby people become more able to better their way of life (educative process), is thus of greater importance than the physical facilities or amenities established as a result of application of community development programmes".

Gray (1996) cites a working document on primary social services (produced by the Department of Welfare in September 1994) that emphasizes the need to render primary social services through "one-stop" community-based organizations to make welfare services more accessible to the poor by combating the situation where the bulk of welfare are concentrated in the urban, developed centres. Welfare services can become more accessible to the poor through primary intervention strategies such as adult education and empowerment.

3.5.2 Adult education as primary intervention strategy

Community education is closely related to community development and adult education. Community education is not confined to a specific age group and is often described as "education for all" since it is concerned with change and growth throughout each individual's life. Poster (1982:3) states that if adult education is to be successful, it must concern itself with the process and types of problems that are faced by the target community. Hewitt (1977:3) points out that "community education in rural areas should seek to impart the motivation and skills necessary to raise general living standards". He clarifies the purpose of community education: "The aim of community education is to serve community development; it is a social, rather than an academic conception of education, one which is intended for all the people for their social life of work, leisure and citizenship" (Hewitt 1977:3).

Brundage and Mackeracher (1980:36) list the following important learning principles for adults:

- Adult learning focuses on the problems of the immediate present; learning content should be derived from the learner's needs.
- Past experience becomes increasingly important as an adult grows older; the potential of past experience to help or hinder the learning process also increases with age.
- When learning focuses on problem solving, the solutions must come from, or be congruent with, the learner's experience, expectations and potential resources, rather than being prescribed by an "expert".

- Adults tend to experience a need to learn quickly and get on with living; they are often reluctant to engage in learning activities or content that does not appear to have immediate and pragmatic application to their lives.

McDonald (1982:3) recommends that health workers learn to be community development education workers. Nelson, Eller, Streets and Morse (1995:35) define adult services as a specialized area of social work. Hence it is essential to gain an understanding of the history, mission and principles of empowerment that underlie adult service programmes and reorganize the challenges presented to community development education workers by their diverse clientele. Also, adult services are to be well defined so as to conceptualize a method, such as the family assessment and change method, and describe the primary skill areas that support the method concerned.

Three assumptions are central to the family assessment and change method:

- The purpose of adult services practice is to help bring about change. Adult services social workers are dedicated to making a positive difference in the lives of clients and their families.
- Individuals are best helped to change when assessments and social interventions are family centred. The most effective interventions have an influence on the family system.
- In bringing about change, adult clients and their families should be empowered to assume as much control of their circumstances as possible. Change comes about from the inside. Empowered individuals are marked by self-control.

Health educators can help people see the significant relationship between drinking, drug use and associated behaviour, and HIV risk behaviour. They can encourage participants to explore their own feelings about the epidemic, to consider their own past or present risk for HIV infection and to evaluate their response to people with HIV in a recovery intervention programme. Quachenbush and Benson (1992:15-16) state that information about the HIV-alcohol relationship, paired with compassion and understanding for all involved in such situations, will strengthen the ability of individuals to achieve and maintain sobriety.

The educational component of primary health care strategies must be understood not only in terms of the passing of relevant health information by the health professional to individuals, but also as part of a health promotion programme aiming at the development of the community. What is involved is not just individual learning but rather the more complicated process of communities gaining more control over their lives. This strategy views an individual in totality, not only as a physical being, but also as a psychosocial being.

3.5.3 Empowerment as primary intervention strategy

Developmental social work is about the empowerment of individuals, groups and in particular communities. Gutierrez and Ortega (1991:24) argue that the concept of empowerment has emerged within a number of different human service fields. Gutierrez and Ortega (1991:24) cite various authors who all allude to this concept. Gutierrez and Ortega (1991) explain that despite these different human service fields, common themes emerge, which suggest some agreement concerning the goals, processes and targets of empowering social work practice.

Communities can experience a feeling of powerlessness when they face the intensity of their problems and needs. There are various theories and levels of empowerment, the latter comprising personal, interpersonal and political empowerment. Gutierrez and Ortega (1991:24-25) mention that theories of empowerment at personal level focus on ways in which individuals can develop feelings of personal power and self-efficacy. The authors go on to say that the experience of powerlessness can be devastating to an individual. Being able to experience oneself as powerful and capable is a crucial foundation for the other levels of empowerment.

Theories of empowerment on the interpersonal level stress the development of specific skills, which allow individuals to be more capable of influencing others. Skill development embraces training in problem solving, assertiveness and how to influence the political process. In some cases, skills to increase interpersonal influence and political power can be developed simultaneously.

Theories of political empowerment emphasize the goals of social action and social change. Political empowerment is based on both the personal and interpersonal levels of empowerment, with an additional goal being the transfer of power between groups in society. These models differ from traditional models of community organization in that individual change is considered an important goal in social action (Fagan 1979; Kahn & Bender 1985; Longres & Mcleod 1980; O'Connell 1978), in Gutierrez and Ortega (1991:24).

Gutierrez and Ortega (1991:25) argue that the three levels of empowerment define the goal of social work practice: helping individuals to develop the capacity to change their situations. The role of the social worker is not to help individuals to adjust or accept problems but to help them to develop the ability to change the situation and prevent its recurrence. Since elements of powerlessness occur on many levels, efforts towards change have to be directed towards both individuals and institutions. It is therefore not sufficient to focus only on developing a sense of personal power, or just to develop skills, or merely to work toward social change. These three elements should be integrated to ensure empowering social work practice. The role of the social worker is therefore comprehensive as he/she meets the needs of the larger community on an individual as well as group level.

Burman-Rossi (1992:70) describes the two major tasks of the social worker in the empowerment of the community: helping the group develop an effective mutual aid system, including a multiplicity of mutual aid relationships, and helping the group recognize obstacles and challenges to mutual aid. A common ground between the individual and the group must be established so that they have faith in the group and a vision for the possibility of change. The author explains that developing a foundation of comradeship is an integral part of this mutual aid system. A further major task for the social worker is to challenge obstacles to empowerment and develop sufficient trust so that the essential work of the group can proceed. By becoming empowered the larger community soon gains confidence in dealing with problems like poverty, substance abuse, tuberculosis, HIV/AIDS and others.

In social work practice, empowerment can also be facilitated through group work. Drower, (1991:76), explains that social group work rests on the premise that man is a social being and has an inherent social nature. A person relies on membership of various types of groups for

the satisfaction of basic needs, including those for emotional warmth, shelter, self-worth, learning and production (Heap 198, in Drawer, (1991:75). Survival is linked to the interrelationships among human beings, starting with the family. It is through initial socialization into the family group and the work group that psychological health is developed and maintained throughout the life cycle (Johnson & Johnson 1985:2, in Drower, 1991:76). Since the individual interacts most of the time in groups, many of his/her difficulties are likely to arise within those group situations. Because healthy group experiences contribute toward the healthy development of the individual, the individual cooperates with others so that his/her problems may be purposefully resolved within a controlled group experience. It is therefore critical that social workers use groups as a medium for change.

Social work is concerned about the interaction between people and their environments, and about social justice. People need to be empowered to facilitate change in their environment, including institutions. Within a group work context, a primary responsibility of social work practice, as Drower (1991:84) points out, is the reduction of environmental stress. In social group work this may necessitate the social worker's intervention in the client's environment outside of the context of the group. Here it is important to note that the group is one of the systems to which members are attached and as such it is connected to and influenced by other systems to which members belong. In order to understand these external forces and their potential effects on individual and group functioning, the social worker must become familiar with the environmental circumstances of the different group members. Drower also points out that during the life of the group, the social worker may find herself intervening in the members' environments for a variety of reasons, including:

- soliciting support for individual group members and/or the group as a whole;
- gathering data on individual group members;
- linking members with resources in their environments;
- mediating between individual members and significant others in the members' environments; and
- advocating on behalf of the group.

In addition to the need for environmental intervention, the social worker should also be familiar with the particular culture of the group members, their families and their community,

as well as the extent to which these people conform to the values and norms of the groups they are members of. In primary prevention work the social worker engages groups of people who may represent the larger community and who may be involved in changing the attitudes of the larger community. In the Nongoma community, the VHWs fulfilled this role.

The philosophy, method and process of community development are utilized in strategies to get people involved in their own decision making and development with regard to primary health promotion and care. These strategies are closely linked to other community strategies, namely adult education and empowerment. Within these community strategies, primary preventive programmes can be designed, developed and implemented to promote the health care and well-being of individuals, families, groups and communities.

On the background of the above discussions, the study explores in addition the systems theory as it gives the crucial link between the varies strategies and theories presented in this chapter. The researcher conceptualizes the combination of strategies already mentioned within systems theory perspective. Roberts (1979: 46) cites Warren (1963) who argues about the relationship between communities and social systems. For systems theory and analysis direct attention both to the internal functions and relationships which identify an organization or community, i.e., a system, and to the relationships between the system and its environment. Its application to community development helps to understand the internal nature and dynamics of a community, as well as its connections with the society in which it exists. Internally, systems thinking helps us to see the community not merely as an aggregate or a summation, in which the parts, i.e., the members, are added to one another and continue to function because of their inherent qualities, but as wholes, in which the parts are arranged and organized in a relationship.

3.5.4 The systems theory analysis

Davies (1977:82) explains that in comparison with other social work theory, the systems theory is not regarded as a fully fledged theory. However, it is a useful tool and "framework" that embrace other theoretical orientations. A definition of systems theory will give some clarity on this issue. Katz and Khan in Davies (1977:90) argue that systems theory is that

field of study "basically concerned with problems of relationship of structure and of interdependence rather than constant attributes of objects". The systems theory is only mentioned to emphasize the need for a holistic approach to problems faced by various professionals. According to Pincus and Minahan (1973:3), social work focuses upon the interactions between people and resource systems in their community. People are dependent upon systems for help to obtain material as well as non-material resources, services and opportunities in order to realize their needs and aspirations to cope with their life tasks.

Elliot (1993:29) on the other hand argue that systems theory provide a framework for implementation and application of the value base. Furthermore the author contends that, whereas systems theory alone tends to lack dynamism and value position, it fits very well alongside social development theory's multisystem, interdisciplinary, holistic approach which gives it a clear dynamic. The researcher could find a rationale for incorporating systems theory in the theoretical framework. Since a systems theory provides an appropriate vehicle for application of the social development, it has thus been conceptualised in the preliminary primary health care model as reflected as Figure 8 in the study. Elliot (1993:31), finally makes an overview of her argument on systems theory as she elaborates that a combination of social development and systems theory brings back the social perspective into social work, while still allowing for individual therapy approaches. It obviates the need for simplistic uncaused explanations at either the micro- or macro-level and enables multilevel and multisystem intervention.

What follows hereunder is an overview of models pertaining to the theoretical framework which have emerged to this end. In this section of the current study the discussions were meant to formulate appropriate models which emanated from the results coming out of the literature review chapter and the current chapter.

Effective intervention strategies for health care prevention need to be founded in models relevant to the specific community context.

3.6 MODELS FOR HEALTH CARE PREVENTION OF SUBSTANCE ABUSE

The Public Health Model on prevention of drugs related harm as developed by Rocha-Silva (2001) is relevant for the context of this study. However, the lack of social services in rural communities in rural communities such as Nongoma can directly be linked to a lack of guidelines or models for primary prevention of substance abuse in these areas. Based on the literature study and practice experience of substance abuse in rural communities, in particular Nongoma, the researcher proposes a hypothetical model for health care prevention of substance abuse that could fit the needs of the community. This proposed model is based on theoretical and practice experience conclusions and is not based on the empirical findings of the study. The proposed guidelines for an appropriate model for health care prevention of substance abuse for Nongoma in Chapter 5 will incorporate the empirical findings of the study.

Models for health care prevention of substance abuse can be designed and developed in various ways. The researcher supports a process approach and will briefly mention the steps in this regard. Rocha-Silva (2001) designed the Public Health Model on prevention of drug related harm on the bases of the public health perspective.

The following citation from Rocha-Silva explains the public health perspective in more detail:

> "In accordance with the conception of social reality as a trinity of interrelated ontological elements – behaviour, beliefs and circumstances – the PH [public health] perspective conceptualized drug use in terms of three triangularly interrelated variables, namely agents, hosts and environments. The concern was with drugs (agents) and, thus, with *drug use*, *individuals* using drugs (hosts), and the contexts within which people live and drugs are used (*environments*). This perspective also assumed that:
>
> - Individual choice regarding drug use was exercised within and influenced by the wider social or societal framework within which it occurred;

- The wider social framework within which individuals found themselves was influenced by individuals' choices with regard to drug use;
- The general levels of *availability of and demand for* (particular) *drugs* in a community were positively related to the *general level of drug use* (Edwards *et al*., 1994; Holder & Edwards, 1995);
- The general level of drug use in a community was positively related to the *general level of associated harm* (e.g. crime, violence, injury/disability, HIV/AIDS) in that community (Edwards *et al*., 1994; Holder & Edwards, 1995)."

In summary, the public health perspective is based on the interrelatedness between substance abuse, individuals and the environment as displayed in Figure 7, which forms the basis for the Public Health Model for the Prevention of Drug-related Harm following below.

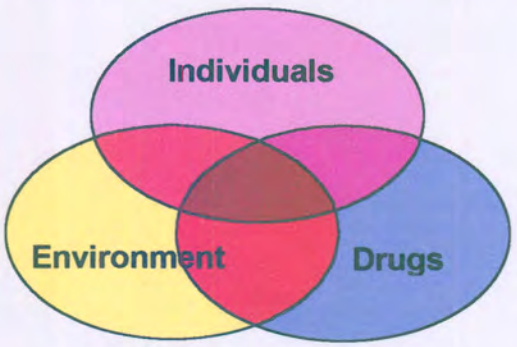

Figure 7: Public health perspective

Adapted from Rocha-Silva (2001), South African Arrestee Drug Abuse Monitoring

The researcher was able to study and conceptualize the public health perspective on account that it tallies well with the context of drug abuse and related harm. The manner in which Rocha-Silva makes exposition of the dangers of drug abuse among disadvantaged groups (i.e., youth and women) is pertinent to the very objective of the study.

3.6.1 Public Health Model on prevention of drug related harm (Rocha-Silva, 2001)

Prevention of Drug-related Harm: Rationale – decentralizing to PHC

Understanding of drug use

e.g.

Positive correlation

- Level of drug use rising in SA ↓ Particularly the very poor (women, youth, rural people)

↓

More "intense" + "combinations" – drug use patterns

- Drug use amenable to change

Infrastructural constraints

- Tighten-the-belt SA economy
- Specialized services "burdened"
- Specialized service-delivery inadequate ↓

deep rural areas
informal settlements

Advantages: PHC decentralization

- Preference in SA: Medically orientated services ↓

historically disadvantaged

- Early identification of harm and service delivery - basic premise of PHC and secondary drug-related prevention
- PHC Alma-Ata Declaration (see Ch. 1:) and secondary drug-related prevention compatible ↓

Emphasis on accessible, affordable, services and development of self-reliance

- PHC part and parcel of sustainable development and planning
- PHC clinics accessible to a wide cross-section and have established credibility
- PHC's medical/health promotion and development banner non-threatening to people with drug-related problems

This proposed model by Rocha Silva (2001), based on the three elements outlined in Figure 7 follows sequential development steps. This model is relevant for a rural community context

such as Nongoma because the issue of protection of youth and women against consequences of drug abuse is paramount in the deep rural area of this region.

3.6.2 A Primary Health Care Model within the Developmental Social Welfare Framework

The following model is researcher's own conclusion derived from his understanding of the theories of primary health care, substance abuse, and developmental social welfare particularly pertaining to a rural community such as Nongoma. Muller, in Grinnell (1981: 606) states that theories can provide social workers with an explanation and a sense of understanding of the events experience in practice.

The proposed model for primary health care within the developmental social welfare framework takes account of the cultural and sociocultural milieu of rural communities.

The prevention strategies that should be used in line with a Primary Health Care Model within developmental social welfare are community education, adult education and community development. The systems approach network (i.e. each part of a system is connected to and influences the whole system) will ensure that this model will maintain its link with the residual and institutional models, although welfare policy encourages a movement away from the latter two models towards the developmental model.

The schematic flow of Figure 8 is explained as follows:

1. The Residual Model is an old historic model in which social workers would deliver services under the auspices of one to one case intervention approach. It is for that reason that Potgieter (1998: 114) argues that social welfare did not succeed in addressing basic human needs, large scale poverty and the social development of the people. Due to this problem a second model was preferred.

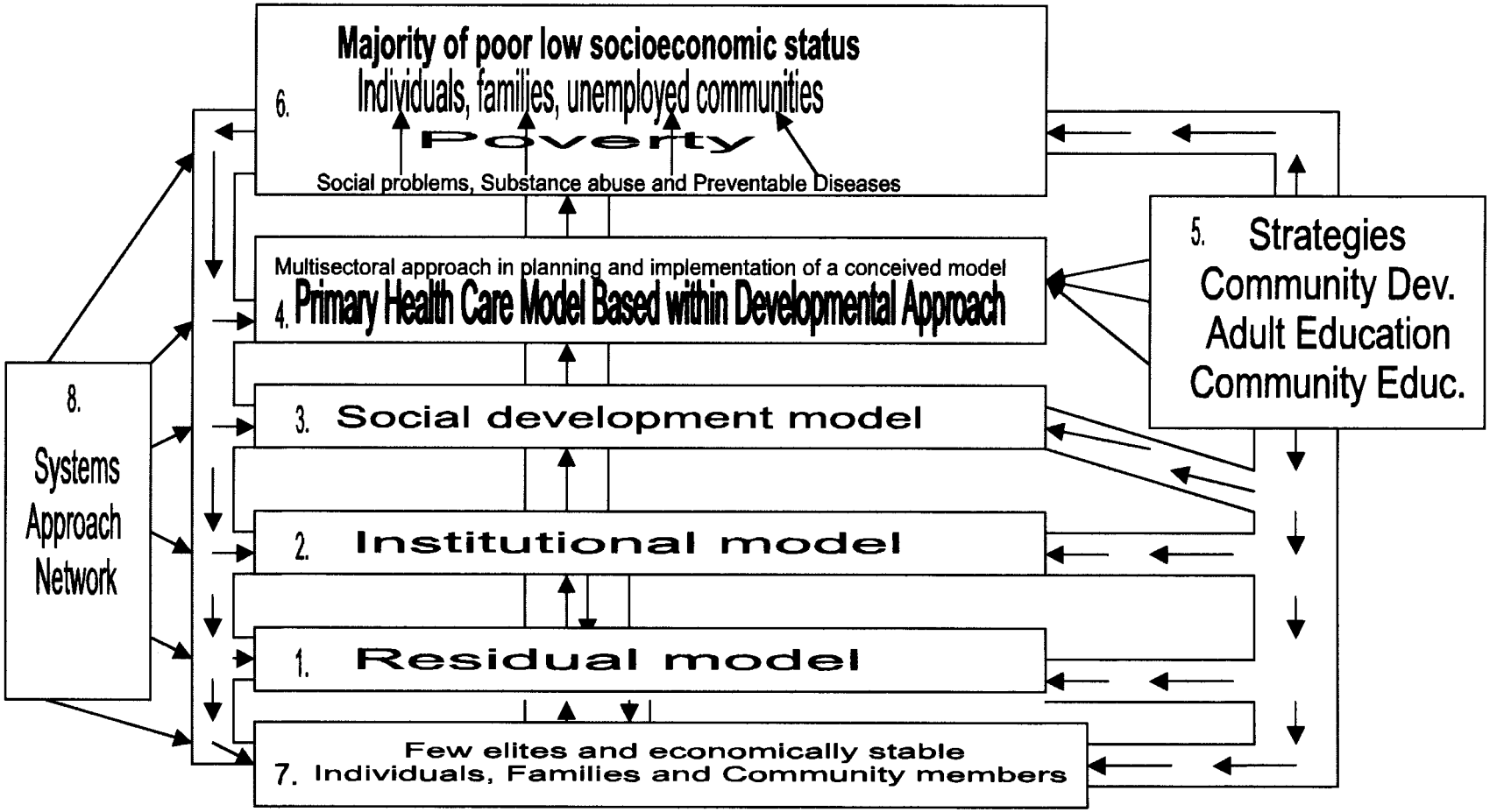

Figure 8: Primary Health Care Model based on the developmental approach

Source: Mathe (2002)

2. The Institutional Model is concerned with addressing social problems and offering services through agency perspective. Although this model had an important role to play it still could not address a variety problems experienced in the disadvantaged rural poor communities. This is in spite of the combination of both residual and institutional models.

3. The Social Development Model aims to bring about "a just and caring society that upholds human and welfare rights, it also seeks to meet the basic needs, realises people's potential and builds human capacity and self-reliance"(White paper for Social Welfare 1997: 15). Midgley (1996:6) argues that unlike the Residual and Institutional models, the Development Model purposefully links social and economic policies and promotes a dynamic process of growth and progressive effectiveness.

4. One of the distinctive features of the model presented above in Figure 8 is its interdisciplinary mode and the proposed partnership and cooperation with the stakeholders. It also seeks to cooperate with the indigenous leaders and other significant people in the community of Nongoma.

5. These are strategies that are meant for planning and applying the Primary Health Model within a developmental social welfare approach. For the detailed discussion of these strategies, refer to Paragraphs 3.6.1 and 3.6.2, respectively.

6. This model caters for substance abuse and preventable diseases. It is where the actual planning for implementation of comprehensive intervention by the multidisciplinary team and intersectoral partnership endeavour. It is at this level that needs assessment is undertaken in line with the primary care model.

7. According to Maslow's hierarchy of needs, it is at this level of development that full actualization of needs and fulfilment is attained and realized (see Maslow's hierarchy of needs, Figure 5).

8. The network confirms the notion that substance abuse (particularly alcohol abuse) is a common factor/denominator of the multiple social and health circumstances already discussed by the researcher. This calls for a systems approach (integrated, intersectoral and multidisciplinary) in the planning and provision of services to the individual, family, community and society. The ultimate aim of this approach is the prevention of

problems that affect individuals, families and communities by their taking control of and responsibility for their own situation.

In the background of the flow chart of Figure 8 the arrows pointing in various directions highlights the point that the communication and interaction is a two way process as the arrows show the directions in the Primary Health Care Model within a developmental social welfare approach.

Gains in health will only be possible through the adoption of radical transformations, one of which is embedded in the Primary Health Care Model and developmental social welfare approach. These should be enhanced by economic development. The integrated approach towards the prevention of substance abuse and preventable diseases should be a concerted effort in mobilizing all partners, including private and non-governmental organizations, towards adopting an intersectoral approach.

An intersectoral approach can be achieved through a multipurpose center, which can be defined as a general purpose centre in which a wide range of services are provided by multipurpose or "generalist" social workers carrying out a wide range of functions (Younghusband's report 1968). The multipurpose worker will often have to work with and through many different sizes and types of systems (one-to-one relationships, families and varied community groups) in helping clients and will provide primary health care services in a wide variety of settings and situations in the community. The multipurpose worker should be acquainted with most of the fields in his/her service delivery and development environment. This indicates a new practice setting, which is a starting point for new service development.

Social service providers, health promoters and others, who work with grassroots communities, should have adequate community development skills to facilitate the empowerment of their clientele. It is impossible to think about sustainable development without considering building human capacity, first that of social workers and primary health care providers and through them, that of rural village communities, thus ensuring the empowerment of all involved. This should be one of the primary outcomes of preventive and developmental services. Since problems such as poverty, tuberculosis, HIV/AIDS and

substance abuse tend to be felt more at grassroots level, it is essential that such communities should be empowered to deal with these problems.

Rahnema (1976), cited in Darkenwald and Merriam (1982:200), reflects on community development as follows: "Development is a process of self-realization, both individual and collective, an authentic liberation. As such, it cannot seek its tools or its models outside itself. It springs from, and can only spring from, within. If it does not correspond to an endogenous process of interrelated, integrated growth of societies, it is self-defeating. If it does not address itself to all components of development, to the collective promotion of society as a whole, it can only result in disruptive tensions, in disintegrating the social fabric." Gray (1996) concurs, seeing community development as an intervention strategy. It is an approach that emphasizes the participation of local people, the importance of empowerment through education (conscientisation and awareness), capacity building and community organization. It is a grassroots or bottom-up approach aimed at social improvement.

In a discussion of the relationship between social work, rural community development, primary health care, primary social services and adult education, Gray (1996:10-11) mentions adult education as a major component in the Primary Health Care Model. According to Poster (1982:3), "interpersonal relationships and participation underlines an essential community education component. If it is to be successful, it must concern itself with the process and not the product. Nor does community education confine itself to any age span. It is often described as education 'from the cradle to the grave'."

As indicated, models for health care prevention of substance abuse can be designed and developed in various ways. The researcher supports a process approach and will briefly mention the steps in a process model design for village health care.

3.6.3 A process model design for village health care

The process is presented here for the purpose of trying to conceptualize the criterion in which a model for health care prevention for substance abuse could be designed. Al Maghraby (date unknown) suggests a process of model design in the following schematic outline (in Mathe, 1983: 83):

The process design for the development of a model for health care prevention for substance abuse is relevant since it is based on the needs and participation of the target group and selected criteria, it is comprehensive and follows sequential steps and it makes provision for the development, implementation and evaluation of the model.

A PROCESS MODEL DESIGN FOR VILLAGE HEALTH CARE

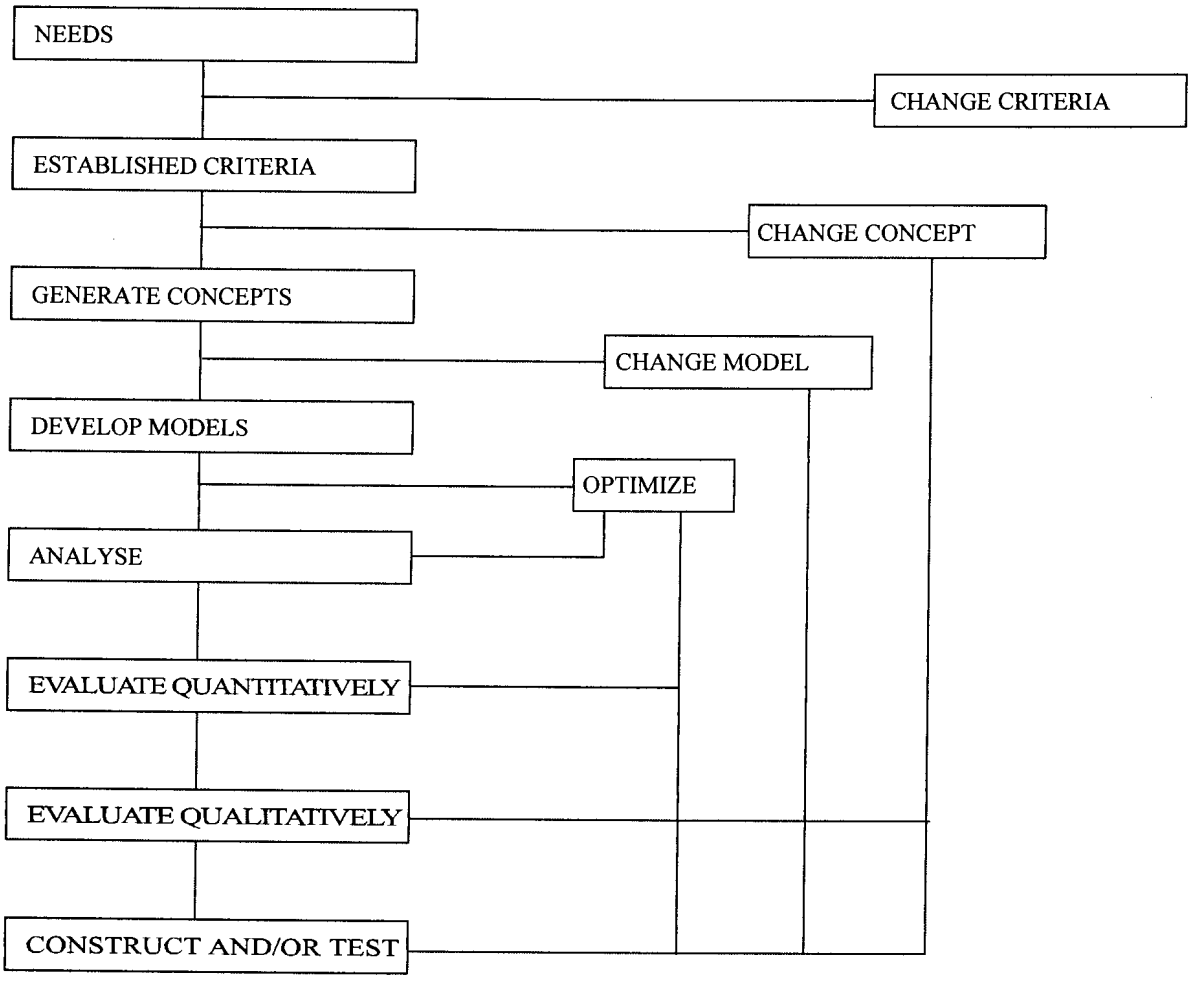

Figure 9: A process of model design
Adapted from Maghraby (undated) (in Mathe, 1983:83)

3.7 SUMMARY

The World Bank (1980:57) has taken up the cause of the promotion of primary health care. Building on this fact and the discussion in this chapter, primary prevention of substance abuse and preventable diseases should be undertaken through health promotion in community education. Developmental social welfare and primary health care policies support this call by emphasizing the need for a radical change to improve quality of life and uphold human dignity.

This chapter has indicated links between primary health care, primary preventive measures and health promotion. The relationship between health and development has been emphasized, and in so doing, health promotion and prevention has been shown to be comprehensive, multifaceted and intersectoral.

Within the context of primary prevention as health promotion strategy, specific health care prevention programmes for substance abuse and preventable diseases were discussed, emphasizing a holistic, integrated approach. Community development, adult education and empowerment were highlighted as relevant intervention strategies for primary prevention of substance abuse and preventable diseases.

Finally, models for health care promotion were discussed. The Public Health Model on the Prevention of Drug-related Harm (Rocha-Silva, 2002) is based on a public perspective. Based on the theoretical conclusions of the study and the practice experience of the researcher, a Primary Health Care Model within a developmental framework was proposed that could meet the needs of rural communities such as Nongoma. It was argued that a process design for the development of a health care prevention model is appropriate within a rural, community development approach.

Chapter Four deals with the empirical analysis of data and the interpretation of results.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The purpose of this chapter is to present, analyse and interpret the data of the empirical study. In this chapter, the research methodology with specific reference to the approaches, data gathering methods and research process is discussed. The research topic was studied in depth in one geographical location, namely Nongoma. The different methods of data collection that were applied yielded a massive amount of data.

The discussion of the research methodology is followed by a situation analysis of Nongoma. Since no research of this nature had ever been conducted in Nongoma, it was essential to commence with a baseline study on the nature and extent of alcohol and other drug use and its risks for related problems among the patients concerned. The purpose of conducting a baseline study was to assist in the analysis of the substance abuse problem among hospital and clinic-patients in Nongoma. The baseline data will also be of great value for future reference and follow-up research.

The findings of the study were presented according to the baseline data. In order to synthesise the massive amount of data collected in this research, the findings were presented, analysed and interpreted according to themes.

4.2 RESEARCH METHODOLOGY

The research methodology was outlined in Chapter One. In this chapter the research type, design and data gathering methods are briefly presented to contextualize the research process.

This study utilized a combination of qualitative and quantitative research approaches. Baker (1988:32) defined methodology as the philosophy of the research process. The methodology

is a rationale for doing the research and for using particular criteria when interpreting data and drawing conclusions. The research design and approach provided the framework for the gathering and interpretation of the data for this study

4.2.1 Research design

Grinnel (1998) states that research designs provide a set of systematic procedures for producing data pertaining to the development, modification or expansion of knowledge. Research designs are plans, structures and strategies that inform the research process.

This study followed an exploratory-descriptive design. Rubin and Babbie (1993) state that an exploratory design is used to examine a new interest and to test the feasibility of undertaking a more profound study. Arkava and Lane (1983:190) argue that it is necessary to adopt this kind of design when a poorly defined problem confronts the practitioner. Grinnell (1988:220) confirms this by asserting that the exploratory design is used where very little is known about an issue. The exploratory design also helps to determine priorities for future research. According to McKendrick (1987:256), an exploratory design is an overall plan or strategy by which questions are answered or hypotheses tested. The combination of the exploratory and descriptive approaches helped to determine the research procedure for this study.

In this study, the researcher chose Cresswell's mixed methodology model (Cresswell 1994, in De Vos 1998:361), which entails the frequent mixing different paradigms. The researcher combined aspects of qualitative and quantitative paradigms throughout this study to gather data on the nature and extent of substance abuse and the relation between this abuse and the prevalence of preventable health and social problems.

Schurink (1998:242) states that the quantitative paradigm emulates the physical sciences in that questions or hypotheses are stated and subjected to empirical testing for verification. Qualitative methodology is also dialectical and interpretive. "During the process of interaction between the researcher and the subject, the subject's world is discovered and interpreted by means of qualitative methods."

- **Qualitative data gathering methods**

Strydom and De Vos (1998:199) state that observation, interviews with informants and studying of policy records are ways in which the desired amount of qualitative data can be obtained. A variety of data gathering methods ensured that data was supplemented and complemented.

In this study in-depth qualitative data were collected from experts by means of the following methods:

Personal interviews. These were conducted with a doctor and a nurse, a former marijuana dealer, a traditional healer and 72 key community informants from Nongoma government and private institutions. A partially structured interview schedule (see Attachment F) was administered by two research assistants (social workers). They were trained by the researcher to administer this type of interview schedule. Interviews were conducted with participants from public and private institutions in Nongoma. These included the magistrate's office, social work agencies, the traffic department, educational institutions and a doctor's private surgery. The interviewing was closely monitored by the researcher.

A total of 573 village people were interviewed by 50 village health workers (VHWs) in remote areas of Nongoma. The village people were still under treatment for TB and other preventable diseases and were followed up through home visits by the VHWs. The population of Nongoma totalled 188 956 people during the 1996 census. The 573 respondents were drawn from a sample of about 3 000 people through target sampling. According to Strydom and De Vos (1998:199) target sampling is employed in the investigation of hidden problems in hidden populations. In this study the problem was hidden in that the devastating effect on the family of alcohol and marijuana use was not recognised. The respondents were selected by the VHWs in their own localities. The selection was based on the VHWs' own knowledge, experience and observation of the problems of local people, accrued during their normal routine work. This work was carried out amongst outpatients on regular treatment at St Benedictine Hospital and its satellite community health clinics.

The involvement of VHWs was an attempt to promote participatory research. As leaders in their community they had helped to formulate the questions that were put to the respondents. Because they had close knowledge of the Nongoma area they provided qualitative information that was invaluable for this exploratory study.

The researcher trained 50 VHWs to participate in the study as the Nongoma area in KwaZulu-Natal is vast (see Map, Figure 10). They were divided into two groups of 25 members each. During 1998, each group was subjected to training, in interviewing and communication skills, that lasted for three days. The object of the training was to prepare them to conduct personal interviews with the identified village respondents. The researcher was also able to utilise their intimate knowledge of village politics and communication patterns. The trainees provided invaluable information on the concerns of local people about substance abuse in the area. They did so in the vernacular.

Focus group discussion. A group of nine nurses who were departmental heads in charge of hospital wards at St Benedictine Hospital, were recruited for a focus group discussion. According to Neuman (1997:253), "focus groups are a special kind of interview situation that is largely non-quantitative". In addition, according to Bless and Higson-Smith (1995:113), "the focus group enables members of a group to share their experiences and to reach some kind of consensus about the topic of research". These latter authors also state that "this is particularly useful in participatory and action-research where members of communities are equal participants in the planning and implementation of research and where the topic of research is a practical community concern". Kruger (1994:19) captures the essence of focus group discussions by stating that they "produce qualitative data that provide insight into attitudes, perceptions and opinions of participants".

Records of MDR-TB patients. The researcher also studied the records of seven patients at St Benedictine Hospital in order to obtain data to supplement the data gathered through the personal interviews and the focus group discussion. This was to establish whether the MDR-TB patients were using, misusing and abusing alcohol and other drugs. As five of the seven patients were already deceased, the remaining case was used for an in-depth analysis. The patient was followed up to ascertain whether he was using, misusing and abusing alcohol and

other drugs. A psychosocial report was compiled on the patient's home circumstances to determine the impact of substance abuse on a TB patient still under treatment. The home visit was also aimed at determining the impact of poverty on the patient's personal and family life.

- **Quantitative data gathering methods**

Interviews were conducted with patients with the aid of an administered structured questionnaire (see Attachment G). As Nongoma lacks infrastructure and street addresses and the illiteracy rate is high, the respondents (patients) were assisted by hospital and clinic nurses (research assistants) in the completion of the structured questionnaire, which was the main data-collecting instrument. The nurses were trained in interviewing skills and on how to complete and administer a structured questionnaire. The researcher explained the objectives of the research and how the hospital and community clinics would benefit from the results of the research.

In this way a total 470 patients at St Benedictine Hospital and its 11 satellite clinics were interviewed. The structured questionnaire was set up in the vernacular, Zulu. This helped the patients to understand what was expected of them in terms of participation and responding to questions. The patients were voluntary participants and knew that they were to be interviewed on substance use while still under treatment at St Benedictine Hospital and its satellite clinics. From a caseload of 600 patients, 470 were selected for the interview, based on purposive sampling. Strydom and De Vos (1998:198) point out that this type of sampling is based entirely on the judgement of the researcher, in that the sample is composed of elements that reflect the most characteristic, representative or typical attributes of the population (Singleton *et al.* 1988:153). Thus the respondents in this study were primarily selected from the population of TB patients at the TB ward (male and female). Patients from the psychiatric ward, the male and female surgical ward and medical wards were included.

Neuman (2000:17) states that by understanding both qualitative and quantitative approaches, one is aware of a range of research methods that can be utilised in complementary ways. This quality is captured by Ragin (1994:92), in Neuman (2000:17): "The key features common to all qualitative methods can be seen when they are contrasted with quantitative methods. Most

quantitative data techniques are data condensers. They condense data in order to see the big picture. Qualitative methods, by contrast, are best understood as data enhancers. When data are enhanced, it is possible to see key aspects more clearly." This study intended to do justice to these complementary methods.

The purpose of combining various methodological categories was to compare the patterns that were emerging from the different strategies in order to understand the nature and extent of use, misuse and abuse, as well as the prevalence of preventable diseases.

4.2.2 Process of Data Collection

The literature study, consulting of experts and negotiations to gain entry into the community contributed to the design of the structured questionnaire and semi-structured interview schedules. This was for the focus group as well as the personal interviews with key informants and village people.

- **Literature study**

Ary *et al.* (1985: 369) state that a literature study paves the way for the hypothesis of the proposed research. It is therefore important that prospective researchers have their ideas in place and have progressed some distance with the literature study before they consult the experts. Neuman (2000:445) argues that a literature review is based on the assumption that knowledge accumulates and that people learn from and build on to of, what others have done. The literature comprised of books, journals, newspapers and research reports.

- **Consulting the experts**

Cilliers (in De Vos 1998:180) suggests that the investigator should be selective in his/her choice of experts. Most prospective researchers are already aware of certain experts whom they can contact. The consultants who were approached by the researcher motivated him to undertake the current study, as he would then be able to contribute invaluable research data to

this inexhaustible field. The list of those consulted and the purpose of consulting experts were discussed in Chapter One.

- **Gaining Entry**

This section outlines the point of entry into the area of study and the consultations to get permission to proceed with the research. De Vos (1998:258) explains the importance of negotiating access into a research setting. Successful fieldwork is usually determined by the accessibility of the setting and the researcher's ability to build up and maintain relationships with stakeholders. Once the researcher has located and established contact with stakeholders, he/she must gain their cooperation. Taylor and Bogdan (1984), cited by Schurink (1998:258), rightly point out that one of the most sensitive issues facing qualitative research is to explain one's research procedures and interests to both subjects and those in authority. A description of the process as it developed in this research follows.

- **SANCA's approval for the type of study proposed**

Before permission was sought to enter the community of Nongoma, the researcher had to obtain permission to conduct the study from the National Management Committee of SANCA, the institution where he was employed at the time. Approval for the study was also obtained from the Executive Committee of SANCA Nongoma Alcohol and Drug Help Centre, who promised support to the researcher where necessary (see Attachment A).

- **Entering the Community of Nongoma**

When the researcher entered Nongoma for the purposes of this study, he had already done a preliminary feasibility study. He had also been a medical social worker at St Benedictine Hospital from 1978 to 1984 (see Chapter One). Later he worked as a welfare officer in charge of the Nongoma region, which comprised the Nongoma, Mahlabathini, Hlabisa, UBombo, Ingwavuma and Simdlangentsha districts. The researcher therefore knew the area of study very well and was familiar with the culture and social dynamics there. He therefore had no

difficulty in coordinating and supervising the research assistants, who comprised social work practitioners, nurses and VHWs.

The respondents were mainly patients of St Benedictine Hospital and community clinics in the three wards controlled by the local tribal authority of Nongoma, namely Usuthu, Matheni and Mandlakazi. The 573 respondents who were interviewed by the VHWs were mainly individuals who were still under treatment and were followed up by the VHWs on home visits.

- **Permission from the Local Health Leadership in Nongoma**

Dr Glover, the medical superintendent of St Benedictine Hospital, was consulted in 1998. She understood the rationale for the proposed research and asked the researcher to write a formal request and proposal for the intended study. This was done. The research proposal and the written request for permission to undertake research at St Benedictine Hospital and its 11 satellite community clinics were subsequently referred to the Department of Health of the KwaZulu-Natal province. A second proposal was submitted on the request of the Department of Health through the medical superintendent of St Benedictine Hospital. The first one was deemed unclear in certain respects. In 1999, written formal approval was granted from the medical superintendent (see Attachment B1 and B2). The letter confirmed that the leadership of the district health system and community health clinics had given permission for the research. In spite of the fact that permission had already been granted by the Department of Health, provincial authorities and the medical superintendent of St Benedictine Hospital, the researcher requested the latter person to circulate a note to the leadership of the nursing staff of the Usuthu District Health Committee in Nongoma. This committee verbally agreed to work closely with SANCA Nongoma and to provide whatever assistance they may be called upon to provide towards the proposed study/research programme). In addition, the Community Health Department agreed that VHWs could be used for this study. The TB, psychiatric and surgical wards agreed to work closely with the researcher. This consultation with the health leadership in Nongoma meant that the researcher could depend on their support for the study. The following map shows the location of the hospital and clinics, which were the source of most of the quantitative data.

- **Permission from Nongoma Regional Tribal Authority**

It was essential for the researcher to make arrangements with the secretary of the Nongoma Regional Tribal Authority to seek permission to enter the villages for the intended research. The researcher was subsequently invited to attend a meeting of the Nongoma Regional Tribal Authority in April 1999, during which he was granted 30 minutes for his presentation. Those attending asked questions on his intended research and gave constructive criticism. The latter was integrated into the focus group discussion and questionnaires.

The chairman of this forum echoed the sentiments of the members and highlighted the fact that alcohol abuse and drug dependence had reached alarming proportions in the village communities. The members of this forum aptly linked substance abuse with diseases such as TB, HIV/AIDS and mental illness. They also voiced concern over the disintegration of the traditional family and the changing value system. This consultative meeting seems to have created a bond between the researcher and community members as the researcher was warmly received and succeeded in eliciting interest in his research topic. The members of the forum subsequently pledged to support the study and provide assistance should the researcher need any in the course of his study. The meeting proved valuable in that it provided the community leaders with an opportunity to reword an identified problem as a felt need and participate in research which would help them to explore their problems and, if possible, provide a solution to them.

The Regional Tribal Authority gave their approval for the study and promised cooperation on behalf of all the stakeholders, including the *amakhosi* (*chiefs*), *indunas* (*headmen*) and other leaders of civil society in Nongoma. They all felt that this type of research was long overdue because of the complex nature of the problems they had experienced and witnessed in their respective villages. The necessary approval was secured at a consultation meeting in Nongoma in 1999 (see Attachment C).

Figure 10: Nongoma Hospital and Community Clinics

Source: Human Sciences Research Council (HSRC-GIS) (Census 1996)

Permission from the Department of Education and Culture in Nongoma District Circuit

Department of Education and Culture in Nongoma District Circuit also gave approval and promised to assist where necessary. This approval was mainly pertaining to schools that would be accessed by the researcher and his team of research assistants. The intended research was fully supported by the circuit of Nongoma and the authorities concerned look forward to hearing the outcome of the research once completed (see Attachment D).

4.2.3 AREA OF STUDY: A PROFILE OF NONGOMA

It was necessary to get baseline data on the Nongoma area through a situation analysis before embarking on the research. The baseline data were obtained through studying various documents, consulting experts and interviewing key informants in the community. Official statistics were sourced from the 1996 census, as later census statistics were not yet available at the time when the baseline data was gathered.

4.2.4 Socio-Economic Profile of Nongoma

Nongoma is a deep rural area in the northern part of the KwaZulu-Natal province in the Republic of South Africa. It is separated from Mahlabathini by the Umfolozi River and is bounded in the south by the Hlabisa district border and in the east by the Umkhuzi River, which separates Nongoma from the Ubombo Mountains. To the north-east lies Pongola and Vryheid. Families consist of seven children on average. More than 40% of the males migrate to urban areas to work in gold and coal mines as well as other industries. Preventable diseases are prevalent (Mathe 1983:1-3).

- **Population of Nongoma**

According to Statistics SA, the population of Nongoma totalled 188 956 during the 1996 census. Females made up 55% of the population and males 45%. The age group 15-64 years formed the largest of the three age groups (54%) whilst the age group 0-14 years made up 42% of the population and those of 65 years and above only, 4% (see Figure 11).

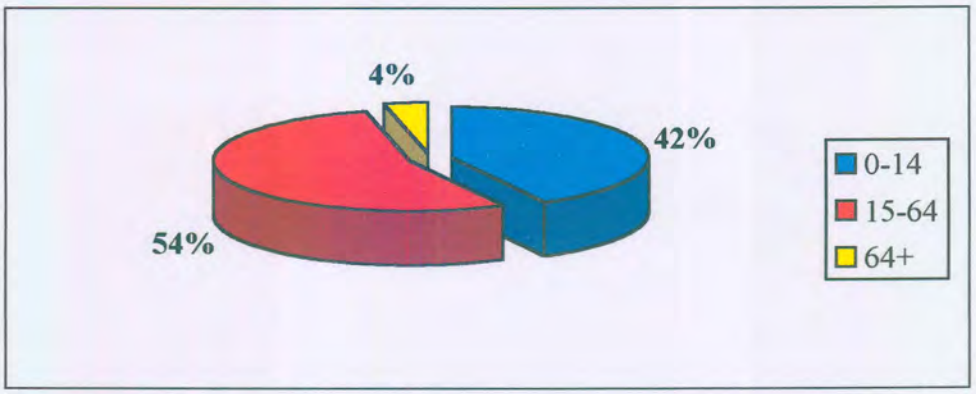

Figure 11: Nongoma population structure

Source: Human Sciences Research Council (HSRC) 1996

High population density is often linked to risky behaviour, such as drug use, as well as with health problems such as TB. The map of Nongoma (see Figure 12) does not show areas with extremely high population density. There are pockets of high population density, however, where households accommodate extended family members who are economically dependent on the breadwinner. The map shows just a few enumerator areas (EAs) in the magisterial district where the density was between 501 and 2 500 people per km^2. These were situated in the east of Nongoma (close to St Benedictine Hospital) and scattered in the southern part of the magisterial district. In comparison to the whole of the province, Nongoma's population density is not very high.

- **Overall educational level**

At the time of this study, the overall educational level in Nongoma was low. The majority of the population (32%) had achieved between Grade 1 and Grade 7 education. Twenty percent (20%) of the population had achieved between Grade 8 and Grade 12 education. Only 1% of the population had a post-matric education. It is also important to note that the majority of the VHWs, who conducted the unstructured interviews among their neighbours, had a low literacy level as they fell in the Grade 5 to 8 level of education. The 1996 sencus is based mainly on estimate survey in rural areas, it is therefore possible that the rest of the percentage that is not reflected here, could probably be that they have no education at all.

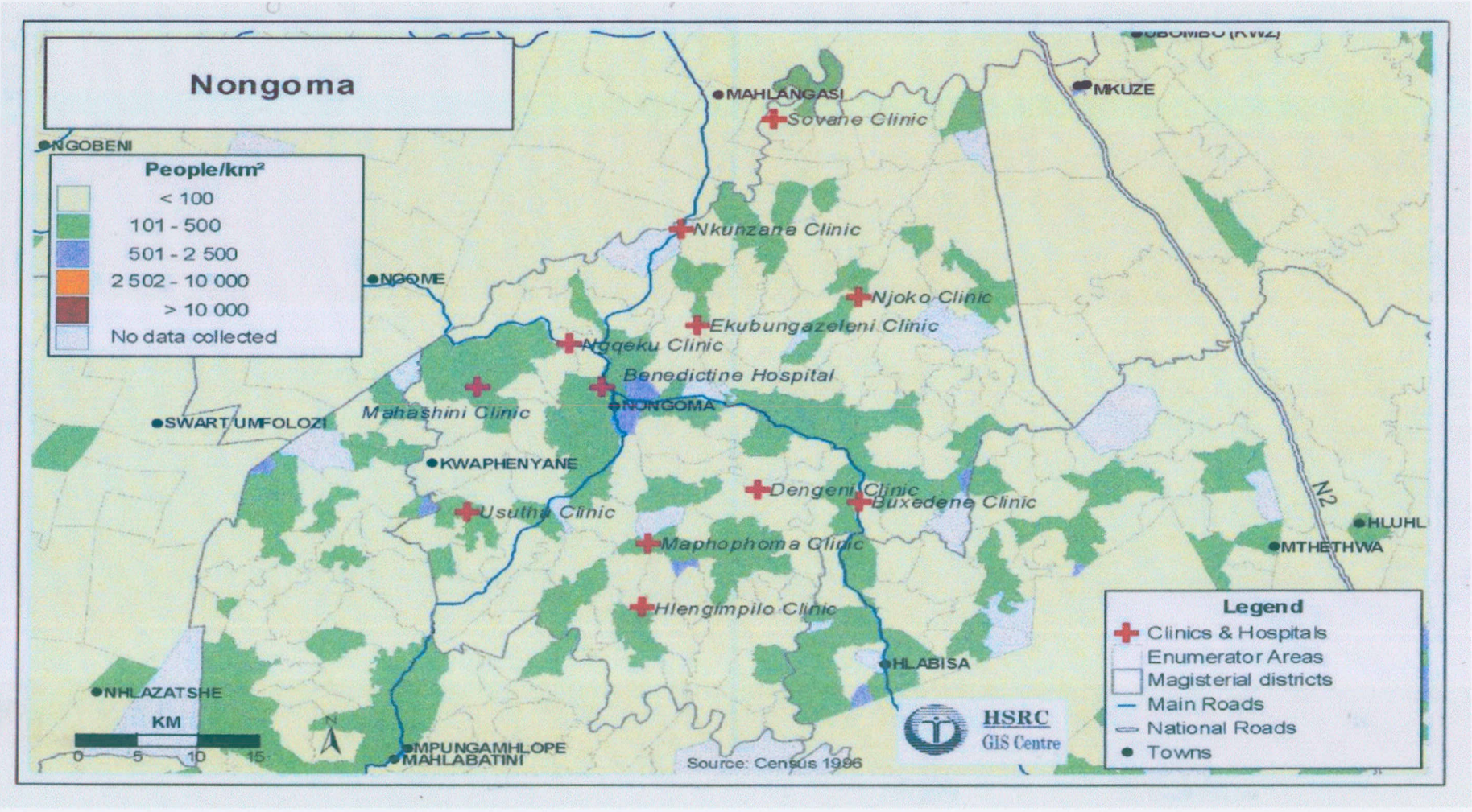

Figure 12: Nongoma clinics and population density
Source: Human Sciences Research Council (HSRC) (Census 1996)

- **Income of Nongoma communities**

Income data were inconsistently recorded in the 1996 census. The reported statistics are therefore inconclusive. The household income for 1996 is reflected in Figure 13. It is alarming that between 7 000 and 8 000 households recorded no income. Whether this was indeed the case, is difficult to establish. A further 7 783 households recorded an income of R6 000 per annum. It seems that by far the majority of households earned below R12 000 per annum. This places the majority of the population below the accepted minimum living level of R800 per month (Stats SA 2000:25). This probably contributes to drug use and other risky behaviour in Nongoma. Very few households earned more than R30 000 per annum in1996.

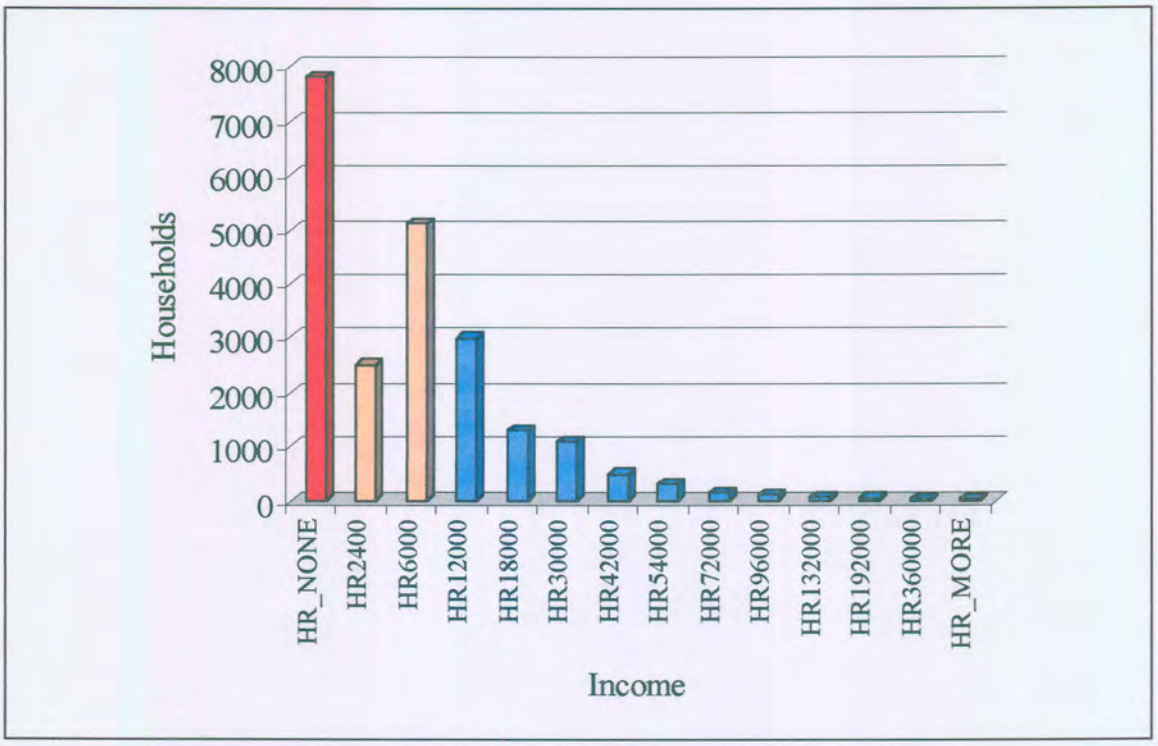

Figure 13: Nongoma household income

Source: Human Sciences Research Council (Census1996)

Unemployed people totalled 19 986 in the 1996 census. Only 6 658 people were employed. This high unemployment rate had a negative influence on the local economy as well as the social fabric of the community. However, the figures noted here were estimates. Actual unemployment figures could have been far higher than the estimates. Nongoma people

sometimes supplemented their meagre income with the illicit sale of home-brewed concoctions (beer) and home-cultivated marijuana. It is noteworthy that villagers often belonged to the same clan and were protective of each other when police officers came searching for marijuana.

- **Dwelling structures in Nongoma communities**

The majority of the Nongoma population (17 814 people) indicated that they lived in traditional dwellings, while 4 158 lived in single standing dwellings and only 1 452 lived in flats (Stats SA 1996). The vast majority of people in Nongoma lived in low socio-economic dwellings. This includes traditional and single-standing dwellings.

- **Crime in Nongoma communities**

Nongoma had a much higher reported crime rate than the neighbouring district villages of Mkuze, Ezibayeni, Mahlabatini and Ceza. Nongoma recorded a total number of 1 800 crimes in 1998, Mkuze recorded 551 for the same period. Crime density statistics, however, indicated that the mentioned villages experienced the same density of crime (number of crimes per square area). Statistics for driving under the influence of alcohol or drugs were relatively low in Nongoma. The recorded figure was 6 per 100 000 of the population. This was lower than the figure for the neighbouring Mkuze (33 per 100 000) and Magudu (14 per 100 000). The rate of drug-related crimes was higher in the adjacent police station of Magudu (73 per 100 000) than in Nongoma (3 per 100 000). The drug-related crime figures for Mkuze (8) Hlabisa (31), Mahlabatini (10) and Ngome (21) were also higher than those of Nongoma. Although crimes like domestic and political violence were not reported, it is strongly suspected that, especially in the former homeland areas like Nongoma, records of the crime rate were not properly kept. Nongoma had always been a hotbed of crime.

In summary, there was a high rate of unemployment and associated poverty in Nongoma. Therefore home-brewed beer and illicit concoctions were produced and sold to the public to meet financial needs. In addition, marijuana was planted surreptitiously and sold to the public. In this hotbed of crime, poverty was compounded by the variety of preventable

diseases in the community, such as malnutrition, kwashiorkor, pellagra, TB and HIV/AIDS. It is against this background that the study focused on the relation between substance abuse and preventable diseases.

4.3 DATA PRESENTATION, ANALYSIS AND INTERPRETATION

To determine the link between substance abuse and preventable diseases such as TB and HIVAIDS, it was essential to explore the perception of the community members on issues such as substance abuse and to understand behaviour which seemed bizarre, like the use of poisonous home brewed concoctions and substance abuse, while the patients were still under treatment.

The demographic features of the sample of 470 respondents who were interviewed at the health centres of Nongoma are presented here below.

The baseline data discussed earlier in this chapter correlates with the findings of this study as reflected in the demographical particulars.

4.3.1 Demographic particulars

Demographic particulars of the 470 respondents who were outpatients of the Benedictine hospital and its 11 (eleven) satellite clinics have been presented here. Eleven nurses were used in collecting the data while the researcher monitored and supervised the proceedings. A structured questionnaire with the title: Health – related alcohol / drug use study was used (see Attachment G). The data presented here was voluntarily provided by the respondents who willingly participated in the study.

The following charts represent an analysis of the respondents by gender. Whenever there is an indication of missing % in a pie chart it means that there was a blank space, which was not completed, in a structured questionnaire.

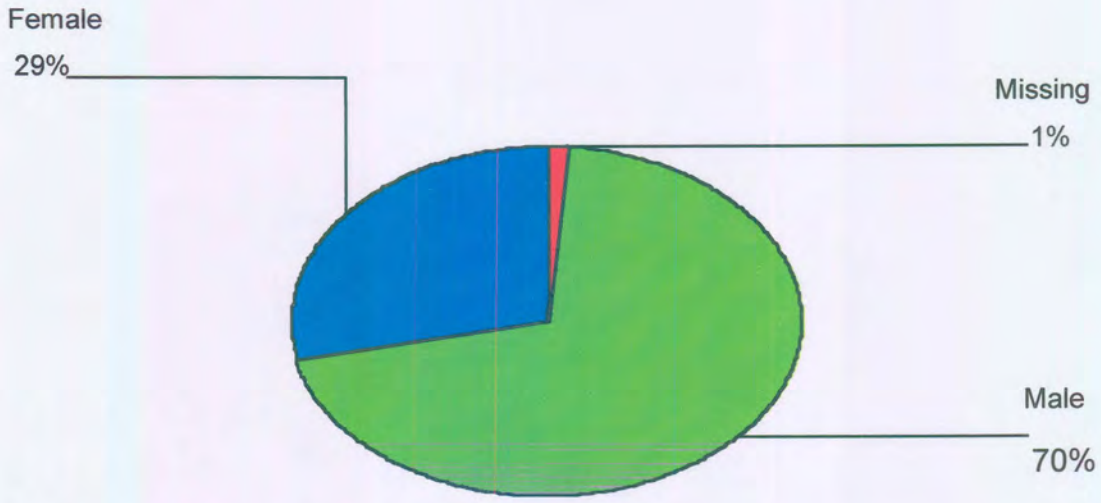

Figure 14: Gender of respondents

Despite the fact that in Nongoma women are in the majority, (55% of the population), there were more male respondents (70%) in this study. This state of affairs is cause of great concern as males are culturally ascribed the role of head of the family and breadwinner. The disparity between male and female respondents means that there were more men being treated for a variety of diseases than women. The most common diseases that the patients at Benedictine Hospital were being treated for were multidrug resistant (MDR)-TB, TB, mental illness, AIDS and other related diseases.

The following charts reflect an analysis of the respondents by age.

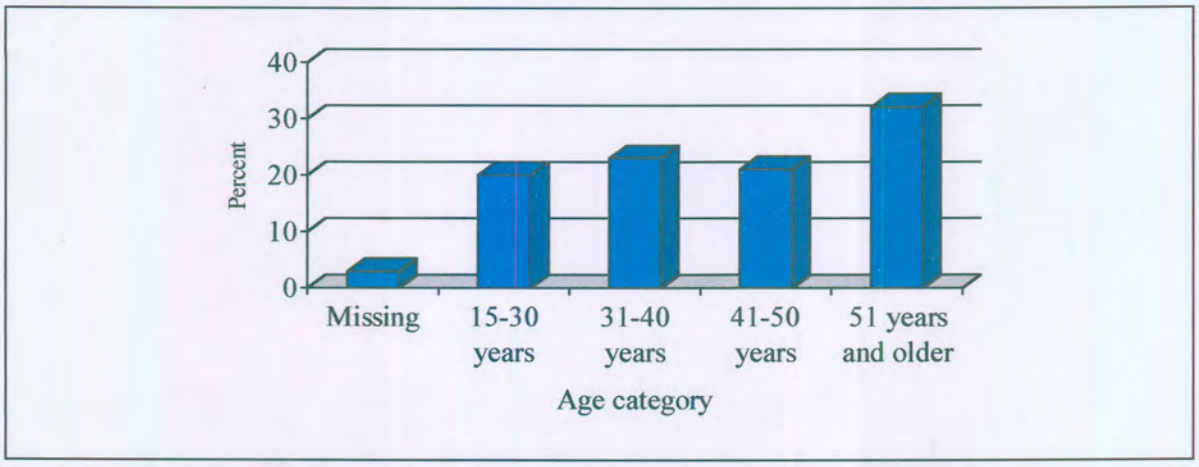

Figure 15: Respondents' age

Figure 15 indicates that adults formed the majority of respondents. This indicates that adults need to be targeted at an earlier stage to ensure healthier lives when they reach adulthood.

The next chart reflects the marital status of the respondents.

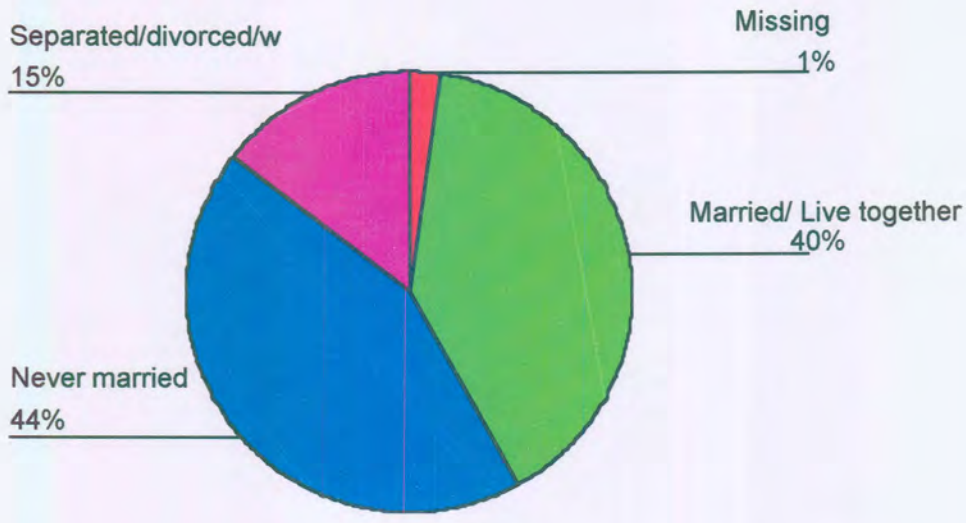

Figure 16: Marital status of respondents

In interpreting Figure 16, it should be taken into account that there could have been some misunderstanding here on the part of the respondents. Marriage to traditional people sometimes means one who is married in the church or at the magistrate's office. However, marriage also means customary union. For the purposes of this study, long-term relationships too were considered as having many of the same correlates as formal marriage. Respondents here indicated that separations are common in Nongoma but divorce is rarely resorted to. Figure 15 above, also indicates that the largest single proportion of the respondents (44%) were never married and therefore the category of respondents who were never married could include people living together in long-term relationships. This again affects the generalisability of the data. The next largest category of respondents indicated that they were "married" (40%).

The financial status of the families in Nongoma was determined on the basis of the employment status of the heads of families. Whether a family was headed by a male or a female, was not considered in this study.

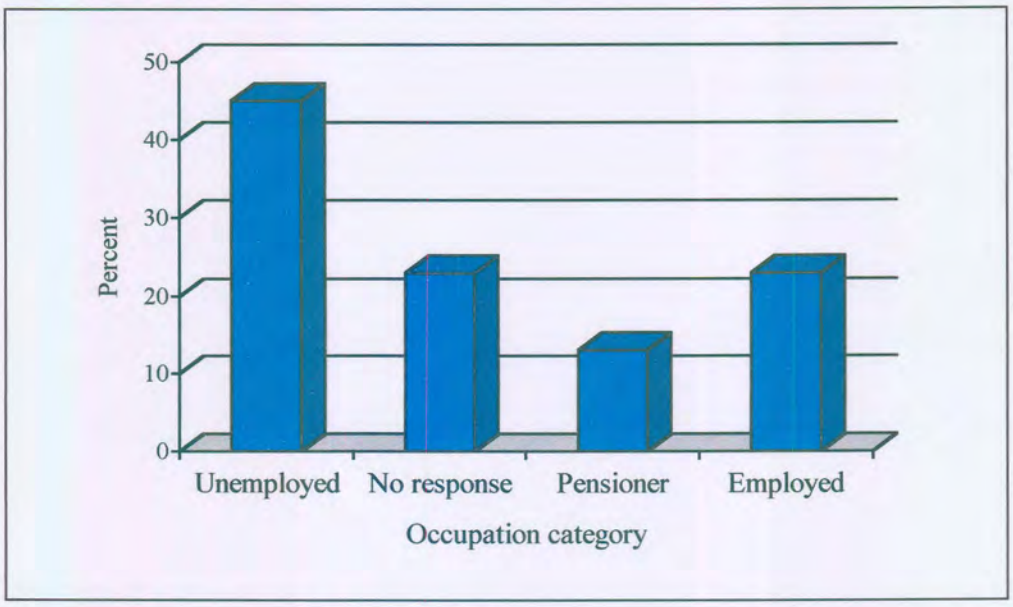

Figure 17: Respondents' employment status

Although Figure 17 above reflects the employment status of the patients/respondents, it roughly corresponds to the high rate of unemployment among the entire rural population in the RSA. This chart indicates that poverty is rampant in Nongoma. Unemployment poses an obstacle to the successful treatment of patients who cannot even afford bare amenities. Treatment is further aggravated by patients' abuse of substances. Additionally the poor are more vulnerable to diseases such as TB and HIV/AIDS. Stillwagon (2001:3) warns that one should expect HIV/AIDS to develop differently in rich and poor countries, just as do tuberculosis, pneumonia, measles and nearly all other infectious diseases. This situation is intensified by the high level of illiteracy which prevails in Nongoma. Job opportunities are limited. Income is low. It is therefore not surprising that TB patients in Nongoma are dependant on the statutory disability grant when this was no longer available, families experienced a crisis.

The following Figure 18 reflects the educational level of the respondents.

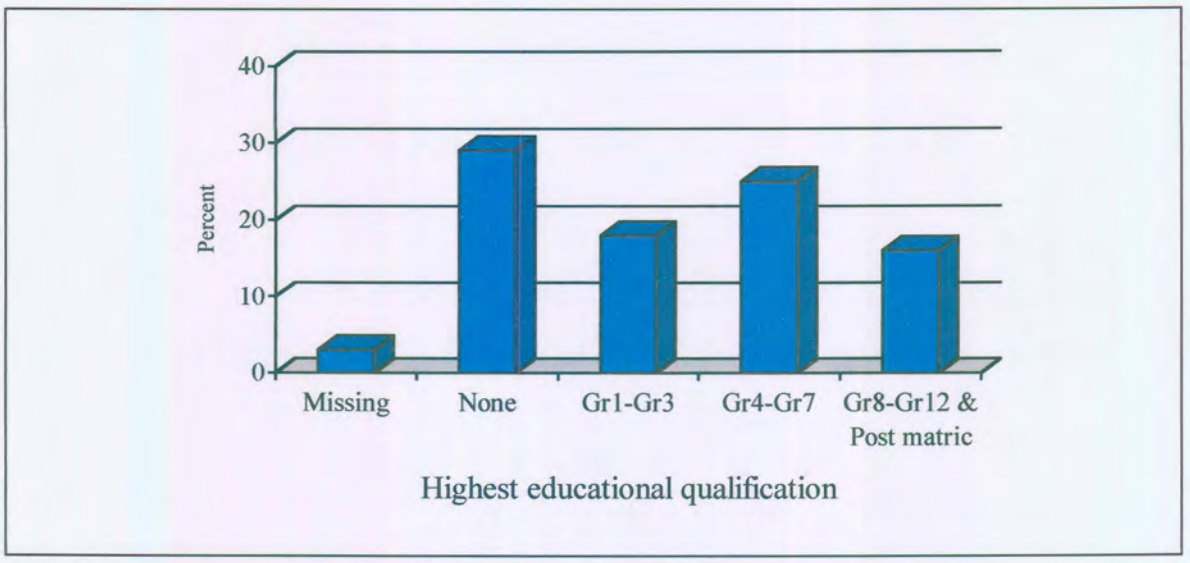

Figure 18: Respondents' highest educational level

Figure 18 indicates that quite a substantial number of people (29%) in the sample group had no education or had very little education, while a small group of individuals had achieved an educational level of Grade 8 to Grade 12 and even fewer had post-matric qualifications. At the time of this study, the overall educational level in Nongoma was low (cf. Stats SA 1996).

The type of accommodation used by respondents is reflected in the following chart

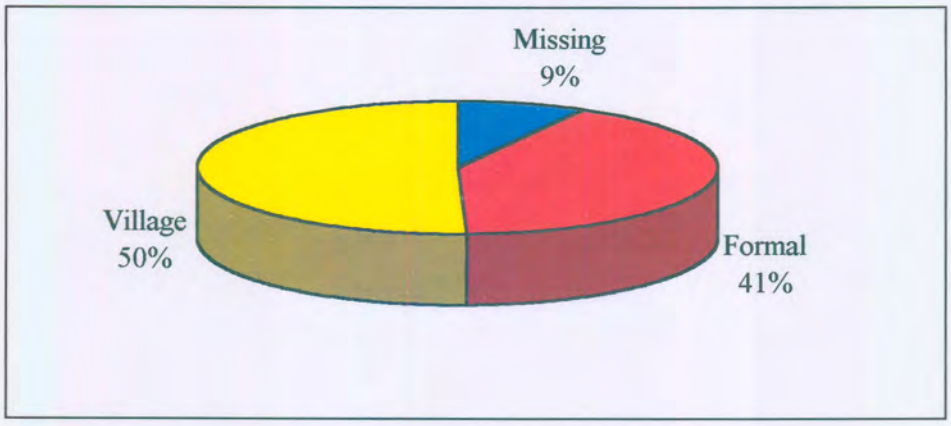

Figure 19: Type of accommodation

Figure 19 above, reflects the majority (50%) of the respondents live in villages. It is possible that most of what is referred to here as formal sector falls under the village sector. In this case, the village sector consists mainly of traditional types of habitation. Reference to the

village sector as compared to the formal sector is that the former has got neither infrastructure nor basic facilities like water-pipes and or sewerage. The researcher is aware that most of the respondents stay in villages which are as yet, not developed.

The respondents' joint monthly income was also analysed. The results are reflected in Figure 20. It must be noted though that the percentages in figures 21 and Figure 21 have been rounded off, hence they reflect a total of 101% and 99% respectively.

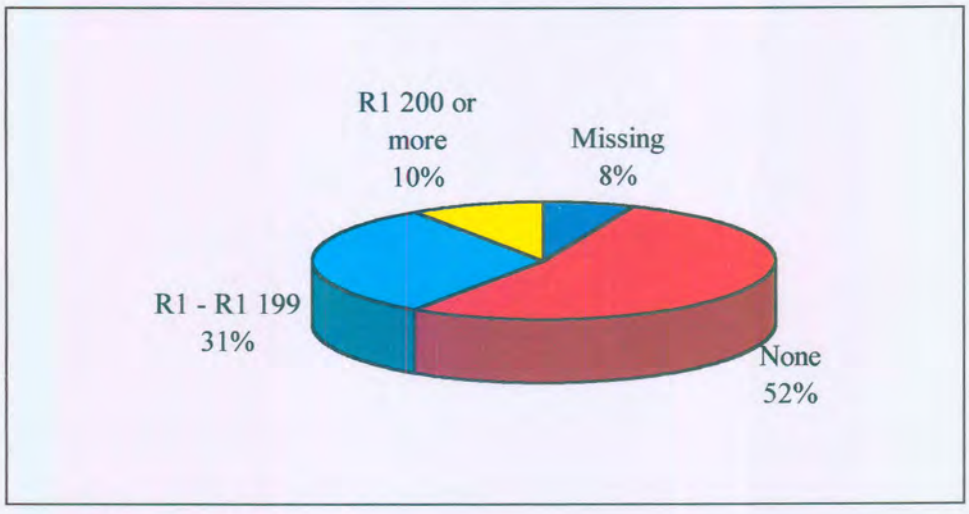

Figure 20: Joint monthly income

In this case, joint monthly income is a total income contribution from both spouses in the family.

Figure 20 indicates that a large proportion of the respondents (52%) have no income at all. Poverty is also one of the major factors contributing to the problem of endemic diseases like alcoholism and drug dependence. McMurray *et al.* (1990:403) mention that primary malnutrition; alcoholism and AIDS are linked by common themes of wasting, immune impairment and the increased incidence of tuberculosis (Chaisson & Slutkin 1989; Schieffebein & Snider 1988; Onwubalili & Scott 1988), in McMurray *et al.* (1990:403). To a community where the majority of people effectively have no source of income, celebrations of any form, where food and alcohol are freely abundant, are most welcome. Traditional celebrations are frequently held in the hope that ancestors will mediate on behalf of people seeking jobs.

The respondents' tendency to attend celebrations was analysed and the trends are reflected in Figure 21.

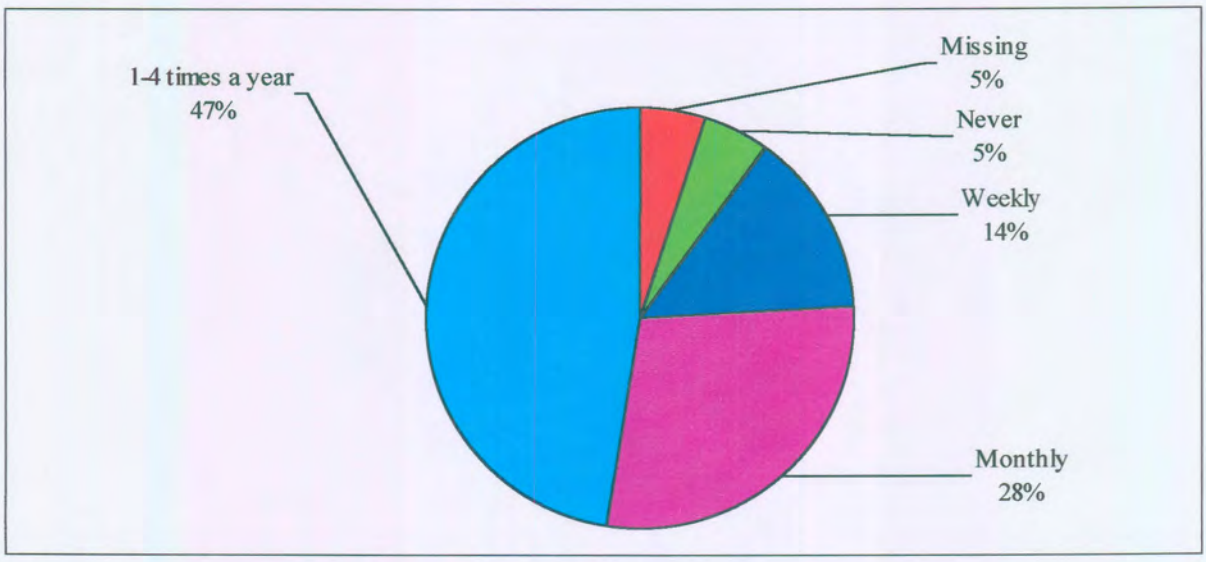

Figure 21: Frequency of attending celebrations

Figure 21 shows that the greatest single proportion of the respondents (47%) attend celebrations 1-4 times a year, followed by those that attend such celebrations monthly (28%). It was established that those who attend celebrations most often tend to be alcohol users. As alcohol is in abundance at celebrations, it can be deduced that some individuals start their habit of drinking alcohol at such celebrations. This is part of the "pleasures syndrome" that was discussed in Chapter Three.

The respondents' tendency to attend church was analysed. Results are reflected in Figure 22.

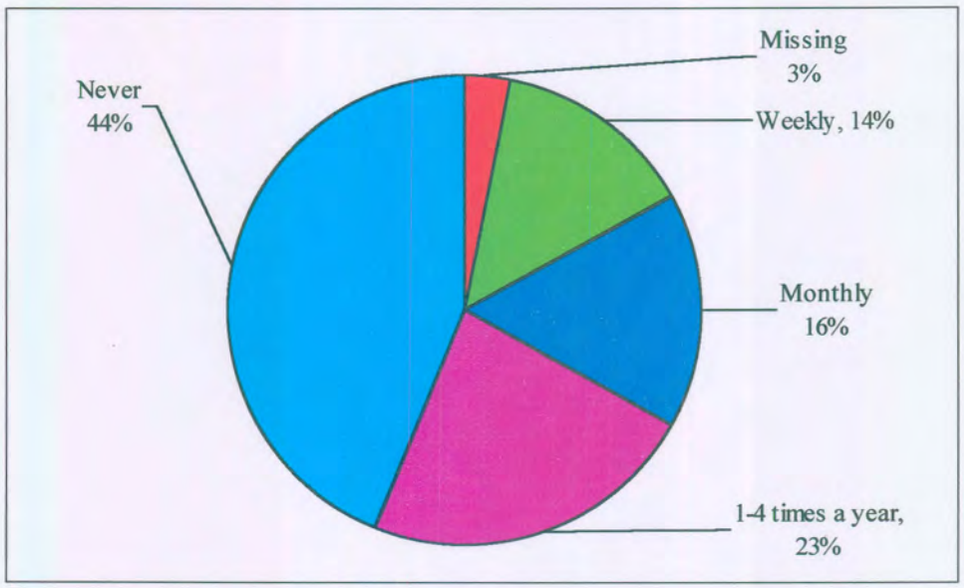

Figure 22: Frequency of attending church

As celebrations are mostly held over weekends, it is not surprising that Figure 22 above indicates that respondents tend not (44%) to go to church. This does not mean that the respondents do not attend religious events. The reality is that traditional rural people usually attend religious ceremonies which are culturally based. Most of the Zionist religious organizations have no church buildings. They usually meet at designated assembly places for religious ceremonies. This has implications for further analysis of this phenomenon. The most popular Christian denominations among the community members of Nongoma are the Zionist/Apostolic denominations.

Respondents' inclination for attending traditional ceremonies was analysed and is found in Figure 23.

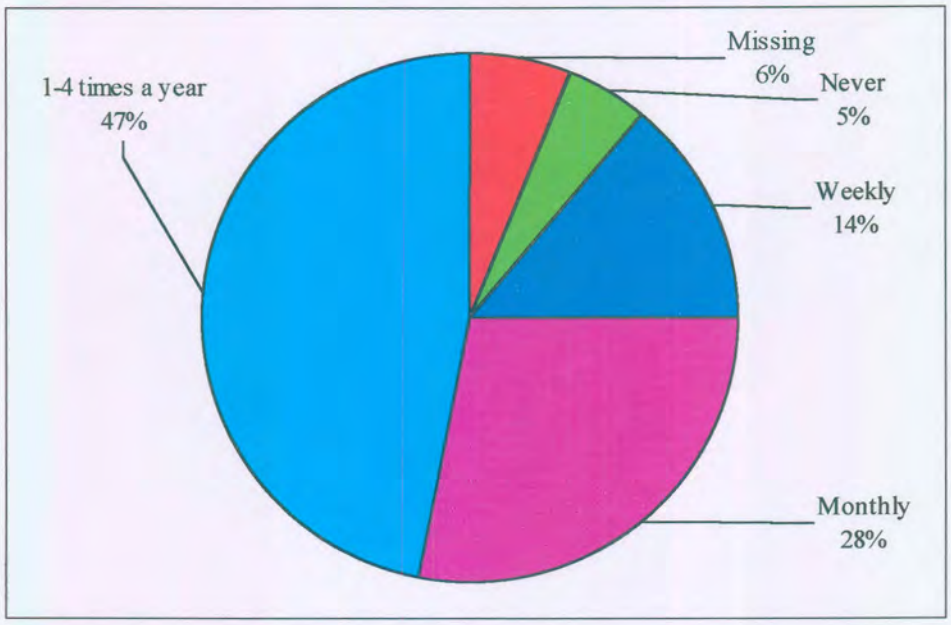

Figure 23: Frequency of attending traditional ceremonies

The attendance of traditional ceremonies has implications. Figure 23 reveals that there was a tendency for respondents who attended traditional ceremonies to have drunk wine during the past 12 months. 64% of those who attended the ceremonies weekly or monthly confirmed that they had drunk wine as compared to those who never attended ceremonies. Alcoholic drinks are commonly served as part of traditional ceremonies and lately wine and other types of alcoholic drink are served in abundance at such ceremonies.

The above discussion was with reference to the demographic particulars of patients (respondents) to whom the structured questionnaire was administered by the research assistants (nurses). The results of the analysis indicate that there is a high rate of illiteracy as well as unemployment among the rural patients of Nongoma. The demographic features of these analyses paint a picture that gives cause for concern. It is significant that the results of the demographic analyses of patients attending hospital and clinic for treatment tally with the socio-economic profile of Nongoma. This is especially with reference to education and income level of the Nongoma community and those respondents (patients) from Benedictine Hospital and the Community Health Clinics.

4.3.2 Qualitative data presentation

Poggenpoel (1998:335) states that data in qualitative analysis are usually in the format of textual narrative (transcribed interviews), written descriptions of observations (field notes) and reflections (ideas and conjectures recorded in the researcher's diary). These records are usually voluminous. Managing such a database is a challenge, as the researcher needs to make sense of the data as well as locate a description to illustrate a concept (Morse & Field, 1996:107-108), in Poggenpoel (1998:335). The data gathered was condensed in statistical descriptive analysis and interpreted in a manner that gives meaning to the set objectives and assumptions of the study. The data was analysed through the use of computer axles. According to Schurink in De Vos (1998:240), the term "qualitative research" can mean different things to different people (cf. Strauss & Corbin 1990:17). It is difficult to describe qualitative research specifically. Denzin & Lincoln (1994:2), in De Vos (1998:240) continue: "For our purposes, qualitative research is defined as a multi-perspective approach (utilizing different qualitative techniques and data collection methods) to social interaction, aimed at describing, making sense of, interpreting or reconstructing this interaction in terms of the meanings that the subjects attach to it."

4.3.2.1 Perceptions of Nongoma people on preventable diseases, substance abuse and HIV/AIDS

Home brewed beer in its present form, is nutritious, hence the description "a fruity gruel" (Gumede, 1995). The perception of home brewed beer as "food" by the community members, has since been transferred to all forms of alcoholic drinks. Among the Zulu people, any form alcohol is regarded as food which is an essential commodity for meeting a primary need (cf. Maslow's hierarchy of needs, 1954, in chapter three). No one is ever described as having over-eaten. An inebriated person is described as "usuthi", literally meaning that he has had enough to eat. It is on the basis of this perception that the conception of alcoholism as a disease is unknown in Nongoma, and nobody believes that "food" can make one ill. This perception was aptly captured in the following statements uttered during focus group discussions with nurses:

- "Patients take prescribed medication (pills) but continue drinking home "brewed beer" (alcohol) in abundance, as they regard it as food."
- "No ritual occasion can be viewed as successful if there is no home brewed beer served in abundance."
- "The ancestors require home brewed beer, if they are to connect with the living family members and relatives."
- "Patients prefer to buy alcohol rather than buy real food with the disability grant provided by the government."
- "Home brewed beer is no longer the nutritious "fruity gruel" it used to be. It is now a poisonous concoction as it is brewed quickly and contains dangerous substance that should be avoided."
- "Treatment courses are often interrupted as many patients are poor and subsequently do not eat a balanced diet, instead they abuse alcohol because they believe it is food."
- "Home brewed beer is traditionally viewed as food in the African tradition."

When a person misuses alcohol to a point of abusing it, s/he is simply viewed as "indlakudla", one who likes food. The following statements during focus group discussions, support this fallacious perception:

- "Alcohol can never cause a disease since it is food."
- "Dagga is medicine which is effective in the treatment of mentally ill people."
- "Doctors, too, indicate that one should take a little wine to cool one's nerves and reduce the side effects of cardiac diseases."

In spite of this flawed perception the Nongoma community was aware of some problems that emanated from substance misuse and abuse. The following quotes are taken from focus group interviews:

- "Addictive substances played a prominent role in the violence that prevailed in KwaZulu-Natal. People were often assaulted while they and/or their attackers were under the influence of substances."

- "Women were sexually molested or abused while they and their attackers were intoxicated."
- "Women joined men in drinking at taverns. Some ended up as victims of gang rape. The following morning the victims would be unable to recall what had happened to them. Numerous women were infected with HIV/AIDS in this way."
- "Alcohol was the primary cause of family breakdown. It often led to domestic violence. In many cases violence occurred while both husband and wife had been drinking. Many people were unemployed because of alcohol abuse."
- "Domestic accidents such as fires were a result of alcohol abuse. People, in particular women, were admitted to hospital with burn wounds. Some harm was inflicted by husbands and/or lovers while some accidents happened while intoxicated women were trying to prepare meals."
- "Because they abused addictive substances, many mothers were unable to take proper care of their children. Some children were admitted regularly to the paediatric ward for treatment due to gross negligence of their mothers, who were known to be abusing alcohol".

It is noteworthy to mention that what has been discussed above by the participants in the focus group has a bearing on the study's future implications. On account of the fact that AIDS has been mentioned, linking it with abuse of alcohol and ultimately resulting in women being sexually molested or abused hence, the problem of substance abuse has wider implications than one would imagine. On the issue of women, neglecting their children due to the fact that they were under the influence of alcohol and thus "some children were admitted regularly to the paediatric ward for treatment due to gross negligence on the part of the mothers, who were known to be abusing alcohol". In the final analysis the themes that come out strongly here, is violence against women, neglect of children and that substance abuse is a common denominator.

The low literacy rate is accompanied by lack of job opportunities. These two problems shape the perceptions of the Nongoma community members around issues such as the amount of

income perceived as an adequate source of income and the responsibility of the breadwinner. The quest for an income takes precedence over the consequences of the source of income.

4.3.2.2 Drug selling as source of income for the family

Culturally, the man is regarded as the bread-winner in the family. When he is unemployed or fails to provide maintenance for his family, his wife has to find a means of putting bread on the table. In Nongoma, where the majority of men are unemployed, they tend to keep themselves occupied by drinking beer or whatever alcoholic substance is available. Disability and pension grants have come to be viewed as a most welcome source of income while homebrewed concoctions; dagga production and distribution are viewed as alternative means of earning income. The following statements made by a key informant during an interview confirmed the above hypothesis:

- Researcher: "What were reasons for getting involved in selling dagga?"
- Response: "I started selling dagga because of unemployment, poverty, and a need for money. My wife does not approve of it, yet she is happy whenever I give her money from my trade. I have children who need to be educated. My eldest son is now a teacher. How else would I have managed?"
- Researcher: "How did you get involved in the trade?"
- Response: "I started selling dagga in 1990 as I was unemployed. This trade provided me with financial resources to take care of my wife and children. I had enough money to meet their need for food and education, and also provide me with extra money. This trade made me rich."
- Researcher: "What is the community's reaction to drug trading?"
- Response: "Friends influence young people to get involved in drug use, misuse and abuse. I still have eight other children to see through school. However my wife has never come to terms with my involvement in dagga trading, but her attitude did not influence my activities. She is just a woman and I have the final word. She was critical of my activities initially, yet she was very glad that I brought in some income that provided comfortably for her needs and those of the children."

- Researcher: "Do your own children use dagga too?"
- Response: "My eldest son was smoking, but he has never smoked in my presence. I believe that he smokes only cigarettes and not dagga. However, I am not completely certain that he is not smoking dagga as well."
- Researcher: "What do you have in mind since your initial encounter with the village health worker?"
- Response: "I do not want to antagonize the village health worker; I realized that dagga is very dangerous after hearing of the suicide of one of my clients. This made me feel guilty because I was part of a dangerous system. I also realized for the first time that dagga trading is against the law."

It is important to note that the interviewee pretended not to have known about the dangers of dagga nor the illegality of his trading with dagga, yet he was uncomfortable with the possibility that his son could be using dagga. People turn to selling illegal drugs in order to make ends meet even though they know how dangerous the drug is to human health.

The following statement during the focus group of 9 nurses of Benedictine Hospital, on how dagga dealers advertised their wares, indicates the extent of the drug problem in Nongoma:

> "They conspicuously hang old tekkies on poles and trees. This sign is well known in the villages."

To prove the authenticity of the statement, the researcher tested this by seeking and finding dagga at two different venues where tekkies were hung. As a result of the survival instinct, rural people have developed and devised ways and means of visual symbolic communication to the general community at large in the villages thus effectively marketing their drug commodity to the would be customers.

The desperation of the majority of people to obtain an income, was described by other key informants including a nurse and doctor team. The significance of a disability grant as a source of income was indicated.

- Researcher: "What are the implications of a shortened treatment period for the TB patient?"
- Response: "Treatment has been shortened to six months. The implication of a change from hospitalization to home care as well as the limitation of treatment to six months only affected the poor families with regard to their source of income (the disability grant). I started working with TB patients in 1987. The government then provided a grant, which catered financially for the needs of the patient and his or her family. To qualify for the disability grant, a patient was subjected to a means test, which assessed how seriously ill a patient was. Disability grants were only awarded in cases where patients were so ill that they were not able to work. The length of the treatment too was considered. Disability grants then were provided for approximately two years, while the treatment also lasted for a minimum of two years".

From the above statements it is clear that while the disability grant was meant to help patients buy nutritious food while they were under treatment, the grant was viewed as a source of income to meet the family' financial needs and individual pursuit for pleasure such as substance use. Peele and Grant (1999:29) observed in this regard that:

- much disease is caused by unhealthy life choices about pleasure and risk and
- many diseases can be prevented by an appropriate lifestyle and behavioural changes, particularly in respect to pleasure.

It is the researcher's view that the all-encompassing theme of the responses of the focus group members (nurses) can be summarised as follows:

- alcohol and other drugs are regarded as a serious health and social problem. On the other hand it is regarded as an accepted drug (especially alcohol), as the majority of village communities perceives it as food.
- alcohol plays a major role in the quest for pleasure seeking and satisfaction.
- alcohol abuse was mentioned repeatedly to be common among TB patients.
- dagga is perceived as medicine and the source of generating income for families.
- an association of alcohol with HIV/AIDS infection was mentioned.

4.3.2.3 Responsibility of the breadwinner

Despite the fact that most TB patients are breadwinners who ought to be concerned abut their families whether in or out of hospital, the data indicated that quite a significant number of the patients had long abandoned this responsibility. The continued use of substances and lapsing into MDR - TB revealed that concern for family was minimal. This is because a substance abuser is usually more interested in getting alcohol at all cost, due to his addiction.. Other family responsibilities become less important. Not only were some patients misusing whatever funds they had for drugs, they no longer cared whether they lived or died. They seemed to be indifferent to family, friends and self.

As early as 1905, Dr Richard Cabot, the chief of medicine at Massachusetts General Hospital, observed that the effectiveness of medical treatment depended on a complete diagnosis. It was therefore necessary for therapists to have information on the patient's home, family, work and problems. He included social workers as an essential component of the medical team in order to avoid recidivism (Dhooper 1997:132).

The experts who were interviewed in this study indicated that substance abuse was a major problem in the treatment of TB patients. The doctor and the nurse interviewed agreed that if a patient drinks alcohol during treatment s/he may just as well discontinue treatment as it will have no effect.

The following table indicates the fatality of MDR-TB

Table 8: MDR TB cases (1998-2000) Benedictine Hospital

Case	Age	Gender	Substance Of Abuse	Occupation	Current position
A.	34	Male	Alcohol & Dagga	Not known	Died Jan. 2000
B.	49	Male	Alcohol & Cigarettes	Coal miner	Died 18 June 2000
C.	37	Male	Alcohol	Unknown	Died Nov. 2000
D.	29	Male	Alcohol & Cigarettes	Unknown	Died Dec. 1999
E.	52	Male	Alcohol & Cigarettes	Unknown	Died October 1999
F.	46	Male X	Alcohol & Cigarettes	Coal miner	Nov. 2000 Still being treated
G.	33	Male	Occasional drinker	Taxi driver	Nov. 2000 Still being treated

Source: Statistics provided in the records of Benedictine Hospital

The researcher was only given seven cases who were MDR/TB and who also were abusing alcohol. The total number of MDR/TB patients were not given, however, this is the only total number of cases who were given to the researcher.

Looking at the table above, with reference to male X, it was not known whether he drank alcohol. The researcher went to his home in order to get information to compile a psychosocial report. The patient lived in a village in the Mahlabathini district. As the patient was not at home, his wife was interviewed. After the researcher established some rapport with her, she confided in the researcher that her husband was supposed to be hospitalised in King George Hospital but asked for a pass-out on the grounds that there was a crisis at his home that he had to attend to immediately. She further told the researcher that her husband drank heavily. He was probably at a shebeen drinking alcohol at that very moment. She further reported that he smoked a packet of 20 Stuyvesant cigarettes a day. Most of his disability grant was spent on buying alcohol and cigarettes, she said. He did not give her enough money for food and for the maintenance of their four school-going children. She pleaded with the researcher not to tell him that she had told about his behaviour; otherwise he

would violently assault her. The researcher reassured her of the confidentiality of the research. However, he asked her to tell her husband to report to St Benedictine Hospital for follow-up treatment and that the hospital was concerned that he had not returned for a check-up and further treatment. The researcher reported back to the TB nurse on his visit and a psychosocial report was filed in the social worker's office (see Attachment H).

The researcher submitted a report, which stressed that in any future discussion with the patient concerned, the relevant health care staff should never mention that the information had been provided by his wife. The TB nurses in charge were highly appreciative of the researcher's intervention, as the patient thereafter came for a check-up. Thereafter the patient reported regularly for check-ups and treatment. The case was handed over to the local social worker (SANCA-Nongoma) for monitoring.

4.3.2.4 Perceptions of respondents on substance use while under treatment

With regard to preventable diseases, substance abuse and HIV/AIDS, the current study places particular emphasis on TB, MDR-TB and mental illness. Perceptions of people regarding preventable diseases, substance abuse, and HIV/AIDS cannot, however, be analysed in isolation from the socio-economic circumstances which influence them. It is therefore appropriate here to again refer to the low literacy rate at Nongoma (cf. Figure 18). This is further confirmed by the prevalent use of VHWs (whose educational qualification range from grade 3 to grade 10) in the health education and after care of patients. In the current study, the fifty VHWs who were used as research assistants, were well known and accepted by villagers and they had easy access to the homes of most of the community in their respective villages.

In this study, respondents did not indicate an understanding of the fatality of using drugs while a person was under treatment for any preventable diseases such as mental disorder, malnutrition, TB and HIV/AIDS. However, from experience the researchers knows that respondents might know, but will deny the link. The general knowledge is that the nurses do warn patients against abusing alcohol and other drugs. The statement that they understand, is due to the fact that abuse of alcohol by patients is always frowned upon by the society at large and strongly disapproved by the health professionals, in spite of the fact that the patients

still believe homebrew alcohol is food. As respondents know one another, belong to the same area and therefore attend all celebrations for baptismal, confirmation at church, traditional ceremonies, weddings and even funerals, there was common knowledge of all deaths and their causes. During the process of the current study, all respondents were aware of the fact that a young dagga user aged 19 years had just committed suicide by hanging himself. The suicide was ascribed to his long-term use of dagga. This young man had been a patient at the St Benedictine Hospital in Nongoma, as well as at Madadeni (a mental hospital). Treatment at both these institutions had been unsuccessful due to his continued use of dagga.

The researcher interviewed the traditional healer as key informant about which diseases the villagers consult him. During the interview, the researcher noticed that village patients when faced with disease did not always go to the hospital but also made use of traditional healers. Many diseases were not diagnosed by name but rather by their symptoms. The traditional healer, as key informant, responded with the following information to the questions:

- Researcher: "What kind of diseases do villagers consult you about?"
- Response: "Paralysis on one side—community members often called this "being hit by the bird".
- "Stomach aches with the patient excreting blood."
- "Intense chest pains."
- "Lower back problems and bent walking posture."
- "Kidney problems: "... the fat is split in the middle until yellow urine is passed out because of the split of kidneys in the middle".
- "Blood clots."
- "Headaches and mental illnesses. These were described as "air emission on the top". "According to the traditional healer these patients were referred to the hospital."
- "Big, wet sores that doctors failed to treat. The healer treated these by pasting some medicine onto them"
- "Serious illnesses, even those that were terminal."
- "Inability to walk, general weakness and dispersed pain among elderly people."

- "Genital problems."
- "Syphilis and AIDS."
- "Coughing up blood."

Additional information given by this key informant was that his patients were not limited to any age group or gender. Many of the symptoms he described coincided with those that manifested in alcohol users. These being loss of appetite, convulsions and withdrawal symptoms. An investigation by the researcher on the medicinal value of dagga yielded the following responses from the traditional healer:

- Researcher: "Does dagga have a medicinal value?"
- Response: "In some cases dagga is used as a drug for treating high blood pressure. In many cases, it is also abused for pleasure. It damages physical and mental health, and can change the user's personality to a point that a person can manifest behaviour that s/he would not engage in under normal circumstances."
- Researcher: "What symptoms cause you to diagnose your client as having HIV/AIDS?"
- Response: "I have been told that the AIDS rate is very high. I have seen patients with what I considered to be AIDS but nobody had ever described to me exactly what symptoms to look for in a person with AIDS".

It could be concluded from the interview that traditional healers were not always sure about the symptoms of AIDS or how AIDS differed from syphilis. The traditional healer described AIDS as a "sucking disease": "It sucks a person until only the spine is left. What I know about AIDS is that people became thin to the extent that they looked like skeletons. Sufferers were said to have genital pain and their hair became fluffy like that of people who drank home-brewed concoctions. They became anti-social and just wanted to be alone. A person's digestion was also affected."

Data gathered from the village people by VHWs indicated that the respondents were aware that AIDS is incurable and that it is spread through sexual intercourse. However, some

respondents believed that traditional healers could manufacture the "germ" that causes AIDS and that they sometimes deliberately infected innocent victims with the "germ."

It is important here to bear in mind that reference to HIV/AIDS or related topics, is completely taboo. The VHWs were sensitive to this convention and in no way could they impose on their respondents. They therefore avoided words like HIV/AIDS (*Ingculaza*) in their conversation. As villagers seemed more comfortable in discussing AIDS related disease such as TB and pneumonia, the VHWs remained focused on those.

Consequently a new set of terms has been developed in Nongoma, in which HIV/AIDS is referred to as "*umuncane*" ("sucking disease") or "slimming disease". The term was coined by a traditional healer (*inyanga*) and seems to be more acceptable socially. Even these terms were not, however, used by respondents.

In focus group discussion that consisted of 9 nurses mentioned above further provided the following recommendations:

- The first issue to be addressed was the improvement of socio-economic circumstances, which would enhance chances of successful TB treatment.
- Alcohol abuse should be seen as a priority by the government as this goes hand-in-hand with the AIDS problem.
- There was need for government to take action regarding the alcohol problem. Laws that prohibit the sale of alcohol to children should be enforced.

Several suggestions for intervention or addressing the problem of alcohol abuse, or to ensure successful TB treatment, were offered:

- Alcoholism is a difficult social problem and as such it needs to be addressed by society as a whole.
- Society should be made aware of the issue and consequences of alcohol and other drug abuse and at the same time there should be a vigorous attempt for community education programmes to change attitudes.

- The government invested a lot of money in TB treatment most of which is due to alcohol and other drug abuse. Inspite of the fact that treatment is being administered to TB patients on a regular basis, it is now clear that MDR TB will not be easily treated due to alcohol and other drug abuse by patients. In the end many patients die due to these problems, which have become a vicious cycle. The government should invest in alcohol and other drug abuse prevention programmes.
- Government assistance in establishing a ward where TB patients could stay for the full course of treatment and be provided with a balanced diet and thus prevent patients from interrupting their treatment after leaving the hospital.
- Ways in which treatment programmes and treatment support programmes could be taken closer to the community should be explored.
- Communities should be educated about SANCA and its services.
- Traditional healers should be issued with government licences to show that they were qualified as healers. This would prevent people from pretending to be healers and in the process doing much harm.
- The presentation of self-help programmes should be resorted to create jobs for self employment.
- There is a concern about the role of the police in addressing the drug issue. The police were aware of people, who planted and sold drugs, but no action was taken and the smuggling of drugs was not being addressed.

Sheafer, Horejsi and Horejsi (2000:37) remarked as follows: "the qualities of a helping relationship are elusive – almost mysterious. For example, what makes it possible for a social worker to somehow enter the life experience of a troubled individual and establish a bond that allows them to work together on making a needed change? Why are clients willing to reveal private information to a stranger? What is it about the presence of a social worker that enables a group of people to take action when they had failed to mobilise their resources on previous tries?"

The qualitative data that were interpreted and discussed above have shown that qualitative research has an important and crucial role in providing data for the study. De Vos (1998:240) states that it is a multi-perspective approach (utilizing different qualitative techniques and data collection methods) to social interaction, aimed at describing, making sense of, interpreting or reconstructing this interaction in terms of the meanings that the subjects attach to it" (Denzin & Lincoln 1994:2, in De Vos 1998:240). Furthermore, Babbie (1998: 91-92) explains that many qualitative studies aim primarily at description. Mouton and Marais (1990:43) argue that the spectrum of descriptive studies includes a large variety of types of research. On the other hand, it is possible to emphasize the in-depth description of a specific individual, situation, group, organization, tribe, sub-culture, interaction, or social object. The above discussion demonstrated most of what is described by the authors in this text. This was, as stated by Mouton and Marais (1990:43) citing Selltiz *et al* (1965), a survey of people who have had practical experience of the problem studied and an analysis of their "insight-stimulating" examples.

4.3.3 Quantitative data presentation on the perceptions of Nongoma community members on substance use

The demographic data obtained from the quantitative research has already been discussed in 4.4.1 of this chapter. In this section, the rest of the quantitative findings of the structured questionnaire (see Attachment G) as administered by nurses to patients (Benedictine Hospital and community clinics), are presented. De Vos and Fouché (1998:203) state that basically data analysis (in the quantitative paradigm) entails that the analyst breaks down data into constituent parts to obtain answers to research questions and to test research hypotheses. The analysis of research data, however, does not in itself provide the answers to a research question. Interpretation of data is necessary. To interpret is to explain and to find meaning. According to Kerlinger (1986:125-126) it is difficult or impossible to explain raw data. One must first analyse the data and then interpret the results of the data analysis. Miles and Huberman (1984:10) regard data analysis as actually consisting of three steps, namely data reduction, data display and verification.

The following tables and charts reflect a quantitative presentation of data on the perceptions of Nongoma community members on substance use. These were constructed from a CHAIDS analysis of a study conducted during 1999/2000. According to Pietersen and Damianov (1995) CHAID is an Automatic interaction Detection method that uses the CHI-squared test."

It is a relatively new statistical technique and was introduced by G. Kass in 1980. At that stage a special computer program had to be prepared for the implementation of this technique and consequently CHAID was not very widely used. Today, however, it is possible to perform a CHAID analysis using some well-known statistical software packages (Pietersen and Daimianov , 1995:B-1).

One of the objectives of the study was to establish some relationship between a single non-metric dependent variable and a large number of predictor variables. According to Pietersen and Damianov (1995:B-1) CHAID will find, among a number of predictor variables, those that have a significant relationship with a single dependent variable, which can therefore be used in predicting the outcome of the dependent variable.

In a study such as this one, where respondents' characteristics such as gender, age and marital status are obtained together with responses on some behavioural questions, one's understanding of the matter under investigation, namely substance use during the past twelve months, may be enhanced a great deal if the two sets of information are somehow linked or associated. One way of doing this is to treat some as dependent variables and others as predictor variables and then relate the two to each other by means of statistical techniques. In this study it was important to treat the behavioural responses as dependent variables and the characteristics of the respondents as possible predictors in order to detect the nature of the associations between the different types of variables.

The decision to use CHAID to link the biographical information with the behavioural responses was based on the ability of this technique to:

- select the most significant predictor from a specified set of predictors

- suggest subgroups of respondents (in terms of their biographics) that are homogeneous in terms of their responses on the behavioural questions and
- display the results in an easy-to-understand tree structure or dendrogram.

It must be noted though that there are certain limitations of CHAID, e.g. its inability to return adequate second and third order relations between variables.

The discussion presented an analysis and interpretation of data that was collected from eleven (11) community clinics and at Benedictine Hospital as well. The instrument used in interviewing the patients (respondents) at the clinics was a detailed and comprehensive structured questionnaire. It is simply referred to as Health-related Alcohol/Drug use study. This is the main section of the study. The interviews were conducted mainly by the clinic and hospital nurses. There were 470 respondents. All the data and analysis based on this section of the study was obtained from this sample number of respondents.

4.3.4 Health-related Alcohol/Drug use study

The following Table 9 lists the questions that were used as dependent variables and for each of them, the biographical predictor with which it had the strongest association.

The analysis of ever_alc reveals that nearly 90% of the sample of respondents had ever used alcohol and that the subgroups that differed most in terms of their response were the males and females. The males were more inclined (92%) to have ever used alcohol than the females (83%). Since the dendrogram for this analysis does not show any further splits, it suggests that among the males and females no further significant differences occurred.

The analysis of alc_p12 shows that nearly 85% of the sample had used alcohol during the past 12 months. The biggest differences occurred among the age groups. It seems that age group 3 (i.e. 41 – 50 years) was more inclined (94%) to have used alcohol during the past 12 months than the younger or the older age groups (83% and 82%). The dendrogram further shows that there were significant differences among the young males and females. The young

females were far less likely (63%) to have used alcohol during the past 12 months than the young males (88%).

Table 9: Alcohol use among patients on treatment at Benedictine Hospital and community health clinics of Nongoma

Dependent variable	Question	Most significant predictor
Ever_alc	Have you ever had an alcoholic drink?	Gender
Alc_p12	Have you had an alcoholic drink during the past 12 months?	Age
Ever_w	Have you ever drunk wine?	Attending traditional ceremonies
W_p12	Have you drunk wine during the past 12 months?	Attending traditional ceremonies
Ever_b	Have you ever drunk ordinary beer?	Level of education
B_p12	Have you drunk ordinary beer during the past 12 months?	Occupation
Ever_s	Have you ever drunk sorghum beer?	Attending church
S_p12	Have you drunk sorghum beer during the past 12 months?	Level of education
Ever_h	Have you ever drunk hard liquor?	Attending traditional ceremonies
H_p12	Have you drunk hard liquor during the past 12 months?	Attending celebrations
Ever_m	Have you ever drunk homebrew?	Level of education
M_p12	Have you drunk homebrew during the past 12 months?	Level of education

The analysis of ever_ w shows that nearly 54% of the respondents had ever drunk wine, and that the biggest differences occurred between the respondents who regularly and seldom attended traditional ceremonies. The dendrogram shows that those who regularly (weekly or monthly) attended such ceremonies were by far more likely (71%) to have ever drunk wine than those who attended such ceremonies less frequently (46%). At this point, it is noted that a second order of correlation may be somewhat unreliable. However there is no alternative at this stage other than the use of CHAID as a tool of analysis particularly in this section of the chapter. Further differences occurred among those who attended ceremonies less frequently, in terms of occupation. Those who were employed were more likely (65%) to have ever

drunk wine than the other occupation categories (i.e. unemployed, pensioners and non-response) (41%). Among the latter occupation categories, significant differences occurred among the respondents who lived in the formal and village sectors. Those who lived in the formal sector were more likely to have ever drunk wine (51%) than those who lived in the village sector (35%).

The analysis of w_p12 reveals that nearly 45% of the respondents had drunk wine during the past 12 months and that the biggest differences occurred between the respondents who regularly and seldom attended traditional ceremonies. Inspection of the dendrogram shows that there was a tendency for respondents who regularly attended such ceremonies to be more inclined to have drunk wine during the past 12 months. 64% of those who attended these ceremonies weekly or monthly answered yes, while only 39% of those who attended 1 to 4 times a year answered yes and only 26% of those who never attended answered yes. No further splits occurred in two of the three subgroups, but significant differences were found in the middle group, among the levels of education.

The dendrogram shows a tendency for higher educated respondents to be more likely to have drunk wine in the past 12 months than less educated respondents. In terms of the three education groupings, it seems that there were significant differences only in the middle grouping (i.e. Gr 4 – Gr 9), in terms of marital status. It seems that the respondents who had never been married were by far less likely (28%) to have drunk wine during the past 12 months than the other respondents (56%).

The analysis of ever_b shows that almost 84% of the respondents had ever drunk ordinary beer and that the biggest differences occurred between respondents with different levels of education. Three education groupings were formed, namely, level of education 1 (none), level of education 2 and 3 (Gr 1 – Gr 7) and level of education 4 and 5 (Gr 8 or higher). Respondents in the middle grouping (Gr 1 – Gr 7) were much more likely (91%) to have ever drunk ordinary beer than the other two education groupings (79 and 79%).

The dendrogram also shows that within each of these three subgroups, significant differences occurred. Among the respondents with the lowest level of education, those who never

attended church were more inclined (87%) to have ever drunk ordinary beer than the rest (68%). Among the respondents in the middle education grouping, the employed were more inclined (100%) to have ever drunk ordinary beer than the rest (89%), and, finally, among the respondents in the high education grouping, those living in the formal sector were more inclined (87%) to have ever drunk ordinary beer than those living in the village sector (70%).

The analysis of b_p12 reveals that nearly 75% of the respondents had drunk ordinary beer during the past 12 months and that the biggest differences occurred between the respondents in the different occupation categories. Those who did not disclose their occupation and the pensioners seem to have been least inclined (66%) to have drunk ordinary beer during the past 12 months. The employed respondents were the most inclined (87%) while the unemployed were also inclined to some extent (76%) to have drunk ordinary beer during the past 12 months. Among the employed, the least educated respondents seem to have been more inclined (98%) to have drunk ordinary beer during the past 12 months than the more educated respondents (77%). Among the unemployed, the respondents in the formal sector seem to have been more inclined (87%) to have drunk ordinary beer during the past 12 months than those in the village sector (69%). Finally, 100% of the respondents in the formal sector had drunk ordinary beer during the past 12 months while only 75% in the village sector had.

The analysis of ever_s shows that almost 55% of the respondents had ever drunk sorghum beer and that the biggest differences occurred between respondents who regularly and seldom attended church. Of those who never attended church, 68% said they had drunk sorghum beer, while 51% of those who attended church not so frequently (monthly to 1-4 times a year) and only 25% of those who attended church weekly said they had drunk sorghum beer. Among the subgroup who never attended church, age was strongly associated with ever_s in the sense that the older respondents (51 or older) seem to have been more inclined to have ever drunk sorghum beer than the rest (57%).

The analysis of s_p12 reveals that almost 46% of the respondents had drunk sorghum beer during the past 12 months and that the biggest differences occurred between the respondents in the different education categories. The dendrogram shows that there was a tendency for the

lower levels of education to be more inclined to have drunk sorghum beer during the past 12 months than the higher levels of education. Among the respondents with the highest level of education (Gr 10 or higher), only 25% indicated that they had drunk sorghum beer during the past 12 months, and among them, the youngest group (15 – 30 years) were even less inclined (13%) to have drunk sorghum beer during the past 12 months. On the other hand, among the respondents with the lowest level of education (Gr 3 or less), 57% indicated that they had drunk sorghum beer during the past 12 months and among them, those who never attended church were more inclined (67%) to have drunk sorghum beer during the past 12 months.

The analysis of ever_h shows that almost 60% of the respondents had ever drunk hard liquor, and that the biggest differences occurred between respondents who regularly or seldom attended traditional ceremonies. The dendrogram shows that respondents who attended such ceremonies regularly (weekly or monthly) were more likely to have ever drunk hard liquor (73%) than those who never attended such ceremonies (39%). Among those who never attended such ceremonies, the no-income subgroup was even less likely (28%) to have ever drunk hard liquor. Among those who regularly attended such ceremonies, those who never attended church were even more likely (85%) to have ever drunk hard liquor.

The analysis of h_p12 reveals that almost 52% of the respondents had drunk hard liquor during the past 12 months and that the biggest differences occurred between the respondents who regularly or seldom attended celebrations. Those who attended weekly were much more likely (81%) to have drunk hard liquor during the past 12 months than the rest (47%). Among the respondents in the latter group, the employed were more inclined (65%) to have drunk hard liquor during the past 12 months than the rest (43%).

The analysis of ever_m reveals that almost 90% of the respondents had ever drunk homebrew and that the biggest differences occurred between the respondents in the different education categories. The respondents with lower education levels (Gr 7 or lower) were more inclined (95%) to have ever drunk homebrew than the respondents with higher education levels (74%). Among the latter subgroup, those who regularly attended traditional ceremonies were less likely (55%) to have ever drunk homebrew than the respondents who seldom attended such ceremonies (80%).

The analysis of m_p12 reveals that almost 84% of the respondents had drunk homebrew during the past 12 months, and that the biggest differences occurred between the respondents in the different education categories. The dendrogram shows that there was a tendency for the lower levels of education to be more inclined to have drunk homebrew during the past 12 months than the higher levels of education. Among the respondents with the highest level of education (Gr 10 or higher), only 58% indicated that they had drunk homebrew during the past 12 months, while among the respondents with the lowest level of education (Gr 7 or less), 91% indicated that they had drunk homebrew during the past 12 months. Among the first subgroup (high education), the high-income subgroup was even less inclined (34%) to have drunk sorghum beer during the past 12 months.

- **Alcohol use, frequency and quantity among patients on treatment**

The following table lists the questions that were used as dependent variables and, for each of them, the biographical predictor with which each had the strongest association.

The analysis of w_often reveals that the frequency of attending traditional ceremonies was most strongly associated with the frequency of wine drinking. Those who attended such ceremonies regularly (weekly or monthly) were also to a great extent those who regularly drank wine. The dendrogram shows that among the respondents who regularly attended the ceremonies, no further differences occurred. Among those attending the ceremonies less regularly, it seems that those with the highest level of education were inclined to have drunk wine more regularly than the less educated respondents.

The analysis of w_quant shows that, as with w_often, the frequency of attending traditional ceremonies was most strongly associated with the quantity of wine that was usually consumed on an occasion. For example, those who attended such ceremonies regularly (weekly or monthly) were to a great extent those who drank small quantities (4 or fewer glasses) of wine. However, of those who regularly attended, a large percentage (18%) usually drank 13 or more glasses of wine on an occasion, compared to 6% and 8% of those who attended less regularly. The dendrogram further shows that among those who attend traditional ceremonies regularly, those living in the formal sector were more likely to have

usually drunk small quantities than those living in the village sector. Among those who attended such ceremonies less regularly, specifically those who attended 1 to 4 times a year, it was again the higher educated respondents who were more inclined to have drunk wine, although not in very large quantities, than the less educated respondents.

Table 10: Frequency of drinking of alcoholic substances

Dependent variable	Question	Most significant predictor
W_often	How often did you drink wine during the past 12 months?	Attending traditional ceremonies
W_quant	How many (glasses) of wine did you usually drink on an occasion during the past 12 months?	Attending traditional ceremonies
B_often	How often did you drink ordinary beer during the past 12 months?	Income
B_quant	How many small cans/bottles of ordinary beer did you usually drink on an occasion during the past 12 months?	Occupation
S_often	How often did you drink sorghum beer during the past 12 months?	Level of education
S_quant	How many cartons (litre) of sorghum beer did you usually drink on an occasion during the past 12 months?	Level of education
H_often	How often did you drink hard liquor during the past 12 months?	Attending traditional ceremonies
H_quant	How many tots of hard liquor did you usually drink on an occasion during the past 12 months?	Attending celebrations
M_often	How often did you drink homebrew during the past 12 months?	Level of education

The analysis of b_often reveals that the income categories in which the respondents were grouped, differed the most in terms of the frequency of drinking ordinary beer. It seems that the highest income group were more frequent consumers of ordinary beer than the rest. More than 60% of them had drunk ordinary beer twice a week or more frequently while less than 40% of the other two income groups had done so. The dendrogram further shows that among the respondents in the two low income categories, differences occurred among those who

regularly and seldom attended traditional ceremonies. Those who regularly attended were more inclined to have drunk ordinary beer more frequently than those who attended such ceremonies less regularly.

The analysis of b_quant shows that the greatest differences in terms of the quantity of ordinary beer consumption occurred between occupation categories. The dendrogram shows that the employed and unemployed categories were similar and were thus combined, while the pensioners and the non-response category were similar and combined. The latter combined group (pensioners and non-response) seem to have been more inclined to consume smaller quantities on an occasion than the first combined group (employed and unemployed), who were more inclined to have consumed larger quantities.

The analysis of s_often reveals that the level of education of the respondents discriminated the most among the levels of s_often. The less educated respondents were not only much more likely to have drunk sorghum beer (53% vs. 30%) during the past 12 months, they were also more inclined to have done so more often than the more educated respondents. Within the less educated group, the dendrogram shows that those who never attended church were more inclined to have drunk sorghum beer during the past 12 months and also to have done so more often than those who attended church. Within the higher educated group, the dendrogram shows that the older respondents (31 or older) were more inclined to have drunk sorghum beer during the past 12 months and also to have done so more often than those younger than 31.

The analysis of s_quant reveals a very similar picture to that of the analysis of s_often. The first split was also in terms of education levels, with the lower levels more inclined to have consumed larger quantities of sorghum beer than the higher education levels. Also similar was that within the less educated group, those who never or very seldom attended church were more inclined to have consumed large quantities than those who attended church more often. Although among the higher educated group the age categories seem to have been different, the differences were mainly due to the different proportions in the age categories that had consumed sorghum beer during the past 12 months and not so much due to differences in the quantities consumed.

The analysis of h_often shows that attendance of traditional ceremonies was most strongly associated with the frequency of consuming hard liquor during the past 12 months. Specifically, apart from the fact that those who regularly attended such ceremonies were more likely to have consumed hard liquor during the past 12 months than those who less regularly attended, they were also more likely to have consumed it more often than those who attended traditional ceremonies less regularly. Among those who attended ceremonies less regularly it seems that the occupation categories differed significantly. A striking finding was that the pensioners who consumed hard liquor were heavily concentrated in the least frequent use category, namely four times a year or less.

The analysis of h_quant reveals that the predictor with the strongest association with it was attendance of celebrations. It seems that this first split was mainly due to the different proportions within the two groupings of att_cel that had consumed hard liquor during the past 12 months and not due to differences in terms of the quantities consumed. However, the next split (of those who less regularly attended celebrations) shows that all occupation levels except the employed were more inclined to have consumed small quantities on occasion.

The analysis of m_often reveals that the level of education of the respondents discriminated the most among the levels of m_often. The dendrogram shows that, except for the tendency of less educated respondents to be more likely to have consumed homebrew during the past 12 months, respondents with the highest level of education were the most likely to have consumed homebrew the least frequently of all education levels. Among the respondents with the lowest education level, the frequency of attending traditional ceremonies was most strongly associated with the frequency of drinking homebrew. The association was somewhat unexpected since those who regularly attended (weekly/monthly) were heavily concentrated as frequently homebrew drinkers, those who attended less regularly (1 to 4 times a year) were more or less equally spread across the levels of m_often, while the respondents who never attended such ceremonies were again concentrated toward very frequently drinking homebrew.

- **Other substances frequency of use during past 12 months amongst patients on treatment**

The following table lists the questions that were used as dependent variables and, for each of them, the biographical predictor with which it had the strongest association.

Table 11: Other substances—frequency of use during past 12 months

Dependent variable	Question *During the past 12 months, how often did you, without a doctor telling you to do so, use:*	Most significant predictor
Pain_oft	Ordinary pain relievers (e.g. Grandpa, Disprin)	Sector
Med_oft	Ordinary medicine (e.g. cough mixtures)	Attending traditional ceremonies
Snuff_oft	Snuff	Occupation
Dag_oft	Dagga	Age
Tob_oft	Tobacco/cigarettes	Gender

The analysis of pain_oft reveals that the greatest differences in terms of frequency of use of ordinary pain relievers were between respondents living in the formal and village sectors. The dendrogram shows that the people living in the formal sector were slightly more inclined (30%) to have never used pain relievers during the past 12 months than the people living in the village sector (26%). On the other hand, the people living in the village sector were more inclined (28%) to have used pain relievers more regularly than 4 times a month during the past 12 months than the people living in the formal sector (15%). The following split of the respondents living in the formal sector was in terms of their attendance of celebrations. It seems that those who attended regularly were more inclined to have used pain relievers more often than those who attended less regularly. The following split of the respondents living in the village sector was in terms of their marital status. The dendrogram shows that the respondents who had been separated, divorced or widowed were different from the rest in terms of the use of pain relievers. They were much more inclined (56%) to have used these once to four times a month than the rest (32%), while they were less inclined (17%) to have used them more regularly than four times a month than the rest (30%).

The analysis of med_oft shows that attendance of traditional ceremonies was associated most strongly with frequency of having used ordinary medicine during the past 12 months. It seems that those who attended such ceremonies regularly were more inclined (47%) to have regularly used medicine than those who attended less regularly (16% and 24%). Among those who attended traditional ceremonies less regularly, those who lived in the formal sector seem to have been more inclined (64%) to have never used medicine than those who lived in the village sector (51%). Within level 2 of att_trad (monthly attendance of traditional ceremonies), the older respondents were more inclined (87%) to have never used medicine than the younger respondents (65%).

The analysis of snuff oft reveals that the pensioners were much more likely (40%) to have used snuff during the past 12 months than the rest (10%). Among the rest (with an overall likelihood of only 10% to have used snuff) it seems that it was the lower educated respondents who were more inclined (20%) to have used snuff and among them, the females (37%) were more inclined than the males (12%) to have used it.

The analysis of dag oft shows that the older respondents (41 or older) were far less inclined (7%) to have used dagga during the past 12 months than those younger than 41 (24%). Among the younger respondents, the males were more inclined (28%) than the females (8%) to have used dagga during the past 12 months.

The analysis of tob_oft shows that the males were much more inclined (52%) to have used tobacco/cigarettes during the past 12 months than the females (19%). Among the male respondents, the younger respondents (younger than 51) were more inclined (58%) than those 51 or older (38%) to have used tobacco/cigarettes during the past 12 months.

Against the background of the structured questionnaire, CHAIDS has put the presentation, and analysis of data on a level of understanding the significance and the rationale of this study. These findings have established some relationship between single non-metric dependent variables and a large number of predictor variables. As already indicated, the total number of respondents (patients) from the Benedictine hospital and satellite clinics was 470. Although the sample was not very large, the objective of using this statistical package for this

study was achieved. The findings indicated that the use and therefore probably abuse of alcohol among patients is alarmingly high. The analysis of alc_p12 shows that nearly 85% of the sample had used alcohol during the past 12 months. The results of demographic analysis with the results from the CHAIDS analysis correlate in most instances. The results of the analysis have thus far established a relationship between substance abuse and preventable diseases among patients under treatment at Benedictine Hospital and Community health clinics in Nongoma.

In verifying these results, fifty village health workers visited Mandlakazi ward in Nongoma with the view to graphically depict the extent of tuberculosis, drug dependence and mental illness amongst patients still under treatment. This endeavour was under close supervision and monitoring by two research assistants (social workers) and the researcher.

In this instance, the researcher refers to the possibility of alcohol abuse because the rural people do not associate drinking excessively as an abuse, since alcohol is perceived as food.

4.4 GENERAL OBSERVATIONS BY THE VHWS ON THE NATURE AND EXTENT OF PREVENTABLE DISEASES IN THE VILLAGES

In total, the village health workers made 573 observations through personal visits to families, requesting information on diagnosed illness in their attempt to graphically depict the extent of tuberculosis, drug dependence and mental illness with patients still under treatment.

A significant consideration in analysing the data is to bear in mind that overt reference to the topic of HIV/AIDS is taboo in the communities investigated. The word, "*ingculaza*", (HIV/AIDS) was never used by respondents. Figures and tables referring to tuberculosis are influenced by this. Many respondents indicating that they have tuberculosis may in fact be suffering from HIV/AIDS as tuberculosis and HIV/AIDS are closely related.

Consequently a new set of terms has been developed in which HIV/AIDS is referred to as "umuncane" "sucking disease" or "slimming disease". The term was coined by a traditional

healer, *inyanga*, and seems to be more socially acceptable. Even these terms were, however, not used by respondents.

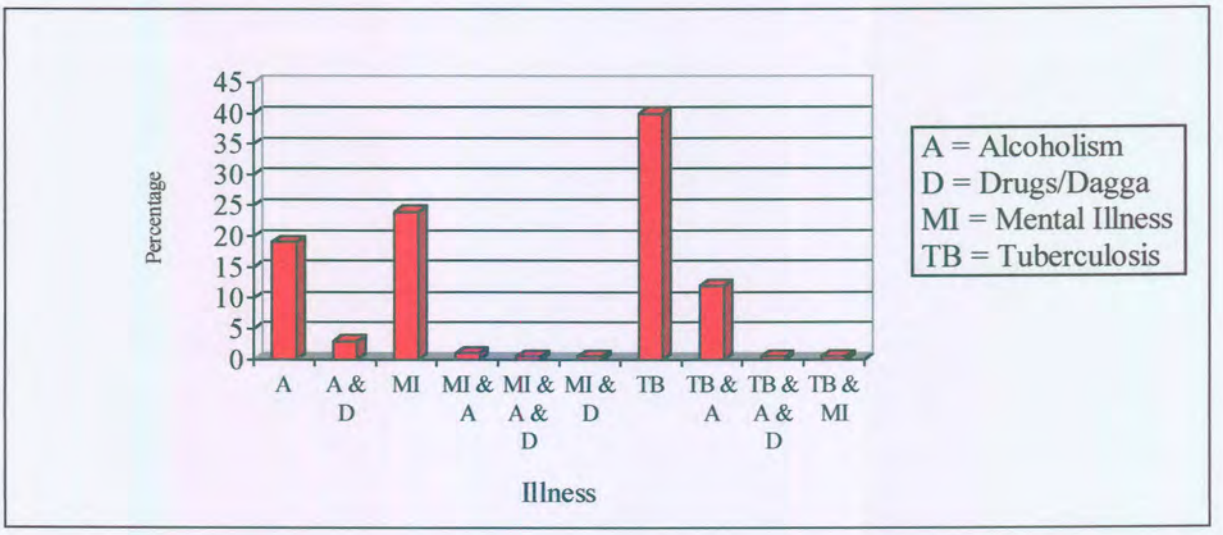

Figure 24: Distribution of illnesses both gender

Figure 24 indicates that tuberculosis was the illness with the highest prevalence (40%), followed by mental illness (24%), alcoholism (19%) and the combined problem of alcoholism and tuberculosis (13%) amongst patients. It should be taken into account in analysing this figure that HIV/AIDS and TB could not be shown as separate illnesses, as they are related diseases. Accordingly, the high prevalence of TB may also include many instances of people suffering from HIV/AIDS. The incidence of alcoholism also appears to be lower than it should be. It should be taken into account that alcohol use is often denied among the population investigated. Many patients also take alcohol, especially home brews, as part of their food intake. One reason for this appears to be the high cost of whisky, brandy and other alcoholic drinks.

The combined problems of mental illness and alcoholism, alcoholism, mental illness, and drug/dagga dependence, mental illness and drug/dagga dependence, tuberculosis, alcoholism and drugs/dagga dependence and tuberculosis and mental illness had a low frequency amongst the respondents. Only a few respondents reported the combined problem of alcoholism and drug/dagga dependence. The following Figure 25 looks at gender in terms of the main types of illnesses.

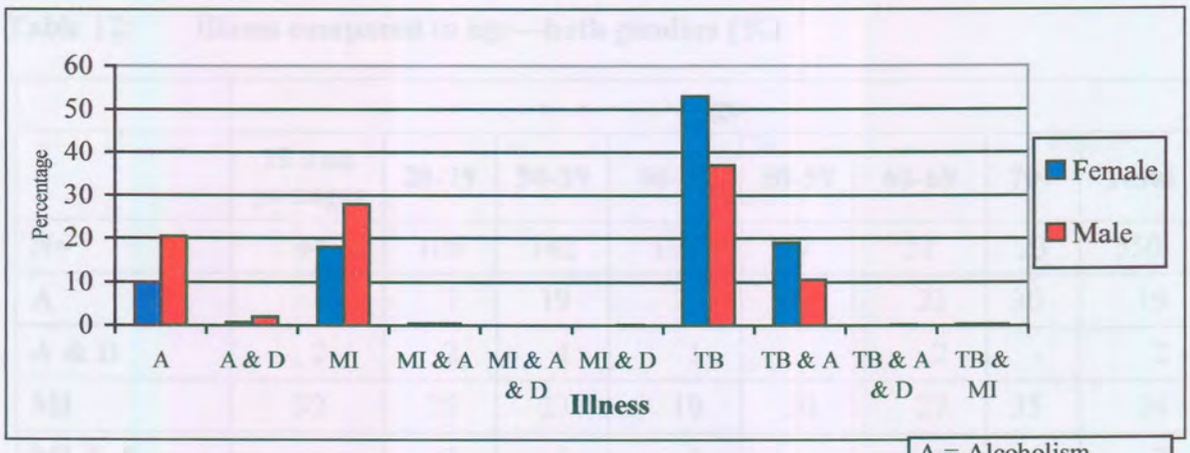

Figure 25: Distribution of illnesses females and males

Figure 25 indicates that tuberculosis is a serious problem among both females (54%) and males (35%). More male respondents (27%) suffered from mental illness than females (17%). This was also true of alcoholism (21% of males compared to 10% of females). The combined problem of tuberculosis and alcoholism was, however, worse among females (18%) than males (11%).

Since the concept HIV/AIDS is taboo in Nongoma, the village health workers mentioned that the TB figures do not indicate AIDS as a separate illness. The high rate of death from TB among young people can be attributed partly to the fact that many of them are dying of AIDS. The level of alcoholism appears low but it is denied among the population as many of them perceive alcohol as food, especially home-brewed beer. The following table has to be read together with Figure 25.

Table 12: Illness compared to age—both genders (%)

	Age							
	19 and younger	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	**Total**
N=	44	106	142	106	77	52	23	550
A	-	7	19	25	31	23	30	19
A & D	2	2	4	1	-	2	-	2
MI	32	25	23	19	20	27	35	24
MI & A	-	2	1	1	-	1	4	2
MI & A & D	-	1	-	-	-	-	-	1
MI & D	-	1	-	2	-	-	-	1
TB	66	47	35	39	42	29	22	40
TB & A	-	15	17	13	8	17	9	13
TB & A & D	-	-	1	-	-	-	-	1
TB & MI	-	1	1	2	-	-	-	1
Total	100	100	100	100	100	100	100	100
A = Alcoholism; D = Drugs/Dagga; MI = Mental Illness; TB = Tuberculosis								

The variable and statistics portrayed above graphically depict the type illnesses for both genders . The following graph shows illnesses according to age group.

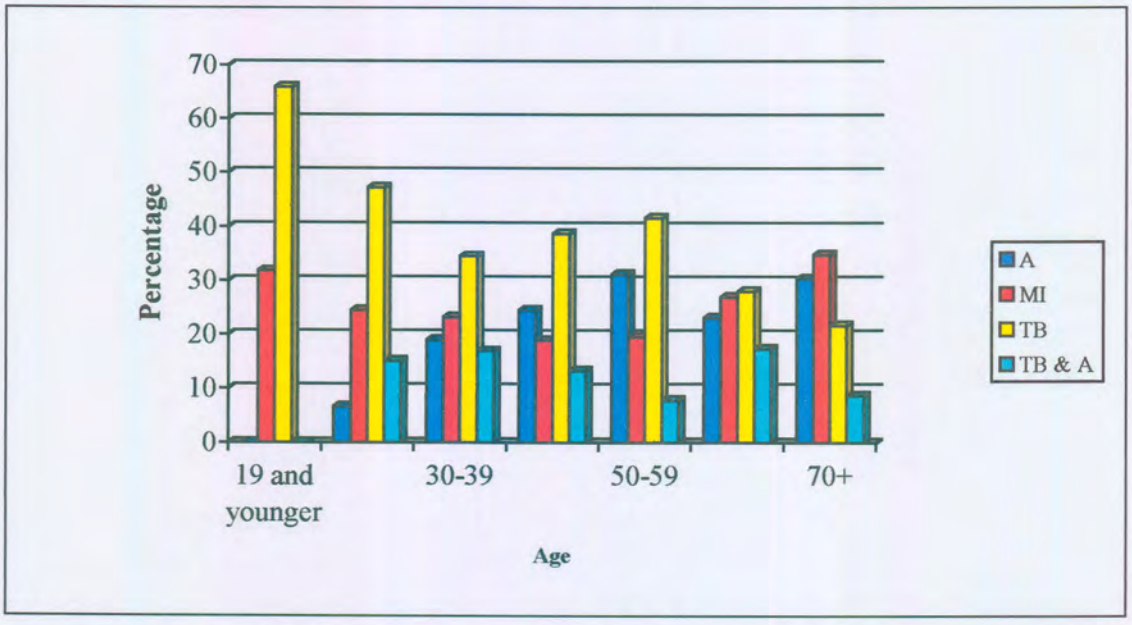

Figure 26: Illness compared to age and gender

Table 16 and Figure 25 indicate that the incidence of tuberculosis decreased from the 19 years and younger category (66%) to the 30-39 years category (35%) but increased to 42% in the category 50-59 years. The lowest incidence occurred in the categories 60-69 years (29%) and 70 years and older (22%). It was only in the age category of 70 years and older where tuberculosis was not the main problem but where mental illness seemed to be the biggest problem (35%), followed by alcoholism (31%).

Table 13: Illness compared to age—females (%)

	Age							
	19 and younger	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	**Total**
N=	**26**	**41**	**39**	**28**	**26**	**19**	**9**	**188**
A	-	2	13	18	121	16	11	10
A & D	-	-	3	-	-	-	-	1
MI	15	17	8	18	27	16	33	17
MI & A	-	-	-	-	-	5	11	1
MI & A & D	-	-	-	-	-	-	-	-
MI & D	-	-	-	-	-	-	-	-
TB	85	61	49	43	54	32	33	54
TB & A	-	17	28	21	8	32	11	18
TB & A & D	-	-	-	-	-	-	-	-
TB & MI	-	2	-	-	-	-	-	1
Total	100	100	100	100	100	100	100	100
A = Alcoholism; D = Drugs/Dagga; MI = Mental Illness; TB = Tuberculosis								

The analysis of illnesses is thus broken down according to categories respondents. In this case illnesses are being compared to age and gender (females).

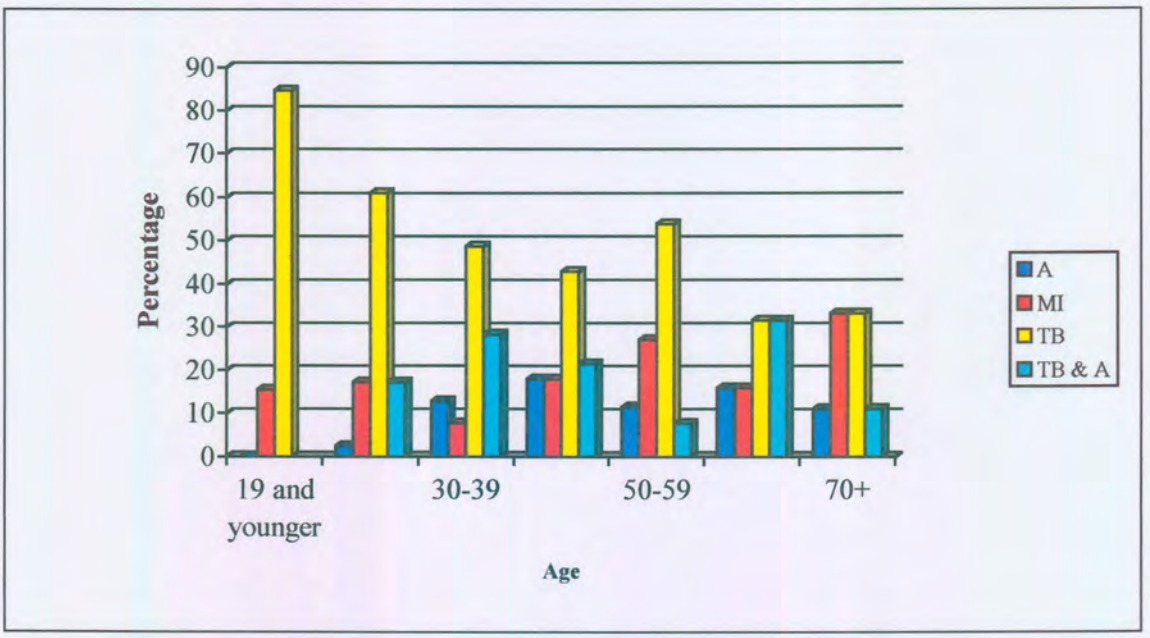

Figure 27: Illness compared to age—females

Table 13 and Figure 27 indicate that more than half of the female respondents (54%) suffered from tuberculosis (probably including HIV/AIDS). Tuberculosis, possibly coupled with HIV/AIDS, alcoholism (18%) and mental illness (17%) also featured strongly. Alcoholism without other illnesses was present among 10% of the respondents.

Tuberculosis, probably combined with HIV/AIDS, was the main problem among females in all age categories up to 59 years. In the age category 60-69 years, tuberculosis (32%) and tuberculosis and alcoholism (32%) were the main problems. In the age category of 70 years and older, tuberculosis (33%) and mental illness (33%) were the main problems.

It seems as if tuberculosis was a more serious problem in the younger age categories. There was a decrease in incidence as age increased, with the exception of the age category 50-59 years, where a higher incidence was recorded. This may be partly due to many TB sufferers already having died (possibly from AIDS) before they reached the older age categories. Males were also analysed separately according to illness and age.

Table 14: Illness compared to age—males

	Age							
	19 and younger	**20-29**	**30-39**	**40-49**	**50-59**	**60-69**	**70+**	**Total**
N=	**16**	**62**	**98**	**77**	**6**	**30**	**12**	**342**
A	-	8	18	26	38	3	33	21
A & D	6	3	5	1	-	3	-	3
MI	50	29	30	20	15	33	42	27
MI & A	-	3	1	1	-	-	-	1
MI & A & D	-	2	-	-	-	-	-	0
MI & D	-	2	-	3	-	-	-	1
TB	42	39	31	38	38	30	17	35
TB & A	-	15	13	10	9	7	8	11
TB & A & D	-	-	1	-	-	-	-	-
TB & MI	-	-	1	1	-	-	-	1
Total	100	100	100	100	100	100	100	100
A = Alcoholism; D = Drugs/Dagga; MI = Mental Illness; TB = Tuberculosis								

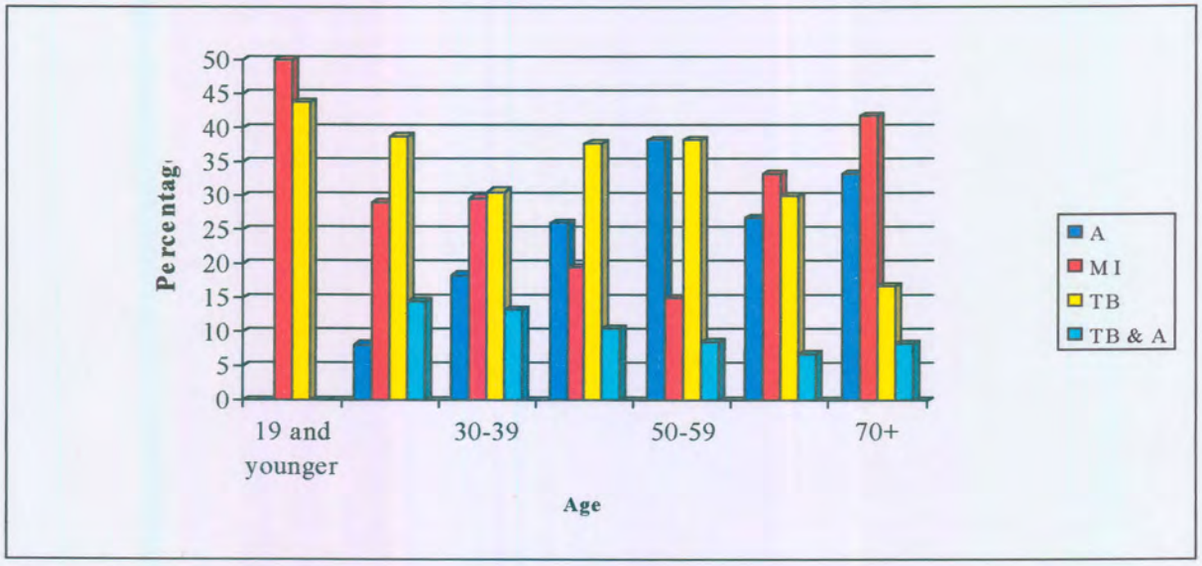

Figure 28: Illness compared to age—males

Table 14 and Figure 28 indicate that male respondents mainly suffered from tuberculosis and probably HIV/AIDS (35%), mental illness (27%), alcoholism (21%) and tuberculosis

(possibly including HIV/AIDS) and alcoholism (11%). The incidence of alcoholism increased with age, with the highest incidence (38%) in the 50-59 years category. It slightly decreased to 27% in the 60-69 years. A high incidence of mental illness (50%) was recorded among the respondents in the age category of 19 years and younger. The relatively small sample size should be kept in mind when considering this result. More sophisticated statistics may also have painted a different picture here. For instance, schizophrenia tends to appear during adolescence. A general decrease in the occurrence of mental illness was present as age increased, up to the category of 50-59 years. It then increased again to 33% in the age category of 60-69 years and to 42% in the 70 years and older category.

To summarize, the above discussions and analysis were mainly concentrating on the five hundred and seventy three (573) patients' data that was gathered by the village health workers (VHWs) in the respective villages of Nongoma. It is significant research that VHWs have done, who, themselves, are not highly educated. However they have been trained to do this kind of qualitative observation.

The information gathered added to the secondary data which was gathered by the research assistants (see Attachment F), through the following key informants: health agencies (surgeries), social work agencies, the magistrate's court, the traffic department and educational agencies. The commonality amongst these agencies is that they all dealt with problems and needs of people stemming from alcohol and other drug abuse for a period of three months (December to February 2000).

The subsequent data presentation and analysis contributed to further understanding of the importance secondary data as the focus was on situation analysis. Neuman (2000:305) states that secondary analysis is a special case of existing statistics, it is the re-analysis of previously collected survey or other data that was originally gathered by others. The previous section in the current study (CHAID) was mainly primary researched data presentation and analysis. The author further elaborates by pointing out that there are several questions the researcher is interested in that should be asked in secondary research (Dale, Arber, and Procter, 1988:27-31; Parcel,1992). These questions are: "Are the secondary data appropriate for the research question? What theory and hypothesis can a researcher use with the data? Is

the researcher already familiar with the substantive area of study? Does the researcher understand how the data were originally gathered and coded?

In this study, secondary data from professionals and institutions who are involved and render services to the target respondent group of this study, could enrich the primary data of the study. These professionals were private doctors, magistrates and prosecutors as well as social workers and others that are mentioned under this section. In this case the secondary data was gathered from the private and public agencies' records and from key informants. Neuman (2000:35) states that sometimes, the existing quantitative information consists of stored survey or other data that a researcher re-examines using various statistical procedures. The author calls this secondary analysis research. It must be noted, though that the key informants include as well the service providers in this context.

4.5 PRESENTATION OF SECONDARY RESEARCH DATA OF STUDY

4.5.1 Situation analysis on drug related accidents

The following Table 15 is based on information that was provided by the key informant at the Nongoma Police station, this data provides a picture of how dangerous dagga and alcohol abuse is in causing accidents.

Table 15: Drug-related accidents

Type of accident	Number
Reckless Driving	48
Beer/Alcohol	5
Culpable Homicide	30

The above table reveal the epidemic proportions of substance abuse in Nongoma and the helplessness of the affected and the afflicted.

4.5.2 Drug-abuse amongst school learners

Most of the respondents (80%) indicated that dagga was used on a daily basis and was not limited to certain times or situations (see Table 16.).

Table 16: Dagga use on occasion

Occasion	Number	%
Before and after school	1	2
Daily	46	80
Weekends	2	3
Parties/Special functions/Weddings	7	11
Holidays	1	2
Pension Day	1	2
TOTAL	**58**	**100**

In Table 16 the instance of dagga used as reported by schools, magistrates case file records and welfare agencies was categorised to reflect the occasions that dagga use was reported. In Tables 17-19 the data is reflected in three categories - drug-related problems that were first mentioned, those that were mentioned second and thirdly, those mentioned by the key informants.

Table 17: First mentioned drug-related problems

First drug problem	Number	%
Truancy	4	8
Aggressive behaviour/Violence	14	26
Substance use/Dealing	3	6
Misbehaviour/Disruptive behaviour	21	39
Stealing/Stock theft/House breaking	8	15
Family problems	1	2
Poor performance	2	4
TOTAL	**53**	**100**

Only on the basis of the information provided by the client (informant) can a social worker make an intervention plan. The following Table is the continuation of the secondary data analysis prevalence in the area of Nongoma.

Table 18: Drug-related problems mentioned second

Second problem	Number	%
Truancy	5	10
Aggressive behaviour/Violence/Rape	12	24
Misbehaviour/Disruptive behaviour	19	36
Stealing/Stock theft/House breaking	6	12
Poor performance/Concentration problems	7	14
Mental Disturbance	1	2
Epilepsy	1	2
TOTAL	**51**	**100**

Table 19: Those mentioned thirdly by the key informants

Third problem	Number	%
Truancy	6	17
Aggressive behaviour/Violence	5	14
Misbehaviour/Disruptive behaviour	11	30
Stealing/Stock theft/House breaking	9	25
Family problems	1	3
Learning problems/Failure	3	8
Neglect	1	3
TOTAL	**36**	**100**

From the above tables, it is clear that the drug problem among South African school learners is no longer just an urban problem. It is also prevalent in rural areas. The consequences are low educational levels amongst users as they ultimately drop out of school and become involved in criminal activities. The case in reference in particular is the youth who indulged dagga (marijuana) abuse and absconded from school and finally when he became mentally ill he committed suicide.

Although there have been other factors contributing to the patient's death, the researcher wants to emphasise that dagga is one of the main causes of death in this particular case.

The analysis of data presented in this section was taken from the semi-structured interview schedule-'situation analysis': The nature and extent of the use and abuse of alcohol and other drugs (see Attachment F). It is important to note that this part of the secondary data was collected mainly by two research assistants (SANCA-Nongoma-2 Social Workers) with the guidance and supervision of the researcher (see results of analysis from Table 19 to Table 23).

4.5.3 Analysis by health service care providers of substance abusers in Nongoma

Table 20 reflects the health conditions related to drug abuse that have been treated by health practitioners.

Table 20: Health conditions related to drug use

Doctor No.	Medical condition	Number of patients	Medical condition	Number of patients
1	Liver Cirrhosis	12	Gastritis/Pancreatitis	50
2	Liver Cirrhosis	1	Addiction	2
3	Withdrawal Symptoms	10	Tuberculosis	3
4	Mental Illness	1		

Table 20. above indicates that substance abuse is common in Nongoma, as 89% of the respondents (patients) admitted to using alcohol. Patients however are never admitted for treatment for alcoholism but rather for alcohol related diseases.

4.5.4 Drug related offences

The public prosecutor (key informant) of the Nongoma magistrate's offices reported that alcohol and drug-related arrests were made. Table 21 indicates arrests related to substance abuse as recorded in the Nongoma magistrate's court.

Table 21: Drug-related arrests in the Nongoma magistrate's court

Type	Number of arrests	%
Dagga	50	17
Drunkenness	10	3
Domestic violence	50	17
Assault	90	31
Child abuse	35	12
Theft	50	17
TOTAL	**286**	**100**

Table 21 indicates that arrests for assault (31%), dagga-related arrests (17%), domestic violence (17%) and theft (17%) were the most prominent. A total of 83 alcohol or drug-related accidents had been reported at the traffic offices in Nongoma over the past three months.

4.5.5 Illegal drug use by gender

The researcher sought to find out the extent to which illegal drug use is prevalent among young people attending school. The problem of illegal drug use and abuse among young people is no more a matter only for urban areas but even rural areas, such as Nongoma, are becoming a serious concern. The situation analysis (secondary analysis) has provided statistics on this, providing significant baseline data. Teenagers are vulnerable and as such are identified as a high risk-group.

In Table 22 data on illegal drug use will be presented by gender, age group, occasion.

Table 22: Illegal drug use by gender

Gender	**Number**	**%**
Males	59	97
Females	2	3
TOTAL	**61**	**100**

The statistics shown above were taken from general practitioner's records.

Table 23: Illegal drugs use by age grouping

Age groupings	**Number**	**%**
Teenager	5	9
Teenager/Young adult	16	26
Teenager/Young adult/Adult	8	13
Young adult	10	16
Young adult/Adult	13	21
Adult	1	2
All ages	8	13
TOTAL	**61**	**100**

The researcher has undertaken to explore possible use of secondary data as an important baseline data that is descriptive of the situation. An additional method of data collection

strengthens the objective of making the results of the study more comprehensive and significant.

4.6 SUMMARY

Looking at the most significant predictors in the CHAID analyses described above, the following conclusions can be drawn.

The results of the baseline data (profile) of Nongoma community correlated with the demographic analyses of patients (respondents) who attend the hospital and clinics for treatment. In an attempt to address their poverty, there are production of illicit concoction and planting of dagga as well as selling of these to the public.

Furthermore, the attendance of celebrations and traditional ceremonies was associated with partaking in drinking of alcohol. At the same time, in the process of pleasure and satisfaction, it entails, on certain occasions, some indulgence in unsafe and risky social activities. The risky behaviour of this nature exposes people to HIV/AIDS infection. The nature and extent of alcohol abuse and TB came out quite strongly in the focus group discussions. The survey that was conducted by nurses, at Benedictine Hospital and its satelite clinics, on patients attending treatment programmes, is quite significant. Patients are abusing alcohol inspite of them being on treatment; see the results of CHAID, Graphs, Pie Charts, Tables (ch. 4; Figures 22, 23, 24 and Table 9). It was further established and revealed that out of seven (7) multi-drug-resistant TB patients, 5 who had already died were abusing alcohol while still under treatment for TB (see Table 8). The level of education also featured in a large number of analyses. It was to a large extent the less educated respondents who were the more regular consumers of home-brew alcohol.

Various sections and subsections of this study explored the nature and extent of alcoholism, drug dependence, tuberculosis (TB), HIV/AIDS and poverty. It was apparent that poverty came out as a cross cutting issue throughout the previous chapters (Chapter Two and Chapter Three). In this instance, the analysis of data and research findings in Chapter Four highlight the significance of alcohol use, misuse and abuse as it is stated in Chapter Two. Chapter Three mentioned the issue of pleasure versus health promotion. This tallies well with what is

said by Poku (2001:195) about the lack of education and recreation. Thus men relied on little else but home-brewed alcohol and sex for leisure. This statement is based on the fact that the secondary and primary data, focus group discussions and in-depth individual interviews, as well as observational data collected by the Village Health Workers, all tended to converge on the fact that, indeed, alcohol abuse and alcoholism is a common denominator across a spectrum of preventable diseases and social problems.

The use of individual in-depth interviews, with traditional healer, former drug dealer, especially dagga in this case, was a demonstration of width and depth of the study. More importantly the use of the focus groups of ward head nurses in charge in their own area of operation helped to approach the whole study in a more comprehensive manner. The main themes that emerged from these exercises were; the first theme that emerged in group process was on orientation. As the group process forged ahead stages by stage, the norms of the implied themes were "Can we trust the group leader?" (Hence testing out would follow) "Are we being taken seriously by the hospital authorities as there was no protection from MDR TB infection?"

The theme that came out loud and clear is "alcoholism" being one of the major contributing factor to TB disease. The theme of hanging "tekkies" symbolized that drugs are available and that there are being sold in this vicinity. This was proven valid after a follow up investigation was conducted. It is crystal clear that the problem of substance abuse among patients especially TB patients, is a cause for concern.

In this chapter a brief overview of the research methodology was presented and the findings of the qualitative and quantitative study were presented, analysed and discussed according to the respective target respondent groups. The preliminary primary health care model accompanied by the public health model have been presented in the preceding Chapter (3). These models have developed from the theoretical framework discussions. The models, referred to as Figure 7 and Figure 8 respectively, form the basis on which guidelines for a primary health care model based within a developmental social welfare approach will be formulated and presented in the subsequent chapter.

The focus of Chapter Five is on the summary of the major findings, the conclusions derived from the key findings and finally recommendations, including guidelines for a primary health care model within a developmental social welfare framework.

CHAPTER FIVE

MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In this chapter, the main aims are to indicate the key findings of the study; to arrive at conclusions on which guidelines for a primary health care model are formulated and finally to make recommendations based on the study. Richard and Grinnell (1993) suggest that in drawing conclusions about a study, the researcher should indicate the following:

- assessment of change in the dependent variable as caused by the independent variable
- the extent to which the study accomplished its purpose as developed in the formation of the research hypotheses
- what the study means to professionals and what is required of them; and
- if there is need for further research on the subject. This will be shown in the study's conclusion. The researcher will then suggest whether the same research methods or other research designs should be utilized in follow - up studies.

As a point of departure the discussion focuses on the original statement of the problem, aims, objectives and hypothesis.

5.2 RESTATEMENT OF THE PROBLEM INVESTIGATED

National research findings and clinical reports point to a general upsurge of alcohol and drug-related problems among South Africans in urban as well as rural areas, but especially in traditionally African communities (Rocha-Silva 1997:1). It is precisely because of the escalation in these communities that welfare and health agents are increasingly emphasizing the need for primary prevention services. Schoeman *et al.* (1994) state that a spectrum of preventable diseases has been linked to alcohol abuse and drug dependence. It is, however, not implied that alcohol abuse and drug dependence cause these preventable diseases. What is

meant is that alcohol abuse, in particular, has been identified as a common denominator in various diseases.

Alcohol and alcohol-related problems affect all sectors of the South African society. The total estimated cost to the South African economy of these problems in terms of lost productivity, damage to health, on-the-job accidents, crime and family disintegration exceeds one billion Rand annually (Van der Burgh 1992). The present study highlights the negative implications for the economy of the country and the extent to which drug abuse touches on the lives of the abuser and innocent victims, such as his/her family members, especially the spouse and children, who are all caught up in a poverty cycle. The latter is identified as one of the main co-factors contributing to increased levels of alcoholism and preventable diseases.

Van der Burgh (1992), in an unpublished paper on facts and statistics, mentions that during the early 1990s, South Africa was ranked fourth in the world in respect of malt and sorghum beer consumption. Van der Burgh's study concentrated only on urban areas. If rural areas were also included, South Africa could conceivably have been ranked first in the world in respect of such consumption. The paucity of researched information in the rural areas needs to be rectified. The present study is an attempt to remedy this in part.

De Miranda (1991) states that practitioners in the related field of substance abuse should look at the alcohol and drug problems affecting Africa against the background of:

- poverty
- malnutrition
- high incidence of TB
- high incidence of infant mortality
- overwhelming spread of AIDS
- unemployment
- sociological chaos — psychiatric syndromes

As indicated in Chapter One, the prevalence of these conditions makes a mockery of the World Health Organization's (WHO) maxim of "Health for All in the Year 2000". This noble goal was conceived with good intentions, making the re-emergence and increase in the number of life-threatening diseases cause for serious concern.

All the problems mentioned by De Miranda have been observed and studied in urban areas. These areas are easily accessible to researchers who find it cost effective to conduct studies where there is infrastructure such as contactable addresses and treatment centres. Rural areas are neglected because of their inaccessibility and lack of infrastructure. South African researchers are also inclined to refer to informal settlements located in urban areas as rural areas, thus perpetuating the lack of research in deep rural areas. Researchers have to be courageous and venture into the rural areas in order to discover information that will promote the provision of the necessary resources.

TB is said to be the number one killer among infectious diseases. TB is reported to kill two to three million people every year throughout the world (AIDS Bulletin, 1997). The WHO estimates that a third of the world population is currently infected. While there is a 10% risk of developing active TB during an individual's lifetime, this figure increases in immuno-compromised patients. The report that TB accounts for 40% of deaths in HIV-positive patients highlights the effects of the convergence of diseases.

Alcohol misuse, in particular, has been associated with the development of disease, associated problems, relapse and multi-drug resistance. Renewed worldwide interest in TB has focused on the occurrence of bacterial resistance to the major anti-TB drugs (Parry and Schoeman: 1994:372). Prim, Wohlrabe, Folle and Vrereck (1994) emphasize the effects of chronic alcoholism on tuberculosis treatment. Parry and Schoeman (1994:372) state that high rates of alcohol misuse are found in most population groups in South Africa. In a household survey conducted in Mamre in the Western Cape (a community of approximately 5 000 persons) by the latter authors, a positive association was found between TB and alcohol related problems.

Alcohol use and misuse significantly inhibits cell-mediated immunity and also compromises the body's defenses. Alcoholism, along with other diseases associated with impaired cell-mediated immunity (e.g. HIV infection), increases a person's susceptibility to active TB infection as well as the reactivation of latent diseases. However, researchers have not yet established whether alcohol consumption itself, or the associated liver damage and malnutrition, is primarily responsible for the impaired immunity of alcoholics (Flynn and Bloom 1996).

Any increase in alcohol and drug-related problems will intensify the burden on health and welfare services in South Africa and impede the current government's attempts to improve the quality of life of all South Africans, especially those in rural areas. Appropriate and cost-effective preventive programmes, particularly in rural areas are urgently needed. However, the detailed information required for mobilizing such programmes is lacking.

In the Nongoma district, it was the villagers believe that alcohol and other drug abuse poses the most serious threat to the already unstable family system. The HIV/AIDS threat in KwaZulu-Natal is well known in South Africa. Everyone fears this disease, yet people avoid warning one another of the danger of drug abuse for fear of interfering. To abuse drugs is a choice that each person may make at his/her own peril. Local concoctions are brewed as a source of income in rural areas where unemployment is rife. This also poses a serious problem that could be prevented if people were enabled to exercise their choice appropriately. Alcohol and other drug abuse is a threat that undermines the entire fabric of the rural communities. Home-brewed alcohol concoctions have become a source of income for a huge number of unemployed rural women. In addition, small marijuana plantations help to supplement other illicit substances that are cultivated for the purposes of making ends meet.

Room (cited in Molamu 1988:117) points out that many patients with alcohol psychoses or withdrawal symptoms fail to relate their symptoms to alcohol. Instead they attribute them to witchcraft or sorcery, spiritual possession and other supernatural causes. Such beliefs tend to be reinforced by traditional healers. It is widely accepted that various health problems also constitute indices of alcohol abuse (Plant, 1980:249). These include liver diseases, particularly cirrhosis of the liver, diseases of the nervous, gastrointestinal and respiratory

systems, heart and vascular diseases, cancers, metabolic and immune system disorders, endocrine disorders, nutritional deficiencies, poisoning and injuries from motor accidents. They are perceived as being closely related to the overall increase in alcohol consumption by the population.

President Mandela, in his opening address to Parliament in 1994, specifically singled out alcohol and drug abuse among social pathologies that need to be combated (National Drug Master Plan document, 1999:1). He said alcohol and other drug abuse (hereafter referred to as substance abuse) is a major cause of crime and poverty. It reduces productivity and causes unemployment, dysfunctional family life, political instability, the escalation of chronic diseases such as AIDS and tuberculosis (TB), injury and premature death.

Its sphere of influence reaches across social, racial, cultural, language, religious and gender barriers and directly or indirectly affects everyone. Substance abuse is a common factor in a wide variety of health and social problems. It is disturbing that although the substance abuse problem has been discussed and defined in detail, what most people understand amounts to the tip of an iceberg. Srinivasan (1982:105) puts it succinctly: "What the individual sees above the water is the small and easily defined the formal. It is what is not seen, the much larger mass of the organization which lies hidden which can break all too easily and cause a shipwreck."

Scotch Tagwireyi writes in the *Mail and Guardian* (1999, September 10-16): "To reiterate, poverty is one of the main co-factors which tends to increase the level of preventable diseases, including alcoholism." The Daily Monitor (Editorial, 2000, November 6) points out that the much-vaunted African extended family system is reeling from unprecedented rates of untimely deaths. There are now many orphans. Communities with endemic poverty should expect an upsurge of HIV/AIDS and TB. HIV and TB infection will exacerbate existing conditions. The editorial adds that the piggyback effect of preventable diseases' viruses on adverse socioeconomic and environmental factors is as deadly as the direct medical effects. Jacobson (1992:39-41) explains that such apparent susceptibility to TB infection among alcoholics, especially those who are homeless or indigent, can be attributed both to biological and to social and behavioural factors.

In rural areas such as Nongoma, it is now becoming clear that the problem is far greater than originally imagined. Little is being done in terms of comprehensive prevention programmes. All that is available at present is a small SANCA Alcohol and Drug Help Centre, whose services and resources fall far short of being a viable facility. To make matters worse, the centre is under- utilized by the local communities, as hospital nurses and doctors rarely refer patients to this facility. Recently, however, SANCA was approached by the health authorities in Nongoma-KwaZulu-Natal to set up a cost-effective alcohol and other drug-related preventive programme in the area. Through this initiative, the basis was laid for developing similar programmes in other rural areas of KwaZulu-Natal.

The theoretical model developed in Chapter 3 and the findings of the present study together enabled the researcher to propose guidelines for an accessible preventive primary health care model and community programme for Nongoma. Since the VHWs assisted the researcher during the research process, the guidelines can be utilized by them when they put the programme into practice. This means that they will be motivated to mobilize the local villagers and make them aware of the services available at the SANCA – Nongoma Alcohol and Drug Help Centre. The villagers themselves will be prepared to engage in a community education programme about alcohol and other drug abuse, TB and other preventable diseases such as HIV/AIDS. The involvement of VHWs in the research process in their respective villages will also help to create awareness of the dangers of using, misusing and abusing substances amongst patients. Flynn and Jacobson (1992: 41) argue that alcoholics may be unlikely to cooperate with treatment if they perceive medical staff as a threat to their drinking.

To summarize, the role played by substance abuse in complicating and compounding the nature and extent of preventable diseases - especially TB, as well as social problems among patients undergoing treatment and the community - is significant. The findings of the present study enabled the formulation of guidelines for a primary health care model within a developmental approach for Nongoma.

5.3 RESTATEMENT OF AIMS AND OBJECTIVES OF THE STUDY AND DEGREE TO WHICH THEY WERE REALIZED

5.3.1 Aim in Nongoma

The study was primarily aimed at determining the relation between the nature and extent of alcohol and other drug abuse and common preventable diseases such as TB, HIV/AIDS and others and their impact on patients, families and communities.

The aim was realized through the achievement of the study's objectives.

5.3.1.1 Objectives

In the discussion to follow the respective objectives of the study will be restated with a brief indication of how they have been achieved in this study.

Objective 1

To study and review relevant literature pertaining to the historical background and socio-economic and political dimensions of alcohol and other drug use, misuse and abuse in South Africa.

This objective was achieved through a literature survey as reflected in Chapter 2 of this research report as well as the quantitative study conducted with patients at Benedictine Hospital and its eleven satellite clinics (see Figure 19 and Table 9, Ch. 4)

Objective 2

To conceptualize primary health care (PHC) within a developmental perspective as a theoretical framework for the study.

This objective was achieved through the study and review of literature on the theoretical framework as discussed in Chapter 3.

Objective 3

To do a situation analysis on drug related health and social problems among selected institutions and centres in Nongoma

This objective was achieved as the collection of secondary and qualitative data for the Nongoma socioeconomic profile gave some indication of the extent and nature of the problem among patients and the data given by the key informants.

Objective 4

To investigate the nature and extent of use of alcohol, marijuana and their possible link with TB, HIV/AIDS and mental health among the village communities of Nongoma.

This objective was achieved through the data gathered by the VHWs among patients who are occasionally followed up through their routine home visits in their respective villages (see Attachment D). In addition the literature review in Chapter 2 confirmed the link between the variables mentioned above. McMurray *et al.* (1990:403) contend that primary malnutrition, alcoholism and AIDS are linked by common themes of wasting, immune impairment and the increased incidence of tuberculosis (Chaisson & Slutkin 1989; Schieffebein & Snider 1988; Onwubalili & Scott 1988).

Objective 5

To formulate guidelines for an integrative, intersectoral prevention model of alcohol and other drug abuse and related preventable diseases for Nongoma based on the research findings.

This objective has been achieved as guidelines indicated above have been formulated in the present study in Chapter 5.

Objective 6

To make recommendations based on the findings of the present study.

This objective has been achieved as recommendations have been formulated based on the key findings and conclusions of this study.

5.4 RESEARCH QUESTIONS AND HYPOTHESIS

The research questions which guided the researcher and provided focus and delimitation to the study were as follows:

1. Can the impact of alcohol and other drug abuse be ignored if diseases influenced by it (e.g. TB and HIV/AIDS) are to be treated effectively?

This hypothetical question was tested in the present study. The information gathered from interviewees and focus group participants indicated that alcohol and other drug abuse hinders the healing process (cf. Ch.2, Tables 5 and 6 and Ch.4, Table 8).

2. Are alcohol and other drug abuse both cause and effect of problems that assail the poor in rural settings? These problems include crime, violence, accidents, rape, malnutrition, TB and HIV/AIDS.

This question was tested in the present study. The information gathered from interviewees and focus group participants concurred that alcohol and other drug abuse contribute substantially to the problems mentioned above (see Figure 5, Ch.3).

3. Are the (deep) rural people more at risk concerning the consequences of alcohol and other drugs with regard to health and social problems due to a lack of adequate and appropriate resource centres?

This question was investigated and information gathered from interviewees and focus group participants revealed that alcohol and other drug abuse hinders the healing process. The spectrum of social and health problems such as poverty, malnutrition, TB, AIDS, mental illness and substance abuse have led to the design of policies by the Department of Health, as reflected in the White Paper for Transformation of the Health System in South Africa (1997:6) and services which are rendered at grassroots level (see Ch 3).

4. Can a primary health care strategy within a developmental social welfare framework provide the necessary integrated approach that would also be cost effective and realistic enough to begin to address issues such as alcohol and other drug abuse and the related illnesses within a poverty context?

All the preliminary findings appear to point to the fact that problems of alcoholism, TB, HIV/AIDS, malnutrition and mental illness can be addressed through an integrated approach of primary health care within a developmental social welfare framework (see PHC Model Guidelines: Figure 7, Ch. 3).

The hypothesis for the study was as follows:

The nature and extent of substance abuse and preventable diseases in Nongoma will determine guidelines for primary health care applicable to the community context.

Since all the objectives were achieved, the research undertaken was able to confirm the hypothesis. This gives rise to cautious optimism regarding establishing a link between substance abuse and preventable diseases such as TB HIV/AIDS and a host of other related diseases and socio-economic conditions resulting in malnutrition due to poverty.

The following section focuses on the major findings and conclusions of the study.

5.5 MAJOR FINDINGS AND CONCLUSIONS

The key findings, as derived from the literature study as well as the empirical study, will be presented and followed by conclusions pertaining to the specific finding(s).

Finding

Nongoma has been found to be a poverty stricken area and thus it meets the criteria of a rural community with strong features of poverty, malnourishment and a low degree of education, income, literacy level and a high rate of unemployment.

Conclusion

Poverty in the area has a direct link to dependency on social grants. The high rate of TB infected patients becomes an income generating disease when a patient qualifies for a disability grant. The whole family tends to depend on the disability grant to meet family financial needs. However, according to findings from focus group discussions, the ordinary TB disability grant has been stopped by the Government, because patients buy alcohol rather than food from it. This decision perpetuates poverty; hunger and starvation (compare Figure 13 and Figure 18, Ch. 4). A primary prevention programme for substance abuse, embedded in community development, should include self help, income generating programmes in order to address the social problems associated with substance abuse.

Finding

The findings indicated that the Nongoma community, especially patients attending treatment programmes at Benedictine Hospital and its satellite clinics, is ignorant regarding alcohol and other drug abuse and its link with preventable diseases. This is supported by the fact that a fairly high percentage of patients were found to be using alcohol while still undergoing treatment for TB and other preventable diseases. This is due to their attendance of traditional ceremonies and celebrations.

Conclusion

Treatment and prevention programmes for both substance abuse and TB, should include a component of the impact of substance abuse on TB. This implies a multidimensional and multidisciplinary approach to the prevention of substance abuse and preventable diseases. Methodological studies, making use of qualitative and quantitative research methods, confirmed the significance of a multidimensional approach in addressing a complicated problem of substance abuse and preventable diseases (see Chapters 1 and 2 of this study).

Finding

Findings indicated that despite the rural environment where people make and drink their own brewed concoctions, alcohol is freely available and abused in the Nongoma community. Literature confirms that of all drugs human beings have used and abused in the course of the history, alcohol is not only regarded as the oldest, but also the most widely used and abused drug because of its easy availability (see Bewley 1986:11 and Ch. 2).

Conclusion

In the present era alcohol has been commercialized to the extent that even rural unemployed people would want to buy the western brewed alcohol. Financially this puts a further burden on already poverty stricken families.

Finding

Due to the cultural connection to drinking in rural communities and the silence on preventable diseases such as HIV/AIDS it is difficult to determine the extent of alcoholism in communities such as Nongoma. Findings indicated that most traditional ceremonies (see Figure 23, Ch. 4) and celebrations (see Figure 21, Ch. 4) were attended by patient respondents, which is a strong confirmation of this.

Conclusion

The cultural connotation to alcohol contributes to the problem of substance abuse in a rural community such as Nongoma and directly impacts on the effectiveness of prevention programmes. Due to the more hidden nature of alcoholism in rural communities, there is a lack of resources in rural areas. This is evidenced by the fact that Government resources are focused on the escalation of alcohol abuse among black communities in urban areas. SANCA treatment facilities, for example, are concentrated around metropolitan cities (see Figure 1, Ch. 2). Policy makers are therefore challenged to make provision for resources in rural areas. Prevention programmes should be designed to address substance abuse, but at the same time be culturally specific and sensitive to the needs of the rural people.

Finding

The findings indicated that alcohol is a potent drug which, if taken together with other prescribed drugs (e.g. in the case of T.B patients), has deleterious effects, as it renders prescribed drugs ineffective in treating the disease or illness. This was specifically confirmed by the ward nurses of the Benedictine Hospital, as they found the link between alcohol and other drug abuse and lifestyle choices which are mainly influenced by the pleasure syndrome phenomenon to be co-factors in rendering certain diseases uncontrollable and ultimately untreatable.

Conclusion

In order to make a significant impact on preventable diseases such as TB, the relation with alcohol needs to be clearly communicated and understood by the health and welfare personnel as well as the village communities of Nongoma.

Finding

The findings indicated that there is a direct relationship in Nongoma community between substance abuse and preventable diseases on the one hand and poor socioeconomic conditions on the other hand.

Conclusion

Substance abuse cannot be addressed in isolation from the socio-economic and health conditions of a community. It demands a holistic, integrated approach. Smith *et al.* in Milkman and Shaffer (1985:145) state: "Alcoholism as a disease is the country's number one substance abuse disorder, inflicting major economic and health damage on millions of people each year." Herrington *et al* (1986:220) concur that alcoholism is responsible for extensive morbidity and mortality on a worldwide basis (see Schmidt & Popham, 1976:50).

It is concluded therefore that alcoholism is a disease not only impacting on a person's health but also on a social level and therefore requires a multidimensional, integrated prevention approach.

Finding

The literature study indicated that dagga is the second most abused drug in South Africa. Dagga has been confirmed through the qualitative results of this study to be the second most abused drug in and around Nongoma. However, findings indicated that, being an illegal drug, patients would not easily and freely reveal the use of dagga to nurses who were research assistants for fear of possible reprisals from these officials. The concealment notion of dagga as an illicit drug was supported by what was mentioned in the focus group discussions, namely that the symbol of 'hanging tekkies' indicates the availability of drugs (especially marijuana) in that particular vicinity.

Conclusion

The failure to freely reveal the use of dagga indicates that the Nongoma community knows very well that dagga is an illegal drug. The community is therefore not ignorant of the possible dangerous effects of dagga on their personal and family lives.

Finding

Findings indicated that dagga (marijuana) dealing and trafficking has become an alternative income generating project in several villages of Nongoma. It has been hinted by the police in Nongoma that they seem to have lost the war against eliminating dagga dealing and trafficking, since it has become an alternative means of income.

Conclusion

As an alternative source of income, dagga (marijuana) is used by the Nongoma community as the last resort to make ends meet. The numerous dagga plantations in the villages around Nongoma rural areas is a cause for serious concern. Studies indicate that 50% of recent arrestees had traces of cannabis (marijuana) in their system (cf. Rocha- Silva 2001, and Ch. 3, Table 20). It is concluded that the high unemployment among rural people indirectly or directly encourages the use of illicit drugs (in this case dagga/marijuana) in terms of income generation. In the poverty context of the community, this behaviour can be regarded as a part of people's survival instinct in spite of possible repercussions due to the fact that it is an illicit drug. It can be concluded that if no alternative source of income is planned and implemented in Nongoma in the form of self help projects, the current problems would continue and could create further problems. If the dagga dealing and trafficking continue as part of a poverty alleviation endeavour, it could, on the other hand, be misconstrued by those involved in drug use, dealing and trafficking, to mean that the government is indirectly legitimizing their illicit drug actions.

Finding

Secondary data and qualitative observation data gathered by the VHWs, as well as qualitative data analysis are supportive of and concur with each other that dagga use has increased most among young people attending schools and especially young people in the 18-25 year group. In addition, a high incidence of mental illness (50%) occurs among the respondents in the age category of 19 years and younger among male respondents.

Conclusion

Young people of school attending age are the most vulnerable and thus are identified as high risk groups to be targeted for primary prevention programmes (see Tables 11, 21 and 22).

Finding

Findings indicated that TB reflects the highest incidence of the disease among patients in Nongoma. This finding was confirmed by the literature study, which indicated that TB is the most common preventable disease in South Africa.

Conclusion

TB is a socioeconomic disease and as such most, if not all, of these patients are poor and unemployed. It can be concluded that TB is associated with poverty as one of the main variables. In general terms TB remains a scourge among the poor in developing countries.

Finding

Personal interviews with a nurse and the doctor revealed, among other issues, that there was a definite association between multi-drug resistant TB on the one hand and the abuse of alcohol and other drugs on the other hand.

Conclusion

TB has been strongly associated with substance abuse. This has been a theme that repeatedly referred to by the focus group discussions.

The findings support that there appears to be wide spread use of alcohol in the area, with many TB patients using and abusing alcohol as well.

Finding

It was found that government invested a lot of money in TB treatment, most of which is due to alcohol and other drug abuse (see Table.4).

Conclusion

The conclusion that can be drawn from this is that investment in the prevention of substance abuse should also receive adequate financial resources for the purposes of reducing and eliminating it among preventable diseases.

Finding

Findings indicated that some patients who visit the clinic and hospital for TB treatment, not only use alcohol regularly but also abuse alcohol. This behaviour formed the major focus of discussion in the focus groups.

Conclusion

Treatment programmes for TB should not only include a strong message on the use and abuse of alcohol while patients are under treatment, but policies should be enacted to find a control and monitoring mechanism that will empower the disability grant recipient to be more responsible and that the family support system be enlisted, as well.

Finding

A finding from the secondary data was that various professions who are engaged in substance abuse related services, e.g. police, justice, medical service and social work, established that alcohol and other drug abuse was a common problem in their respective case records.

Conclusion

It can be concluded that various sectors and professions are involved in dealing with substance abuse and preventable illness. With regard to programmes for the prevention of substance abuse and preventable diseases the emphasis should therefore be on a holistic and integrated approach.

In summary, the research findings and conclusions of this study provide clear guidelines for primary health care in Nongoma., It has become crystal clear that the study supports the need for an integrated approach towards addressing the problem of substance abuse, the host of preventable diseases and social problems.

5.6 GUIDELINES FOR A PRIMARY HEALTH CARE MODEL FOR PREVENTION IN NONGOMA

Guidelines for a primary health care model for prevention in Nongoma, should provide direction with regard to the following aspects: situation analysis, commitment from community leadership and key role-players, inter-sectoral and inter-disciplinary collaboration, prevention programmes and strategies and policy. However, these components should be contextualized within a primary health care model, relevant to the specific community of Nongoma. Therefore the first guideline for a primary health care model for prevention in Nongoma, should be to identify the appropriate model as a framework for planning and implementing the abovementioned components. Mouton and Marais (1990:141) state that models provide explanation sketches and the means for making predictions. Furthermore, Kaplan (1964:284), in Mouton and Marais (1990:140), quite justifiably state

that the model is a particular mode of representation, so that not all its features correspond to some characteristic of its subject matter.

5.6.1 Identification of relevant model for primary health care in Nongoma

De Vos (2002:407) states that by studying successful and unsuccessful models or programmes that have attempted to address a problem, researchers identify potentially useful elements of an intervention. This synthesis of existing knowledge helps to guide design and develop activities (Fawcett *et al*; 1994:33).

As discussed in Chapter 3, the selected and proposed models for prevention of substance abuse and preventable diseases are the following:

1) Public Health Model on Prevention of Drug related Harm as enunciated by Rocha-Silva (see Figure 7, Ch. 3);
2) Primary Health Care Model based on a developmental approach as conceptualized and formulated by Mathe (see Figure 8, Ch. 3);
3) A Process Model Design for Village Health Care as Adapted from Maghraby (see Figure 9, Ch. 3).

For the area of Nongoma the researcher is of the opinion that a mix of the proposed models is more appropriate than one specific model. All three models include elements that could be helpful to guide the design, planning and implementation of a prevention model for Nongoma.

The Primary Health Care Model's point of departure is to meet the needs of a rural community, by promoting the health of people in communities and by doing so address poverty, malnutrition, income, literacy level and unemployment by means of health promotion strategies. This focus also forms the premises of the Public Health Model, since it particularly takes into account health promotion and the development of the very poor (women, youth and poor people).

The Process Model Design for Village Health Care is relevant for Nongoma since it is based on the needs and participation of the target group and selected criteria. The community and other stakeholders play an important role in the process of designing, planning, implementing and evaluation of a model for primary prevention. In the process of addressing substance abuse, preventable diseases and social problems, poverty remains the focal issue cutting across a pyramid health and social problems. Within this context, all three of these models are embedded in a developmental framework and approach which make them appropriate for the prevention of substance abuse and preventable diseases in the villages of Nongoma.

5.6.2 Situation analysis

A thorough situation analysis was done for the purpose of determining the feasibility of adapting these guidelines to the cultural milieu of this deep rural situation of Nongoma.

Primary health care should at all times be based within the context of the community. This implies that the current health and socio-economic contexts need to be continuously updated within the prevailing political context and cultural milieu of the community. Although the situational analysis of Nongoma as reflected in this study could be utilized as base line data to plan programmes and services relevant to substance abuse and preventable diseases, there is still a need for further research of the dynamic interrelatedness of substance abuse and TB amongst multidrug resistant TB (MDR-TB) patients. The major findings of this study have highlighted the fact that most MDR-TB patients were abusing alcohol and other drugs. The impact of substance abuse on MDR-TB patients has a crucial policy implication for primary health care in Nongoma.

5.6.3 Commitment from community leadership and key role-players

As indicated in the study, it is important to obtain cooperation and commitment from the local leadership and key role-players who render services to the local community. In this case the local leadership refers to the rural authorities. In a rural community such as Nongoma, it is vital to gain access to the community through the local headmen and solicit their commitment to ensure the successful implementation of a primary health care prevention

model in the community. The key role-players in the community refer to organizations and institutions such as SANCA Nongoma, the Departments of Social Welfare and Health and the authorities from Benedictine Hospital and its eleven satellite clinics in Nongoma. This commitment envisages enlisting support from local authorities as well as private and public sectors.

5.6.4 Inter-sectoral and inter-disciplinary collaboration

A model for primary prevention care in Nongoma should promote interagency cooperation. All relevant stakeholders should be mobilized for strategic planning, coordination, implementation, monitoring and evaluation of primary health care programmes and strategies. Multi-sectoral and inter-disciplinary community involvement and participation is of critical importance to successfully bring resources to the rural community of Nongoma. As indicated by the findings of the study, these resources can include social workers, nurses, and justice personnel, police, doctors, teachers, clergy, councilors, community leaders and Village Health Care Workers (VHWs). Inter-sectoral and inter-disciplinary collaboration should be guided by specific terms of reference for inter-organizational exchange of resources such as personnel, specialized expertise, facilities, funds and other crucial resources.

Area service programmes should at all times be in accordance with the felt needs and capacities (strengths and assets) of the community as identified by a thorough assessment. This implies involving and ensuring grassroots participation of the Nongoma community based on some of the community development principles such as felt needs, strengths and capacities of the community, participation and self-help.

Collaboration amongst stakeholders needs to be an ongoing process. Monitoring and evaluation of outcomes of programmes should be a collaborative effort amongst various stakeholders.

5.6.5 Primary health care prevention programmes and strategies

Primary prevention programmes and strategies within a developmental social welfare approach should include awareness campaigns, poverty alleviation programmes and empowerment strategies such as community education, community development and self-help. In this case some of the policies should be specific and cater for rural health care programmes according to the *recent trends in village health programmes* (see Figure 6, Ch. 3).

5.6.5.1 Prevention programmes

- **Awareness campaigns**

A primary health care model for prevention should include comprehensive awareness campaigns with a focus on substance abuse and preventable diseases. This is necessary because the majority of rural communities (especially patients) of Nongoma are ignorant of the fact that alcohol is a drug and that abusing alcohol and other drugs whilst still on treatment renders that treatment and medication ineffective.

Regarding prevention of drug use, misuse and abuse, awareness campaigns should in particular target the youth and teachers at schools as well as education authorities. During these campaigns, young people could also be recruited and trained for a youth-to-youth programme, for example for peer counselling.

Communities should be educated regarding resources such as SANCA and its services, since substance abuse is the primary concern of the organisation. Through this education the community can build a trusting relationship with SANCA as an available resource in their immediate environment.

- **Poverty alleviation programmes**

Poverty alleviation programmes are important due to the link of poverty with substance abuse and preventable diseases in the Nongoma community. To prevent substance abuse in Nongoma, it is a priority that sustainable income generation projects be established in the community. This is meant to offer an alternative to dagga and cultivation and dealing in dagga and trafficking as an alternative source of income among the village people. This might also reduce the dependency on the disability grant meant for TB patients as the source of income generation for the whole family due to the high rate of unemployment amongst patients.

- **Treatment and support programmes**

A primary health care model for primary prevention should also make provision for tertiary prevention, which implies an exploration of possibilities of taking treatment programmes and support programmes closer to the community. Currently there is no detoxification facility for treating alcoholics and drug addicts in or close to the Nongoma village. It has been stated in the findings that fully functional and viable treatment Centres are found mainly around cities (see Figure 1 Ch. 2). Even the SANCA Nongoma: *Alcohol and Drug Help Centre* is ill equipped to undertake and handle comprehensive treatment and community programmes that are envisaged as outcome of this study. However, as this centre is already located in the community and renders services to the community, it could be expanded and equipped to also provide treatment and supportive programmes with regard to substance abuse and related preventable diseases.

5.6.5.2 Prevention strategies

Primary prevention strategies should be based on empowerment through community education, community development and self-help. This focus is in line with the theoretical model of primary health care, which encompasses strategies such as empowerment; community education and community development (see Figure 8, Ch. 3).

This endeavour will involve the police not only to think in terms of dagga eradication but rather find alternatives to such action in terms of self-help projects.

Community education, for example, is important for rural people to change their attitudes against perceiving home brewed beer as food and the myth or belief that it applies to all types of alcohol. Through community development, the community can get involved and participate in self-help activities to address, for example, poverty through income-generation projects.

5.6.6 Primary health care prevention policy for Nongoma

Within the context of a primary health care model for primary prevention for Nongoma, key role-players should revisit their agency policies, programmes and procedures in order to achieve the ultimate agreed upon goals for inter-sectoral and inter-disciplinary collaboration. This implies not only a commitment from NGOs and CBOs, but Government, in particular, should regard policies, strategies and programmes to address substance abuse in relation to TB and AIDS as a very high priority. The commitment of Government to invest in resources for rural communities such as Nongoma is a critical component of successfully designing and implementing a primary health care model for prevention in Nongoma.

The purpose of the proposed guidelines as outlined above was to provide direction for the design, development, implementation, monitoring and evaluation of a primary health care prevention model for the community of Nongoma. The researcher is of opinion that if these guidelines are utilised for this purpose, an inter-sectoral, inter-disciplinary primary health care model for prevention will emerge which will accommodate an integrated approach where the community and the relevant role players will jointly take responsibility for addressing the social problems of substance abuse in relation to preventable diseases within a poverty alleviation policy framework.

5.7 RECOMMENDATIONS

The recommendations based on the research study and findings are:

1. The primary recommendation of this study is that the research findings of this study and the proposed guidelines for primary health care prevention as outlined in this chapter, should be used by relevant stakeholders to guide the design, development, implementation, monitoring and evaluation of a Primary Health Care Model for the prevention of substance abuse and related diseases in the Nongoma community within a developmental policy framework. Stakeholders in Nongoma should include the SANCA Nongoma: *Alcohol and Drug Help Centre*, the Departments of Health, Welfare and Population Development, and Education, Local Government Structures as well as other Non-Governmental and Community Based Organizations such as and other religious organizations.

2. It is recommended that the SANCA Nongoma: *Alcohol and Drug Help Centre* and the Provincial Department of Health personnel should take responsibility for driving this process of seeing to it that the proposed guidelines for a primary health care model for Nongoma are followed up and implemented in collaboration with other nominated, appointed and volunteered representative leaders from the above organizations as well as from the Nongoma community.

3. Substance abuse (especially alcohol abuse) should be recognized by all government departments (particularly, Welfare, Health and Education), civil society and the communities at large *as a priority problem* in South Africa. It should enjoy a similar priority preference to TB and HIV/AIDS. SANCA National and Provincial, in consultation with SANCA Nongoma, should take the initiative for negotiating and proposing a policy change to this effect. The Department of Health in particular, must start addressing substance abuse among TB patients and recognize the inter-link with other diseases, such as malnutrition and HIV/AIDS.

4. Strict enforcement of the law should be sought with respect to under age buying, drinking and selling of alcohol. This should be the prerogative of the Local Government structures in Nongoma and all the stakeholders to ensure that the protection of children and their rights forms part of the overall background of caring derived from the national legislation is effectively complied with at local levels such as the deep rural areas of Nongoma.

5. Social workers in collaboration with Allied Professionals as well as the community leaders of Nongoma must rethink their role and function aimed at the masses of poverty-stricken community groups in terms of planning and implementation of poverty alleviation programmes. This must be taken as a challenge by the social workers in dealing with problems of the poor as the major findings have made some connections between substance abuse, preventable diseases and the extent of poverty, especially in rural areas.

6. Viable resource centres within the entegrated rural development strategy which would redress structural issues should be established in deep rural areas such as Nongoma and will also cater for the prevention and treatment of substance abuse and preventable diseases. A good example is the establishment of a community multipurpose center.

7. Community based research should be integrated in the design and planning process of a model for primary prevention of substance abuse and preventable diseases in Nongoma. The level of impact the model has on the community in terms of reduction in substance abuse and preventable diseases such as TB and other related illnesses (diseases) should be monitored through action and evaluation research. These results could be utilized for primary health care models in other rural areas in South Africa. The responsibility for carrying out this recommendation lies with a task team identified for taking the process of implementation of guidelines forward. The task team should consists of social workers from SANCA Nongoma-Alcohol and Drug Help Centre, health personnel and other relevant stakeholders.

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ATTACHMENT-A

SANCA NONGOMA COMMITTEE NOTE OF APPROVAL

1999-04-24

Mr. S.V. Mathe
P.O. Box 99
NONGOMA
3950

Dear Mr. Mathe

RE: SANCA NONGOMA'S RESPONSE TO INTENDED RESEARCH ON SUBSTANCE ABUSE AND PREVENTABLE DISEASES AT BENEDICTINE HOSPITAL, COMMUNITY SATELITE CLINICS AND IN NONGOMA VILLAGES

I have pleasure to inform you that SANCA Nongoma Committee has accepted your request for conducting the type of research you explained to us as a committee. We wish to assure you that we will lend our support and open SANCA Nongoma office facilities and personnel to your full usage as envisaged by you.

We believe that the results of this research will assist in further development of SANCA Nongoma professional services and especially to our SANCA Nongoma Social workers and will benefit the entire Nongoma communities.

On behalf of SANCA Nongoma Executive Committee I wish you a successful outcome of this important project.

Yours sincerely

Rev S.P. Ntshangase
SANCA Nongoma - Chairman

PATRON: HIS MAJESTY KING GOODWILL ZWELITHINI
Fundraising No: 021-809-NPO

Attachment -B1

First MEDICAL SUPERINTENDENT LETTER OF APPROVAL

PROVINCE OF KWAZULU-NATAL
Health Services

ISIFUNDAZWE SAKWAZULU-NATALI
Ezempilo

PROVINSIE KWAZULU-NATAL
Gesondheidsdienste

Office of – Medical Superintendent – Benedictine Hospital

Postal Address: P/Bag X5007
Ikeli Leposi : Nongoma
Pos Adres : 3950

Fax No. : 0358-310339 Office
Fax : 0358-310457 Home
Faks No:

Tel No.: 0358-310314 Hospital
Ucingo : 0358-310339 Office
Tel No : 0358-310044 Home

Enquiries :
Imibizo : Dr A. E. T. Glover
Navrae :

Date :
Usuku : February 15th 1998
Datum :

Reference :
Imkomba :
Verwysing:

Mr Sipho Mathe

SANCA National Directorate
P.O. Box 663
Johannesburg

Dear Mr Mathe,,

Thank you for sending me the details of the time scale of your plans for research in Nongoma District.

My personal opinion is that this research will start to enable the health service in the district to face one of the important health problems in the adult population; one which brings a high morbidity and subsequent mortality, and adversely affects a large number of families. I am very happy for you to go ahead, and look forward to hearing about your progress.

I can see that you hope to work with the clinic nurses in some depth. At the moment they have a great deal of work, but I hope that they will see their way to make use of the opportunity which your research affords to up-grade the management of alcoholism in the district. I am asking Matron Mbatha to arrange a presentation at the next In-service training day so that the nurses have opportunity to comment at this early stage.

Unfortunately it was not possible to present the proposed research to the Health Ward Advisory Board at the last meeting. I hope that the next meeting will be arranged fairly soon and that the members will be informed at that stage. Also I feel that it is important to involve the local health committees before community health workers become involved. I think arranging health committee meetings will probably be on your agenda. In particular I would hope that these committee members will be prepared to present the understandings which your research will give them to the meetings of the Tribal Authorities.

Thank you for bringing home these new initiatives for us to work with you on them

Yours sincerely,

Amy E. Tremayne Glover
Senior Medical Superintendent

ATTACHMENT –B2

First MEDICAL SUPERINTENDENT LETTER OF APPROVAL

PROVINCE OF KWAZULU-NATAL
Health Services

ISIFUNDAZWE SAKWAZULU-NATALI
Ezempilo

PROVINSIE KWAZULU-NATAL
Gesondheidsdienste

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Fax : 0358-310457 Home
Faks No:

Tel No.: 0358-310314 Hospital
Ucingo : 0358-310339 Office
Tel No : 0358-310044 Home

Enquiries :
Imibizo : Dr A. E. T. Glover
Navrae :

Date :
Usuku : June 5th 2000
Datum :

Reference :
Imkomba :
Verwysing:

To Health Service Providers in the Nongoma area

Mr Sipho Mathe has approached the Hospital Management and Regional Authority members to support a research project in Nongoma which will look at the extent of alcohol related problems in the rural situation with the objective of developing a participative preventive model which will reduce alcohol related problems and reduce levels of ill health due to substance abuse.

The Hospital Management consider the extent of alcohol / substance abuse needs to be shown, particularly in relation to the undermining of health, and the need to find ways to reduce this hazard and improve the health of the community members affected.

The Provincial Department of Health has been consulted, and foresee no problems with the research provided that community members are happy to volunteer to participate, and no compulsion is used.

Amy E. Tremayne Glover

Senior Medical Superintendent

Attachment C

PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATAL
PROVINSIE VAN KWAZULU-NATAL

DEPARTMENT OF TRADITIONAL AND ENVIRONMENT AFFAIRS

Telephone No: (035) 8313820 THE DISTRICT ADMINISTRATOR P/Bag x 6254
Fax. No: (035) 8312610 NONGOMA
3950

Enquiries : **Date :** **Reference :**
Imibizo : B.M. ZULU **Usuku : 2001/02/21** **Imkomba : 22/1/4**
Navrae : **Datum :** **Verwysing:**

TO WHOM IT MAY CONCERN

The Nongoma Regional Tribal Authority consisting of Usuthu, Matheni and Mandlakazi Tribal Authorities, was approached and addressed by Mr S.V. Mathe in April, 1999 on the proposed research to be conducted in Nongoma on the issue of substance abuse and Health related problems in this area.

The Council of the above mentioned authority supported the intended research and expressed that it was long overdue- priority problem. The members of the said authority said that they hope that it would result fruitful outcome and benefit the people of this region.

Yours faithfully

DISTRICT ADMINISTRATOR NONGOMA
BMZ/tay

ATTACHMENT – D

VILLAGE HEALTH WORKERS

1. General

The following is based on 573 observations by 50 VHWs.

Tuberculosis is the illness with the highest prevalence (40%). **Mental Illness** (24%), **Alcoholism** (19%) and the combined problem of **Alcoholism and Tuberculosis** (13%) follow this.

Tuberculosis is a serious problem among both males (35%) and females (54%), with the highest prevalence among females. More male respondents (27%) suffer from **Mental Illness** than females (17%). This is also true for **Alcoholism** – 21% of males compared to 10% of females. The combined problem of **Tuberculosis and Alcoholism** is, however, worse among females (18%) compared to 11% males

The incidence of **Tuberculosis** decreases from the young age category (19 years and younger – 67%) up to the category of 30-39 years (35%). It increases again to 42% in the category 50-59 years. The lowest incidence occurs in the categories of 60-69 years (29%) and 70 years and older (22%).

It is only in the age category of 70 years and older where **Tuberculosis** is not the main problem – **Mental Illness** seems to be the biggest problem (35%), followed by Alcoholism (30%).

The combined problems of **Mental Illness and Alcoholism** (1%); **Mental Illness, Alcoholism and Drug/dagga** (0%); **Mental Illness and Drug/dagga** (1%); **Tuberculosis, Alcoholism and Drugs/dagga** (0%) and lastly **Tuberculosis and Mental Illness** (1%) were not really present amongst respondents. Only a few (2%) reported the combined problem of **Alcoholism and Drug/dagga.**

2. Females

More than half the female respondents (54%) suffer from **Tuberculosis.** The combined problem of **Tuberculosis and Alcoholism** (18%), as well as **Mental Illness** (17%) is also a problem. **Alcoholism** without the presence of other illnesses is present amongst 10% of respondents.

Tuberculosis is the main problem amongst females in all age categories up to 59 years. In the age category 60-69 years, **Tuberculosis** (32%) and the combined problem of **Tuberculosis and Alcoholism** (32%) are the main problems. In the category of 70 years and older, **Tuberculosis** (33%) and **Mental Illness** (33%) are the main problems.

It seems as if **Tuberculosis** is a more serious problem in the younger age categories, with a decrease in incidence as age increases, with the exception of the age of 50-59 years, where a higher incidence rate was recorded.

3. Males

Male respondents mainly suffer from **Tuberculosis** (35%), **Mental Illness** (27%), **Alcoholism** (21%) and the combined problem of **Tuberculosis and Alcoholism** (11%). The incidence of **Alcoholism** increases with age, with the highest incidence (38%) in the 50-59 years category. It then slightly decreases (27% in the 60-69 years category), with an increase (33%) in the 70 years and older category.

A high incidence of **Mental illness** (50%) was recorded amongst respondents in the age category of 19 years and younger. The relatively small sample size should be kept in mind when considering this result. A general decrease in occurrence of mental illness is present as age increases, up to the category of 50-59 years. It then increases again to 33% in the age category of 60-69 years and 42% in the 70 years and older category.

4. Interpretation of labels

A = Alcoholism

D = Drugs/Dagga

MI = Mental Illness

TB = Tuberculosis

ATTACHMENT – E

PROFILE OF 9 NURSES WHO PARTICIPATED IN FOCUS GROUP DISCSSIONS AT BENEDICTINE HOSPITAL

Gender and years of experience of interviewees

Interviewee no.	Gender	Years in ward	Ward
1	Female	8 years	Out-patients
2	Female	13 years	Female surgical ward
3	Female	20 years	Mental health
4	Female	6 years	Paediatric ward
5	Female	6 years	Male medical ward
6	Female	10 years	Female medical ward
7	Female	17 years	Male surgical ward
8	Female	25 years	Matron & Coordinator
9	Male	3 years	TB ward

ATTACHMENT-F

SITUATION ANALYSIS: SEMI-STRUCTURED INTERVIEW SCHEDULE

THE NATURE AND EXTENT OF THE USE OF AND TRADING IN ALCOHOL AND OTHER DRUGS

Introduction: Co-worker, please complete this schedule for each respondent and in as detailed a manner as possible, using extra sheets of paper if necessary

Name of the district/area that is reported on: .....
Date of completion of schedule:

Section I: Health agencies in area/district concerned (e.g. hospitals, clinics, medical practitioner's surgeries)

Instructions Co-worker, (1) approach senior medical personnel at the respective health facilities in the district/area on which you are reporting (e.g. medical superintendents at hospitals, senior/head nurses at clinics); and (2) complete a separate schedule for individual health facilities.

1. Biographic Information

Type of health facility: .....
Name of health facility: .....
Address of health facility: .....
Name of respondent: .....
Position of respondent: .....

2.a Have you had persons who presented for medical treatment due to alcohol and or other drug use over the past three months?

Yes .....
No .....

2.b If "yes", how many people received medical treatment for what illness/medical conditions (e.g. liver cirrhosis, TB) due to alcohol and/or other drug use in the past three months? (specify below).

Type of medical condition/illness:	Number of people
i.	i. .....
ii	ii. .....
iii.	iii. .....

Instruction **Co-worker, if more than three types of illness, continue on an extra sheet of paper**

Section II: Social work agencies in area/district concerned (i.e. at hospitals, schools, welfare agencies)

Instructions **Co-worker, 1. approach senior social work personnel at the respective social work agencies in the district/area on which you are reporting; and 2. complete a separate schedule for individual social work agencies.**

1. Biographic information

Type of agency: .....
Name of agency: .....
Address of agency: .....
Name of respondent: .....
Position of respondent: .....

2.a Have you had persons who presented with alcohol and/or other drug-related problems over the past three months?

Yes .....
No .....

2.b If "Yes", how many people presented with alcohol and/or other drug related problems in the past three months? (Specify below).

Type of alcohol/drug problem:	Number of people:
i.	i. .....
ii	ii. .....
iii.	iii. .....

Instruction: **(Co-worker, if more than three types of problems, continue on an extra sheet of paper).**

MOVE TO SECTION V

SECTION III: Criminal justice agencies in area/district concerned (e.g. SAPS offices, magistrate offices, traffic departments)

A. SAPS offices

Instruction: **Co-worker, 1. Approach senior SAPS personnel at the Respective SAPS offices in the district/area on which you are reporting; and (2) complete a separate schedule for individual SAPSA offices.**

1. Biographic information

Name of SAPS office: .....
Address of SAPS office: .....
Name of respondent: .....
Position of respondent: .....

2.a Have there been alcohol and/or other drug-related crime reports/arrests through your office over the past three months? With regard to:

i. reports/arrests for illegal trade in alcohol and/or other drugs:
Yes ..... No .....

ii. for possession of illegal drugs:
Yes ..... No .....

iii. for driving under the influence of alcohol/drugs
Yes ..... No .....

iv. for drunkenness:
Yes ..... No .....

v. for alcohol/drug related rape:
Yes ..... No .....

vi. for assault:
Yes ..... No .....

vii. for child abuse:
Yes ..... No .....

viii. for theft:
Yes ..... No .....

2.b If "yes", how many and what kind of alcohol/ drug-related crime reports/arrests were made through your office in the past three months? (Specify below)

(a) Type of alcohol/drug related crime:	(a) Number of reported cases:
i.	i. .....
ii.	ii. .....
iii.	iii. .....
iv.	iv. .....
v.	v. .....
vi.	vi. .....

Instruction: (Co-worker, if more than three types, continue on an extra sheet of paper)

Type of alcohol/drug related crime:	Number of arrests:
i.	i. .....
ii.	ii. .....
iii.	iii. .....

Co-worker, if more than three types, continue on an extra sheet of paper Move to Section V

Instruction: Co-worker, 1. approach senior personnel at the respective magistrate offices in the district/area on which you are reporting; and 2. complete a separate schedule for individual offices.

1. Biographical Information

Name of magistrate office: .....
Address of magistrate office: .....
Name of respondent: .....
Position of respondent: .....

2a Have there been alcohol and/or other drug-related court cases for illegal through your office over the past three months?

i. court cases for illegal trade in alcohol and/or other drugs:
Yes ..... No. .....

ii. for possession of illegal drugs:
Yes ..... No. .....

iii. for driving under the influence of alcohol/drugs
Yes..... No: .....

iv. for drunkenness
Yes..... No: .....

v. for alcohol/drug-related domestic violence:
Yes..... No: .....

vi. for assault:
Yes..... No: .....

vii. for child abuse:
Yes..... No: .....

viii. for theft:
Yes..... No: .....

2.b If "yes" how many and what kind of alcohol/drug related arrests were made through your office in the past three months? (Specify below).

Type of alcohol/drug related arrests:	Number of arrests:
i.	i. .....
ii.	ii. .....
iii.	Iii. .....

(Co-worker, if more than three types, continue on an extra sheet of paper)

Traffic department Offices

Instruction Co-worker, 1. approach senior personnel at the respective magistrate offices in the district/area on which you are reporting; and 2. complete a separate schedule for individual offices.

1. BIOGRAPHICAL INFORMATION

Name of office: .....
Address of office: .....
Name of respondent: .....
Position of respondent: .....

2.a Have there been alcohol and/or other drug-related traffic accidents reported at your office over the past three months? with regard to:

i. driving under the influence of alcohol/drug
Yes ..... No. .....

ii. traffic accidents in which pedestrians were injured because of the car driver being under the influence of alcohol/drug
Yes ..... No. .....

iii. traffic accidents in which pedestrians were killed because of pedestrians being under the influence of alcohol/drugs
Yes. ..... No. .....

2.b If "yes", how many and what kind of alcohol/drug-related accidents were reported at your office in the past three months?

Type of alcohol/drug related accidents:	Number of accidents:
i.	i. .....
ii.	ii. .....
iii.	iii. .....

Instruction: Co-worker, if more than three types, continue on an extra sheet of paper)

MOVE TO SECTION V

Section IV: Educational agencies area/district concerned (e.g. schools, colleges, Universities, training centres)

Instruction Co-worker, 1. approach senior personnel at the respective agencies in the district/are on which you are reporting; and 2. complete a separate schedule for individual agencies.

1. Biographical information

Type of agency: .....
Name of agency: .....
Address of agency: .....
Position of respondent: .....

2.a Have you had persons attending your agency with alcohol and/or other drug-related problems over the past three months?

Yes .....
No .....

2.b If, "yes" 1. how many people presented with
2. what alcohol/drug related problems in the past three months (Specify below).

Type of problem:	Type of drug(s) involved/used:	Number of people
i.....	i.	i. .....
ii.	ii.	ii. .....
iii.	iii.	iii. .....

Co-worker, if more than three types, continue on an extra sheet of paper

Section V: All the respondents in the previous sections

Co-worker, this section relates to the views of the respective respondents in the previous sections on the nature and extent of drug use and drug trading in the district/area in which you are working.

1. Biographical Information

Name of respondent: .....
Address of respondent: .....

2.a Are there individuals using alcohol/drug in this district/area?

Yes .....
No .....

2.b If yes

(i) Which is the most used drug (alcohol, tobacco or other drugs) in this district/area, and what proportion/percentage of the total population would you say use this drug?

Most used drug: Proportion using this drug:

…….. ……

(ii) If there are individuals using alcohol in this district, what type of alcohol is mostly used, by whom and then (occasion)?

Type of alcohol Most used drugs:	Persons mostly using this type of alcohol:	Occasion here this type of alcohol is mostly used
……	Gender: …… Age group: ……	……

(iii) If there are individuals using illegal drugs(e.g. dagga, cocaine) in this district, what type is mostly used, by whom and when (occasion)?

Type of illegal Drug mostly used	Persons mostly using this drug:	Occasion where this drug is mostly Used:
……..	Gender ……... Age group ……..	……..

3. If alcohol is used in this district/area, at which places is it sold and how many of these places exist?

(i) Bottle stores? If yes, how many bottle stores are there?

Yes …….. Number: ……
No ……
Don't know ……..

(ii) Tarvens? If yes, how many tarvens are there?

Yes: …….. Number: ……..
No: ……
Don't know: ……

(iii) Local shops? If yes, how many shops are there?

Yes: …….. Number: ……..
No: ……
Don't know: ……

(iv) Supermarkets? If yes, how many are there?

Yes:..... Number: .....
No: .....
Don't know: .....

(v) Shebeens? If yes, how many are there?

Yes:..... Number: .....
No: .....
Don't know: .....

(vi) Other (specify)? If yes, how many are there?

Type: .....
Yes: ..... Number: .....
No: .....
Don't know: .....

4.a Those people, if there are nay, who use alcohol, do they generally .....

Use it daily? .....
Less often than daily? .....

4.b If less often than daily, is it generally used:

During the week or: .....
During weekends?: .....

5. If illegal drugs are used in this district/area, at which place are they sold and how many of these places exist?

(i). Bottle stores? If yes, how many bottle stores are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(ii). Tarvens? If yes, how many tarvens are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(iii) Local shops? If yes, how many shops are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(iv) (Supermarkets?) If yes, how many are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(v) Shebeens? If yes, how many are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(vi) Hawkers/vendor? If yes, how many are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(vii) Chemists? If yes, how many are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

(viii) Other (specify)? If yes, how many are there?

Yes: ..... Number: .....
No: .....
Don't know: .....

6.a Those people, if here are any, who use illegal drugs, do they generally .....

Use it daily?: .....
Less often than daily? .....

6.b If less often than daily, is it generally used:

During the week or: .....
During weekends? .....

7.a Is home-made alcohol sold in this district/area?

Yes: .....
No: .....
Don't know: .....

7.b If yes, what is it made of (ingredients)?

.....

8.a Are there dagga plantations in this district/area?

Yes: .....
No: .....
Don't know: .....

8.b If yes, how many are there?

Few: .....
Many: .....
Can't say: .....

9. Generally speaking, is dagga use views as harmful in this district/area

Yes: .....
No: .....
Can't say: .....

10. Generally speaking

(i) Is dagga use acceptable by the local communities

Yes: .....
No: .....

11. Do you think that the use of dagga should be legalized?

Should be legalized: .....
Should not be legalized: .....
Can't say: .....
Explain your answer: .....

12.a Are there people in this district/area who use mixtures of dagga and mandrax?

Yes: .....
No: .....
Can't say: .....

12.b If yes, what proportion more or less in the total population, use mixtures of dagga and mandrax?

.....

13. If there is a follow up on information/programme of similar nature would you be willing to take part in it again?

Yes .....
No .....

This questionnaire will be left with you for a period of 3 days and after which the research assistant will arrange with you the date and time for the interview.

Thank you very much for having participated in this information exercise. Your cooperation is highly appreciated.

ATTACHMENT – G

STRUCTURED QUESTIONNAIRE

HEALTH-RELATED ALCOHOL/DRUG USE STUDY

SANCA-NONGOMA would like your permission to include you in the research that they are doing on the use of alcohol and other substances, such as dagga and pain killers. Your participation will help SANCA and the clinic to get some overview of the situation in your community regarding the use of alcohol and other substances. It will also help to improve the treatment offered to the patients at the clinics. A research assistant will ask you questions and thereafter the nurse will do a medical examination. Your answers will be treated in strictest confidence. We would also like to know if you would be available for a follow-up study.

For a summary of the overall results of the research, contact Mr Sipho Mathe (Tel. 035-8310077; Cell 083-476-2154) after approximately six months.

Your assistance is greatly appreciated.

CO-WORKER COMPLETE THIS TABLE ACCORDING TO THE INSTRUCTIONS IN THE ATTACHED PAPER:

Date:	
Clinic name:	
Respondent number:	
File number:	

CARD NO.						1	1
CLINIC NO.							2
RECORD NO.							3-5
PROJECT NO.							6-11

1

A. BIOGRAPHICAL DATA

1. Sex of respondent — Male 1 Female 2 — 12

First, tell us a bit about yourself

2. How old are you, in years _____ years — 13-14

3. Are you — 15

Married legally	1	Widow/Widower?	4
		Divorced?	5
Married ceremonially	2	Live together	6
Never married	3	Separated?	7

4. CO-WORKER PROBE AND COMPLETE: Highest educational qualification — 16

None	1
Grade 1 & 2 (Sub A & B)	2
Standard 1	3
Standard 2 - 5	4
Standard 6	5
Standard 7	6
Standard 8 - 10	7
Post matric	8

5. CO-WORKER PROBE: — 17

Resident in formal sector of Nongoma	
Resident in the village sector of Nongoma	

6. What is your (or if you are not single) joint income (both spouses) per month (grass income from all sources)? — 18-19

	Single	Joint
None	1	1
Less than R200	2	2
R 200 - R1 199	3	3
R1 200 - R1 999	4	4
R2 000 - R3 999	5	5
R4 000 - R8 999	6	6
R9 000 and above	7	7

7. What is your current occupation? _____ — 20-21

8. In the <u>past 12 months</u> have you attended

	Never	Weekly	Monthly	1-4 times a year	
Church	0	1	2	3	22
Celebrations (e.g. birthday parties/ weddings/ funerals/univeiling of tombstones)					23
Traditional ceremonies (umsebenzi wabaphantsi/ mosebetsi wabadimo)					24

B. ALCOHOL/DRUG USE | 1 |

SOME PEOPLE DRINK ALCOHOLIC BEREVERAGES (E.G. BEER, BRANDY, ETC.) OTHERS NOT

9. Have you ever had an alcoholic drink? (e.g. beer, wine, brandy, etc.)

Yes	1	
No	2	25

10. Have you had an alcoholic drink during the past 12 months?

Yes	1	
No, drank alcohol in past but not in past 12 months	2	26

If you had an alcoholic drink during the past 12 months continue with the questionnaire, proceed with question 11.

11. LET'S THINK OF WINE

11.1 Have you ever drunk **WINE**?
If no, continue to 12

Yes	1	
No	2	27

11.2 Have you drunk **WINE** during the past 12 months?

Yes	1	
No, drank alcohol in past but not in past 12 months	2	28

11.3 How often would you say did you drink **WINE** during the past 12 months?

Daily, five or six times a week		01	
Three or four times a week		02	
Twice a week	Weekend (Saturday/Sunday)	03	
	Week (Monday to Friday)	04	
	Week and weekend	05	
Once a week	Weekend (Saturday/Sunday)	06	
	Week (Monday to Friday)	07	
Three or four times a month		08	
Twice a month		09	
Once a month		10	
Three or four times a year (e.g. every 3rd or 4th month)		11	
Twice a year		12	
Once a year		13	29-30

11.4 How many (glasses of **WINE** did you usually drink on an occasion during the past 12 months?
CO-WORKER NOTE: WINE: 250 ml bottles = 2 glasses; 500 ml bottles = 4 glasses; 750 ml bottles = 6 glasses

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	31

11.5 What is the largest quantity (glasses) of **WINE** that you drank on an accasion during the past 12 months?

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	32

		1

11.6 How often would you say did you drink the above largest quantity of **WINE** (that you have drunk on an occasion) during the past 12 months?

Daily, five or six times a week		01		
Three or four times a week		02		
Twice a week	Weekend (Saturday/Sunday)	03		
	Week (Monday to Friday)	04		
	Week and weekend	05		
Once a week	Weekend (Saturday/Sunday)	06		
	Week (Monday to Friday)	07		
Three or four times a month		08		
Twice a month		09		
Once a month		10		
Three or four times a year (e.g. every 3rd or 4th month)		11		
Twice a year		12		
Once a year		13		33-34

12. **LET'S THINK OF ORDINARY BEER**

12.1 Have you **ever** drunk ORDINARY BEER (e.g.) Castle, Black label, Ohlsons)?

If no, continue to question 13

Yes	1	
No	2	35

12.2 Have you drunk ORDINARY BEER during the past 12 months?

Yes	1	
No, drank before but not in past 12 months	2	36

12.3 How often would you say did you drink ORDINARY BEER during the past 12 months?

Daily, five or six times a week		01		
Three or four times a week		02		
Twice a week	Weekend (Saturday/Sunday)	03		
	Week (Monday to Friday)	04		
	Week and weekend	05		
Once a week	Weekend (Saturday/Sunday)	06		
	Week (Monday to Friday)	07		
Three or four times a month		08		
Twice a month		09		
Once a month		10		
Three or four times a year (e.g. every 3rd or 4th month)		11		
Twice a year		12		
Once a year		13		37-38

12.4 How many small cans/bottles (340ml) of **ORDINARY BEER** did you usually drink on an occasion during the past 12 months?

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	39

	1

12.5 What is the largest quantity (340ml) of **ORDINARY BEER** that you drank on an occasion during the past 12 months?

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	40

12.6 How often during the past 12 months did you drink the above largest quantity of **ORDINARY BEER** (that you drank on occasion)?

Daily, five or six times a week		01	
Three or four times a week		02	
Twice a week	Weekend (Saturday/Sunday)	03	
	Week (Monday to Friday)	04	
	Week and weekend	05	
Once a week	Weekend (Saturday/Sunday)	06	
	Week (Monday to Friday)	07	
Three or four times a month		08	
Twice a month		09	
Once a month		10	
Three or four times a year (e.g. every 3rd or 4th month)		11	
Twice a year		12	
Once a year		13	41-42

13 LET'S THINK OF SORGHUM BEER

13.1 Have you **ever** drunk **SORGHUM BEER** (commercially brewed and sold over the counter)?
If no, continue to question 14

Yes	1	
No	2	43

13.2 Have you drunk SORGHUM BEER during the past 12 months?

Yes	1	
No, drank before but not in past 12 months	2	44

13.3 How often would you say did you drink **SORGHUM BEER** during the past 12 months?

Daily, five or six times a week		01	
Three or four times a week		02	
Twice a week	Weekend (Saturday/Sunday)	03	
	Week (Monday to Friday)	04	
	Week and weekend	05	
Once a week	Weekend (Saturday/Sunday)	06	
	Week (Monday to Friday)	07	
Three or four times a month		08	
Twice a month		09	
Once a month		10	
Three or four times a year (e.g. every 3rd or 4th month)		11	
Twice a year		12	
Once a year		13	45-46

1

13.4 How many cartons (litre) of **SORGHUM BEER** did you usually drink on an occasion during the past 12 months?

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	47

13.5 What is the largest quantity (litre cartons) of **SORGHUM BEER** that you drank on an occasion during the past 12 months?

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	48

13.6 How often during the past 12 months did you drink the above largest quantity of **SORGHUM BEER** (that you drank on occasion)?

Daily, five or six times a week		01	
Three or four times a week		02	
Twice a week	Weekend (Saturday/Sunday)	03	
	Week (Monday to Friday)	04	
	Week and weekend	05	
Once a week	Weekend (Saturday/Sunday)	06	
	Week (Monday to Friday)	07	
Three or four times a month		08	
Twice a month		09	
Once a month		10	
Three or four times a year (e.g. every 3rd or 4th month)		11	
Twice a year		12	
Once a year		13	49-50

14 **LET'S THINK OF HARD LIQUOR (e.g. brandy, whisky, vodka, rum)**

14.1 Have you **ever** drunk **HARD LIQUOR**?
If no, continue to question 15

Yes	1	
No	2	51

14.2 Have you drunk **HARD LIQUOR** during the past 12 months?

Yes	1	
No, drank before but not in past 12 months	2	52

14.3 How often would you say did you drink **HARD LIQUOR** during the past 12 months?

Daily, five or six times a week		01	
Three or four times a week		02	
Twice a week	Weekend (Saturday/Sunday)	03	
	Week (Monday to Friday)	04	
	Week and weekend	05	
Once a week	Weekend (Saturday/Sunday)	06	
	Week (Monday to Friday)	07	
Three or four times a month		08	
Twice a month		09	
Once a month		10	
Three or four times a year (e.g. every 3rd or 4th month)		11	
Twice a year		12	
Once a year		13	53-54

	1

14.4 How much (tots) **HARD LIQUOR** did you usuallydrink on an occasion during the past 12 months?

NOTE: 25ml = 1 tot; 200 ml (nip) = 8 tots; 375 ml (pint) = 15 tots; 500 ml (half jack)= 20 tots; 750ml (quart) = 30 tots; 1 litre =40 tots

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	55

14.5 What is the largest quantity (glasses) of HARD LIQUOR that you drank on an occasion during the past 12 months?

1-2	3-4	5-8	9-12	13-16	17-20	More than 20	
1	2	3	4	5	6	7	56

14.6 How often would you say did you drink the above largest quantity of HARD LIQUOR (that you have drunk on an occasion) during the past 12 months?

Daily, five or six times a week		01	
Three or four times a week		02	
Twice a week	Weekend (Saturday/Sunday)	03	
	Week (Monday to Friday)	04	
	Week and weekend	05	
Once a week	Weekend (Saturday/Sunday)	06	
	Week (Monday to Friday)	07	
Three or four times a month		08	
Twice a month		09	
Once a month		10	
Three or four times a year (e.g. every 3rd or 4th month)		11	
Twice a year		12	
Once a year		13	57-58

15 **LET'S THINK OF HOMEBREW**

15.1 Have you **ever** drunk **HOMEBREW**?
If no, continue to question 16

Yes	1	
No	2	59

15.2 Have you drunk **HOMEBREW** during the past 12 months?

Yes	1	
No, drank before but not in past 12 months	2	60

		1&2
15.3	How <u>often</u> would you say did you drink **HOMEBREW**during the <u>past 12 months</u>?	
Daily, five or six times a week		01
Three or four times a week		02
Twice a week	Weekend (Saturday/Sunday)	03
	Week (Monday to Friday)	04
	Week and weekend	05
Once a week	Weekend (Saturday/Sunday)	06
	Week (Monday to Friday)	07
Three or four times a month		08
Twice a month		09
Once a month		10
Three or four times a year (e.g. every 3rd or 4th month)		11
Twice a year		12
Once a year		13

61-62

CARD NO	2	2
CLINIC NO		2
RECORD NO		3-5
PROJECT NO		6-11

2

16. SUBSTANCES OTHER THAN ALCOHOL (CO-WORKER PROBE)
During the past 12 months how often, if ever, would you say, did you, WITHOUT A DOCTOR TELLING YOU TO DO SO, use:

	Times per week				Times per month			Times per year			Never			
	Daily/ 5-6	3-4	2	1	3-4	2	1	3-4	2	1	0			
Ordinary pain relievers that one buys over the counter (e.g. Grandpa, Syndol, Disprin, Codis)	10	09	08	07	06	05	04	03	02	01	00			12-13
Stuff that help you to sleep or rest (e.g. Amytal, Nembutal)	10	09	08	07	06	05	04	03	02	01	00			14-15
Stuff that help you to stay awake or give energy (e.g."remakers", pep pills, dietpill, black bombs, purple hearts)	10	09	08	07	06	05	04	03	02	01	00			16-17
LSD (acd)	10	09	08	07	06	05	04	03	02	01	00			18-19
Stuff that relief **depression** (e.g. Tofranol, Elavil	10	09	08	07	06	05	04	03	02	01	00			20-21
Cocain	10	09	08	07	06	05	04	03	02	01	00			22-23
Crack cocain	10	09	08	07	06	05	04	03	02	01	00			24-25
Severe pain reliever (e.g. pethidine, welconal opium, morhine)	10	09	08	07	06	05	04	03	02	01	00			26-27
Ordinary medicine that one buys over the counter (e.g. cough mixtures, Lennons, antihistamine)	10	09	08	07	06	05	04	03	02	01	00			28-29
Snuff	10	09	08	07	06	05	04	03	02	01	00			30-31
Dagga	10	09	08	07	06	05	04	03	02	01	00			32-33
White pipe (mandrax & dagga)	10	09	08	07	06	05	04	03	02	01	00			34-35
Mandrax	10	09	08	07	06	05	04	03	02	01	00			36-37
Heroin	10	09	08	07	06	05	04	03	02	01	00			38-39
Steroids (improves physical performance)	10	09	08	07	06	05	04	03	02	01	00			40-41
Tobacco/cigarettes	10	09	08	07	06	05	04	03	02	01	00			42-43
Sniffing glue, petrol, benzyne, thinners, tippex, dry cleaning material, etc.	10	09	08	07	06	05	04	03	02	01	00			44-45

17. If you have used tobacco/cigarettes during the past 12 months:

17.1 What did you mainly use, cigarettes, cigars, pipe or chewable tobacco? (Choose one)

Cigarettes		
Cigars		
Pipe		
Chewable tobacco		
All of the above		46

	2&3

17.2 Thinking of that which you mainly smoked in the past 12 months, how many cigarettes/pipes/cigars did you usually smoke in a day

Over 40		
21-40		
11-20		
5-10		
2-4		
1 per day or fewer		47

GENERAL: CURRENT USERS OF ALCOHOL/DRUGS

18. Thinking now of your **reason(s)** for using alcohol/substances other than alcohol that you said that you that you used during the past 12 months:

What was you **main reason** for using:

Alcohol _____ 48

Other Substances _____ 49

19. With whom, if anyone, were you most often when you used:

Alcohol _____ 50

Other Substances _____ 51

20. Where did you most often use:

Alcohol _____ 52

Other Substances _____ 53

21. Have you, or have you not at some time during the past 12 months **felt a need for help/advice** in connection with your use of:

	Yes	No	
Alcohol	1	2	54
Other substance	1	2	55

CARD NO	3	1
CLINIC NO		2
RECORD NO		3-5
PROJECT NO		6-11

3

22. **CO-WORKER PROBE (Also note that "other substances" include those listed in q 16)**

	Ever				In the past 12 months					
	Alcohol		Other substances		Alcohol		Other substances			
	Yes	No	Yes	No	Yes	No	Yes	No		
Do you need a drink/other substances (q 16) when you can't sleep and/or are extremely upset and/or have another severe difficulty/problem	1	2	3	4	1	2	3	4		12-13 14-15
Have you had DTs (Delirium Tremens), severe shaking, heard voices or seen things that were not there when you suddenly stopped drinking/taking other substances (q 16)	1	2	3	4	1	2	3	4		16-17 18-19
Have people annoyed you by criticizing your drinking/taking other substances (q 16)	1	2	3	4	1	2	3	4		20-21 22-23
Have you felt bad or guilty about your drinking/taking other substances (q 16)	1	2	3	4	1	2	3	4		24-25 26-27
Have you had a drink/taking other substances (q 16) first thing in the morning to steady your nerves or get rid of a hangover	1	2	3	4	1	2	3	4		28-29 30-31
Have you had a memory lapse/blackout after drinking/taking other substances (q 16)	1	2	3	4	1	2	3	4		32-33 34-35
Has your drinking/taking another substance (q 16) affected your work	1	2	3	4	1	2	3	4		36-37 38-39
Has your drinking/taking other substances (q 16) caused problems between you & your family	1	2	3	4	1	2	3	4		40-41 42-43
Have you been in an accident/had an injury because of your drinking/taking other substances (q 16)	1	2	3	4	1	2	3	4		44-45 46-47
Have you had a feeling you should cut down on your drinking/taking other substances (q 16)	1	2	3	4	1	2	3	4		48-49 50-51
Are you drinking/taking other substances (q 16) in greater quantities at present than you did before? **(CO-WORKER NOTE: "ever" = approximately 5 years ago; "over past 12 months progressively drank more")**	1	2	3	4	1	2	3	4		52-53 54-55
Has it happened that you could not stop drinking/taking other substances (q 16) when you wanted to	1	2	3	4	1	2	3	4		56-57 58-59

24. **Additional comments by co-worker:**

_____ 60

_____

	4	
CARD NO	4	1
CLINIC NO		2
RECORD NO		3-5
PROJECT NO		6-11

C. CLINICAL EXAMINATION <u>To be completed by consulting nurse/medical doctor</u>

1. Presenting illness of patient (diagnosis today)

		12-13

2. History of chronic illnesses and/or illnesses related to drinking/drug taking (e.g. pancreatitis, TB, HIV, "alcoholism" effects of vitamine deficiency such as repeated occurrences of Pelagra)

		14-15

3. **Clinical examination results:**

Yes	No		
1	2		16

Obvious signs: Specify

		17

	Yes	No		
Conjunctival injection (red/yellow eyes)	1	2		18
Hand tremor	1	2		19
Tongue tremor	1	2		20
Hepatomegaly	1	2		21
Smell of alcohol (breath/clothes)	1	2		22
Slurring speech	1	2		23
Ataxia - staggering gait	1	2		24
Gradual loss of weight	1	2		25
Glucose in urine	1	2		26
Smell of dagga	1	2		27
Impaired coordination of movements	1	2		28
Aggression	1	2		29
Glue stains on clothes	1	2		30
Chronic running nose/upper respiratory infections	1	2		31
Drowsiness	1	2		32

4. Clinic Section:

	4
Tuberculosis	1
Curative	2
Maternal	3
Psy-chia-tric	4

33

5. **Additional comments**

34

ATTACHMENT -H

CASE STUDY OF A MDR –TB PATIENT

PSYHOSOCIAL REPORT ON HOME VISIT TO MULTI-DRUG RESISTANT TB PATIENT AT MAHLABATHINI (OKHUKHO) DISTRICT OF KWAZULU-NATAL

DATE OF VISIT: **14 SEPTEMBER 2000**

NAME OF THE PATIENT: **MR X**

NAME OF THE RESEARCHER: **MR S. V. MATHE**

TIME SPENT IN AN INTERVIEW: **1 HOUR 15 MINS**

1. INTRODUCTION

NB: The name of the social worker, patient and his wife have not been mentioned in this study. This is done for confidentiality and ethical reasons.

This is an investigation into the problem of alcohol abuse and other substances by the patient on treatment of tuberculosis (TB). It has been learnt that five of the seven TB patients, who had been certified as multi-drug resistant patient, have died. It was also learnt that one of the two remaining was known to be abusing alcohol. This was reported by the nurse in charge of the TB ward at Benedictine Hospital. Since the other, second patient, was also an MDR-TB, the researcher was therefore interested to find out whether he was or was not abusing alcohol. The hypothesis at the onset was that: *It is highly likely that the second MDR patient was also abusing alcohol*; *hence he is a certified MDR patient.* The name of the patient is Mr X (Male) 46 years of age. The researcher in this case (Mr. Sipho Mathe) was accompanied by the social worker Miss Y, to the home of the patient. At the home of the patient, he was not found, he was visiting his neighbors. However his wife: Mrs. X, (Female) 39 years of age received the researcher and the accompanying social worker and agreed to participate in an interview concerning her husband and her family. The researcher assured the interviewee of the confidentiality of the interview, in question. The distance from Nongoma (Benedictine Hospital) to Mahlabathini at OKHUKHO was 67 kms (via St Francis Hospital).

It is important to note that Miss Y, the social worker accompanied the researcher (Mr Mathe) mainly as the moderator and observer in this case.

2. DISCUSSION

After the researcher introduced himself and his colleague and stated the purpose of the visit, she tended to be at ease, to know that the investigative visit was in the best interest of her husband and the family.

2.1 FAMILY COMPOSITION

2.1.1 Mr. X, 46 years of age. Husband and the father of four children.

2.1.2 Mrs. X, 39 of age. She attended school up to Grade 3. She is a house wife. Out of their marriage they have the following children:

- First born, (female) 15 years old. Attending school – Grade 7.
- Second born, (female) 13 years old. Attending school – Grade 6.
- Third born, (male) 10 years old. Attending school – Grade 3.
- Fourth child, (male) 5 years old. He is doing – Grade 0.

It is alleged by Mrs. X, that there is a boy who was born out of wedlock. However, he does not stay together with the family.

3. SOCIOECONOMIC BACKGROUND OF THE FAMILY

Previously, Mr. X was working in the mines at Carletonville in Gauteng. He later joined the coalmines at Okhukho in Mahlabathini from 1994-1998. During 1998 he developed TB disease and was put on disability grant. When later he received some money from his work in the mines, he built himself a nice small home and also bought himself a vehicle (Van). According to his wife it is still unregistered. However, he uses it to travel from one point to another. He buys a bag of meal mealie (maize meal) for the household food. However, he rarely buys meat or vegetable to sustain nutritional level of daily food at home. He uses the

disability grant to buy his family groceries. The wife of the patient concerned did say that the money is mostly used in buying liquor and cigarettes.

- **Health status of Mr. X**

When the wife was asked as to what was the present health status of her husband? She said that he could be better if he was not drinking beer – alcohol. She further said that he coughs a lot at night. When asked as to where does he get alcohol. She said that there is always home-brewed alcohol in the neighbourhood. When asked whether she knows what type of home – brewed alcohol was. She thought that it was the usually known home-brewed beer-alcohol. She further said that she knows of concoction brewed alcohol, but she has never heard of it being brewed in her neighbourhood. She further said that her husband is usually not home but is at the place where drinking of alcohol by the local village men is taking place.

Mrs. X (interviewee) further revealed that her husband is a heavy smoker. He smokes 20 packet of cigarettes per day. However, she implored the researcher not to say to her husband that she reported this, otherwise she will be beaten up and abused in any physical manner possible. She was assured of the confidentiality of the interview between the researcher and herself. It was asked whether her husband doesn't he become violent on her sometimes. She said that her husband does utter abusive words of anger direct at her and children. However, he rarely beats her and children.

TB TREATMENT PROGRAMME

Mr. X was initially treated at Benedictine Hospital and was later referred to King George (TB) Hospital in Durban as an MDR patient. Whilst he was admitted at King George Hospital, a message reached him that his vehicle at home was stolen and as such he asked for a pass-out.

After which, when he returned to the hospital(King George) he asked that he be treated at his home. However, the problem expressed by his wife is that he does not take his TB treatment as he should. Several times she begs him to take his treatment. Since he leaves home in the morning and returns in the evening, he rarely takes his treatment according to prescribed

schedule times. This could be one of the factors reinforcing an MDR aspect of TB disease, apart from alcohol abuse.

FEARS FOR THE FUTURE

When asked as to whether does she still have hope for the future and her family. She responded by saying that when she sees the young bereaved women clad in clothing typifying widowhood, she imagines and fears that she will soon be the next young woman to be in this situation. She further said that she was not ready or prepared for this crisis situation.

When she asked whether she believed her husband could be cured, she said yes it was possible but only if he could stop abusing alcohol and stop smoking cigarettes. When asked whether her husband does he not also smoke dagga. She said that she was not aware of other substance other that alcohol and cigarettes. One thing she fears for most is her children who could be left with no source of income, thus creating a crisis beyond her coping ability.

The interview finally came into an end at the time when relationship (rapport) had reached a level of openness and sharing of fears and insights for the future without any fear or suspicion on the part of the interviewee (Mrs. X). She was thanked for the cooperation and asked to tell her husband to report at Benedictine Hospital and see TB Clinic for follow up purposes on his treatment programme.

It is interesting to note that the patient did report to the hospital on the 15th September 2000, having been told by his wife.

EVALUATION

The purpose for the home visit was stated well in the introduction. The hypothesis was that it was highly likely that the MDR (TB) patient was abusing alcohol. What has been verified was that, indeed, the patient was abusing alcohol. It was further found out that it was not only alcohol abuse but that the patient was also a heavy cigarette smoker. It is alleged by his wife that he smokes a packet of 20 cigarettes a day. However, drinking of alcohol was dating back even before he started working in the mines.

There is also an aspect of noncompliance with the treatment (pills-taking) programme. The wife is regarded as a minor by her husband and as such, she has no strong influence over him or to compel him to take the treatment regularly.

She is desperate of the fact that she has no control over the situation. The little income the husband has from disability grant is spent in buying liquor and cigarettes. Very little and insignificant contribution goes to the family needs and food.

Although alcohol abuse is one of the factors that contribute to emergence of MDR on TB patients, it is clear therefore that alcohol abuse plays the significant part in disturbing the treatment programme and thus exacerbates the progression of MDR-TB disease.

PLAN OF ACTION

It is strongly recommended that since it is known that alcohol abuse plays an important and crucial part in disturbing the treatment of MDR- TB patients, an indepth research should focus on finding out the extent of alcohol abuse in reinforcing an MDR- TB disease on patients under treatment. This is very important because it is clear that little attention is paid to substance abuse (especially alcohol abuse).

Miss Y (SANCA Nongoma social worker) has to make a follow-up on home visit-plan on the patient and his family as well as a joint long term intervention plan with the TB nursing personnel at Benedictine Hospital.

Attachment -I

PROVINCE OF KWAZULU-NATAL | **ISIFUNDAZWE SAKWAZULU-NATALI** | **PROVINSIE KWAZULU-NATAL**

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TO WHOM IT MAY CONCERN

This is to confirm that **Mr S. V. Mathe** approached the **Department of Education authorities in Nongoma** for permission to conduct research at selected schools in Nongoma. After full explanation on the purpose of research among school pupils, permission was granted with understanding that the research being intended for academic purpose, it would be later developed into school programme in prevention of alcohol and drug abuse among school pupils.

In short, therefore, the intended research was fully supported by the circuit of Nongoma and we, therefore, look forward to hearing the results of the endeavour.

C DISTRICT CO-ORDINATOR
MR H.A.S MADELA

DISTRICT MANAGER
DR M. D. BUTHELEZI