

Full thesis

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**SOCIAL LEARNING PROCESSES OF HIV/AIDS WOMEN
CAREGIVERS ON THEIR USE OF TRADITIONAL FOODS AND
MEDICINAL PLANTS:**

**The case of Raphael Centre and Keiskamma Art and Health Centre
Communities of Practice, Eastern Cape Province, South Africa**

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ABSTRACT

The scale of people being infected by HIV/AIDS (*Human Immunodeficiency Virus /Acquired Immune Deficiency Syndrome*) has meant that the family and the community have had to become involved in caring for the sick (Van Dyk, 2005). This has inevitably led to the emergence of informal caregivers in the form of family members caring for their relatives (Kipp, Nkosi, Laing & Jhangri, 2006).

The research investigated the social learning of women caregivers looking after people living with HIV/AIDS, with emphasis on caregiving practices related to how they use traditional foods and medicinal plants. The research was undertaken in Grahamstown at the Raphael Centre and in Hamburg at Keiskamma Health Centre and Art Project, Eastern Cape, South Africa.

Data was collected using interviews, focus group discussions and diaries written by participants. The data was analyzed in two phases: the first phase involved reading the interview transcripts and collating the responses into analytical memos that were captured into broad categories, while the second phase made use of the community of practice analytical framework to further analyze the data to get better understanding of the social learning processes.

This study reveals that participating in a community of practice like Raphael Centre and Keiskamma Health Centre enables caregivers to learn about caregiving. It also reveals that within these communities of practice there are varied learning processes that take place, such as observational and collaborative learning. The research also revealed that caregivers learn from the communities from which they come, for example caregivers learn about traditional food and medicinal plants which they use from their family members, friends, other caregivers as well as non governmental organizations. The research found that caregivers are influenced in their learning and practices by a number of factors which include their own experiences, ambivalent messages from different stakeholders concerned with fighting HIV/AIDS and exposure to new information.

The research recommends that diverse learning processes in a community of practice and outside a community of practice should be encouraged and strengthened. It also recommends that HIV/AIDS caregiving options should be strengthened by drawing on experience and knowledge of caregivers. Caregivers should be encouraged to be self-sustaining to improve their caregiving practices. Stakeholders in the field of HIV/AIDS should

be alert to and address ambivalence on use of medicinal plants. Existing programmes that enable women to learn about new information on HIV/AIDS should be strengthened.

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LIST OF ACRONYMS

HIV/AIDS	<i>Human Immunodeficiency Virus /Acquired Immune Deficiency Syndrome</i>
UNAIDS/WHO	The Joint United Nations Programme on HIV/AIDS and World Health Organization
LAV	<i>Lymphadenopathy-associated virus</i>
HTLV-111	<i>Human T-cellphotropic virus type 3</i>
NACOSA	National AIDS Convention of South Africa
ARVs	Anti-retroviral drugs
TAC	Treatment Action Campaign
ASSA	The Actuarial Society of South Africa
WECD	World Commission on Environment and Development
JEEP	The project ' <i>Jardins et Elevages de Parcelle</i> '
VCT	HIV Voluntary Counselling and Testing
CD4	Cluster of differentiation 4
H.C	Humburg caregiver
G.C	Grahamstown caregiver
Hfg	Humburg focus group discussion
Gfg	Grahamstown focus group discussion
HDW	Humburg diary writer
GDW	Grahamstown diary writer
G.K	Grahamstwon key informant
AM	Analytic memos

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CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 THE RESEARCH INTEREST AND CONTEXT

The Joint United Nations Programme on HIV/AIDS and World Health Organization (UNAIDS/WHO, 2007) reported *Acquired Immune Deficiency Syndrome* (AIDS) as being the most critical problem facing public health in the world. The UNAIDS/WHO report estimated that worldwide 33.2 million people were living with *Human Immunodeficiency Virus* (HIV) in 2007. In that year alone, it was estimated that 2.1 million people died of AIDS with another 2.5 million new infections. Of the new HIV infections and deaths caused by AIDS in 2007, southern Africa accounted for one third of the number, which is disproportionately high since the region contains only 6% of the world's population.

South Africa was estimated as having the highest number of HIV infections worldwide. The UNAIDS/WHO (2007) report also indicated that new infections of pregnant women dropped from 30% in 2005 to 29% in 2006. In the Eastern Cape Province where Grahamstown and Hamburg are located, AIDS was reported to be the leading cause of death (Dorrington, Bradshaw & Budlender, 2002). Several writers cite issues of migration, poverty, denial, shifting of blame by the general public during the early days of the disease, and transition from the apartheid system during 1993-2000 as some of the reasons why South Africa has been the worst affected country (Pembrey, 2007).

One of the findings of the UNAIDS/WHO report (2007, p. 4) indicates that worldwide, of the 6 800 people who become infected every day from HIV, 5 700 die of AIDS because of "inadequate access to HIV prevention and treatment services". Odendal (2007) indicated that most of the people in the Eastern Cape who required treatment for HIV/AIDS were not receiving it, because the Department of Health was failing to provide anti-retroviral drugs (ARVs) to everyone who needed them.

Besides the shortage of medication Oner (2006) also argues that hospitals are not able to cater for everyone suffering from HIV/AIDS because of the costs that are needed to care for them in hospital. The 'brain drain' of medical practitioners, who are leaving the country and going overseas to take up positions with better working conditions, worsens the dilemma (Robertson, 2006). As a result of these challenges, better collaboration between the

government of South Africa and the community would have been ideal (Russel & Schneider, 2000). However, Akintola cited in Oner (2006) states that families and communities are the ones increasingly taking responsibility of caring for people that are living with HIV/AIDS.

Several studies that were done on caregiving in Africa indicated that family members (particularly women) are the ones who carry the burden of looking after people who are sick (Schatz, 2007; Oner, 2006). In my own experience I have found many women assuming the role of caregivers, which stimulated my interest in considering women as caregivers for this study.

In 2006, I worked as a volunteer at a Non-Governmental Organisation (NGO) in Grahamstown called the Raphael Centre, which offers services to people who are infected with HIV/AIDS. I did this as part of my honours degree in Social Sciences. From this experience, I learnt through personal observation that most of the Raphael Centre's clients were HIV infected women who, besides looking after themselves, were also primary caretakers of children and relatives living with HIV/AIDS.

During that same period I was also involved as an assistant researcher in the Department of Pharmacy at Rhodes University, in a programme investigating the level of knowledge of community health workers about HIV/AIDS. This study was conducted in all the clinics and the only hospital in Grahamstown. Among the community health workers who were interviewed, the majority were women. From these experiences I therefore assumed that women in Hamburg and Grahamstown comprised the majority of caregivers for people living with HIV/AIDS which was later proved to be true from evidence generated in this research.

With families playing enormous roles in caring for people living with HIV/AIDS, there is a concern that such families have considerably higher costs than other families (Kaiser Family Foundation, 2001). Such costs include additional health care, transport and nursing needs associated with anyone who is HIV/AIDS infected in the household (Kaiser Family Foundation, 2001). All these expenses strip the families of means for basic necessities, such as clothing and food.

In deprived economic situations, Gari (2004) argues that natural resources are vital to the livelihood of the poor as they are locally available and affordable. Traditional foods and natural resources are particularly important in the context of HIV/AIDS, where poverty and HIV/AIDS are regarded as mutually aggravating. There is evidence that people use traditional foods and medicinal plants, in particular, when they face a crisis, of which HIV/AIDS is one (Gari, 2004).

Shava (2000) in a study conducted in an Eastern Cape community indicated that people used traditional food plants. Janse van Rensburg et al. (2004) discusses the nutritional quality of traditional foods. This alone makes traditional food of importance in the context of HIV, where provision of adequate nutrition is considered a primary health care element (South Africa, Department of Health, 2001). Medicinal plants are used for primary health care by people living with HIV/AIDS where the poor face limitations in accessing modern drugs because of economic and trade inequalities that are in existence (Gari, 2004).

Affordability of traditional foods and medicinal plants has resulted in many families which are infected and affected by HIV/AIDS, relying more on natural resources for their survival (Gari, 2004). However, this comes with negative consequences. For instance, studies conducted in the Eastern Cape indicate that in unprotected areas there are several plants that are becoming difficult to find because of over-exploitation (Dold & Cocks, 2002). One of the reasons behind over-exploitation of natural resources is the HIV/AIDS pandemic which is causing an increase in the use of medicinal plants, according to these researchers.

Although people in the Eastern Cape are relying on natural resources, and their way of harvesting is "indiscriminate, destructive and unsustainable for many species" (Dold & Cocks, 2002, p. 596), The World Commission on the Environment and Development (1987) recognises that there is great need for people (particularly the poor) to use natural resources as their survival is dependent on the environment. The idea of viewing sustainability as enabling the poor to use natural resources to meet their needs also formed part of the UN Millennium Declaration's related goals. These goals give consideration to the needs of the poor so as to not only emphasise conservation where people are often considered secondary (Lotz-Sisitka, 2004).

In this context I investigated the social learning processes of women caregivers in a community of practice. I also investigated how women learn about caring for people living with HIV/AIDS and particularly how they rely on knowledge of traditional foods and medicinal plants. I became interested in investigating the sustainability practices of caregivers related to the plants that they use and how they learn about them. These questions have led to a concern about social and situated learning when working in the context of HIV/AIDS and sustainability.

Social learning, as opposed to other perspectives of learning argues that the purpose of such learning is to help people solve real issues in life (Hughes, Jewson & Unwin, 2007). It views learning as something that can not be restricted to the presence of a classroom and a teacher but is a process that can happen in many settings. Wenger's (1998) work on communities of practice indicates that people learn by their active participation in a social

setting. In other words, people learn in real life situations by doing, interacting with and observing others.

1.2 THE STUDY AREA

Grahamstown is a small but major city in the Eastern Cape Province of South Africa. Hamburg is a small semi-rural town located in the same province. The Eastern Cape is known for its high rates of poverty, unemployment and increasing incidence of HIV infections (Bradshaw et al., 2000). In Grahamstown the study site was the Raphael Centre, an NGO which provides free HIV/AIDS counselling and testing (Raphael Centre Annual Report, 2004/5). In Hamburg, the study site was at the Keiskamma Health Centre which provides full-time in-patient care for those who need it (Keiskamma Trust, 2008). The Keiskamma Art Project, which equips women with skills of art and craftwork so that they are able to generate income and start their own small enterprises, is also there. Below are the maps of South Africa showing Provincial boundaries with Eastern Cape located in the south-east part of the country.

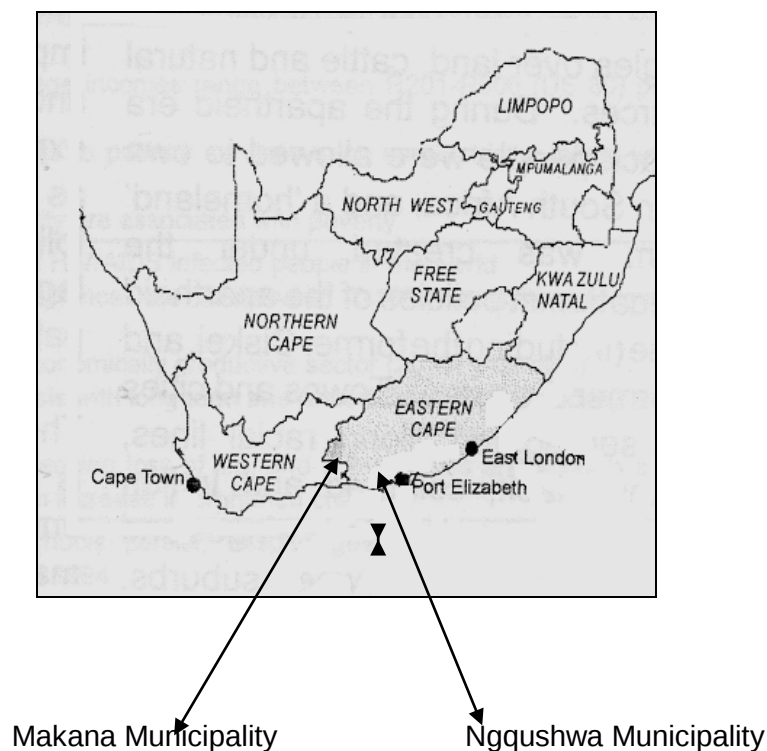


Figure 1.1 Map of South Africa, showing the Eastern Cape Province (Adapted from Lotz-Sisitka & Wilmot, 2008, p.2)

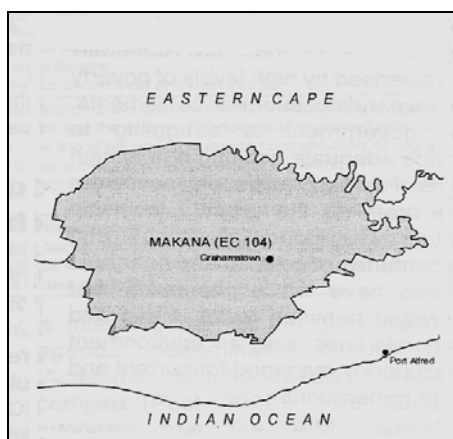


Figure 1.2 A map of Makana Municipality, showing Grahamstown (where Raphael Centre is located) (Adapted from Lotz-Sisitka & Wilmot, 2008, p.2)

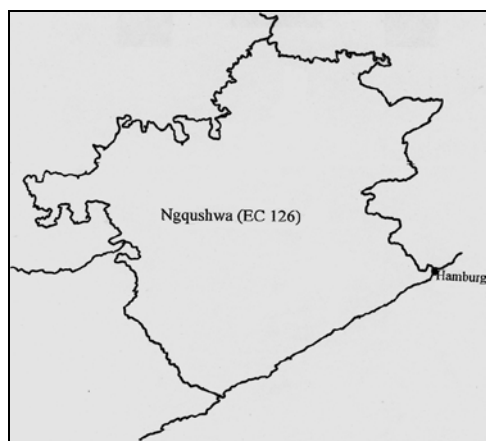


Figure 1.3 A map of Ngqushwa Municipality, showing Hamburg (where Keiskamma Health Centre and Keiskamma Art Project are located) (Downloaded from <http://www.ngqushwamun.gov.za/ourregion.php>)

1.3 RESEARCH STATEMENT

HIV/AIDS is an incurable disease. It requires that those who are infected with HIV be cared for properly so as to prolong their lives. Many people who live with HIV/AIDS are cared for at home. This, therefore, means that people (in this case women) who have not previously been caregivers are learning the expertise of caregiving. In the context of HIV/AIDS, the provision of proper treatment and nutritional foods to people living with HIV/AIDS are primary components of caregiving. Thus the question of how women learn to give care led to the aim and objectives of this study, as outlined below.



1.4 AIM OF THIS STUDY

The aim of the study was to explore how women caregivers in Grahamstown and Hamburg learn, as communities practising caregiving, to use traditional food and medicinal plants when caring for people living with HIV/AIDS.

1.5 OBJECTIVES

The objectives of the study were to:

- Explore learning interactions amongst caregivers and how that shapes their caregiving practices.
- Document which traditional food and medicinal plants are used by caregivers.
- Explore factors which influence caregivers' practices in using traditional food and medicinal plants in relation to HIV/AIDS.
- Establish their sustainable practices associated with plants that they use.

The ultimate intention of the study is to inform environmental educators and health workers on social learning processes associated with the use of traditional food and medicinal plants, and their sustainable use in relation to HIV/AIDS caregiving.

1.6 CLARIFICATION OF KEY CONCEPTS

Caregiver in this research refers to women who are caring for those people who are living with HIV/AIDS in their households.

Traditional foods are foods of indigenous origin i.e. which naturally belong to an area and some that have been used by the community for so long that such foods are now part of that community's tradition.

Wild vegetables and fruits are plants which occur in a wild, uncultivated form and are found in natural ecosystems. Included here are edible plants which are regarded as weeds in arable/cultivated lands. These are plants capable of reproducing and spreading naturally.

Imifuno' or 'pot-herbs' are wild vegetables or spinach which are consumed after cooking.

'Participants' I prefer to use the term 'participants' because I feel the people with whom I engaged during the study, actively participated in discussions about issues related to

HIV/AIDS and voiced their opinions, views and concerns rather than passively providing information in response to questions asked.

'Informants' refers to individuals who were familiar with the research area and were responsible for introducing me to the community and helping me to identify research participants.

'Research Assistants' are the *Xhosa* women who translated for me during data collection. One research assistant was well known to community members in Hamburg, whilst the one I had in Grahamstown was familiar with the kind of research I was conducting as she had participated in a study similar to this one.

Practice is what women in this study were doing in order to look after people living with HIV/AIDS with emphasis on how they use traditional food and medicinal plants. Practice in this study also refers to what women were doing to conserve the plants which they use.

A community of practice is a group of people (in this case HIV/AIDS women caregivers) who share a concern and a set of problems and who meet from time to time to learn together.

1.7 OVERVIEW OF THE THESIS CHAPTERS

Chapter 1 is an introduction to the study. It begins by introducing the research interest and context of the study and the study site and area. The chapter also presents the aim and objectives of the study. This chapter provides clarification of concepts used in the study. The chapter concludes by summarising chapters 2 to 6 below.

Chapter 2 provides a literature review and historical background to HIV/AIDS and its prevalence in southern Africa, South Africa, and the Eastern Cape and more specifically the areas of this research (Grahamstown and Hamburg). It explains informal caregiving in the context of HIV/AIDS in South Africa. This chapter also reviews literature on the use of traditional foods and medicinal plants in relation to caregiving and health, and how women acquire knowledge and practice sustainable use of these plants. The chapter contains a discussion on education and learning and how these aspects have evolved over time. I explain and situate the research in the emerging body of literature on social and situated learning, drawing more specifically on the concept of 'community of practice' as a social

learning theory. In this chapter I also explore the context of the learning community that is being investigated in the study focusing specifically on how adults learn, and on how such learning is occurring in the field of HIV/AIDS and environmental education.

Chapter 3 discusses the research methods which were used in order to address the research questions and achieve the objectives of the research, as outlined in this chapter. It also discusses the theoretical framework which was used as lens to collect and analyse the data. The steps taken to ensure validity and trustworthiness of the research are discussed. The ethical considerations and constraints that were experienced during the data collection and analysis of the data are then discussed.

Chapters 4 and 5 report on the findings gained from the data generated through the research process. They present the perspectives of caregivers on how they learn about care giving. The chapters give an outline of the themes that emerged from Raphael Centre, Keiskamma Art Project and Keiskamma Health Centre communities of practice.

The broad themes outlined for the communities of practice are as follows:

Learning interactions of HIV/AIDS caregivers, caregivers' practices related to their use of traditional food and medicinal plants, influences on plant use practices as shared by caregivers, and sustainability practices associated with the plants that they use.

Chapter 6 is a discussion of the main findings that emerge from data presented in chapter four. The discussion is guided by Wenger's (1998) community of practice theory, which was used as a lens to interpret the data. The chapter discusses findings on participation as providing a mechanism for supporting learning and learning processes in community of practice being varied. Learning is also discussed as something that happens out of a community of practice. Women are shown in the chapter as learning to re-value their traditional knowledge and practice in a new context. Women caregivers were shown not to be explicitly learning about the sustainable use of plants. The chapter also discusses influences on learning and practices which include ambivalent messages from different stakeholders, power relations between caregivers and health practitioners, experience of caregivers, exposure to and incorporation of knowledge by women caregivers, and visible symptoms of illness as a determining referent for practices by caregivers.

Chapter 7 provides summary of the study. It also provides recommendations based on the major findings discussed in Chapter 6. The chapter ends with a reflexive review of the study.

CHAPTER TWO

REVIEWING THE CONTEXT AND THE LITERATURE

2.1 OVERVIEW

A brief historical background of HIV/AIDS and its prevalence in the regional context (southern Africa), country context (South Africa), and local context of the study (Eastern Cape) and more specifically on the two areas under study (Grahamstown and Hamburg) is provided. This chapter provides details on informal caregiving in the context of HIV/AIDS in South Africa and discusses literature on the use of traditional foods and medicinal plants in relation to caregiving and health and how women learn about that knowledge and the sustainability of these plants.

The chapter also provides a brief historical background to education and learning. I explain and locate the research in the emerging body of literature on social and situated learning, more specifically drawing on the ideas of **community of practice** as a social learning theory. This chapter also explores the context of the learning community which is investigated in the study, looking specifically at how adults learn, how learning is happening in the field of HIV/AIDS and in environmental education.

2.2 HISTORY OF HIV/AIDS

In 1981 five young homosexual men in New York were reported to have had a most unusual cancer, called *Kaposi Sarcoma* (Angel, 2006). During that same year there were reports of an increase in lung infections, called *Pneumocystis carinii pneumonia* (PCP) in California, Los Angeles and New York (Kanabus & Frederickson-Bass, 2005). The occurrence of previously very rare diseases caused great alarm and marked the beginning of general awareness of AIDS in the United States of America (USA). Soon afterwards reports surfaced of a disease which undermined the immune system causing people to suffer from weight loss and diarrhoea amongst heterosexual people in Central Africa (Van Dyk, 2005).

Connor and Kingman cited in Kanabus and Frederickson-Bass (2005) stated that, in August of 1982, the disease was named Acquired Immune Deficiency Syndrome (AIDS). In 1983, Luc Montaigner and his team at the Louis Pasteur Institute in France isolated a virus which

they believed was causing AIDS called *lymphadenopathy-associated virus* (LAV) (Van Dyk, 2005). The following year, Dr Robert Gallo of the USA also isolated a virus that was believed to be the cause of AIDS, called *human T-cellphotropic virus type 3* (HTLV-111) (Schoub, 1994). Coffin et al. as cited in Kanabus and Frederickson-Bass (2005) stated that in May of 1986 the International Committee on the Taxinomy of viruses ruled that LAV and the title HTLV-111 be dropped and a new name, Human Immunodeficiency Virus (HIV) be adopted.

The 1980's and the early 1990s were marked with research that led to the discovery of drugs which slow down the progress of the virus. It was also during this period that the United States Centre for Disease Control held a meeting to consider ways of preventing the spread of the disease (Kanabus & Frederickson-Bass, 2005). These preventive strategies were aimed at targeting groups of people who were associated with being at risk of infection with the disease (Pronyk, 2002). By that time AIDS was being reported throughout the world. By 1997, developed countries were celebrating a drop in the numbers of deaths that were AIDS related, due to use of combination therapies. On the other hand, Africa continued to record a rise in deaths due to lack of treatment (Kanabus & Frederickson-Bass, 2005).

2.2.1 History of HIV/AIDS in South Africa

The first reporting in this country of HIV/AIDS cases was in 1983 amongst homosexuals (Kauffman & Lindauer, 2004). It was only eight years later that reports surfaced on incidences of HIV among heterosexuals and mostly the African population (Kauffman & Lindauer, 2004). The 1980's were marked with denials of HIV/AIDS amongst the general public and this led to shifting of blame to certain sectors of the population (Kauffman & Lindauer, 2004). For instance, Drum as cited in Kauffman and Lindauer, (2004) stated that in the early days of HIV/AIDS in South Africa people blamed the homosexual community for spreading the disease. When the disease was observed mainly amongst the black population, the blame shifted to the black population, with black people blaming the apartheid system for having come up with another strategy of trying to eliminate them. This misinformation is believed to be one of the causes that there was an explosion of HIV/AIDS in South Africa because society and the government were slow to take up the challenge of HIV/AIDS. The other reason given for the epidemic spread of HIV/AIDS in South Africa is the high rate of transmission which is perpetuated by migration and poverty, just as with any other venereal disease. For instance, most of the working-age men in South Africa left their families in their home areas while they searched for work in cities and mines (Kauffman & Lindauer, 2004).

The first public response by the South African government to HIV/AIDS was in 1992, when the National AIDS Convention of South Africa (NACOSA) was addressed by Nelson Mandela. The purpose of this convention was to develop a national strategy to cope with the disease (Pembrey, 2007). 1994 witnessed the formation of Soul City, a South African organisation formed to develop and produce media information so as to distribute information on health and also HIV/AIDS (Pembrey, 2007).

Whilst all these various organisations were being formed, the South African government was criticised for not putting much effort into providing drugs like anti-retrovirals (ARVs) which are believed to slow the progression of HIV to AIDS (Kauffman & Lindauer, 2004). As a result pressure groups such as the Treatment Action Campaign (TAC) were formed in 1998 (Pembrey, 2007).

In July 2000, President Thabo Mbeki of South Africa opened the 13th International AIDS conference in Durban, where he is believed to have said that human immunodeficiency virus (HIV) was not the only cause of Acquired Immune Deficiency Syndrome (AIDS) but that there were other factors that could be linked to AIDS like poverty (Fourie, 2006; Pembrey, 2007). He is also quoted as having said that ARVs are toxic (Fourie, 2006).

Van der Vliet as cited in Natrass (2008) stated that in March of 2003, the Minister of Health echoed the stance of the President by encouraging people who were infected with HIV/AIDS to use garlic and olive oil for boosting the immune system, instead of taking ARVs which she claimed were toxic. While foods that were advocated by the Minister of Health are known to boost the immune system and to make medication more effective when there is adequate nutrition, there is broad medical consensus that HIV/AIDS can not be treated by eating certain kinds of foods (Kauffman & Lindauer, 2004).

In 2002 the government was taken to Court by the Treatment Action Campaign (TAC) to compel it to provide the drug, Nevirapine, to pregnant mothers to prevent passing of the disease from mother to child. The following year, the government of South Africa approved the use of ARVs in public hospitals (Pembrey, 2007). Although much has been done to attain this end, much still needs to be done in South Africa to provide ARVs to all people who are in need of the medication. By 2006 only 33% of the people who needed ARVs were able to access the drugs (Pembrey, 2007).

2.3 HIV/AIDS PREVALENCE

Africa is the most HIV/AIDS affected and infected continent, with Sub-Saharan Africa regarded as the worst region in the World, and southern Africa having the highest prevalence rate. Among the southern Africa countries, South Africa has the highest number of people who are infected with the disease (UNAIDS/WHO, 2007). The reason why South Africa has such a high number of infected people when compared with any other country on the entire continent is that the disease went unchecked for too long between the years 1993 and 2000 (Pembrey, 2007). This, it is believed, was because the government was concentrating on major political and social transformations which were taking place as the country changed from the apartheid system that was previously in place (Pembrey, 2007).

In South Africa, 5.41 million people were estimated to be living with HIV in 2006. 257 000 of these were children as reported by the Department of Health, working in conjunction with UNAIDS and WHO (Noble, 2007). The Actuarial Society of South Africa (ASSA) 2003 model had also estimated that the number of people who would be infected with HIV in the same period would be 5.4 million, and it also predicted that the total number of people who would be infected with the disease will be 6 million by the year 2015 (Noble, 2007).

The age group most strongly affected by the disease are people aged 15-49 years. The prevalence amongst this group was estimated to be around 18.34% in 2006 (Noble, 2007). According to Pembrey (2007) the pandemic has resulted in the life expectancy to drop from 64 years to 54 years. Pembrey also argues that many of the patients being admitted to hospitals are suffering from HIV/AIDS related diseases and are estimated to be about 60-70% of the total patient population in the country's hospitals.

2.4 REGIONAL CONTEXT

This section presents a contextual profiling of the province and towns in which Raphael Centre, Keiskamma Art Project, Keiskamma Health Centre communities of practice are located. The contextual profiling is done to provide insight into the broader social context influencing the learning since communities of practice as a theory that was used to collect and analyse data does not make adequate provision for this aspect of understanding learning (see section 3.10.3).

2.4.1 The Eastern Cape Province

The Eastern Cape Province is situated in the south-east of South Africa (see Figure 1.1, Chapter 1). It shares borders with the Free State Province, Lesotho, KwaZulu-Natal Province and the Indian Ocean. The Province covers a ground area of about 169 580 km², occupying about 13, 9% of the total area of the country (Bradshaw et al., 2000). As a result, the Eastern Cape is the second largest province of South Africa and is known as the home of the *AmaXhosa* ethnic group (Lotz-Sisitka & Wilmot, 2007).

The Eastern Cape became a province of South Africa in 1994, when the country gained its independence (Bradshaw et al., 2000). Before that it was divided into two homelands, namely Transkei and Ciskei, and the eastern part of the former Cape Province (Bradshaw et al., 2000). These homelands were not well managed and people lived in overcrowded conditions (Leoning-Voysey, 2002). The system was discriminatory as it segregated those who lived in towns along racial lines and placed them into racial areas of blacks, whites and coloureds. Blacks and coloureds lived in locations and townships while the white population resided in suburbs. This legacy of the apartheid regime is still evident today (Kelly & Ntlabati, 2007).

The majority of the people who live in the Eastern Cape Province are in rural areas (Bradshaw et al., 2000). The Eastern Cape has a total population of 7 567 903 and the majority of these people are women. The age groups of men, who are limited in the region, are between 15–64 years. This is a group which constitutes the working class. The province is one of the poorest provinces in South Africa with about 69% of people living below the poverty line in 2002. At least 55% of the population in the region are not employed (Bradshaw et al., 2000).

The total number of people who are HIV positive is estimated to be around 1 150 422 (Dorrington et al., 2002). The South African Department of Health's study which was conducted amongst antenatal clinic attendees from 2001 to 2006 indicated that there was an increase in the number of people being infected with HIV (Noble, 2007). The pandemic was the leading cause of death in 2000 for both men and women (Bradshaw et al., 2000). This situation, of having vast numbers of people who are infected with HIV in the Eastern Cape could be explained using the arguments of Giarelli and Jacobs (2001, p. 53) who said that:

HIV/AIDS has been described as an illness of marginalised persons, such that it affects the poor, disenfranchised, and disadvantaged. Apartheid in South Africa historically fostered the creation of political and economic environment that marginalised a dominant portion of the population....

The profiles of Grahamstown and Hamburg, where the cases studied in this research are located, represent the conditions described above.

2.4.2 Grahamstown

2.4.2.1 Historical background of the city

Grahamstown is a small, inland city located between Port Elizabeth and East London. It falls under the management of Makana Municipality, and has a total population estimated to be around 120 000 (Kelly & Ntlabati, 2007). The city itself, has a population of around 62 000 people, with 90% of the people being blacks and 10% being white (Kelly & Ntlabati, 2007). Just as with any other place which is in the Eastern Cape Province, the history of Grahamstown is marked with battles which occurred between the British and the *AmaXhosa* people, and the Dutch and the *AmaXhosa* people (Holleman, 1997). All these battles were for governance of land and cattle (Holleman, 1997).



Figure 2.1 Photograph of Grahamstown Central and East (Rhini)

The landscape which one sees in Grahamstown is the legacy of what was created during the colonial and apartheid system (Lotz-Sisitka & Wilmot, 2007). The town is marked by a business centre which includes a number of private schools where the more affluent send their children. Rhodes University is on the western side of the city, which is marked by suburbs in sharp contrast to houses found on the eastern side, where mainly the poor working class and the unemployed reside. The west and eastern parts of the city are divided

by a stream which historically marks the boundary of the two areas along social, political and economic lines (Lotz-Sisitka & Wilmot, 2007; Kelly & Ntlabati, 2007).

Grahamstown East (Rhini) is a residential area where the majority of black people reside (approximately 100 000 people). It continues to be marked by poor housing (low cost housing and informal settlements) with service roads being potholed and untarred (Møller, 2008; Lotz-Sisitka & Wilmot, 2007). This grim situation was created as a result of legal restrictions during the apartheid era, and remains a permanent feature of Grahamstown (Kelly & Ntlabati, 2007).

2.4.2.2 Socio-economic factors

Although Grahamstown is regarded as a centre of education, the city has a limited industrial base, which aggravates the unemployment problem (Lotz-Sisitka & Wilmot, 2007). The majority of unemployed people reside in the black township areas which are collectively known as Rhini (Lotz-Sisitka & Wilmot, 2007). Because of unemployment, most people rely on government grants for survival with the 'child support grant having become a source of income for over four in ten households' (Møller, 2008, p. 43). Indications are that people also rely on moneylenders as the number of such enterprises has increased from 16% in 1999 to 24% in 2007. Levels of crime remain high and many household have shifted from using the bucket system toilets to flushing toilets indicating some improvement in living conditions (Møller, 2008).

Compared with a survey conducted in 1999, there has been an improvement in provision of electricity and piped water to many households. The 2001 census indicated that, 27% of people in the Eastern Cape who were aged between 15-65 years of age were employed, with 34% reported as being unemployed or unable to find work (Kelly & Ntlabati, 2007). Grahamstown reflects the Eastern Cape unemployment statistics that were reported above. Møller, (2008) conducted a study of households within the Rhini area which indicated that the average income had increased from R594 a month in 1999 to R1100 per month in 2007. However, although that study indicated that there has been a significant increase in household income, it was still below the basic amount needed for a family to meet its basic needs. Møller (2008) argued that such families need 2.6 times more than the income they received.

In Rhini, there are more women than men in the age group 35 to 64 (Grahamstown Municipal Population Census, 2001). A study conducted by Møller (2008) in Rhini indicates that women headed almost half of the households. The study also found that such

households were poorer than those households headed by men because women tended to rely more on social security income than wage earnings.

2.4.2.3 HIV/AIDS Context

No reliable HIV/AIDS prevalence data was available at the time of this research for the city. Most of the information presented here is based on the data produced by Kelly and Ntlabati (2007) when they were doing a study of marketisation of municipal services, daily life and HIV in South Africa as a case study of Grahamstown. They collated data from a number of sources and estimated the HIV/AIDS prevalence in the population to be around 11%. They estimated the prevalence of HIV/AIDS amongst people 15 to 19 years of age to be around 17%.

About 8 000 people are estimated as being HIV positive in the Makana municipal region, with about 800 of them being in stage 3 to 4 of HIV/AIDS progression. There are about 700 orphans throughout this region and more than 80% of them are estimated as being from Grahamstown alone. Although no official statistics exist on the geographical spread of HIV in the city, the majority of the people who seek HIV support services are from Grahamstown East (Rhini) (Kelly & Ntlabati, 2007).

2.4.3 Hamburg

2.4.3.1 Historical background of the town

Hamburg is a semi-rural urban service centre which is located in the Province of the Eastern Cape. It lies about 14 kilometres off the R72 road which runs between Port Alfred and East London, and falls under the Ngqushwa Municipality. It has a population of about 84 186 of whom 95% live in the rural areas. Hamburg is one of the urban areas under this municipality where it is the seventh ward of 14 wards (Afesis-corplan, 2004).

Hamburg is partly a rural town and is situated at the Keiskamma river estuary on the western bank overlooking the wetlands. On the western side of the town are rural homesteads which are built on plots. The rural side of Hamburg is mainly occupied by the *AmaXhosa* people. All the participants in this study reside in this rural area. Hamburg town constitutes both white and black communities. There are also homes for retirees and some holiday houses (Afesis-corplan, 2004).

Hamburg was named after the Germans who settled in the area during the 1850's. The German settlers were said to have been positioned there by the British for military strategic

purposes. They were to act as a buffer settlement between the British and the *AmaXhosa* who were always fighting each other for land and cattle. These fights between the British and the *AmaXhosa* people, especially along the Keiskamma River, made the area very unsafe for the *AmaXhosa* to live in (Wolhuter, 2004).

The town did not benefit much from the settling of the Germans in terms of development. It only began to benefit from tourism after the Second World War, when it began to attract holiday makers and people interested in fishing (Afesis-Corplan, 2004). After that the town was again neglected when it was integrated into the Ciskei Homeland in 1981, when a segregationist system was put in place by the apartheid government which did not allow the blacks to own land in South Africa. After independence, the area continued to suffer neglect to such a degree that even today there are dilapidated structures evident as one indication of poor development in the area (Wolhuter, 2004).

2.4.3.2 Socio- economic factors

Hamburg has a total population of about 3 000. A survey carried out by Afesis-corplan (2004) on Hamburg Household Affordability found that 36% of the people in the area regarded themselves as unemployed whilst 46% were pensioners. From the data, one can extrapolate that there is high rate of unemployment in the area especially when it is compared with the unemployment rate of the municipal area in which it falls, which is 16% (Afesis-Corplan, 2004). Because of the high rate of unemployment in the area, the majority of people rely on pension income, government grants, and selling abalone and oyster that they poach (Afesis-Corplan, 2004). People in this area rely on two major social networks, the burial society and a grocery club.

A considerable number of people in Hamburg seem to reside in fairly decent houses as research shows that about 77, 5% of the population live in formal housing and 10 to 12% live in shacks or mud houses (Afesis-Corplan, 2004). In the rural area of the town the houses are well-serviced, meaning that on average everyone has tap water and electricity with the basic necessities.

Like all the places in the Eastern Cape, most people in Hamburg live below the poverty line, and this has created its own problems. For example, because people are unemployed and poor, they live off the environment and this has led to ongoing destruction of the once pristine environment (Afesis-Corplan, 2004). This reflects the inter-linkages that exist between socio-economic factors and the environment (Dold & Cocks, 2002).

There is no industry in Hamburg and most of the people, especially men, migrate to the cities leaving their families behind. The migration from their homes to seek work is one of the leading causes of the spread of HIV (Kauffman & Lindauer, 2004) and this also applies to Hamburg. The level of education in Hamburg is assumed to be minimal considering that education falls under the Eastern Cape Government (Bradshaw et al., 2000)¹. A low level of education is one of the factors affecting vulnerability to the disease because the people do not access information which would empower them to protect themselves against it. These various dynamics can explain the HIV/AIDS infection statistics as discussed in the subsequent section.

2.4.3.3 The HIV/AIDS Context

The Peddie district statistics, in which the town of Hamburg falls, were used to provide a general picture of the prevalence of HIV/AIDS statistics in Hamburg. The ante-natal infection rate is approximated to be 35%. This statistic was used by the Keiskamma Trust (2008) to extrapolate incidence rates within the Hamburg community which is estimated to be around 17%. This means that approximately 35 000 people are HIV positive in Peddie district, with about 10 % of those requiring ARVs now, and 10% being children. The statistics show that there is need for antiretroviral drugs to treat people. Since the government is unable to provide ARV medication to everyone who needs it (Uys, 2003), it becomes important to consider what people are doing to care for the sick.

2.5 EMERGENT CAREGIVING PRACTICES AMONGST WOMEN IN RESPONSE TO HIV/AIDS

2.5.1 What is caregiving?

Cheung and Hocking (2004) view caregiving as an important aspect of life which people require for survival. Several studies done in Africa have indicated that most people who live with HIV/AIDS rely on the care that they get from family members (Nnko, Chidua, Wilson, Msuya & Mwaluka, 2006; Kipp et al., 2006; Moore & Henry, 2005; Uys, 2003). Caring for people who are living with AIDS includes activities like washing and bathing those who are HIV/AIDS infected, accompanying them to the doctor, cooking for them and sometimes even

¹ The 2001 census report indicated that in Eastern Cape Region 23% of people that were 20 years and above had not received formal education

feeding them, buying their medicine and making sure that they take their medicine (Moore & Henry 2005; Kipp et al., 2006). HIV/AIDS is an epidemic that calls for people to nurture and care for one another.

In this study, the component of caregiving to be considered was the use of traditional food and medicinal plants in relation to HIV/AIDS. This research follows on previous studies that were done in the Eastern Cape which indicated that traditional food and medicinal plants are of benefit to, as well as affordable to the poor communities in the Eastern Cape (Shava, 2000). Furthermore, caregiving "...can be understood to imply a distinct way of being, thinking, believing and acting that calls for commitment, knowledge and skills" (Cheung & Hocking, 2004, p. 476). A study conducted by Wrubel and Folksmans (1997) in the United States of America, on informal caregivers of male partners with HIV/AIDS, indicated that the caregivers had developed skills that included the ability to give emotional support, hands-on support such as helping their partners to manage vomiting and diarrhoea, and health care advocacy.

Following on the definitions given above, this study considers the practices of women in terms of the use of traditional foods and medicinal plants to care for people living with AIDS. Do they meet and share such knowledge with others in order to improve on the practice, as suggested by Wenger (2007) in his definition of communities of practice?

This definition of caregiving, as expounded by the authors cited above also puts emphasis on the act of 'believing and thinking' (Cheung & Hocking, 2004, p. 476). For instance, by investigating what meaning the caregivers attach to using traditional food and medicinal plants, one may understand why, how and what they think and believe in terms of caregiving practices. The process of caregiving creates identity for those who are caring, as well as those being cared for (Cheung & Hocking, 2004) and "...implies active engagement in the person-to-person process of being and becoming" (Cheung & Hocking, 2004, p. 476). This seems to suggest that, as a practice, caregiving only happens if someone participates in the practice, and that active participation is what allows people who are caregivers to identify themselves. Lave and Wenger (1991) define identity as something that is a result of people learning through interaction in a community of practice. A study done by Nnko et al. (2006) in Tanzania indicated that caregivers who had cared for a person who had HIV/AIDS and were caring for another person for the second time, could identify themselves as better carers than they were before because they had learned how to be better caregivers through practice.

2.5.2 Informal caregiving

HIV/AIDS is a terminal disease in that once a person is infected the disease remains with them for the rest of their lives, because no cure has yet been found (Vthayachocktichump, 2006). The "...magnitude of the HIV/AIDS crisis has inevitably meant that the family and the community have had to become involved in most care programmes" (Van Dyk, 2005, p. 259) such as in home-based care, where the sick are taken care of in their homes, rather than being hospitalised till they die. This led to the emergence of informal caregivers in the form of family members caring for their relatives (Kipp et al., 2006). This, therefore, means that people who are not formally trained are now looking after the seriously sick. It is not possible for people who are HIV/AIDS positive to be looked after in hospital because of astronomical hospital costs in caring for people who are living with AIDS (Oner, 2006).

The situation is exacerbated in Africa, where most country's economic climate limits the availability or affordability of Western drugs, physicians or hospital stays (Moore & Henry 2005; Uys, 2003). For instance, a study done in the Eastern Cape indicated that there is no access to ARVs by most of the people who require them.

By the end of the 2006/7 financial year the Eastern Cape Department of Health had 28 382 patients registered for ART in the Eastern Cape... The target for the 2007/8 is to have 40 000 patients registered for ART... However, the Eastern Cape Department of Health reports that during 2006/7 there were 12 388 patients who were medically eligible for ART on the waiting list. This means that the department was not providing treatment (at a minimum) to 30% of the people that the department knew of (Odendal, 2007, p. 64).

The situation in the Eastern Cape implies that informal caregiving is an alternative to providing care to people living with AIDS, which has become vital aspect in the fight against HIV/AIDS (Uys, 2003). Besides a chronic shortage of ARVS needed to care for those who are infected, the Health Department also faces a 'brain drain' problem. Most South Africa medical practitioners are emigrating in their search for better working conditions (Robertson, 2006). This means that hospitals in South Africa remain understaffed and are unable cope with the increasing numbers of patients, of whom the majority have HIV/AIDS (Oner, 2006). The shortage of staff is even more significant for poor communities, i.e. in the Eastern Cape, as trained medicinal practitioners still in the country are reluctant to work in such areas (Odendal, 2007).

Faced with such challenges, the Department of Health had to consider collaboration between the government of South Africa with the general community (Oner, 2006; Russel & Schneider, 2000). However, the problem with a decentralisation process is that although the intention is for collaboration between government, hospitals, communities and families,

evidence shows that families and communities on their own are increasingly taking responsibility for the care of people with HIV/AIDS (Russel & Schneider 2000). This makes this study even more significant as it considers how those who are carrying the burden of caring for people living with HIV/AIDS are learning caregiving, considering that HIV/AIDS is a relatively a new disease and people have little experience in dealing with it.

2.5.3 Women as informal caregivers

Several studies on caregiving in Africa indicate that family members carry the burden of looking after people who are sick (Schatz, 2007; Kipp et al., 2006; Oner, 2006). According to Schatz (2007, p. 1391) "In the case of HIV/AIDS, a number of studies have shown that mothers, grandmothers, wives, daughters and aunts are most likely to become primary caregivers for the ill". More specifically, therefore, women are the primary caregivers for relatives who are living with AIDS (Kipp et al., 2006). The provision of nourishing food is a key caregiving practice assumed by women. Women traditionally make food choices and prepare meals for the family, including the sick.

A study conducted by Beoku-Beits (1995, p. 541) on women, food and preservation of cultural identity among the Gullah in the Sea Islands of Georgia and South Carolina indicated that the "...senior generation of Gullah women fosters and sustains cultural identity inter-generationally thus broadening the base of cultural knowledge in the community".

Abrahams, Jewkes and Mvo (2002), in their study of the Afrikaans speaking community in Cape Town, revealed that mothers, grandmothers and aunts were responsible for passing on the information about herb use and they were consulted frequently. This study indicates that women often are agents for the transmission of health information as they tend to share ideas during crises and also on issues pertaining to sustenance.

2.6 USE OF TRADITIONAL FOOD AND MEDICINAL PLANTS

2.6.1 Use of traditional food

In southern Africa, many people rely on traditional plants as food (Van Wyk & Gericke, 2000). Traditional foods and plants have always been a source of nourishment, particularly for people with low incomes (Balick & Cox, 1996). Traditional food plants are a cheap, reliable source of food for people who live in rural areas, where most people are unemployed.

Besides being economical, traditional foods are often also more available as families often grow their own food and can harvest directly from the environment when they are in season (Mtshali, 1994). Rodin (1985) documented the use of wild plants by the Kwanyama Ovambos who harvest a wide variety of wild food plants. Studies done on the biodiversity of traditional leafy vegetables in countries like Botswana, Zimbabwe, Cameroon, Kenya, and Senegal also indicate that traditional, leafy vegetables are mainly used as an accompaniment to their starchy, staple diets (Chweya & Eyzaguirre, 1999). Similarly, Lee's work (1979, p. 158), of the Kung in Dobe, Botswana, indicates that:

Security of the Kung life in the Dobe area is attributable in a large part to the fact that vegetable foods and not meat is the primary component of their diet. Plant foods are abundant, locally available, and predictable; game animals, by contrast are scarce and unpredictable, and though the Kung holds meat in high esteem, they never depend on it for their basic subsistence.

In South Africa, more than 60% of the population is reported to be using traditional plants for their well-being (Abrahams et al., 2002). In the Eastern Cape, which is the focus area of this study, there is evidence that people continue to use traditional foods and plants as food and medicine. A study conducted by Shava (2000) in a rural area called kwaTuku in Peddie, showed that people use traditional food plants for nourishment. Shava compiled an inventory comprising more than 80 species of edible wild plants used in the village, which he classified as wild spinach or *Imifuno*, wild fruits, edible roots/tubers, beverage plants, and 'other' edible plants.

Jolly (2006), in her study of Xhosa women's narratives on traditional foods, reports on use of traditional food in relation to the well-being of the people. In her study, many of the participants indicated that they believe that *Umphokoqo*, a dish made of mealie meal is steamed and fluffed and served with *Amasi* (sour milk), was very good for the sick. *Amarhewu*, a home-made fermented drink made of mealie meal, yeast and flour, was reported to be more nutritious than the commercial sodas that one can obtain from the supermarkets (Jolly, 2006).

Likewise, Mtshali (1994) indicated that wild spinach was being used as an important supplement dish to the starchy, staple diet of mealie meal. Van Wyk and Gericke (2000, p. 63) argue that "...green vegetables are not far behind the cereals in terms of their importance as sources of food in southern Africa". They may be eaten fresh but are more often eaten as potherbs. Similarly, Janse van Rensburg et al. (2004) confirmed the nutritional value of traditional plants.

Other researchers such as Chweya and Eyzaguirre (1999); Odhav, Beekrum, Akula and Baijnath (2006) have recorded that wild vegetables contain nutrients such as proteins, iron,

calcium riboflavin, nicotinic acid, vitamins, A, B & C, and thiamine to mention just a few. Frequently utilized South African species such as *Amaranthus spp*, *Chenopodium album* and *Bidens pilosa* have been found to have at least 200 times more carotenoids and up to eight times more vitamin A than cabbage (Kruger, Sayed, Langenhoven & Holing, 2005). Carotenoids, along with Vitamin A, have been shown to play a major role both in reducing risk of infection as well as slowing the progression of HIV into AIDS (Mehendale et al., 2001; Melikian et al., 2001). Odhav et al. (2006, p. 432) states that the evidence from their study "...raised the possibility that traditional vegetables can be used as a concentrated form of essential mineral nutritional supplements".

In another study, Conway-Physick (2007) noted that among the traditional plants, some have originated from other parts of Africa, South America and Europe and have become accepted as traditional vegetables by local people who because they have been using them for so long, now consider them to be traditional foods.

Although it is patently clear that people use traditional foods as nourishment, there are indications that these foods, especially vegetables harvested from the wild or as weeds, are no longer so popular (Odhav et al., 2006; Janse van Rensburg et al., 2007). From these findings it appears that there is increasing interest from researchers and policy makers about the use of traditional foods and their benefits (Janse van Rensburg et al., 2007). One reason given by authors like Janse van Rensburg et al. (2007) and Odhav et al. (2006) for the decline in the use of traditional food stems from increasing lack of knowledge amongst the younger generation about traditional food.

Another given reason for the young and the urban not considering traditional food as food is that they regard it as being for the poor. In Asafo-Adjei's study (2004) carried out in the Eastern Cape, there is also an indication that there is a general lack of interest in the use of traditional food plants by educated people such as teachers.

2.6.2 Nutrition and HIV/AIDS

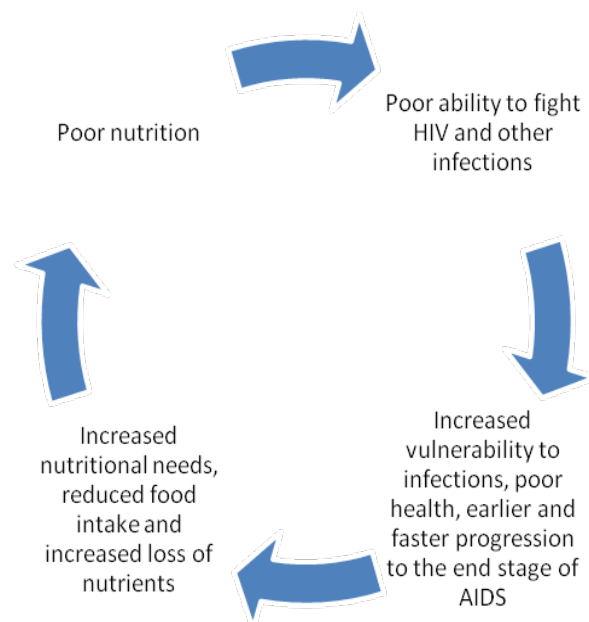
The decrease in the use of traditional plants is one of the reasons that contribute to the problem of under-nutrition in many parts of Africa especially in rural areas where people rely on the plants for their survival (Odhav et al., 2006). The situation becomes dire in a poor society which is infected and affected by HIV/AIDS (Friss, 2002).

In the Eastern Cape, vulnerable populations like impoverished children, the elderly and the sick are most at risk for not consuming a well-balanced diet. The highest rates of the children

under five years old who show abnormal growth rates (stunting), are found in the Eastern Cape and Northern Provinces of South Africa (Zere & McIntyre, 2003).

Friss (2002) argues that it has always been known that good nutrition has a positive effect on sick people, and it has always been known that proper nourishment was essential even prior to the advent of antibiotics. Traditional foods are very important when it comes to providing the necessary nutrients to rural populations and low income communities, and also those who reside in urban areas. There is a huge potential for the use traditional foods to provide necessary nutrients to those who are infected with HIV/AIDS.

The issue of care giving through provision of proper nutrition is extremely important when caring for those who have HIV/AIDS, because of the established relationship between nutrition and the control of HIV/AIDS (Friss, 2002). The diagram below illustrates this point:



(Adapted from South Africa, Department of Health, 2001, p. 2)

The diagram illustrates that people living with HIV/AIDS are likely to have poor nutrition as:

- People living with HIV/AIDS are likely to eat less because of a lack of appetite or painful ulcers in the mouth and throat (Friss, 2002).
- Nutrients are lost through urination and stools as some sick people are prone to suffer from diarrhoea.
- No proper access or availability of nourishing food (South Africa, Department of Health, 2001)

People who are infected with the HIV virus require more nutrients than people who are not infected or sick in order for the body to fight the disease. People who are infected with HIV use up to 50% more protein and 15% more energy and more micronutrients than uninfected people (Friss, 2002).

Poor nutrition will result in a person living with HIV/AIDS having their immune system further compromised. This means that they are open to infection by more opportunistic diseases which, again, means more nutrients are needed as outlined above. (Friss, 2002, p. 5) summarises the cycle when he says:

...most micronutrients are essential to various specific and non specific immune functions, and deficiencies may thus impair resistance to infections and lead to increased frequency or severity.

Here is an argument for people living with HIV/AIDS to receive the provision of nutritious foods, and this vital requirement should not be underestimated. As mentioned earlier, traditional food is a reliable and economical source of required nutrients.

2.6.3 Traditional food plants used as medicine

Research shows that traditional food plants also have medicinal properties, and besides many being used as food, there are traditional food plants which are also used for healing purposes. The Tonga and the Shangaan people "...use *Rapoko* together with *Plumbago zeylanica* as an internal medicine for leprosy" (Tredgold, 1986, p. 24) the Kilifi believe that a vegetable called *Mtsunga* can prevent or cure malaria, and among the Kisii *enderama* (*Basieila Alba*) is believed to cure skin diseases and to increase blood. *Muthunka* and *Managu* are used by the Tharaka to stimulate the appetite (Maundu, Njiro, Chweya, Imingi & Seme, 1999). In Kenya, the Luo use most of the traditional vegetables to treat diverse ailments (Ogoye–Ndegwa, 2003).

2.6.4 Use of medicinal plants

A substantial number of people in developing countries use medicinal plants for self medication (Singhal, 2005; Keirungi & Fabricius, 2005; Louw, Reignier & Kosten, 2002). This is because of the challenges which many countries face such as shortage of funds to buy medication, inadequate health facilities and the difficulty of obtaining newly developed medicines hence the reliance on natural resources (Keirungi & Fabricius, 2005).

In India, a study which was done in a rural area called 'Java' indicated that there was widespread use of home remedies by women in the treatment of their families (Hull, 1979). According to Bamber (1998) many of the Thai people have been known to rely on herbs for curing opportunistic infections. In Africa, the situation is not any different (Van Wyk & Gericke, 2000) where there is widespread use of traditional plants, especially in households which are affected by HIV/AIDS.

Mander cited in Cocks and Valerie (2002) estimated that 27 million South Africans use traditional medicine to cure themselves of a variety of ailments. Other authors such as Van Wyk and Gericke (2000) have different estimations to that of Mander. However, their common ground is that they all estimated that several millions of South Africans rely on traditional plants for medicine.

In South Africa, many of those who use medicinal plants are amongst the African population (Louw et al., 2002). The use of medicinal plants is part of South African history, and people never stopped using them even with the advent of western medicine (Louw et al., 2002; Keirungi & Fabricius, 2005). Medicinal plants are used by people of diverse social and economic structures (Cocks & Valerie, 2002). They are also used by people who come from the rural and urban areas alike (Wiersum, Dold, Husselman & Cocks, 2006).

Knowledge of medicinal plants is not the sole domain of traditional healers or herbalists. Others such as traders and women in general are also knowledgeable about medicinal plants (Singhal, 2005). Keirungi and Fabricius (2005, p. 497) reported that "...more than 700 plant species are actively traded for medicinal purposes throughout South Africa" and there is a high demand for these medicinal plants.

Research on gender indicates that women play a major role in disseminating knowledge about medicinal plants (Singhal, 2005). Singhal (2005) argues that the division of labour in African society makes women responsible for collecting wood and foods in the forest, maintaining the home garden and preserving and conserving their plants. Women are traditionally expected to look after the welfare and well-being of the family which leads to them being knowledgeable about medicinal plants. Women pass this knowledge of medicinal plants from one person to another within or across generations, making that knowledge 'socially construed' (Singhal, 2005).

In the Eastern Cape Province, there is evidence that the *AmaXhosa* people, like many other South Africans, rely on medicinal plants (called *Amayeza* in their language) and they have always relied on them as part of their day to day life (Wiersum et al., 2006; Keirungi & Fabricius, 2005; Louw et al., 2002).

The Zulu, Xhosa and Sotho people of South Africa use about 147 plant families to cure several ailments and they usually turn to them during the initial stages of an illness (Keirungi & Fabricius, 2005). Self-medication is especially common in rural areas amongst the Eastern Cape people (Keirungi & Fabricius, 2005). This could be because, as mentioned above, most rural people in developing countries rely on medicinal plants because of a lack of medical facilities, which are often unreliable, and the high cost of travelling great distances to reach help. Evidence shows that medicinal plants can be used as a source of income when sold (Wiersum et al., 2006).

The use of medicinal foods and plants is reported to have increased due to the advent of HIV/AIDS world wide (Gore-Felton et al., 2003). Despite benefits that come from using medicinal plants, there are also certain negative consequences in the HIV/AIDS situation as this can lead to unsustainable harvesting of the medicinal plants (Keirungi & Fabricius, 2005; Wiersum et al., 2006).

Another problem occurs when unknowledgeable individuals take advantage of the HIV/AIDS crisis and claim to have a cure for this disease thereby giving wrongful hope to sufferers. This is detrimental to the health of people as many of them will only go to the hospital once they realise that their illness has worsened (F. Zita, personal communication, September 7, 2007). Although there is certainly an over-exploitation of some of the plant species which are in demand by vast numbers of people, evidence still shows that millions of people do benefit by using these medicinal plants.

2.7 SUSTAINABILITY

A discussion follows of what is meant by 'sustainability' in the context of this study and why it is relevant to consider sustainability in the context of caregiving communities of practice. One reason to consider sustainability in this study is that many people in developing countries struggle with issues of poverty, which force the majority of people to really struggle to meet their basic needs, like food, shelter and health facilities (Elliot, 1994). Poverty is a leading factor which causes people to rely heavily on their environment for sustenance and medicine which sometimes leads to unsustainable use of these natural resources (Lotz-Sisitka, 2004) thus affecting future access to these resources.

This research also considers how people use available and cheap plant resources for sustainable health. The research sought to establish how people apply their knowledge of traditional foods and medicinal plants looking specifically at sustainability as continued

availability, affordability and accessibility, particularly considering the fact that the communities which were investigated are generally characterised by poverty.

2.7.1 Defining Sustainability

It has been argued that it seems "...easier to identify what is unsustainable (i.e ecologically, socially, ethically, culturally and environmentally) than to identify what it is to be sustainable" (Wals & van der Leij, 2007, p. 17). Many authors concur that there is no single definition which can be attached to sustainability and sustainable development (Elliot, 1994; Becker & Jahn, 1999; Dresner, 2002; Scott & Gough, 2004; Edwards, 2005). Dresner likens the concept of sustainable development to "liberty and justice" (2002, p. 2), meaning that, like justice and liberty, the concept is contestable. The concept of sustainable development has been used by different people with varied interests to justify their actions. Wals and van der Leij, (2007, p. 17) noted that sustainability and sustainable development are understood differently by "...all kinds of stakeholders in many contexts and people who may not agree with one another". They also argue that issues of power, accountability, self-sufficiency, inequality play a significant role in the way individuals or groups of people embrace issues of sustainability.

The most quoted and utilised definition of sustainable development is one which was coined by the WCED in 1987, defining sustainable development as 'Development that meets the needs of the present without compromising the ability of the future generation to meet their own needs' (WCED, 1987, p. 43). According to Baker (2006, p. 19) this definition of sustainable development managed to link the "...economic, social, and ecological dimensions of development".

The definition of sustainable development, as expounded by WCED (1987) seeks to make it clear that meeting the needs of people at the present time should not be the only focus as the needs of the future generations must also be taken into consideration (Baker, 2006). Baker (2006, p. 38) explains sustainable development as a concept which endeavours resources to be equitably shared, "intra-generational and inter-generational". Intra-generational equity means that people who are living within the same generation should all have access to resources, and the WCED (1987) believed that this could be done by considering the needs of the poor. Inter-generationally means that people that are living in the present generation should use the resources, knowing that the same resources will be needed by future generations.

Munier (2005, p. 15) discusses two theories of sustainability, namely, 'weak' and 'strong' sustainability. Weak sustainability advocates for the view that "...natural resources are utilitarian and are there to support humankind". This means that they should be used without necessarily taking into consideration the future in terms of what will happen if such resources diminish as there will always be a replacement for them (Munier, 2005). Another theory of sustainability is the strong theory which Munier (2005, p. 15) stated:

The other approach is not utilitarian as it claims that resources should be used but respecting their intrinsic qualities, enjoying the biodiversity they offer. They must be used in more rational and restrained ways, since human kind cannot substitute all of them, so we must do this in ways that at the same time preserve this capital for future generation.

However, the challenge of strong sustainability is that a rational use of resources is an aspect that is only possible in communities which can make such choices (i.e. usually the affluent ones). In situations of poverty and vulnerability, it is all about survival today and not about providing for tomorrow. For example, a person who needs fuel to cook a meal today will cut down the last tree for firewood, if that is the only source of fuel available. This is the reason why I also considered investigating whether women in this study use traditional food and medicinal plants sustainably and if they do how they manage to use and still save or regenerate the plants which they use for future use.

2.7.2 Learning and sustainability

A consensus seems to exist that resource utilisation needs to be rationalised, the problem lies in the lack of will power to make necessary practical shift. To this end Wals and van der Leij (2007, p. 17) note that:

What is clear by now is that to break deeply entrenched, unsustainable patterns (assumptions, behaviours and values) requires a kind of thinking inspired and informed by powerful learning processes that simultaneously lead to individual and collaborative action and transformation'

Learning that seek to address issues of sustainable development should bring about change (see section 2.10.1). Scott and Gough, (2004, p. 2) report that there is need to emphasise learning when addressing issues of sustainable development, because "...the learning that will need to be done transcends school, colleges and universities, it will be learning in, by and between institutions, organisations and communities". This means sustainable development as a social learning process can not be approached by routine ways of doing things but rather people should approach issues of sustainable development by finding new ways of knowing and understanding bearing in mind that it is understood differently by

different people. This implies that there can not be objective solutions to sustainability but rather solutions should be context specific. For instance Lotz-Sistika, Olvitt, Gumede & Pesanayi (2006) argue that sexual education is a human right issue in the context of HIV/AIDS in Africa, and yet explicitly teaching the subject contradicts some cultural views. Part of the problem lies in that “social, cultural and behavioural change does not keep pace with technical insights” (Bradbury, 2007, p. 26). Bradbury further notes that the core of the matter is that the approach on sustainability has been to present huge technical emphasis with little regard to the human, cultural and belief systems that inform society’s response to this subject. This, therefore, means that if people are to solve problems such as the HIV/AIDS pandemic they need to engage in social learning processes which will allow engagement with contradictions and tensions to solving such issues, and they need to learn how to deal with and overcome them.

Communities of practice was used as a theoretical framework to investigate social learning and sustainability practices of caregivers in the use of traditional food and medicinal plants in this study. This theory proposes that learning is something which happens outside the classroom where people are involved in their practices, in this case, the practice of care giving. Munier (2005) seems to concur when he says people need to participate in issues of sustainability because people are more likely to practice what they would have contributed during decision-making rather than just following instructions disseminated by others. Wals and van der Leij (2007, p. 19) note that:

The point of social learning is perhaps not so much of what people should know, do or be able to do, which could be the embodiment of authoritative thinking and prescriptive management, but rather: How do people learn? What do they want to know and learn? How will they be able to recognise, evaluate and when needed, potentially transcend or break with existing social norms, group thinking and personal biases? What knowledge, skills and competences are needed with new natural, social, political and economic conditions, and to give shape and meaning to their own lives?

They argue that social learning is an effective learning tool in the context of sustainability as it stems from the very community that practices it and therefore is relatively open-ended and transformative.

An understanding of the ways in which people learn about sustainable development is of vital importance in the context of sustainability, as it will allow people to realise and appreciate the existence of differences and conflicts which can arise when addressing sustainability (Wals & van der Leij, 2007). Investigating the learning culture of communities in the context of addressing sustainability helps, as it is argued that truth is understood from the point of view of people in a particular context. Kwibika (2007, p. 462) based the results of

his study on how small scale vanilla farmers in Uganda learned to produce for export with linked issues of sustainability and learning by arguing that:

A sustainable livelihood is not something that can be offered to people. It is the adaptive capacity of people to respond to challenges with creativity in a solution orientated manner. Social learning therefore contributes to sustaining the adaptive capacity to cope in changing environment by providing the impetus and confidence to take collective action...

2.8 AN HISTORICAL PERSPECTIVE ON EDUCATION AND LEARNING

Marx (1969) and Johnson (1971) argue that learning and education is one and the same thing. Education and/or learning refer to the process of people acquiring and gaining knowledge and skills. On the contrary, authors like Jarvis, Holford and Griffin, (2003, p. 17) in their book *The Theory and Practice of Learning*, view learning as different from education. They argue that education is a modernist term which is "...characterised by order, stability, a belief in science and progress, cultural styles, shared values, and so on". These authors believe that in the modern era education has been used as a tool to 'socialise' people so that they get to 'know their place' in a society.

Similarly, Babikwa (2004, p. 63) argues that a neo classical orientation views education as a "neutral instrument for overcoming technical problems, and views educational processes as a process of transmitting knowledge to change people's behaviour". Janse van Rensburg (1997) argues that most of the time education is viewed as being a one-directional activity whereby there are those who need to be educated and have to receive knowledge from the knowledgeable. By this she meant that education is often linked with its formal education roots, which involves children being educated by more educated individuals. Likewise, David and Wright (1975, p. 75) argue that "...one myth of present-day education is that most learning takes place in the classroom and depends on the physical existence of the teacher and textbooks".

Learning, on the other hand, is a term which is now widely used in post-modern and late modern society, as it is more appropriate for use in a society which is associated with "risk, illusion and ambiguity" (Jarvis et al., 2003, p. 17) and reflexivity (Wals, 2007). Unlike the term education, learning stresses the idea of truth being relative or fallible, which is contrary to the existence of absolute truth (Jarvis et al., 2003). This, therefore, suggests that truth is subjective and, as a result, there is no one person or a single system that can be viewed as the sole custodian of knowledge, as knowledge also changes.

The differences between these two terms, education and learning, have resulted in this study placing emphasis on the aspects of learning, rather than education. This was because the nature of this study was to investigate how people acquire knowledge and skills outside the classroom in everyday life (Wenger, 1998). This is not to say education is not important, but the focus on learning was more relevant to this particular study. The study investigates how people learn to deal with risks and problems which they face in life.

In this study, it was also assumed that HIV/AIDS is a form of risk and a problem to which there is no absolute solution, and that people would be more likely to tackle the problems that they face differently because caregiving focussed on HIV/AIDS manifest itself differently in different social contexts. Hence the need for this study to investigate how people learn to deal with the unique challenges of HIV/AIDS caregiving in their environment.

2.9 THEORIES OF LEARNING

Authors such as Phillips and Soltis (2004); Jarvis et al. (2003) concur that it is not possible to come up with a single definition of what learning entails. For them, there are different forms in which learning happens; hence the existence of many definitions of what constitutes learning. Phillips and Solstis (2004, p. 5) suggest that "...there is a possibility that different theories of learning have resulted from various investigators approaching the phenomenon of learning from different directions and armed with different initial hunches". Likewise, Smith (1999) identified four ways of explaining learning after the works of (Merrian and Caffarella as cited in Smith 1999) as discussed below:

2.9.1 The behaviourist orientation to learning

According to Borger and Seaborn as cited in Jarvis et al. (2003, p. 24) behaviourists define learning as "...any more or less permanent change in behaviour which is the result of experience". Pavlov Ivan as cited by Jarvis et al., (2003), was one of the first scientists to attempt to explain how learning happens. He studied the digestive system of dogs and discovered that the process of learning caused a change of behaviour in the dogs. In his experiment with dogs and food he realised that dogs salivated at the sight of food. With time, he experimented by ringing a bell before giving dogs any food. Through these experiments he discovered that the dogs learned to associate the ringing of the bell with food, and that they would salivate just by hearing the sound of the bell and before they even saw the food.

Psychologists, like Thorndike and Skinner as cited in Jarvis et al. (2003), experimented with cats and food, rats and food respectively and they indicated that learning resulted in a change of behaviour. For these psychologists, learning was not something that happened independently, inside the mind of an individual but came about as a result of external influences. The environment determines what is learnt, and that leads to a change of behaviour (Smith, 2003).

Educators who subscribe to this perspective of learning will be concerned about the product of learning, which is the change of behaviour and how they can reach their end product (Smith, 2003). So an educator's job is to promote an environment which is conducive to learning and to delivering knowledge, with the hope that learners will learn how to change their behaviour.

However, this orientation to learning has been criticised on the basis that this view of learning is a one-way process, where learners are taken as passive receivers of information and their behaviour is controlled by the environment in which they are placed (Bandura, 1977). This orientation assumes that learners' behaviour can change from time to time, depending upon external influences, as they will have no control over what they learn.

2.9.2 The cognitive orientation to learning

Cognitivists are very much opposed to the behaviourist perspective on learning because, for them, not all learning results in a change of behaviour (Bandura, 1977). For the cognitivist, learning is not a product but a process that happens in the mind of the individual (Smith 2003). Bandura's (1977, p. 10) social learning theory incorporates the strength of this orientation to learning, when he argues that "...a theory that denies that thought can regulate actions does not lend itself readily to the explanation of complex human behaviour". This means that what happens in the mind of an individual is vital when it comes to explaining how learning takes place; hence it should not be disregarded when one is investigating learning.

Cognitivists view learning as something that involves processes such as insight. This means that, unlike the behaviourist, a learner is not just a passive receiver of knowledge but has the ability to see clearly or deeply the central nature of things. It assumes that a learner has the ability to memorise that which is learnt, although that might not be evident in a change of behaviour. This means that educators will look at the objective which they want to achieve and try to find steps that should be taken in order to allow the learner to understand that

which they are being taught. However, the challenge with this view of learning is that it highlights the cognitive aspects yet excludes the external motivators of learning encompassed in the behaviourist learning approach.

2.9.3 The humanistic orientation to learning

Abraham Maslow's hierarchy of motivation is one of the models which explains learning in a humanistic orientation (Marx, 1969). A humanistic orientation to learning views learning as something which leads to the satisfaction of human needs. According to Maslow, people have needs such as physical, social, and so on, and these needs are hierarchical. People learn to satisfy needs that are at the bottom of the hierarchy of needs before they learn to satisfy those that are at a higher level. Learning, in this case, is directed by learners who out of a desire to satisfy their needs as articulated by Maslow, will end up learning.

The role of an educator, in this case, is to facilitate the development of the whole person (Marx, 1969). Holistic learning has, however, drawn criticism on the basis that not everyone will follow all the stages of needs in order for them to learn because, for others it might be that they find other needs that are at the higher level more satisfying than the lower needs; hence they may disregard the lower level needs (Bandura, 1977).

2.9.4 Social /situational orientation to learning

The cognitive, behaviouristic and humanistic orientations emphasise learning as an individual activity (Phillips & Solstis, 2004). This is the main difference between them and the social/situational orientation to learning, which views learning as something that happens when an individual interacts with others or as something that happens within groups with a cultural frame (Smith, 2003). Although behaviourist, humanistic and cognitive perspectives of understanding learning may be important and relevant in the understanding of how learning happens, for the purposes of this study the main focus was on obtaining a deep understanding of the learning processes of HIV/AIDS caregivers in the context of social/situational perspectives of knowledge and learning.

Bandura (1977) is one of the pioneers of social and situational learning. Although Bandura's work was mainly on how learning happens through observation and cognitive processes especially with children, it lays the foundations for understanding of social learning. He argues that:

... virtually all learning phenomena resulting from direct experience occur on a vicarious basis by observing other people's behaviour and its consequences for them. The capacity to learn by observation enables people to acquire large, integrated patterns of behaviour without having to form them gradually by tedious trial and error (Bandura, 1977, p. 12).

His theory proposes that people learn the positive and the negative from what they observe in others. This helps them, in future, to consider the best way to respond when faced with similar situations. In other words "...learning from experience happens in everyday contexts as part of day to day living" (Boud, Cohan & Walker, 1993, p. 169). Social learning does not only happen when people interact directly with others through observation and cultural artefacts, but other media influence the processes of social learning. Bandura (1977) argues that people learn from so many social situations that it is no longer difficult for them to access role models, which can come through mass media such as radios, television and reading of newspapers (Wenger, 1998; Bandura, 1977).

Another important aspect of social learning is that learners have the capacity to reflect on what they have observed. This process of reflection enables them to make meaning from their experiences and thus enhance learning (Wals, 2007). The linking of past experiences with present ones through reflection allows learning to happen.

2.10 A SOCIAL THEORY OF LEARNING

2.10.1 Defining social learning

There is presently no universal understanding of what is meant by 'social learning' (Glasser, 2007). Authors such as Goldstein (1981), O'Riordan (1995), Kai Lee (1995), Woodhill (2002), Leeuwis and Pyburn (2002b) were identified by Glasser (2007) as all having different interpretations of social learning. Similarly, Parson and Clark cited in Glasser, (2007, p. 47) argued that there is a variance of meanings attached to social learning. Glasser (2007) reflects that they categorise their understanding of social learning into two groups when they state that:

... the deepest difference is that for some, social learning means learning by individuals that take place in social settings and /or is socially conditioned; for others it means learning by aggregates.

Wals and van der Leij (2007) also concur that there is a diversity in meanings associated with social learning for sustainability and sustainable development and they describe the concept of social learning as "open ended" (see section 2.7.2).

Glasser (2007), argued that social learning is learning that happens naturally as human beings are constantly learning in everyday contexts through observation and interacting with others (see section 2.9.4). He classified social learning into two categories:

Passive social learning is learning that occurs through:

...reading a newspaper, watching a blacksmith forge a tool, viewing a movie, listening to a radio program, attending a lecture or poetry reading (without questions from the audience), searching the internet or following a recipe. It also includes observing the practice of, and interactions among, others (Glasser, 2007, p. 49).

Glasser, (2007, p. 49) views passive social learning as learning from “prior learning of others”. His argument draws on Bandura’s (1977) understanding on social learning (see section 2.9.2). Glasser (2007, p. 49) pointed out the advantages of passive social learning as he sees it as a tool that can be used to change people’s unsustainable behaviours without wasting much “time and effort”.

However, passive social learning comes with its short falls in that it can be to some extent used to promote unsustainable behaviours. He illustrated this by giving an example where an advert can be used to promote unsustainable behaviours when it uses role models displaying unsustainable behaviours without any negative consequences. The other disadvantage of passive social learning is that it is not interactive and learners cannot get feedback from the source of information, this therefore means that it is an uncritical way of learning where the learner has to trust the source of the information. Because of the nature of passive social learning, issues of power and inequalities come in to play as few individuals in powerful positions or who have access to resources may use social learning processes to pursue their own interests at the expense a common good of many people. This in itself hinders learning for sustainability and sustainable development as it is not always the case that interests of those in positions of power are sustainable (Wals & van der Leij, 2007).

Active social learning is learning which is built on “conscious interaction and communication between at least two living beings” (Glasser, 2007, p. 51). Active social learning occurs in situations like formal meetings, social conversations, conferences and forums. Unlike passive social learning, active social learning is portrayed by Glasser (2007) as being more open, enabling people to engage and learn as equals.

Glasser argued that social learning is learning that happens when there is competition and conflict of ideas, interest and values and is learning that enables people to embrace their challenges through:

- Building a common language,
- Tolerating others with different world views,
- Being honest and open to criticism, and
- Trusting each other and working together for the common good.

It is learning which should enable individuals to rethink the ways they are used to doing things and accommodate new ideas in their actions (Wals, 2007). Learning can also take place collectively when an individual's way of understanding is challenged by interacting with other humans who hold different interpretations from theirs. The process of comparing one's ideas with others that are contrary to one's ideas enables learning as it challenges complacency and encourages people not to take things for granted (Sterling, 2007; Glasser, 2007). It is learning that should enable people to come up with new resolutions to emerging challenges in a world which is always evolving. Social learning has potential to encourage people to realise that they cannot solve problems and challenges by resorting to routine "problem solving approaches" (Wals & van der Leij, 2007, p. 17). Wals and van der Leij (2007) argued that social learning should enable people to live sustainably and improve the way we live, and should allow people to deal with day to day issues and challenges in a "systemic and reflexive" way.

Glasser, (2007, p. 51) categorised active social learning into three groups based on "skills, values and power relations":

1) Hierarchical which is characterised by the existence of a teacher and learners. Glasser, (2007) discusses the weakness of this form of learning in that power relations between teachers and learners might be a hindrance to learning if those in powerful positions decide to direct learners towards their understanding and ways of doing things without being open to varied views and understandings. An example of an ethnographic study of 14 high school students discussed in section 2.10.2 is an illustration of this weakness.

2) Non hierarchical where experts share knowledge. Social learning as a learning process is dependent on effective capacity building. This means that for individuals to be able to learn they have to be prepared to learn from others by being open and mature enough to be able to embrace constructive criticism of their beliefs and views and embracing new ideas from others (see section 2.11). A discussion on communities of practice as a social learning process (drawing on Lave and Wenger, 1991) indicates that people that are able to interact and ask questions from the old timers learn better than the ones that are not open.

3) Core-learning is learning which is based on “collaboration, trust, full participation and shared exploration” (p. 51). Glasser’s (2007), explanation of core-learning concurs with Wenger’s (1998) understanding of social learning as something that happens in communities of practice made up of **domain** (that which matters to people), **community** (a group of people who interact regularly to learn from each other) and **practice** (a common understanding of approaching issues) (see section 2.11). Wals and van der Leij (2007) also explain social learning as learning that occurs as communities of learners determine either in full or in part the goals of what they are learning.

2.10.2 Situated Learning

One of the models of social learning theory is that of situated learning. Tennant cited by Smith (1999) states that situated learning is a model proposed by Lave and Wenger (1991). This model suggests that learning is always contextualised, specific and practical in meaning (Smith, 2003). Benzie, Mavers, Somekh and Cisneros-Cohernour, (2005, p.180) argue that:

...the context and the activities through which learning take place are an integral part of what is learned and the environment in which the learner engages in learning is an integral part of the learning experiences and it shapes that which is learned.

Such a situated learning perspective implies that for learning to have any purpose at all, it should be viewed as something which happens in a social context, where people learn in relation to life challenges, and cultural and social referents.

Lave and Wenger (1991) understood social learning as a ‘situated activity’ through the notion of legitimate peripheral participation. This concept emerged from Vygotsky’s concept of zone of proximal development (ZPD) as cited in (2001, p. 4), which he defined as:

...the distance between a child’s actual development level determined by independent problem solving and the actual level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers

It is from this concept of ZPD that Lave and Wenger (1991, p. 29) originated their concept of legitimate peripheral participation in which they state that:

...learners inevitably participate in communities of practitioners and the mastery of knowledge requires newcomers to move toward full participation in the socio- cultural practice of a community.

Legitimate peripheral participation provides a way in which to speak about “activities, identities, artefacts and communities of knowledge and practice” (Lave & Wenger, 1991, p. 29). This implies that people learn new things not from a community but as part of being an

active participant in that community (Smith, 2003). What is important with regard to legitimate peripheral participation is that new people are gradually 'apprenticed' by experienced community members, beginning with minor roles/duties until they eventually learn the practices which enable them to function as full members of that community of practice.

In their ethnographic studies of the apprenticeship of Yucatec midwives, tailors, quartermasters and non drinking alcoholics, a newcomer learnt from old timers by being allowed to participate in certain tasks relating to the practice of the community. As time passed, a new comer moved from the periphery to the centre, and became a full member of the practice (Lave & Wenger, 1991). However, in the case of Alcoholic Anonymous, Lave and Wenger (1991) demonstrated that learning can also take place without necessarily starting at the periphery but also by people sharing stories of failure and success.

In environmental education, Lupele (2007), in his study on learning as it happens amongst the members of the Course Development Network (CDN) in environmental education, established that sharing of lived experiences of members acted as a learning curriculum to members what Glasser, (2007) identified as non-hierarchical active social learning (see section 2.10.1). Other works that are consistent with Lave and Wenger's (1991) work are those done by (Orr as cited by Amin & Roberts, 2007, p. 357). Orr's study of Xerox technicians involved replicating and refining a certain kind of craft knowledge through "shared practice", and Wenger's (1998) study of insurance claims processors where new comers at the firm learn through being formally trained and working with more experienced employees.

However, Smith (2003, p. 4) argued that the problem with Legitimate Peripheral Participation is that it fails to point out that "...there may be situations where a community of practice is weak or exhibits power relationships that seriously inhibit entry and participation". An ethnographic study of the experiences of 14 high school students' experiences when working for an environmental management organisation which was run by the Institute of Ecosystem Studies in America indicates that the power dynamics between a novice and an experienced member hindered the learning of the newcomers (Hogan, 2002). Another study, carried out in the United Kingdom on the experiences of doctors who were training to become general practitioners, indicated that being on the periphery was not necessarily conducive to learning (Cornford & Carrington, 2006).

2.11 COMMUNITIES OF PRACTICE

Wenger, Macdermont and Snyder as cited in Fullan (2003) describe communities of practice as a group of people who share a similar concern, set of problems, or passion and who increase their knowledge and expertise in a particular area. Similarly, Wenger (1998) defined the concept of community of practice as a group of people who have a common interest in achieving something, and they share ideas on the best ways to achieve their common goal. Wenger (1998) further observed that a community of practice is a unique combination of three fundamental elements:

- **Domain:** A sense of joint enterprise (that which matters to people) and which brings members together. Such a sense of joint enterprise creates identity, a shared domain of interest and a commitment to this domain. For instance in research conducted by Downsborough (2007), citrus farmers in Patensie in the Eastern Cape were found to share a domain or interest which was centred on long term production and export of citrus products. They interacted as a group and shared knowledge amongst themselves and with other institutions as they responded to changes and uncertainties posed to them and the citrus industry as a whole (Downsborough, 2007).

Downsborough's research showed that networks are an important and valuable aspect of social learning as they provide an important, vital source of information (Field, 2003). Wenger (1998) also argued that a community of practice should not be viewed in isolation to the world but rather in its relation to other networks which allow members of a community of practice to learn their practice.

- **Community:** Members engage in joint activities, thus helping one another in sharing information in the pursuit of their goal. It has been found that 'joint enterprise' belongs to participants in a community of practice because they are the ones who negotiate responses to situations they will face (Rock, 2005). A community is only a community of practice if members interact on a regular basis and learn from one another on how to achieve their objectives.

In health and business, ethnographic studies were conducted by Blaka and Filstad (2007) in Norway. These studies centred on how nurses learn to become midwives, and people learn to become estate agents. Their studies indicated that newcomers who were able to interact with their colleagues at an informal level, through asking questions, tended to learn more than newcomers who were reserved. This showed that through interaction, newcomers were able to observe, and learn, important aspects of the jobs

which were understood by everyone without actually being stated (tacit knowledge) (Wenger, 1998). This, therefore, means that learning was as a result of active participation in practice (Chindgren, 2005) enabling newcomers to get access to both tacit and explicit knowledge.

- **Practice:** It is a common understanding of interest among members of a community of practice and a way of approaching problems in a similar way. Members of a community develop a shared repertoire. Wenger (1998, p. 79), summarises repertoire as "...routines, tools, ways of doing things, stories, words, gestures, symbols, genres, action or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice".

In education, a study conducted by Linington and Excell (2004) in Soweto, South Africa, identified two communities of practice amongst teachers. They worked together for a period of eight months, learning from one another how to become more effective in relation to their teaching. Some of the findings were that these two communities of practice developed shared repertoires, like "songs, rhymes and art activities" which was the result of learning in a community of practice (Linington & Excell, 2004).

In business Kimble, Hildreth & Wright, (2001) show that a community of practice of photocopier repair technicians had shared repertoires, like war stories and documents which developed as a result of the existence of a community of practice, thus enabling members of the community of practice to learn from one another. Wals (2007) defines social learning as a process which should allow people to explore and reflect on their common ground and differences, simultaneously. These researchers believe that through such a learning process, people are able to live more sustainably in their context. For instance, Craps, Dewulf, Mancero, Santos & Bouwen, (2004, p. 378) were able to show that professional experts and local people in the rural areas of Ecuador were able to put aside their differences and work together because they wanted to achieve the same goal of "sustainable drinking water management".

2.12 ADULT LEARNING

Adults can learn either in formal or in non-formal environments (Illeris, 2006). An understanding of adult learning is important in this study because it is mainly about how women caregivers and participants in the three case study sites who were all adults learn. It also makes it easier to unravel how women learn to care for people who are living with HIV/AIDS and the rationale behind their learning experiences. Adult learning in the context of

social learning is consistent with social learning as its orientation is situational (see section 2.9.4).

An understanding of adult learning behaviour in HIV/AIDS caregiving and management through the use of traditional food and medicinal plants in this study is of relevance as it addresses issues of social learning and sustainability in the context of HIV/AIDS. This is because caregiving in the management of HIV/AIDS is a sustainability issue (see section 2.7.1). It is importance to understand how adult caregivers learn as HIV/AIDS caregiving is associated with risk and uncertainty especially on the use of traditional foods and medicinal plants in which caregivers have to trust that what they are practicing is correct and beneficial. It is also important to understand how caregivers as adults learn about caregiving in reference to their use of traditional food and medicinal plants where many actors whose interests and values may be diverse and contradictory (see section 2.2.1 & 2.6)

Another feature of adult learning which makes it relevant to an understanding of social learning is the fact that "...adults draw on the resources that they already have in their learning" Illeris (2006, p. 17). This means that when adults as with any other learners are presented with new information they tend to compare with their existing knowledge, to see if it is reliable.

Adults may carry traditional patterns of thought to their learning activities, including beliefs that they strongly hold (see section 2.7.2). This could place them at a disadvantage when learning about new issues that may be in opposition to what they strongly believe (Knowles, 1984). A discussion of adult learning was relevant in the context of social learning as it was assumed that difficulties that were likely to be faced by women caregivers were likely to encourage them to learn - making learning something which happens in everyday context (see section 2.10.1).

2.13 NETWORKING AND SOCIAL CAPITAL

As has been said earlier in this literature review, HIV/AIDS is the leading cause of death in South Africa. The government of South Africa, specifically the Health Department, has not been able to provide all the necessary structures to provide services to people who are living with HIV/AIDS. Birdsall and Kelly (2005, p. 12) noted that:

...the scale of the epidemic, the slow and / or partial implementation of certain elements of the national response, and structural limitation of the public health and welfare systems have contributed to growing community-level pressure to support and care for people living with HIV/AIDS.

Situations where community, family, churches and non-governmental organisations take it upon themselves to provide care for those with HIV/AIDS is not unique to South Africa. It is equally applicable to all African countries. For example Jamil and Muriisa (2004) noted in their study that non-governmental organisations were also playing an important part in fighting against the pandemic in Uganda.

The challenges associated with HIV/AIDS have led to the formation of relationships and partnerships which are meant to deal with issues of HIV/AIDS through prevention, provision of cure, testing, counselling and caring for those who are already infected (Pronyk, 2002).

A 19th century Sociologist, Emile Durkheim, argued that through interaction people are able to solve problems and achieve goals which they could not have achieved, or which may have taken them longer if they had done it alone (Field, 2003). These relationships which people form because of similar challenges have been explained using conceptual frameworks such as social capital (Birdsall & Kelly 2005, p. 12). Because this research also investigates how the community uses social learning in the care for HIV/AIDS subjects, this section goes on to discuss social capital and how it enables learning in relation to HIV/AIDS caregiving.

2.13.1 Social capital and learning

Social capital is defined as the shared norms and values within a society that enable action towards the universal good (Birdsall & Kelly, 2005; Jamil & Muriisa, 2004). This implies that people tend to form relationships when they have something in common as Field (2003, p. 2) states "...if people are going to help each other, they need to feel good about it, which means that they need to feel that they have something in common with each other".

This aspect of social capital relates to communities of practice as a social learning theory in that social capital has the ability to facilitate sharing of health information through social networks (Birdsall & Kelly, 2005) and the "provision of information support". Birdsall and Kelly (2005, p. 13) note:

In communities or societies with high social capital, people are more trusting and tolerant of one another, interact more, and are better able to co-ordinate themselves and cooperate in the interests of the community.

In this study, it is hypothesised that HIV/AIDS caregivers must have a social platform that enables them to learn from one another's skills and knowledge. However, Field (2003) warns that social capital can also act as an instrument to exclude while it includes others. In other words, social capital might seem to suggest that people only interact with whom they have

the same challenges and exclude those they perceived as not facing a similar challenge. This creates a situation where the excluded may not be trusted to offer help, this despite the fact that people who are not facing similar challenges can still form an integral part of the network. This aspect of social capital can be both enabling and hindering to learning.

2.14 THE LEARNING COMMUNITY

As discussed earlier, although it is true that people benefit from medicinal plants and traditional foods, the question of the sustainability of these plants is becoming ever more important in the face of increasing usage of such plants. The World Commission on Environment and Development's definition on sustainable development has been provided above. This definition seems to suggest that a balance is needed between both the use of resources by those who need them and the sustainable use of such resources. To achieve this Glasser (2007, p. 46) suggests that:

...environmental management must become much more about managing people - especially the way we learn, form and test our values and use nature to satisfy our needs and our desires - than managing nature per se....

The question then is how can the way people learn be managed unless it is known how they learn in the first place? This is where this research is applicable as it attempts to investigate the learning process in the context of caregivers in their caregiving practices with reference to how they use traditional foods and medicinal plants.

In this context, education and how people learn is vital in the field of HIV/AIDS, where there are indications that other education programmes have failed (Heald, 2002). Similarly Dyball, Brown and Keen, (2007) argue that attempting to solve local problems by 'importing' solutions which have worked in a different context has met recurrent failure in terms of sustainability. The same theory applies to issues of sustainability where the use of education to compel people to change their behaviour has proved problematic (Wals & van der Leij, 2007). It therefore, appears that there is a need for new approaches to sustainability education and HIV/AIDS education. Social learning provides an alternative way of understanding learning.

Similarly to Wals and van der Leij (2007), Heald (2002, p. 3) argues that when educating people in the field of HIV/AIDS there is a need to realise that "...people cannot be assumed to be autonomous agents operating in a social vacuum". By this he means that when educating people on issues of HIV/AIDS in Africa it is advisable to remember that choices which are human made are influenced by social context and identity.

An understanding of social learning processes is a shift from a modernist understanding of learning, which views learning as something that happens in the minds of individuals and knowledge as something which is objective (Hart, 2007) (see section 2.8) . Rather, post-modernist theorists believe that there are several ways and forms of knowing which can have different meanings and interpretations (Girbich, 2004). Learning is something that happens as individuals interact within their society and so as people participate in the social world the knowledge which they generate is useful in their context (Girbich, 2004).

Constructivists like Checkel cited in Hart (2007) although being understood to be more individualistic than social learning theorists, also supports social learning theory in that they view learning as something which is influenced by culture, history and politics. Bulman (2005), in her research on the how women learn about the HIV/AIDS epidemic in the maritime province of Canada, used constructivist epistemology as the basis for her study because she believed that knowledge is actively created by people and that knowledge is something which makes sense to them. Sutherland, cited in Bulman (2005), as a constructivist, argued that knowledge is a creation of life experiences, which might be different from knowledge that is gained from formal education.

According to Hart (2007) challenges facing researchers include understanding how people deal with complex situations which are shaped by environmental changes, be they economic, social or physical and how they have resulted in people questioning how others know what to do in complex situations. This has resulted to a widening realisation that the:

...concept of learning may provide openings to how people gain insight and control of the ways in which their actions may affect natural and human domains to ensure a more sustainable future (Hart, 2007, p. 315).

Anderson and Anderson (2005, p. 421) argue that this new focus on “...viewing learning as situated and bound to specific settings ... offers a basis for research...” This study is especially relevant since very little work has been done which investigates social learning in the field of environmental education, and even less has been done to examine the relationship between health, environment and social learning.

2.15 CONCLUSION

This chapter discussed the contextual profiles of the cases that were investigated (Grahamstown and Hamburg). It reviewed literature on the history of HIV/AIDS and informal HIV/AIDS caregiving. It also reviewed literature on use of traditional foods and medicinal plants and their benefits to people that are sick with specific reference to HIV/AIDS. The

chapter differentiates the concepts of education and learning and briefly discusses various theories of learning. Social learning theory is discussed in more detail, with specific reference to communities of practice theory which is used as lens in this study. The chapter also reviews literature on sustainability as well as the relationship between sustainability and learning. Adult education, social capital and learning are also discussed. The next chapter is a discussion of the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 CHAPTER OVERVIEW

This chapter discusses the research methodology used to address the research questions and achieve the objectives of the research as outlined in Chapter 1. It describes the theoretical framework used as the lens to collect and analyse the data. It also discusses the research participants, methods of data collection and analysis and research participants as well as the research design which followed a two phase process to allow for increased depth of data generation and analysis (see section 3.6). The steps that were taken to ensure the validity and trustworthiness of the research are also discussed. Ethical considerations which were taken and constraints that were experienced during the data collection and analysis of the data are also discussed.

3.2 RESEARCH ORIENTATION

As indicated in Chapter 1, the purpose of this study is to investigate the learning processes of women caregivers in a community of practice; to understand their practices in the usage of traditional food and medicinal plants in relation to HIV/AIDS, and how they make meaning of their practices. Since the study focused on learning as it happens in a contextual situation, an interpretative approach was adopted. Cantrell (1993, p. 84) argues that within an interpretative perspective "reality is constructed". For Cantrell, this, therefore, means that within an interpretive paradigm the task of the researcher is to "...understand and to interpret meaning within the social and cultural context of the natural setting". In other words, the researcher has to see reality from the perspective of the people under investigation.

Janse van Rensburg (2001) and Connole (1998) pointed out that, when doing interpretative research; the researcher has to understand what is going on in a specific context. Similarly, Cohen, Manion and Morrison (2000, p. 36) say that the interpretative paradigm "...understands the subjective world of human experience". This argument could be supported by what Fetterman as cited in Cantrell (1993, p. 84) says concerning doing an interpretative study: "...what people believe to be true is more important than any objective reality: people act on what they believe". Likewise, Connole (1993) suggests that when human beings act, there will be reasons behind their actions.

In this interpretative study, I explored how women were learning to give care in their context, characterised by poverty, unemployment and lack of health facilities, and I tried to understand what was really happening in that specific context. I, therefore, investigated how learning was happening from the perspective of members of the community of practice under study. I also assumed that knowledge about the use of traditional foods and medicinal plants and practices of sustainability were true to this specific group of women who were being studied. I tried to understand the reasons behind their practices from their point of view, taking into consideration that knowledge is what these women were constructing in their context. To provide further depth to these interpretations, I drew on the communities of practice theory which helped to explain the learning process further with a social context perspective as discussed in 3.3 below.

3.3 THEORETICAL FRAMEWORK

Wenger's (1998) theory of communities of practice gives a social account of learning by exploring, in a systematic way, the intersection of issues of community, social practice, meaning and identity (Austin, 2002). The theory of communities of practice was the major theory used to guide this study because Benzie et al. (2005) argue that the notion of community of practice provides a useful theoretical framework for researching the social learning processes of groups in contexts such as the workplace or the local community as indicated in section 2.10.2, Chapter 2. This study looks at learning processes of women caregivers in a local community.

The strength of working within an analytical framework which has the concept of community of practice at the centre is that it emphasizes the situated nature of knowledge and brings matters of context to the fore. It highlights relationships both between individuals and between individuals and community and, in this way, "...it is well suited to supporting accounts that capture social complexity" (Benzie et al., 2005, p.185).

Because this research was focussed on investigating learning as it happens in a community, the concepts of **practice**, **meaning**, **identity** and **community** were used to inform data collection and analysis in the study. Community of practice was used as the lens for understanding inter-relationships amongst caregivers and other institutions, and for further interpreting their learning processes.

3.3.1 Community

Wenger (1998) defines a community as a group of people who have a common interest in achieving something. They share ideas on the best way of achieving their common goal and thus a community is characterised by:

3.3.1.1 Joint venture: Wenger (1998) refers to becoming involved in some activity together for the fulfilment of the goal, or to tackle a challenge which is common among members. Wenger argues that 'joint enterprise' means that members of a community work together in responding to their challenge, and this they do irrespective of factors that might be beyond their control.

3.3.1.2 Mutual engagement: This is defined as "...people who are engaged in actions whose meanings they negotiate with one another" (Wenger, 1998, p. 73). In other words, members of a community make an effort to meet so that they can share knowledge on the best way to achieve their objective.

3.3.1.3 Shared repertoire: Wenger (1998, p. 83) summarises repertoire as "...routines, tools, ways of doing things, stories, words, gestures, symbols, genres, action or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice". These shared repertoires are a result of people being mutually engaged in a joint enterprise so that they end up learning and sharing ideas which will lead to doing things in a similar way. This means that the presence of shared repertoires in a community of practice indicates learning taking place amongst members of that community of practice. Absence of a shared repertoire might also mean that there is no engagement or joint enterprise; hence there is no community of practice to facilitate learning. To address the concept of community in this study, I explored the following questions:

- What is it that women do together as members of community of a practice to enhance their knowledge about caregiving?
- What is it that they have in common which shows that they are learning together?

3.3.2 Practice

Practice is one of the central ideas of Wenger's understanding of learning (Tusting, 2005). According to Wenger (1998, p. 47) "...practice connotes doing, but not just doing in and of

itself. It is doing in a historical/ social context that gives structure and meaning to what we do". Hogan (2002, p. 591) notes that practice as a situated view of learning can:

Emphasise the inseparability of knowing from doing and culture from cognition. Coming to know a discipline such as professional or citizen science entails improving one's participation in the discipline's practice - the culturally and historically rich activities, norms, and patterns of relationships that characterize a particular community.

Thus, learning involves some form of participation, doing something so that one can master a profession. The following questions were asked to address the concept of practice in this study:

- Do caregivers practise the usage of traditional foods and medicinal plants?
- Which traditional foods and medicinal plants do they use in relation to HIV/AIDS?
- Do caregivers practise sustainability of plants that they use?
- What are their sustainability practices?

3.3.3 Meaning

Wenger (1998, p. 52) defines meaning as:

...an experience that is located in the process of negotiation of meaning ... and negotiation of meaning involves interaction of two constituent processes called participation and reification and these are fundamental to the human experience of meaning and thus to the nature of practice.

This way, meaning comes as a result of connecting the two.

3.3.2.1 Participation: Participation "...refers to a process of taking part and also to the relations with others that reflect this process" (Wenger 1998, p. 55). It emanates from the interaction amongst people as they take part in a practice within a community of practice (Wenger, 1998).

3.3.2.2 Reification: Wenger (1998, p. 38) defines reification as a process that happens when participants in the communities of practice create meaning based on their practice, in which they abstract and represent practice as it exists in the real world. He defined 'reification' as a process of 'making into a thing'. Wenger (1998, p. 58) says that "...we project our meanings into the world and then we perceive them as existing in the world, as having the reality of their own". For example, if this explanation of reification is to be applied in this study one would say that the caregiving potential of traditional foods and medicinal plants (reification) is meaningless in relation to HIV/AIDS care giving until caregivers use them

(participation) and see the value in their use. To explore the meanings which women were attaching to their practises, the following question was central to this idea:

- How do the women explain the usefulness of traditional foods and medicinal plants which they use in relation to HIV/AIDS?

3.3.4 Identity

Identity is the characterisation of who we are as expressed by our everyday actions. The reason why novices are different from experts is that the experts have developed expertise or knowledge and experience over time and through practice, ways of doing things in which they are relatively certain of what they do. Bradley (2004) defines identity as being able to do that which is expected of you; knowing how to communicate; interact and look at the world in a way which is unique to your community of practice. Wenger (1998, p.151), defines identity as:

...a layering of events of participation and reification by which our experience and its social interpretation inform each other. As we encounter our effects on the world and develop our relations with each other, these layers build upon each other to build our identity as a very complex interweaving of participative experience and reification projections.

As illustrated by the definition above, the following factors are responsible for the way identity develops and changes:

- The way individuals view themselves as they interact with each other leads to the development of identity, and
- Interaction with others enables individuals to learn and the learning process leads to the formation of new identity.

Participating in the practice allows individuals to become confident in themselves and hence identify themselves with a certain practice. The points above can be summarised through Bradley's (2004, p. 349) argument which states that "...the intertwined nature of identity and participation is inescapable. Identity is formed during participation and participation includes forming an identity". Thus, for novices to identify themselves as members of a community of practice they will have to learn from experts in the community of practice through collaboration or observing the experts as they practise. To investigate this concept I asked the caregivers to tell their stories as caregivers and how they have learned the practice over time.

3.3.5 Networked learning communities

Wenger (1998) explains that communities of practice do not exist in isolation but are connected to the rest of the world. Members of a community of practice learn from other communities of practice and from the world in general. This also means that individuals can belong to more than one community of practice. In some situations, they might find themselves at the centre of a practice, yet in others at the periphery (Lave & Wenger, 1991). With this in mind, I did not restrict my investigation of women's learning processes to their communities of practice but also looked at other sources from which they were learning.

3.4 CASE STUDY APPROACH

According to Gillman (2000) a case study is a study which is specific and contextual in nature. Similarly, Yin (2003, p. 13) argues that:

...a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.

This implies that, a case study is an approach which researchers use when the issue that they want to investigate cannot be defined without having first understood the social, historical and cultural context of the phenomenon. A case study is defined as an investigation of a case which can be in the form of an individual, group, institution or a community. According to Yin (1993) case studies enable a researcher to undertake an in-depth investigation that allows details to be captured for interpretive analysis. In other words a case study approach is adopted when one wants to gain insight into real-life experiences.

Yin (2003, p. 14) argues that a case study is a study which "...relies on multiple sources of evidence, with data needing to converge in a triangulating fashion and, as a result benefit from the prior development of theoretical propositions to guide data collection and analysis". He categorised case studies into explanatory, descriptive and exploratory case studies. Explanatory case studies focus on reasons why something has happened. There are cases that explain the "cause-effect relationship" (Yin, 1993, p. 5) of a phenomenon under investigation. Descriptive case studies are conducted over a period of time to provide reasons for certain circumstances and are used to explain change. Exploratory case studies are "... aimed at defining questions and hypothesis of a subsequent (not necessarily case) study" (Yin, 1993, p. 5).

According to Yin (2003) case studies can be designed as single-case or multiple-case studies. Single-case studies are conducted in situations where researchers want to test a theory either to confirm or challenge it; when the case that is investigated is exceptional or the case is not easily accessible to scientific researchers. Multiple-case study designs use more than one case study and they cannot be used in situations that are suitable for single-case study design mentioned above. Researchers choose multiple-case study design because results from multiple-case studies are often considered more trustworthy than those from a single-case study design.

In light of the fact that this study was an investigation of how women learn about HIV/AIDS and because it was interpretative in nature, I adopted the case study approach because I was concerned with getting a better understanding about participants' meaning of their experiences, interactions and action from their point of view. In this study an effort was made to try and understand concepts such as community, practice, meaning, and identity as they are explained in Wenger's theory of community of practice in depth, since he used these to explain how learning happens in specific and contextual situations. The case study approach was also adopted in this study to allow use of different qualitative methods such as individual interviews, focus groups and diaries that were written by women caregivers (see section 3.6).

The study was designed as a multiple-case study with three case studies (Raphael Centre and Keiskamma Art Project and Keiskamma Health Centre) (see Chapters 1 and 2). The three case studies increased chances of understanding the phenomenon in more depth from more than one context (see section 1.2) (Yin, 2003). The case studies were also chosen because their context were considered to have some aspects of diversity in that Raphael Centre is located in an urban context (see section 2.4.2) and Keiskamma Art Project and Keiskamma Health Centres are located in semi-rural context (see section 2.4.3). Because of the diversity in context of the three case studies, some of the results were similar across the three cases, while others were different. To make sense of the insights gained across the three cases, I used Bassey's concept of 'fuzzy generalisations' (see section 3.9.4) to discuss the three cases.

3.5. PARTICIPANTS

3.5.1 Sampling technique

The sampling technique employed to select participants in this study was purposeful sampling. Purposeful sampling is defined by Baker (1988) as sampling that is done by a researcher who chooses participants after considering the most desired characteristics to recruit a sample of respondents. Similarly, Miles and Huberman, (1994, p. 27) also noted that when doing sampling in qualitative research, researchers are concerned with "...small samples of people that are nested in their context and studied in-depth". Communities of practice, as a theoretical framework, calls for purposeful sampling because as a theory it looks at learning as it happens in a specific context. In this study, participants were to be women who were caring for people living with HIV/AIDS. Non-governmental organisations which offer HIV/AIDS services were used as key informants who introduced me to women to whom they were providing services and who were looking after people who were living with HIV/AIDS. All participants in this study were those who showed a willingness to participate by being interviewed and to have the interviews audio-taped.

3.5.2 The research participants

3.5.2.1 Hamburg participants

Hamburg participants included interviews, focus group participants and three diary writers, a process involving a total of nineteen respondents. To maintain anonymity and confidentiality, eight caregivers from the Hamburg who participated in individual interviews were coded H.C1 to H.C8. H.C1 to H.C4, were working at the Keiskamma Art Project, whilst H.C5 to H.C8 were working at Keiskamma Health Centre. These same respondents were the ones who participated in focus group discussion 1 and were allocated codes A-H, and their focus group was coded Hfg1. A different group of eight women caregivers participated in focus group discussion 2 coded Hfg2 and participants allocated codes A-H. Focus Group 2 consisted of monitors at the Keiskamma Health Centre. Two focus group discussions were held to follow up on issues that were not fully addressed during individual interviews (see a discussion on focus group discussion section 3.6.2.1). Three women caregivers were asked to record in diaries traditional food and medicinal plants they were giving to their patients. This was done to check if women were practicing what they had said they do during individual and focus group discussion (see section 3.6.3).

All participants in this study were Xhosa-speaking and residents of rural Hamburg. Participants from Keiskamma Health Centre (see section 1.2), consisted of one nurse, a trained monitor and voluntary caregivers, whose educational levels were grades 11 to 12. At Keiskamma Art Project educational levels of women ranged from grades 4 to 12. Their age group ranged from 26 to 65.

Diary writer 1

Hamburg Diary writer 1 (HDW1) is a grandmother, aged sixty, who is taking care of a fourteen year old grandchild living with HIV/AIDS. The grandchild is the daughter of her elder son, whom she is also taking care of. The mother of this child died two years ago and her son is married to another woman who is also being supported by HDW1. She lives on a government old age pension of R920 per month, which is used to support a family of six. HDW1 has electricity and tapped water and uses pit latrine toilets. Her educational level is grade four.

Diary writer 2

This lady looks after her brother who is living with HIV/AIDS. She is employed at the Keiskamma Art Project. Her monthly income varies depending on how much art work she produces as she is paid on a commission basis. She lives with her husband, their three children and is the only bread winner. She earns a minimum of R1500 per month HDW2 has electricity and tapped water and uses toilets with flush system. Her educational level is grade twelve.

Diary writer 3

This caregiver is a monitor at Keiskamma Health Centre. She lives in one of the villages in Hamburg, has HIV and is aged 35. She is a mother of two. Her monthly income as monitor is less than R2 000, 00 per month. As a monitor, she assists one of the families in the village which has a child who is living with HIV/AIDS. HDW3 also has electricity and tapped water and uses pit latrine toilets. Her educational level is grade ten.

3.5.2.2 Grahamstown Participants.

As in the case of Hamburg, Grahamstown participants included interviews, focus group participants and three diary writers, and three informants, a process involving a total of twenty two respondents. To maintain anonymity and confidentiality, eight caregivers who participated in individual interviews were coded G.C1 to G.C8 and each of them was interviewed once. These same respondents were the ones who participated in focus group

discussion 1 and were allocated codes A-H and their focus group was coded Gfg1. A different group of eight women caregivers participated in focus group discussion 2 which was coded Gfg2 and participants allocated codes A-H. As was the case in Hamburg focus group discussions were used to follow up on issues identified during individual interviews that required more in-depth probing.

The above participants are clients at Raphael centre and all of them were unemployed except for G.C4 who indicated that she works in the kitchen. All of them reside in the locations which make up Rhini (see section 2.4.2.1) and are Xhosa-speaking. Two of the caregivers had attained grade twelve with the other participants having educational levels varying from grades one to five. Their age group ranged from 22 to 48.

Diary writer 1

This lady is a mother of four, aged 36. She is not employed and she lives on a disability grant of R940 per month. She was diagnosed with HIV in 2000 and is caring for herself. She is not married and lives with her two children. She resides in Joza 1, in a one-roomed house. She use paraffin as a source of energy and tapped water and uses toilets with flush system. Her educational level is grade ten.

Diary writer 2

This caregiver, aged 44, was born in Grahamstown and had her first child in 1986. Her level of education is grade 12. She became aware of her HIV status in 2005, when her second child was born. She lives with her boyfriend and her child in Ntentyi, a location in Rhini. She is looking after her three year old child who also has HIV. Her boyfriend is unemployed and they live on a meagre child support grant of R210 per month. She receives food parcels from the Raphael Centre every month. Her shack has no electricity so she uses paraffin for energy. Her toilet is a bucket system. She indicated that she always struggles with debts as her income is not nearly enough to take her through the month. Her educational level is grade twelve.

Diary writer 3

This lady is 35 years old and is living with HIV and is caring for her child who is also living with HIV/AIDS. Her boyfriend left her when she was diagnosed as HIV positive. She is an HIV Voluntary Counselling and Testing (VCT) counsellor at Raphael Centre and she earns R3000 per month. She joined the Centre in 1999 and was trained in counselling. Her educational level is grade twelve. She lives in Rhini and her house has electricity and a flush toilet.

Key Informants

Three key informants from Grahamstown were each interviewed once. Two of them allocated codes G.K1 and G.K2 were interviewed to ascertain the background of the Raphael Centre community of practice because they were some of the founders of the centre and to clarify issues that were raised during individual interviews. Another informant from Grahamstown was nutritionist at Settlers Hospital in Grahamstown. She was coded G.K3 and was interviewed because I wanted to find out more about support groups as a source of information as that information had emerged during individual interviews as well as on use of traditional foods and medicinal plants. The data generation process is given in Table 3.1 below, and includes an inventory of the data, with codes of respondents used for confidentiality.

Table 3.1 Data generation process and inventory

Data source and phase of analysis	Code	Date of data generation
Case 1: Grahamstown		
Key Informant Interviewee		
	G.K1	04-02-2008
	G.K3	07-02-2008
	G.K2	12-05-2008
Individual interviews		
Clients at Raphael Centre who were either living with HIV/AIDS or were caring for someone living with HIV/AIDS	G.C1	10-11-2007
	G.C2	13-11-2007
	G.C3	16-11-2007
	G.C4	17-11-2007
	G.C5	18-11-2007
	G.C6	19-11-2007
	G.C7	20-11-2007
	G.C8	21-11-2007
Focus group discussions		
Clients at Raphael Centre who participated in individual interviews (G.C1-8)	Gfg1 coded A-H	10-01-2008

Clients at Raphael centre who were either living with HIV/AIDS and or were looking after someone living with HIV/AIDS	Gfg 2, coded A-H	18-01-2008
Diary writers		
Clients at Raphael Centre who were either living with HIV/AIDS or looking after someone living with HIV/AIDS	GDW1, 2 and 3	17-09 to 17-10 2008
Case 2: Hamburg		
Individual interviews		
Members of Keiskamma Health Centre and Keiskamma Art Project caring for someone living with HIV/AIDS	H.C1	10-10-2007
	H.C2	11-10-2007
	H.C3	12-10-2007
	H.C4	13-10-2007
	H.C5	14-10-2007
	H.C6	15-10-2007
	H.C3	16-10-2007
	H.C8	17-10-2007
Focus groups discussions		
Caregivers (H.C1-8) who participated in individual interviews	Hfg1 coded A-H	12-01-2008
HIV/AIDS monitors and caregivers at Keiskamma Health Centre	Hfg2 coded A-H	21-03-2008
Diary writers		
Women who were caring for someone living with HIV/AIDS or were living with HIV/AIDS and caring for themselves belonging to Keiskamma Health Centre or Keiskamma Art Project	GDWR1, 2 and 3	17-09 to 17-10 2008

3.6 DATA COLLECTION

Case study methods involve systematically gathering enough information about a particular person, social setting, event, or group to permit the researcher to effectively know how the subject operates or functions. The case study is not actually a data gathering technique but a methodological approach that incorporates a number of data gathering measures (Berg, 2004, p. 251).

Because this study used case study methodology, it took into account the above argument about case studies and employed three data collection strategies i.e individual interviews, focus groups and diaries, to explore the learning processes of caregivers. These data collection methods were used in a two phased process, to allow for increasing depth in the data collection process. Phase two data collection therefore extended data collected in phase one. Table 3.2 below provides a summary of the type of questions that were asked at each stage of data collection.

Table 3.2 Table showing the difference between phase one and phase two questions

Phase one Individual interviews, Key informants Literature reading	Phase two Focus group discussions Diaries written by caregivers
Items investigated Information on their background as members of a community of practice	Items investigated Information on their background as members of a community of practice Diary writers profiles
Profiles of caregivers investigated Stories of care giving as they are told by caregivers.	Use of traditional food and medicinal plants
Information about being a member of a community of practice	Reasons for their practices in the use or non use of traditional food and medicinal plants
Use of traditional food and medicinal plants	Sustainability practices in the use of plants
Reasons for their practices in the use or non use of traditional food and medicinal plants	
Sustainability practices in the use of plants	

3.6.1 Phase one of data collection

3.6.1.1 Individual Interviews

In-depth, face to face interviews were used as a method of data collection for this study, in order to explore the learning processes as they took place within three HIV/AIDS caregiving

communities of practice. The interviews were informal (Murray, 2006) but were guided by use of a few questions derived from the broader research questions (see appendix 1). The questions were, however, by no means restricted to those few questions.

Open-ended questions were used in order to allow participants to have control over what they wished to say and how they wished to say it (Irwin, 1999). This enabled informants to articulate their opinions and viewpoints without restraint, and also allowed for the capture of the unexpected (Irwin, 1999). The advantage of informal interviews is that reality can be constructed in the 'world' of the interviewee (Schurink, 1998). The use of unstructured interviewing provides greater breadth than other interview types (Denzin & Lincoln, 1994).

In terms of quality and understanding of the questions which I was asking, testing of the interview questions was done in two steps. Firstly, the interview guide was prepared and critically examined by peers who have done similar research, to check whether the questions related well to the study. The second step was to conduct a pilot interview with one of the caregivers in Grahamstown, to "assess how effectively the interview will work and whether the type of information being sought will actually be obtained" (Berg, 2004, p. 90). The time taken to conduct the interviews was measured and took about 25 to 35, minutes depending on how articulate and zealous a particular participant was. The transcripts were transcribed in Xhosa and then translated to English (see section 3.7).

3.6.2 Phase two of data collection

3.6.2.1 Focus Group Discussions

Initially, I intended to do only two focus groups in Hamburg with the two communities represented by the participants (the Keiskamma Health Centre and the Keiskamma Art Project) and another one at Raphael Centre in Grahamstown (see section 3.5.2). However, I ended up doing four focus group interviews, two focus groups Gfg1 and Gfg2 in Grahamstown and two in Hamburg Hfg1 and Hfg2 consisting of 8 participants each, as a follow-up on issues that which were not fully answered during the first phase of the data collection which was the individual interviews. For instance, the question which was seeking to explore why caregivers were using traditional plants was not fully answered during individual interviews and therefore formed a key aspect of phase 2 focus group discussion (see appendix 4).

I dealt with this issue by taking traditional foods and medicinal plants that were identified during the first phase of data collection to the focus group meeting for identification by

participants and to initiate a discussion on why they practise the usage of traditional foods and medicinal plants. The benefits of the plants were then discussed while participants were looking at the plants.

I noted that this approach opened up discussion among the participants and I managed to get varied responses this time. As a follow-up method, open-ended questions (Irwin 1999) were used in these interviews to investigate caregiver use of medicinal plants, as caregivers were rather reluctant to answer this question during individual interviews. Another strategy used to obtain additional information was to give the participants of the focus group the questions which were asked in *isiXhosa* prior to the discussions. This allowed the participants to be more prepared for the discussions.

Besides using focus groups to follow up on issues which were not clear during individual interviews, I also used them, for purposes of triangulation. Questions which were answered well during first interviews, such as questions on the practices of the use of traditional foods were again discussed during focus group discussions to confirm the data with the participants. The focus group discussions were largely unstructured although a number of pre-set questions and probes (see appendix 3) were used to guide the discussions (Berg, 2004). The discussions lasted for approximately forty five minutes to one hour (see an example of a transcript in appendix 4). The focus group discussions were transcribed word for word in *isiXhosa* then translated to English by someone fluent in both languages.

3.6.2.2 Diaries

This phase of data collection was done mainly for data triangulation. I asked three caregivers from each case study to write diaries, in which they were to record food and medicinal plants which they were using for a period of three to four weeks, depending upon their willingness. I did this to establish whether during individual interviews and focus group discussions, caregivers had not just mentioned the foods and medicinal plants they possibly were no longer using. Diaries were also meant to triangulate data on how women learn about such foods and medicinal plants.

3.7 DATA MANAGEMENT AND ANALYSIS

3.7.1 Data Management

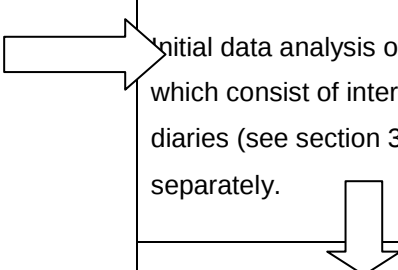
Cohen et al. (2000) argue that researchers should avoid distorting, misrepresenting, reducing or losing data. To address this, the recorded information obtained from interviews

conducted with caregivers was transcribed (Flick, 2006). The process of transcription was done word for word, without making any changes to each of the tape-recorded interviews, with someone fluent in *isiXhosa* and English. The same person was used in translations of the transcriptions. The translator was an experienced person who had previously been involved in translation of transcripts. Some of the transcripts were directly translated to English during transcription to save time.

3.7.2 Data Analysis

Data analysis was also undertaken in two phases, but these were not the same as the two data collection phases. Phase one data analysis involved analysis of the data collected to develop an insight into the learning processes in the three communities of practice using induction. Phase two of the data analysis involved recontextualising the data using the communities of practice theoretical framework using abduction as summarised in Table 3.3 below:

Table: 3.3 Summary of how and where two modes of inference are used in the data

Phase one and two Data collection 	Phase one Data analysis (using induction). Initial data analysis of data collected during phase 1 and 2 which consist of interviews, focus group discussions and diaries (see section 3.7.2.1). Three case study sites analysed separately.	Chapter 4 and 5
	Phase two Data analysis (using abduction) I used communities of practice theory as a conceptual and analytical framework to recontextualise data across all sites	Chapter 6

3.7.2.1 Phase 1 of data analysis process

Patton (1990, p. 436) differs from many research authors who advocate for absolute distinctions between data collection and analysis when he argues that “...ideas for making sense of data that emerge while still in the field constitute the beginning of analysis: they are part of the record of field notes”. In this research process there was no clear-cut point between data collection and data analysis, as data were analysed from day one at the pilot interview stage. Miles and Huberman (1994, p. 84) state that the process of doing data collection and analysis simultaneously allows “...the field worker to cycle back and forth between thinking about the existing data and generating strategies of collecting new, often better quality data”. The scenario described by Miles and Huberman (1994) was the approach adopted in this study. As I did data collection I undertook initial analysis work to identify data gaps to inform phase two questions and data collection. Besides this, I undertook a comprehensive analysis of all the data collected during phase one and two using induction.

The first phase of data analysis was therefore primarily inductive in nature (Connole, 1993). Induction is defined by Danermark et al. (2002) as a process of data analysis that involves developing conclusions from observing a small number of events and then generalising these to a larger population. Ezzy (2002) describes induction as a process whereby the research findings emerge from the dominant or significant theme inherent in the raw data. In this study, this analysis involved coding by reading translated transcripts, guided by the research questions (see appendix 2) (Ezzy, 2002). While I was guided by research questions “...the specific nature of the categories and themes were not predetermined” (Ezzy, 2002, p. 88) by the conceptual framework although this did influence some aspects of the analysis for instance the focus on practice, and dynamics of learning in a community of practice. From this process of induction I produced analytical memos (see appendix 5) through a process of bracketing, which involves gathering together information from different transcripts and sources of data relevant to the same category (Flick, 2006). Analytical memos helped me to look into the data systematically and deeply and to formulate the reporting based on the categories and sub-categories that emerged from the data coding and analysis (see Table 3.4 below), which form the basis of Chapters 4 and 5.

Table 3.4 A preliminary list of categories and sub-categories

Main theme	Category	Sub-category
Background to the community of practice	How caregivers learn about the centre Reasons for joining a community of practice	Referred by the clinic Through family and friends Through local paper and radio station To get food For support group meetings Training on life skills and home-based care
Learning interactions of HIV/AIDS caregiver	Caregivers learning in a community of practice	Care giving 'domain' Mutual engagement of caregivers Informal sharing Observation enabling learning Caregivers learning from printed information Joint enterprise Shared repertoires of stories
	Caregivers learning in the community	Caregivers sharing knowledge and learning from other caregivers Caregivers learning from the media Learning from older members of the family Support groups facilitating learning of caregivers Churches enabling caregivers to learn Traders and traditional healers Caregivers drawing from what they had learnt from school Learning from Non governmental organisations Learning from clinics and hospitals
Caregivers practices related to their use of traditional food and medicinal	Use of traditional food	Use of Wild vegetables (<i>imifino</i>) as food <i>umphokoqo umnqa</i> (stiff pap <i>Umgqusho</i> <i>Amarhewu Umxhanxha Isophi</i> in relation to HIV/AIDS

plants	Use of medicinal plants by caregivers	Caregivers using medicinal plants Caregivers not using medicinal plants
Sustainability practices associated with the plants that they use	Caregivers sustainability practices	Practice sustainability by harvesting methods
Influences on traditional food and plant use practices as shared by caregivers	Reasons for using traditional food	Nutritional value of the food Medicinal plants
	Reasons for use/non use of medicinal plants	Medicinal plants are helpful Medicinal plants cannot be used together with ARVs

Data from the interviews, focus group discussions and diaries was triangulated and synthesised using the analytic memos, and is reported comprehensively in chapter 4 and 5.

3.7.2.1 Phase two of the data analysis process

After the first phase of data analysis, the data was further analysed using the process of abduction. This was because induction alone was unable to give explanations which lie behind the findings that had emerged from the data in phase one of the analysis. Danermark, Ekstrom & Jabsen, (2002, pp. 80-81) defines abduction as a process of “...interpreting and recontextualising individual phenomena within a conceptual framework or a set of ideas”, so that the phenomenon is understood in a new conceptual framework. In other words, it is a process of understanding observed patterns in a new context. The advantage of using abductive analysis as noted by Danermark et al. (2002, pp. 80-81) is that it “...provides guidance for the interpretative processes by which we ascribe meaning of events in relation to a larger context”.

In this study, I drew on Communities of Practice theory as a conceptual framework to observe, describe and interpret the patterns recurring in the data presented in chapters 4 and 5 through the development of analytical statements which, according to Bassey (1999, p. 70) reflect the main themes evident in the data and “...give concise answers to the research question”. These statements were used to describe and explain the learning, practices, and influences on learning and practices and help to synthesise the findings

presented in Chapters 4 and 5 in relation to the research questions. The following are analytical statements that form the basis of chapter 6.

- Participating in a community of practice can provide a mechanism for supporting learning.
- Different learning processes are possible in communities of practice.
- Practices need not only be learnt in a community of practice context.
- Women caregivers can learn to re-value their traditional knowledge and practices in a new context.
- Women caregivers are not learning explicitly about sustainable use of plants.
- Ambivalent messages arising in learning processes can influence practice.
- Power relationships between caregivers and health practitioners influence the learning practices of caregivers.
- Experience appears to be key influencing factor in learning.
- Visible symptoms of illness appear to be determining referent for practices.
- Exposure to and incorporation of knowledge can influence practices.

3.8 ETHICAL CONSIDERATIONS

Social scientists, perhaps to a greater extent than the average citizen, have an ethical obligation to their colleagues, their study population, and the larger society. The reason for this is that social scientists delve into the social lives of the other human beings. From such excursions into private social lives, various policies, practices and even laws may result. Thus, researcher must ensure the rights, privacy and welfare of the people and communities that form the focus of their studies (Berg, 2004, p. 43).

In order to meet 'ethical obligations' as indicated by Berg (2004), the following steps were taken into consideration during the study:

3.8.1 Informed consent

Informed consent means the "...knowing consent of individuals to participate as an exercise of their choice, free from any element of fraud, deceit, duress, or similar unfair inducement or manipulation" (Berg, 2004, p. 64). In this study the aims and nature of the research were made clear to each participant prior to undertaking the research. Explanations were verbal, and were provided in detail to each participant when they were first approached. Permission was asked to record the interviews prior to the interviews and the reason for recording was

explained to the participants. The participants were also informed that if they wanted any information not to be recorded this would be permissible.

3.8.2 Voluntary participation

The participants in the study were all volunteers (Babbie, 2001). They were also told that they were free to withdraw from the study at any time if they felt that they were uncomfortable.

3.8.3 Confidentiality

Because of the sensitivity of issues being discussed, the participants were assured of confidentiality, as suggested by Babbie (2001) who advocated for confidentiality during and after interviews. Berg (2004, p. 65) defines confidentiality as "...an active attempt to remove from the research records any elements that might indicate the subject".

During research, confidentiality was achieved by safely storing the audiotapes which were made during the interviews so that no one apart from the researcher and the translator could have access to these materials. All participants were referred to by pseudonyms and codes throughout the report (Berg, 2004). In addition, focus group participants were asked to respect the confidentiality of others in the focus group, by not divulging details of the discussions to outsiders.

3.9 VALIDITY/TRUSTWORTHINESS

In order to maximise validity and trustworthiness of the study the following steps were taken into consideration:

3.9.1 Face validity

Lather (1986) argues that one of the important factors that needs to be taken into consideration as part of ethical considerations is to do 'member checking'. Member checking is a process whereby participants will be given regular feedback and transcripts of interviews (Maxwell, 2005). In this study it was necessary to check with the participants whether what I had reported in the study was in fact what the participants said. As the study was situated in a community of practice, it was necessary to check that what had been translated was an

accurate reflection of what the participants said, as truth was perceived from the point of view of members of the community practice.

This was done with the data that were collected during the first phase of data collection (individual interviews). When I returned for the second phase of data collection I reported on the first stage of data collection and I asked participants to comment especially on the practices and the meanings, and the learning processes that most of them shared, and I asked for their feedback. The focus group discussions were member checked by taking the transcribed focus group interview to the participants of each focus group discussion for their comments. Maxwell, (2005, p. 11) stated that member-checking “is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say...”.

3.9.2 Triangulation

In this study, data from the individual interviews were triangulated with focus-group discussions and diaries written by caregivers, to provide a detailed and descriptive account of the data (Yin, 1993). The different tools used to collect data, are as suggested by Miles and Hubermas (1994, p. 267) who said that triangulation “...is a way to get to the findings in the first place, by seeing or hearing multiple instances of it from different sources by different methods and by squaring the findings with other it need to be squared with”.

3.9.3 Thick descriptions

Thick description, which is important in case studies, involves writing as close to the data as possible. Throughout Chapter 4 and 5, the voices of caregivers are expressed in excerpts taken directly from diaries, focus group discussions and interviews. This technique was used to provide more detailed understanding of caregivers' social learning processes, practices and how they make meaning of what they do. The use of direct quotations which were a product of verbatim transcriptions was to add trustworthiness (Maxwell, 2005).

3.9.4 Generalisability

Yin (1993) argues that the use of a theory enables an investigator to generalise the results of a case study. The argument is that use of a theory can allow the application of the same theory in other sites, to test similar phenomena. This means that theoretical ideas can be generalized but the specific case-related findings cannot, because they are context specific (Maxwell, 2005). Generalisability, therefore, assumes that the theory may be useful in

making sense of similar situations. For instance, this study relied on the assumptions of communities of practice to investigate a small group of women caregivers in three case studies that could be 'extended to other cases' of women caregivers throughout the Eastern Cape Province.

Because this research was done in three case studies within the same region in the Eastern Cape, 'fuzzy generalisation' which are statements that make no absolute claim to knowledge but leave room for doubt as a possible way forward (Bassey, 1999), could be made on the way women learn about HIV/AIDS caregiving, as I have provided "...enough detail of the study's context so that comparisons can be made" (Merriam, 2002, p. 29). These 'fuzzy generalisations' are framed as analytical statements in Chapter six. In Chapter two I provide a contextual profile of the Eastern Cape region and the two cases studied in the same region, so there is a possibility that other communities of caregivers in the same region are practising caregiving using plants in similar ways to those in the studied cases. This means that readers who are in situations similar to the ones that were under study could draw on the theoretical framework and consider the applicability of the results to their context.

3.10 REFLECTION ON THE METHODOLOGY

As indicated in sections 3.6 and 3.7 above the study used a phased approach, both for data collection and for data analysis. The bulk of the data was translated due to language constraints. Here I reflect briefly on the research design and aspects of the methodology.

3. 10. 1 Language constraints

Language was a key constraint during both data collection and interpretation of the data as I am not familiar with the *isiXhosa* language. The ideal would have been to interview people in English, but that was not possible as most of the participants were not conversant with English, except for key informants who participated in this study. The use of an interpreter made it difficult to collect data, as she translated both for myself and participants.

Although I made good use of an experienced interpreter who was conversant in both *isiXhosa* and English, it was also difficult for her to interpret idiomatic expressions, where I think some meaning may have been lost. However it must be said that an experienced translator was a real benefit to the study.

3.10.2 Time constraints

One of the constraints that I faced in this research was that it took the transcriber too long to do the work. This delayed the second phase of data collection which affected the entire process of data gathering and analysis.

3.10.3 Use of communities of practice framework

This section presents a critique of communities of practice as a theoretical framework. The critical review of Wenger's communities of practice draws on a collection of papers in a book edited by Barton and Tusting (2005) entitled '*Beyond Communities of Practice*'. The critiques raise issues about dealing with power and conflict in communities of practice research; exclusion of the wider social context in communities of practice research, and inadequate attention to issues of language in communities of practice.

Power and conflict

The main concern with Wenger's (1998) communities of practice theory that I considered in this study is its failure to address "...power and conflicts where groups do not share common goals and interests" (Barton & Hamilton, 2005, p. 25). As discussed in section 2.11, Wenger (1998) presented the concept of a community of practice as constituting people who share a common goal, interact and share knowledge which results in them developing a common way of doing things.

Wenger's (1998) communities of practice concept is, however, critiqued for being 'benign' in that it assumes that learning occurs in communities of practices where all members of the community of practice share the same objective, ways of doing things and have the same repertoires (Barton & Tusting, 2005), a view which paints out conflicts of interest and power differentials and how these affect learning. Views on social learning that are contrary to Wenger's (1998) 'benign' communities of practice show that learning in communities of practice may also happen because there are conflicts and contradictions (Wals and van der Leij, 2007). In other words learning in communities of practice does not necessarily happen in communities that are 'homogeneous' but occurs in communities that are 'heterogeneous' in terms of goals, repertoires and meanings (Creese, 2005; Rock, 2005). Such communities of practice encourage 'out-of-the-box-thinking' (Glasser, 2007, p. 53). In this study the theoretical framework did not extend to a full analysis of issues of power, ambivalence and conflicts of interest in the women's experiences in great depth, although some of these

aspects were visible from the data generated (see for example section 4.5.2, 5.7.1 and 5.7.2).

Broader Context

Martin and Keating as cited in Barton & Tusting (2005) argue that Wenger's theory of communities of practice fails to look at how broader contexts influence how people learn in communities of practice. They argue that the notion of legitimate peripheral participation where a newcomer joins a community of practice and learns from the older timers misses the point that newcomers bring with them tacit knowledge, lived experiences, language and culture that so called 'old timers' may not be in possession of. In other words critics of Wenger's communities of practice theory argue that it is not always true that newcomers always learn from old timers as old timers can also learn from newcomers. They argue that Wenger's (1998) communities of practice does not have analytical components that can be used to provide a deeper understanding of how socio-economic conditions, political issues and culture can impact on learning processes. Martin (2005, p. 9) suggested that socio-cultural activity theory can be used to look at social learning as a tool to bring about change as it is able to address "...practice as generated through collaboration-innovative expanded learning-rather than by being acquired by a new comer moving into existing community with established practice". In other words Martin argues that socio-cultural theory can explain how conflict can allow for generation of new knowledge that brings about change. In this research I have provided contextual profiles of the study sites, and of the issues associated with HIV/AIDS in the Eastern Cape Province (see sections 2.4.2 and 2.4.3) to provide insight into how the broader social context influences learning. In some instances, this was also evident in the data (see for example section 4.2 and 5.2 and 5.4).

Issues of the language-in use in a communities of practice theory

Tusting (2005), Creese (2005) and Rock (2005) argue that Wenger's (1998) communities of practice theory does not address the role of language in understanding social learning processes yet it is mainly through language that knowledge is transmitted. They argue that language that is used in the learning process can also reflect issues of power as they believe that in communities of practice there are some voices that are suppressed and some that are promoted and it is the ideas of the promoted voiced that are learnt. While this study did not focus on detailed discourse analysis to establish language-power-knowledge related issues, the study did consider issues of power in the learning process (see for example section 6.4.2).

3.11 Conclusion

This chapter discussed the research design and research processes. The theory of community of practice used to guide collection and analysis of the data is explained. The sources of data which were generated, such as individual and focus group interviews and diaries, are also explained as is the analysis process. This chapter closes with a discussion of validity and ethical issues and reflections on the research methodologies. The following two chapters, chapter four and five present the results obtained from the two case studies that were investigated.

CHAPTER FOUR

LEARNING, PRACTICES AND MEANING OF PRACTICES

THE CASE OF THE RAPHAEL CENTRE COMMUNITY OF PRACTICE

4.1 INTRODUCTION

This chapter presents the research findings. The data used to compile the chapter is based on interviews, focus group discussions and diaries of caregivers. The data was organised into analytical memos using categories that emerged from the data sources, as reported in section 3.7.2. This chapter covers one of the case study sites, namely the Raphael Centre Caregiving Community of Practice in Grahamstown. The Keiskamma Art Project and Keiskamma Health Centre Caregiving Communities of Practice in Hamburg are presented in the next chapter. Each of the case studies covers the following aspects:

- Background of the communities of practice that were investigated (see section 4.2, 5.2 and 5.4)
- Learning interactions of HIV/AIDS caregivers (see section 4.3, 5.3 and 5.5).
- Caregivers practices related to their use of traditional food and medicinal plants (see section 4.4 and 5.6).
- Influences on traditional foods and medicinal plant use practices, as shared by caregivers (see section 4.5 and 5.7).
- Sustainability practices associated with the plants that they use (see section 4.6 and 5.8).

4.2 BACKGROUND TO THE RAPHAEL CENTRE COMMUNITY OF PRACTICE

As discussed in Chapter 1 (see section 1.2) Raphael Centre is a non-profit organisation offering free, voluntary counselling and HIV testing to people (Raphael Centre Annual Report, 2004/5) located in Grahamstown (see section 2.4.2) where the context of the area is discussed. The Centre was established in 1999 by a group of people led by a Minister of the Anglican Church after realising the need for an AIDS Centre in Grahamstown (G.K.1, pers. comm., 4 February 2008). At that time there were no other HIV/AIDS centres in Grahamstown (G.K.2, pers. comm., 7 February 2008). The centre was named after St

Raphael, an archangel known for his healing powers (G.K.1, pers comm., 4 February 2008). Besides offering free voluntary counselling and HIV testing, the centre also offers support services which are required by its clients who are HIV positive or living with AIDS. The manager at the Centre noted some of the services that they provide to the community:

Clinics offer voluntary counselling and testing but they do not offer it every day like what we do, so for instance if a person come to a clinic and say I want an HIV test then that clinic is not offering it lets say on Monday then they say if you need it you can go to Raphael Centre ... We also provide follow up services here by training and education. These people that are HIV positive, they are welcome to come and attend at this centre and get HIV education, mainly what I call coping skills. ... We spend more time with people individually, some people need that, and they need to hear things more than once for it to sink in, so that's the strength of Raphael Centre. ... Thursday of every month we hand out clothing and food parcels. It is an incentive so that everybody will come in so that we can see how they are. In other words the Centre 'reinforces the message that the clinic and the hospital gives (G.K.1, pers. comm, 4 February 2008).

4.2.1 How caregivers learn about the Centre

- *Referred by the clinic*

Four of the caregivers who participated in individual interviews and one of the participants in focus group discussion 1 (Gfg.1) indicated that they got to know about the Centre through being referred by clinics and hospitals, as evidenced by G.C3 who said:

I went to Joza clinic and there I met a nurse called Glen. She encouraged me and told me the names of the centres, Raphael Centre and St Phillips, She explained that St Phillips is in our township, Raphael is in Town and I've chosen Raphael Centre which is in town.

Participant H in Gfg.1 also confirms that clinics refer people to the centre when she said that *"I heard about Raphael Centre from [xxx] when she was talking at the clinic. I investigated and I then came here and I became a member"*.

- *Through local paper and radio station*

The manager of the centre (G.K.1) indicated that the centre advertises its services in the local paper and radio station. This was confirmed by participants G.C7 and G.C8, who indicated that they had heard about the centre over the local radio station as G.C7 said: *"There was a programme about HIV and AIDS and I was always listening to it and I also heard about Raphael centre from the radio and I came here"*.

- *Through family and friends*

G.C1, G.C5, two caregivers from focus group discussion one (Gfg1) and seven caregivers from focus group two (Gfg2) indicated that they had joined the centre after being told about it by family members and friends. From the responses of caregivers, I noted disclosure of one's HIV status to other people as being an enabling factor in being referred to Raphael Centre for assistance as evident from the following examples of data extracts:

...but when I told my mother about my status my mother also told her madam (boss). So my mom's madam brought me here at Raphael Centre' (G.C1).

I am [xxx]. I arrived here in 2002. I was ill and I was advised by my friend [xxx] that there is a place where HIV positive people meet called Raphael Centre (G.H).

4.2.2 Reasons for joining the Centre

- *To access food*

Three participants in the focus group discussions and individual interviews indicated that they joined the Raphael Centre because of the meals and food parcels that they receive from the centre. During an individual interview, one of the caregivers said *'the support group help me when I have a problem at home of sleeping without food. Here we are getting bread before we go home, we eat bread with tea'* (G.C3). Evidence from the focus group discussion also indicated that food parcels and meals were a motivating factor for women joining the centre, as noted by participant F during focus group discussion 1, who said that *'If I come regularly I get food parcels'*. Participant B in focus group discussion 2 also said, *'When we get here in the morning we have porridge at 10:00am and bread and at lunch time we have lunch'*. The reason for coming to the centre for meals and food parcels was also confirmed by diary writers 2 and 3, who recorded in their diaries only one meal per day and indicated that they were getting some of their meals at the centre.

- *Joining for support group meetings*

Three out of eight caregivers, who participated in individual interviews, and also participants B and C in focus group 1, indicated that they come to the centre because they want to belong to the support group at the centre which meets everyday, to get advice and learn about other things which they do not know (Appendix 5 AM1.a).

- *Management of stress related to living with HIV/AIDS*

G.C 5, who participated in an individual interview, indicated that she had joined the centre because she wanted to manage stress as a result of being HIV positive, or learning to care for someone living with HIV/AIDS. She said: *"I used to think only about being HIV positive, the reason being that I also have a ten year old who is HIV positive, and so is the father of my child. I then decided to join Raphael Centr".* This reason for joining Raphael Centre for the management of one's stress was also confirmed during focus group discussions, as noted by the following citations:

I came here because I was stressed and had begun to drink a lot. Someone who has stress gets helped here and that is the reason why I joined Raphael Centre' (Participant G, Gfg 1).

I came here because I was reluctant to accept the HIV. I got here I was stress free because of mama [xxx]'s teachings (Participant E, Gfg.1).

I really got a lot of help. [xxx] advised that I should not sit down and do nothing because I will be stressed ... it was then that I came to Raphael Centre' (Participant F, Gfg.2)

- *Training on life skills and home-based care*

The centre offers training on life skills and home-based care of people living with HIV/AIDS, as recalled by caregiver G.C2 when she said: *"I was told by [xxx] that people get help here ... on life skills and home-based care".* This reason was also confirmed by five caregivers who participated in focus group discussion 2 in Grahamstown.

4.3 LEARNING INTERACTIONS OF HIV/AIDS CAREGIVERS

4.3.1 Caregivers learning in a community of practice

The learning interactions of women caregivers were identified in individual caregiver interviews, triangulated by focus group discussions and diaries written by caregivers. Evidence from this data indicates that women at the Raphael Centre are a community of practice, as illustrated below.

4.3.1.1 Caregiving 'domain'

A community is only a community of practice if there is a 'domain' (Wenger 1998) (see section 2.11). This means that members of a community of practice should have a common passion or challenge which brings them together in search of a solution. The responses that

I received from all the participants who are clients at Raphael Centre indicate that they all face the challenge of how best to care for someone living with HIV/AIDS.

Of the eight individual interviews which I conducted in Grahamstown, three caregivers G.C2, G.C3 and G.C8, indicated in their responses that they are not caring for anyone except for themselves as the following interview excerpts confirm:

In 1998 the father of my children told me that [xxx] is like that now (ndinjalo) HIV positive. I didn't believe him. I went for HIV test myself at the clinic and when I tested positive I then decided to join this centre so I could look after myself well (G.C8).

I am not taking care of anyone who is HIV positive. It's me who is HIV positive (G.C2).

I am only caring for myself. My baby boy is also sick but it is my sister who cares for him. I could not care for him myself because of this sickness (G.C3).

However, these caregivers are not the only ones who claimed to be looking after themselves. Some of those who indicated that they are caring for their children or their relatives, for example, G.C6, G.C5, G.C7 and G.C1, were also living with HIV/AIDS. When I planned the data collection, it was not my initial plan to look at caregiving as looking after oneself, but during the research process, it became evident that caregiving also included looking after oneself, as many participants reported that they were looking after themselves as well as others.

Two caregivers, G.C6 and G.C4, are looking after their relatives. G.C4 indicated that she was negative and looking after her sister whom she said had improved. She said: *"For now I don't have a problem she is getting well, but before when she was very sick it was so painful to me, but now she is fine"*.

G.C6 being positive herself is also looking after her sister and she had this to say about being a caregiver *"... but I was the first one to be diagnosed with HIV, then my sister also got infected from where she was working. She then came back home after she was missing for a while and told us that she was HIV positive"*.

Three of the participants, G.C5, G.C7 and G.C1, are mothers living with HIV/AIDS who are also looking after their children living with HIV/AIDS. These children were born HIV positive and two of them are ten years old, with one being three years of age. The excerpt below shows the responses given by these women in response to a question as to whether they were looking after someone living with HIV/AIDS:

I am looking after my child who got very sick after birth in 1999. I was sent by the clinic to Settlers Hospital in Rhini. The hospital sent us to Livingstone in PE. He was

very sick and they asked if they could test him, because there is a disease and I agreed. They tested him and told me that he was HIV positive (G.C7).

In 2004 I did not know that I was HIV positive. I got pregnant that year and I got sick. I went to Tanyi clinic and was tested and was found to be HIV positive. I delivered my baby and she was also positive and now I am the one looking after her (G.C1).

I am HIV positive and have a ten year old who is HIV positive that I am looking after (G.C5).

4.3.1.2 Shared repertoires of stories

Martin (2005) and Wenger (1998) argue that when people spend time together and share knowledge, they end up sharing stories as a result of having learnt together. In this case study, I noted that clients share identical repertoires. Their stories revealed a trend of people who at some point in their lives as caregivers had experienced pain resulting from a fear that they would lose their loved ones and from physical pain due to sickness, or as a result of failing to accept their HIV status. This trend emerged during individual interviews, when seven of the eight caregivers told their stories about how they experienced pain when they first became caregivers. The following excerpt shows evidence of the painful experiences of these women:

I felt very painful at first because I thought most of the children born with HIV/AIDS do not last long before they die (G.C.5).

It was very painful and difficult sometimes to explain the disease to my child. I remember one day he asked me about it and I had to explain to him that if he looks after himself well he would grow big like me (G.C.7).

I was very worried when I first knew I was HIV positive thinking that my child and I were going to die (G.C3).

I first knew that I was HIV Positive when I was pregnant with my child in 2006 and I could not accept it... (G.C2).

I got sick and I was admitted in Hospital. My legs were painful and I could not even walk and I had to use a wheel chair... (G.C.8)

Its not easy especially that my child is HIV positive; also especially before I came here I used to think that okay I am HIV positive and I am going to die but...(G. C.1).

These stories, however, changed from stories of pain or worry to stories which revealed caregivers who gained confidence. Some of the caregivers claimed that, through interaction with others with similar challenges at the Centre, they gained confidence in caregiving after having learnt how to administer appropriate care to people living with HIV/AIDS. Evidence of caregivers having gained confidence was seen in the fact that some of the caregivers claim

that they are now sharing information with other people who are in similar situations as theirs, in the communities in which they live.

These stories of caregivers who gained confidence were evident from stories that were told by G.C.2, G.C.8 and G.C.6, which revealed that they had changed from being worried, or feeling painful, to caregivers who possess confidence in themselves. The following interview extracts confirm this:

...If you are sick I advise you to go to the clinic and have been also helping others to take their treatment by explaining how they should take them (G.C.2).

Now I am sharing with other people in my area where I live about my story on how I managed to fight HIV/AIDS. Some then even say [xxx] you are a big example (G.C.8)

When I first took care of my brother he was helpless but I can say I have been able to help him because now I can see he is getting better and he is even able to fetch water for himself from the tap, which was the thing he was not able to do because he was very sick (G.C.6).

Since I came here my health is improving and my child's also, because I give her healthy food and all that she wants and I also try to keep her clean' (G.C1).

4.3.1.3 Mutual engagement of caregivers

- *Learning from the same module*

Responses given by participants during individual interviews and focus group discussions indicate that there were both formal and informal interactions taking place amongst the participants, which were enabling them to share information on caregiving. Caregivers indicated that they had learnt most of the things that they knew about care giving through attending formal meetings conducted at the centre. When I interviewed the manager of the centre (G.K1) and one of the counsellors (G.K2) to establish how caregivers were learning, they pointed out that participants were learning through attending formal meetings conducted at the centre. These formal meeting are conducted every day during weekdays. During these meetings, caregivers learn a variety of subjects concerning HIV/AIDS, as indicated in the file used for the meetings (see appendix 8). The topics include:

- Effects of alcohol
- Nutrition and HIV/AIDS
- HIV and AIDS Prevention

- Care and Treatment
- Pregnancy and HIV
- HIV/AIDS and relationships
- HIV/AIDS and hygiene
- Voluntary HIV testing and counselling.

To establish if women learn through attending meetings, I explored what caregivers were saying about their learning at the centre and compared it with the topics in the files being used to facilitate caregivers' learning. I observed from the data that there was evidence that caregivers were learning from the same source as their responses during individual interviews, focus group discussions and diaries revealed a correlation between what they were telling me that they learn from attending the Raphael Centre and the topics recorded in the centre's files.

G.C6, G.C3, G.C2, G.C7, G.C1, and G.C5 indicated that they had learnt about the importance of eating regularly and using a variety of foods, including vegetables and fruits. This was also reflected in the centre's files used to facilitate learning for women caregivers (see appendix 8). Because caregivers had been encouraged to eat vegetables, they were now including traditional wild vegetables in their diets. This was evident from responses that were given by seven of eight caregivers who participated in individual interviews, as shown by the excerpt below:

They encourage us to eat green stuff, fruit. We should use milk, peanuts, spinach, and beans. Eat healthy food regularly lets say four times a day. They say food like pumpkins, spinach, onion and carrots is good for people living with HIV/AIDS. They teach us about diet. When you are HIV positive you catch diseases easily. We must eat vegetables like Intyabontyi (melon) green pepper and nesigwamba, Imifuno (wild vegetables). We should have a full meal and eat foods like cabbage sometimes spinach, rice, pumpkin, lentils and rice, stiff pap, cabbage and pumpkin dumplings. Most of the things that I have learnt here I have found them to be beneficial. Like they say that as HIV positive people we need to eat healthy food.

Amongst the caregivers there was a recurrent view that it is important to drink plenty of water. During individual interviews, one of the caregivers who participated in this study indicated that 'people living with HIV/AIDS need, to drink lots of water' (G.C5). This was reiterated by G.C7, who said that 'even those not HIV positive need to drink lots of water as it is good for their health'. The importance of water to people living with HIV/AIDS was confirmed by three caregivers who, during focus group discussion 1, agreed that the reason

why people living with HIV/AIDS should use melon is for its high quantity of water as apparent in the responses below:

Melon is a vegetable and it's a body builder. You can when it's cooked strain the water and drink them to get strength (Participant D).

Melon is an important vegetable because it is green in colour. Us AmaXhosa like to cook it with mealie rice (Participant E).

As you said its water is very good, as it has lots of water. The water is a medicine to your body because it activates your body (Participant F).

It was also evident from the data that women were learning from the same source of information when seven caregivers, who participated during individual interviews, indicated that they were discouraged to use alcohol, fat, red meat and caffeinated foods for people living with HIV/AIDS as they were not good for their health. This is evident in the following examples of interview extracts:

They told us what to eat. The problem is with us we don't obey the rules, even coffee we are not allowed to drink, but we drink it. We should take a little bit of fat not a lot, but we need a lot of fat in our food and it can cause heart attack, so we are killing ourselves by not following the instructions (G.C8)

Some of the food like traditional food does not need fat when preparing it and that is good because fat is not good for me (G.C5).

The discussion amongst the caregivers during focus group discussion 1 about use of red meat confirmed G.C8 and G.C5's statements which indicate that women are learning that caring for people living with HIV/AIDS includes avoiding using certain foods and making selective choices about foods which are healthier for people living with HIV/AIDS. During focus group discussion 1, caregivers indicated that they had learnt that red meat can cause an increase of the *viral load* in the blood and a decrease of the *CD4 count (cluster of differentiation 4)*, as illustrated below. During the discussion participant H said that beef was good for people living with HIV/AIDS. Other participants disagreed with her and they discussed the effects of red meat on people who are living with HIV.

Those of us who are HIV positive we should make sure that it's well cooked before we eat it, otherwise we should not eat beef at all (Participant D).

As my colleague already said, we should not eat red meat because it causes the effect of the virus to be high (Participant E).

It is said that we can eat beef but not too much, because it has lots of salts and that will lower the CD4 count (Participant H).

It will look like I am repeating the same thing but we should not eat beef at all (Participant F).

Among the caregivers there were three who indicated that they had learnt about the importance of hygiene and eating well-cooked food. This was evidence of caregivers having learnt from the Centre, as this topic is also reflected in the Centre's file as being one of the topics covered during formal meetings. Two caregivers who participated in individual interviews and one of the participants in focus group discussion 1 indicated that they had learnt from the Centre that they should always use food which has been washed and well cooked when taking care of people living with HIV/AIDS. As G.C2 said, '*Imbikicane, (chenopodium album) you wash first before you cook*', a view which was alluded to by G.C8. Participant A in focus group 1 also said, '*those of us who are HIV positive we should make sure that food is well cooked before we eat it*'.

- *Learning by attending workshops*

G.K 1, in a personal interview, indicated that the Centre offers caregivers an opportunity to learn about gardening so that they can be self-sustaining by growing their own food. This was confirmed during focus group discussion 1 when participant C indicated that the reason why she came to Raphael centre was that she wanted to learn about life skills like 'gardening as there was no garden at home, but now there is one'. This was supported by another three caregivers from the same focus group who had similar views. This finding from the focus group discussion supported the claim which was made by G.C6 during individual interviews, when she said: '*I heard from someone who came to run a workshop and told us about Inongwe (Aloe). He said we can use Inongwe (Aloe) for our faces and since then I started to use Inongwe (Aloe) so that I can see for myself if it is true*'.

The idea of learning through attending workshops arranged by the Centre was also evident when GDW3 indicated that she had learnt about medicinal plants, like *Irhawu (Urtica dioica)*, sunflower and ground ginger which she said are good for the immune system, at a workshop which had been arranged by the Centre and when they had to go to East London for a programme that she called relaxation, as illustrated in her diary extract, Figure. 4.1 below.

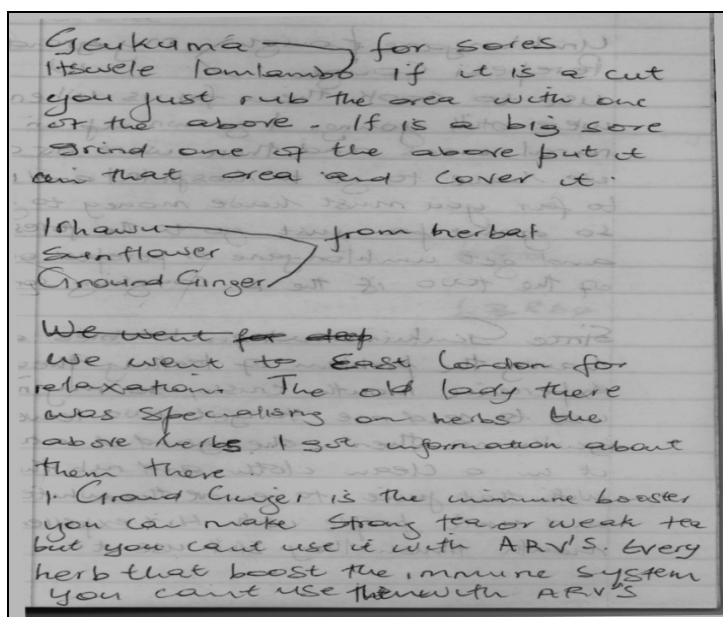


Figure 4.1 An extract from GDW3's diary entry on how she learnt about medicinal plants from attending workshops

4.3.1.4 Joint enterprise

Wenger (1998) argues that members of a community of practice achieve their goal when they work together. This means that they make an effort to be successful in what they desire to achieve. In this study, I noted that in order to realise their goal of providing better care to people living with HIV/AIDS, caregivers who participated in this study and attended the Centre are involved in a combined effort. This involves the preparation of food by the clients (caregivers) at the Centre, whilst the Centre provides the food.

G.K1 indicated that the Centre encouraged caregivers *"to learn what a healthy balanced diet is and that it is possible to eat a balanced diet even if you are from a rather very low income"*. In order to lead by example, G.K1 indicated that 'the Centre gives a vegetarian meal each day as of this year we no longer serve them meat'. The claim made by G.K1 concurred with the daily menu which was obtained from the chief cook (see appendix 8).

The duty roster confirmed the joint enterprise between the Centre and caregivers, as all the women who participated in individual interviews and focus group discussions had their names on the duty roster. This could not be shown in this research for ethical reasons. Diary writer 2 confirmed that, as a client at the Centre they were involved in the preparation of meals. She indicated in her diary that she had learnt of some of the dishes she was preparing at the Centre. This suggests that caregivers are encouraged to prepare affordable

traditional dishes. An extract from GDW2 showing how she learnt to prepare a traditional dish called *Umgqusho* (samp).

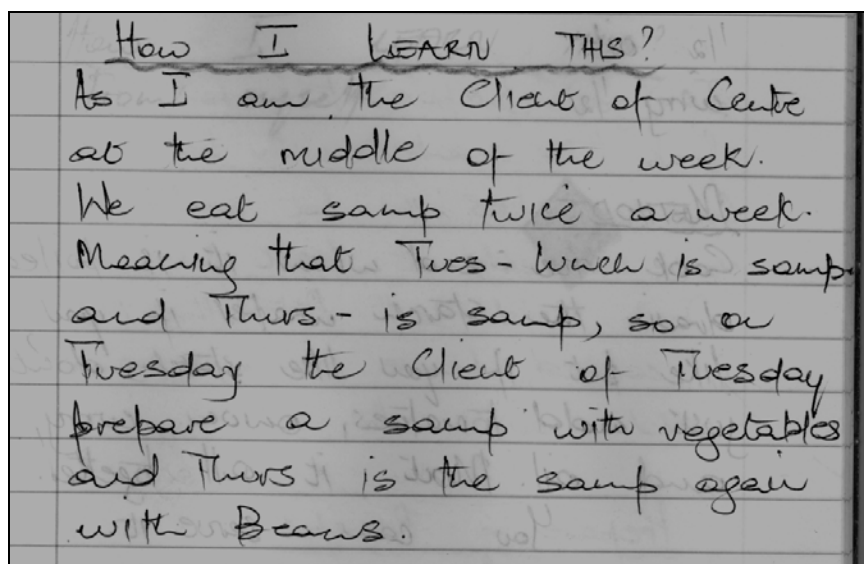


Figure 4.2 Extract from GDW2's diary showing how she learnt to prepare *Umgqusho* (samp).

4.3.1.5 Observation enabling learning

Attending the Centre provided an opportunity for one of the participants to learn through contact with other people who shared the same challenges as hers. Witnessing healthy people that are HIV positive was, in itself, for G.C1 the basis of learning to live positively. She said:

When I came to Raphael Centre, I stayed one week and started to feel happy I began to forget about my status. The other thing is that when I looked at these people I could not tell that they are HIV positive and that encouraged me as well.

4.3.1.6 Caregivers learning from printed information

Caregiver G.C5 said that she had learnt about the foods that she should use, and other information concerning living with HIV/AIDS, 'from some pamphlets and counsellors here at the Centre'. She indicated that she was learning about food that she should use from available material at the Centre, that are 'all on the poster and pasted up on the wall'. During my visit to the Centre I observed that there were many pamphlets and posters accessible to caregivers.

4.3.2 Caregivers learning in the community

In the case of Grahamstown it was evident that the learning process for caregivers was not only limited to the Centre. Data from interviews, focus group discussions and caregivers' diaries reveal that caregivers are accessing learning from diverse sources.

4.3.2.1 Caregivers sharing knowledge and learning from other caregivers

Seven out of eight caregivers who participated indicated during individual interviews that they were sharing and learning from other caregivers or people living with HIV/AIDS in the communities from which they came. For instance, as a mother, caregiver G.C7 said the following concerning her learning experiences on caregiving:

I also interact with other mothers who also have children that are HIV positive but they are not in this centre. They attend the other Centre which is in our township We discuss on how to deal with segregation from other people who swear to our children saying Rha you are HIV positive.

It appears that interacting and sharing with other mothers who attend different support group allowed G.C7 to learn more about issues pertaining to HIV/AIDS. This is evident in that she is even learning to deal with the stigma and discrimination of the disease that affects people living with HIV/AIDS. In another instance, participant G.C6, who is caring for herself, said she had learnt to take better care of herself after getting advice from her neighbour, who is also living with HIV/AIDS, about the food that she is supposed to eat. In turn, participant G.C6 indicated that she shared food that she brings from the Centre with her neighbour, as well as reminding her neighbour to take her medication on time, as noted in this quotation:

There is a lady where I stay, she told me that she was sick of this when I met her and we started discussing. I told her that I was also sick from the same disease. We became friends and now we are always sharing and one time she told me that I was not eating good food because I was eating rice and potatoes so I did not enjoy the food. I never even used to eat porridge. She told me that in the morning I should eat porridge. If I have spinach at the centre I bring her some for cooking that she should mix with wild vegetables from the garden in one pot and she will enjoy it. I also encourage her to take her tablets on the right time.

What one can extract from the above quote is that G.C6 is not only sharing information with caregivers in her immediate community of practice (in this case the Centre) but also with other people who do not attend at the Centre. Other caregivers, like G.C4 G.C2 G.C1 and G.C5, reiterated that they were learning and sharing information with other people in the community in which they were living.

4.3.2.2 Caregivers learning from the media

I listen to the radio most of the time; read Khomanani books and also books from the clinic that are written in Xhosa. I can read Xhosa (G.C2).

I heard from the radio and also seeing it on others through symptoms I learn from the television also (G.C7).

I learn from watching television. Sometimes when I visit the clinic there are papers with information. I read and learn from it and listen from the radio programmes on HIV/AIDS (G.C4).

I listen to the radio on some programmes on HIV/AIDS (G.C8).

During individual interviews, four caregivers pointed out that they learn in many ways about how they should care for people living with HIV/AIDS, i.e. through the media like radio, television and books like *Khomanani* which are written about HIV/AIDS. However, of those who indicated that they learn from the media, only two of the caregivers (G.C2 and G.C4) said they learn from reading materials written on HIV/AIDS, and G.C2 clarified that she was only able to read materials written in *isiXhosa*. Learning through the media did not come up for discussion during focus group discussions or diaries that were used for triangulation. This absence of any caregivers who claimed that they learn through the media from other data collection methods that were employed in this study, might suggest that the media is not a significant source of information for learning for caregivers who participated in this study.

4.3.2.3 Learning from elderly family members

Individual interviews, focus group discussions and diaries of caregivers on traditional foods and medicinal plants which they use indicate that caregivers gain knowledge and skills from relatives. Six caregivers, G.C8, G.C6, G.C4, G.C3, G.C2 and G.C7, who participated during individual interviews, indicated that they had learnt about traditional food, the preparation of foods and their benefits from their parents, grandparents and older relatives, as shown in the excerpt below:

I learnt from my mother who used to pick these vegetables and cook for us (G.C8).

I learnt from my mother about Isigwamba (variety of wild vegetables cooked together) and how to prepare it. To make it you have to cut into pieces Imifino (wild vegetables), wash and put it in the pot. When it is boiling you put maize meal and salt or maybe mealierice in one pot for boiling or simmering all at once, wait for few minutes, keep on stir it, and wait until it is ready to serve (G.C4).

My mother liked to cook for us traditional food when she was alive (G.C3).

I have learnt from my grandmother about traditional Xhosa food, but she died last year (G.C2).

I learnt from my grandmother. She would show me these plants that would just grow in our garden like Ihlababa (Sonchus asper), Umsobo (solanum nigrum) (G.C6).

My aunt likes to cook these wild vegetables Imifino (wild vegetables) (G.C5).

The vital role of elderly folk in transferring knowledge to the younger generation was reiterated during focus group discussions. Four caregivers in focus group discussion 2 had the following conversation pertaining to how they have learnt about traditional food:

I would sit next to my grandmother when she cooked on the farm where I grew up and would see how she does it and how she cooks Umxhaxha (melon with pumpkin) (Participant D).

Me too, I know this food from the farm. My mother and grandmother would show me what to put together with what so that I can have something to eat before I went to sleep (Participant C).

I used to stay on the farm with my mother and father, so when my mother cooks I would be next to her learning how to cook what she would be cooking (Participant E).

I came to know about these foods because my mother fed me these foods' (Participant G.F).

Data from focus group discussion 1 confirmed this trend, as one of the caregivers sums up the opinions of another seven who were participating in the discussion concerning how they had learnt about traditional food, when she said that, "*We know these foods because we are black Xhosa people. We grew up eating these foods*". As a way of triangulating the data, three caregivers were asked to write diaries on food and medicinal plants they were giving to people living with HIV/AIDS as well as record how they have learnt about the foods and medicinal plants. For most of the traditional foods which were recorded in the diaries, the main source of information that kept being mentioned was the mother, grandmother or an elder female member of the family. This confirms the finding obtained from individual interview and focus group discussions.

The transfer of intergenerational knowledge was also evident when discussing how caregivers had learnt about the use of medicinal plants. Four caregivers who participated in individual interviews, indicated that they had learnt about the use of medicinal plants from their elders, as indicated by the examples below:

I learnt from my mother. My mother was using it when we were growing up and coughing (G.C4).

I know Iperepesi (Clausena anisata) for coughing. For chest you use tobacco and my father used to mix it with Iperipesi and you will never go to the clinic for an ear problem my father used to get Igcegeceleya (Azima tetraantha) which he would

crush and use the clean white cloth and put the crushed *Igcegeceleya* (*Azima tetracantha*) and squeeze it in the ear and the ear will get better (G.C5).

This finding was confirmed by GDW2 in her diary, where she explains, in detail, the use of *Iperepesi* (*Clausena anisata*) and *Ingcegeceleya* (*Azima tetracantha*) and indicated that she obtained her knowledge from her parents, who would use the medicinal plants when she was growing up. GDW3 explained how her grandfather used to use *Umhlonyane* (*Matricaria nigellifolia*) when she was growing up, to cure them of fever, because they lived far from the hospital. Participant G.C7's response brought an interesting dimension to the discussion, concerning learning from the elderly about medicinal plants, when she said: '*I learnt about Ikhakhulu (Aloe) from my mother but by that time there was no HIV/AIDS*'. This implied that the knowledge which she gained from her mother about medicinal plants, she also learnt about in different circumstances, and she was using that knowledge in a new situation.

Diary writer 3 alluded to the claim that was made by caregiver G.C7, when she explained how her mother used to use *Igcukuma* (*Carpobrotus edulis*) when babies had mouth thrush, caused by teething. She, however, said she used this knowledge of *Igcukuma* (*Carpobrotus edulis*) in relation to HIV/AIDS as people living with HIV/AIDS experience a similar problem with mouth thrush.

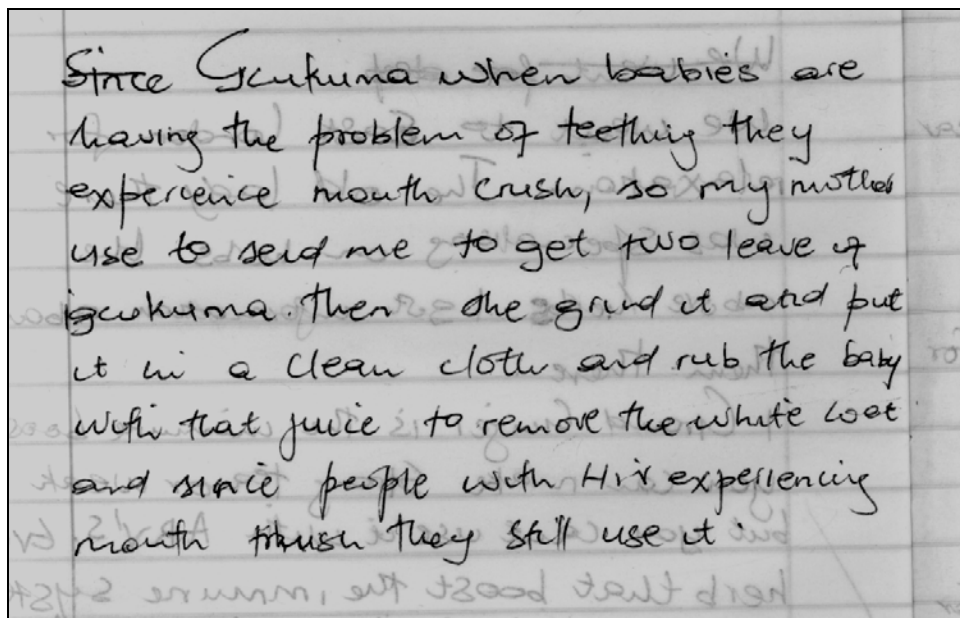


Figure 4.3 GDW3 explains how she learnt from her mother about use of *Igcukuma*

Intergenerational knowledge transfer was evident in the caregivers' knowledge about the sustainable use of plants which caregivers said they use. Caregiver G.C8 explained that it was her parents who taught her that when she is harvesting medicinal plants she should not destroy them: *"I was taught by my parents, when we used to live in KwaZulu-Natal, on how to harvest these plants"*. G.C 1 said that her mother taught her about the sustainable use of plants, like wild vegetables, by teaching her to *"dry the leaves of wild vegetables so that you can have something to eat when they are not available"*. However, caregivers did not say very much concerning sustainability, which might suggest they are not too knowledgeable about the subject (see section 4.6).

4.3.2.4 Support groups facilitating learning of caregivers

G.C4, G.C3 and G.C5 do not only attend the Centre's support group but are also members of other support groups, where they learn more about HIV/AIDS caregiving. I conducted an interview with key informant G.K3, a nutritionist at Settlers' Hospital, in Grahamstown. During the interview she explained that support groups were initiated by the government as part of its efforts to combat HIV/AIDS. She said that people who are infected with and affected by the disease need to share their life experiences with others in similar situations. She also mentioned that support groups exist to meet the basic needs of people infected with and affected by HIV/AIDS, by providing them with food.

The claim made by G.K3, about sharing within support groups, confirmed what was said by caregiver G.C3: *"some of the things I never knew them, but I got to learn about them through support group educating and visiting us at home"*. G.K3 also mentioned that support groups are usually made up of people who stay in the same neighbourhood, making it easier for caregivers to meet from time to time. The existence of support groups as platforms for the sharing of information and experiences with others in similar positions as caregivers, confirmed what was said during individual interviews quoted below:

I joined Joza as my support group; we have also a big support group in Tentyi. All support groups meet once a week (G.C3).

We have a support group in my area where we usually met in the afternoon and share the information. Support groups from Raphael Centre, clinic and Joza also meet and share information (G.C5).

4.3.2.5 Churches enabling caregivers to learn

Churches were another venue where caregivers have an opportunity to share and learn from people who have similar experiences to theirs:

...People from my church, we share problems and they advise me on how best I should deal with it (Participant G. C8).

We talk about the way we should care for people living with HIV, the way we can make them feel comfortable amongst us not feel isolated; ask advice from each other if she is not feeling well. For instance when my sister started to take tablets her body was itching all the time and she was always scratching herself. One of the ladies at church told me that there is no cure for itching but my sister was going to improve with time (G.C4).

Besides learning, one can see that participant G.C4 was helping others to learn about caregiving as she spoke. However, it was evident that most participants were not learning about caregiving at church; only two individuals mentioned the involvement of the church in their lives.

4.3.2.6 Traders and traditional healers

During an individual interview, participant G.C1 said that, *'I got to know about it from the people from the farm who sell it after they harvest from the forest and from traditional healers'*. In her diary, GDW2 indicated that she finds medicinal plants, *'at the shop in High Street by the robots that specializes in medicinal plants and one will get there all the different kinds of medicinal plants'*. However it was only these two participants who indicated having learnt about medicinal plants and food through traditional healers and traders.

4.3.2.7 Caregivers drawing from what they had learnt at school

Focus group discussions were used for triangulating data from individual interviews. One of the questions which I asked was how caregivers had learnt about the benefits of the foods they were using in relation to HIV/AIDS. On this particular question, learning from school emerged as a source of information that had not initially been mentioned during individual interviews. Four of the participants, during focus group discussions, seemed to agree with one of the participants who said that, *'I learnt about them (meaning traditional foods and their benefits) at school, information like vitamins, nutrients and calcium'*. This was confirmed during Focus Group 1 where three participants agreed with one of them, who said she had learnt about traditional foods and their benefits: *'At school, also, we were doing Agricultural Science and that is when we learnt about what we get from traditional foods'*. Diary writers 1 and 3 also indicated in their writings that they had learnt about the nutritional components of foods at school.

4.3.2.8 Learning from non- governmental organisations

Caregiver G.C5 gave a summary of what she learned from attending meetings that had been organised by the Treatment Action Campaign (TAC) and her other two colleagues, G.C2 and G.C1, concurred.

We have workshops at the library conducted by TAC where we are taught about disclosure to your children and we should also educate them that they can still live with the disease for a very long time. We are also taught about empowering ourselves as women and the need for the children to know that you are HIV positive and you are on ARV so that your family can be able to help you. We are also taught to live normally in our homes, where we share food normally, and not have some food reserved for the one who is HIV positive as that will cause resentment (G.C5).

However, it was only those three participants who indicated that they are learning from attending meetings organised by the Treatment Action Campaign.

4.3.2.9 Learning from clinics and hospitals

Two caregivers, G.C7 and G.C5, indicated during individual interviews that they were learning about the use of traditional food and caregiving from the clinic which they were visiting. They said:

I learnt from the clinic when I first went there about how to care for myself and the foods that I should eat (G.C7).

I know of these foods because even at the clinic they tell us to use these foods that are good for our health (G.C5).

The statements above were confirmed during an individual interview with a key informant, G.K3, who, as a dietician, indicated that she advises clients who come to the clinic to use foods which are available to them, and that some of them include traditional foods. She said:

Mostly as dietician our starting point is based on patients' available resources. If traditional foods come up then I use those for education and often it will be traditional vegetables and such things, of which we would encourage the intake of such (G.K3).

4.4 CAREGIVERS PRACTICES RELATED TO THEIR USE OF TRADITIONAL FOOD AND MEDICINAL PLANTS

Empirical evidence from the case shows that participants were involved in a number of practices to improve their care giving. The practices of the participants in this case study included the use of traditional foods, use of medicinal plants and non-use of medicinal plants. Practices of caregivers in their use of traditional foods were studied. Data revealed

that the caregivers use traditional foods, mainly because of their nutritional and medicinal values. Issues which emerged as reasons given for the non-use of some of the traditional foods included urbanisation, leading to an unavailability of some of the foods. In the sections below, I discuss the traditional foods which caregivers use. I also present reasons which they gave for their choices of such foods.

4.4.1 Use of traditional food

4.4.1.1 Use of imifuno (wild vegetables)

There was a general claim made during individual interviews by caregivers G.C1, G.C2 G.C3, G.C5, G.C6 and G.C8 that they use wild vegetables like *Utyuthu* (*Amaranthus hybridus*), *Irhawu* (*Urtica dioica*), *Umsobosobo* (*Solanum nigrum*), *Imbikicane* (*Chenopodium album*) *Umhlabangubo* (*Bidens pilosa*) *Ihlaba/Irhabe* (*Sonchus asper*) and *IThanga* (*Cucurbita pepo*) as a side dish served with stiff pap, or for the preparation of a dish called *Isigwamba*. *Isigwamba* was described by caregivers as being a dish prepared by mixing a variety of greens (either wild or cultivated) and mealie rice (a coarse form of mealie meal). It is traditionally made with *Imifuno* (wild leafy greens), as evidenced by examples of responses below:

I cook Utyuthu (Amaranthus hybridus), Imbikicane (Chenopodium album), Umsobosobo, mixed in one pot and pour a little bit of rice or mealie meal and fat... (G.C3).

I know Isigwamba that I can pick from the garden and field like Utyuthu (Amaranthus hybridus), Irhawu, (Urtica dioica) Ihlaba (Sonchus asper), and Umsobosobo. You cut all these vegetables, put them in the pot and mix with mealie meal or you can serve it on its own with stiff pap (G.C6).

We make fire for making Isigwamba, cut vegetables like Irhawu (Urtica dioica),, Ibhata, Umhlabangubo (Bidens pilosa) into pieces, wash and put it into the pot, when it is boiling you put maize meal and salt and sometimes in place of maize meal I put mielierice (G.C4).

This data was triangulated with focus group discussions which confirmed that caregivers use wild vegetables. In Focus Group 1, two out of eight participants indicated that they prepare *Isigwamba* for themselves. This was reiterated by six out of eight caregivers in Focus Group 2, who indicated that they prepare this dish for people living with HIV/AIDS. However, evidence from diary writer 3 clarified that the use of *Imifuno* (wild vegetables), is seasonal, when she said: “*I used spinach because it is the one which is available at this time of the year*”. Diary writer 3 also indicated that the reason why she uses spinach is because wild

vegetables are only found at a place called *Emasimini* and, because of crime, she is afraid to go and harvest the plants even when they are in season.

The findings also indicated that amongst the list of traditional foods which the participants reported using, there was mention of vegetables like cabbage, spinach, carrots, beetroot as though participants now considered these vegetables part of their traditional foods. This showed that probably these plants had been cultivated for so long that they had become part of the local food, and participants were now identifying with them as traditional practices (Conway-Physick, 2007).

4.4.1.2 Use of Umphokoqo

Caregivers G.C4, G.C5 and G.C8 mentioned, during individual interviews, that they use *Umphokoqo* as food. They explained that *Umphokoqo* is a dish made of mealie meal, which has been steamed and fluffed and then served with *Amasi* (sour milk). Although only three participants out of eight caregivers who participated in individual interviews indicated that they were using *Umphokoqo*, five caregivers out of eight in Focus Group 2 mentioned *Umphokoqo* as one of the traditional foods which they use, and think they it is good for people living with HIV/AIDS. This claim on the use of *Umphokoqo* amongst caregivers was evidenced during Focus Group 1, with six out of eight participants who participated in this group confirming their use of it.

Data in the diaries confirmed that, indeed, the caregivers were using *Umphokoqo* for people for whom they were caring. All three diaries had recorded *Umphokoqo*, and it appeared to be a favoured dish, as it was frequently mentioned.

Another interesting finding emerging from the data was given by participant D, in Focus Group Discussion 1, who indicated that the “*sour milk that is used in rural areas is from the cow, but I only know the one we buy from the shops; I have never seen the one which is made directly from the cows*”. This is evident in a photograph taken by GDW2, showing *amasi* (sour milk) that she uses which is bought from the shops.



Figure 4.4 Umphokoqo without sour milk

Umphokoqo with sour milk

This finding might suggest that urbanization has led to a decline in knowledge about the use of traditional foods. The urban environment, with its range of supermarkets, offers plenty of non-local food products from which a consumer can choose, at the expense of traditional foods.

4.4.1.3 Umnqa (stiff pap)

Umnqa (stiff pap) as one of the traditional foods mentioned during data collection, seemed not to be very popular with caregivers, with only three participants during Individual interviews mentioning it as a food which they use. This was confirmed during Focus Group discussion 1, when only one participant referred to it as a food she was using, as did only two from Focus Group discussion 2. Diaries reiterated a similar trend with stiff pap being mentioned on very few occasions.

4.4.1.4 Umngqusho

Like *Umnqa* (stiff pap), *Umngqusho* (samp) was not a favoured dish amongst caregivers who participated during individual interviews. This trend was noted during Focus Group discussion 2 where only one participant out of eight indicated that she used *Umngqusho* (samp). However, responses from caregivers who participated in Focus Group 1 were contrary to data from individual interviews and Focus Group discussion 2, as five out of eight participants indicated *Umngqusho* (samp) was good for people living with HIV/AIDS. This was confirmed by diary writer 1 and 2 in their entries.

4.4.1.5 Amarhewu

Data from individual interviews, focus group discussions and diaries indicated that *Amarhewu*, as a traditional beverage, is not something which most caregivers in this study used. Only three caregivers G.C8, G.C6 and G.C2, mentioned that they use it. During Focus Group discussions and in the diaries, none of the participants indicated that they were using *Amarhewu* in relation to HIV/AIDS. This may suggest that *Amarhewu*, as a fermented drink with a sour taste that gives energy and which is made from mealie meal, yeast and flour, is not used by caregivers; or it could be that they do not regard it as useful for people living with HIV/AIDS.

4.4.1.6 Umxhaxha

This is a dish which participants said they prepare using a pumpkin called *Intyabontyi*. They mix it together with maize and sugar, a dish regarded by G.C5, G.C3, G.C7, G.C2, G.C1 and G.C4 as being good for people living with HIV/AIDS. Caregivers indicated their liking for *Umxhaxha* because of *Intyabontyi* used in the dish which is believed to be good for the health of people living with HIV/AIDS.

4.4.2 Use or non use of medicinal plants by caregivers

As indicated earlier individual interviews were triangulated with focus group discussions and diaries to explore the practices of caregivers in their use of medicinal plants in relation to people living with HIV/AIDS. Overall results on this question revealed that there are two categories of caregivers: those who use medicinal plants and those who do not.

4.4.2.1 Caregiver using medicinal plants

From individual interviews as well as the focus group discussions and diaries, I compiled an inventory comprising about thirty medicinal plants which had been mentioned by caregivers as useful for people living with HIV/AIDS (see appendix 6, table 1). Six caregivers, out of eight who participated in individual interviews, indicated that they used medicinal plants to cure general ailments that they suffered. The excerpt below shows examples of responses given by caregivers when asked whether they use medicinal plants:

I use Inongwe (African potato) and garlic to make myself strong (G.C5).

One thing I know as a HIV positive person is that there is a root called Inongwe (African potato). I drink the water from this root and it just releases the pain in my body. It also helps when my knees are weak. It gives me a lot of energy (G.C6).

I know and use Ikhalakhulu (aloe). It helps with coughing (G.C7).

I use the inner part of avocado pear for my face. When I started with this disease my face was looking terribly black like this tape recorder and things have since changed when I started using this medicine and I am still using it (G.C8).

Use of medicinal plants by caregivers in relation to HIV/AIDS was confirmed during both Focus Group discussions 1 and 2 (see appendix 5, AM.1c). G.K2, a key informant, confirmed the use of medicinal plants by caregivers when she said: *'I use garlic for thrush. I also use garlic mixed with ginger, green pepper and cucumber. I grind them together and boil, let them cool and put in the fridge and use it daily for swollen glands'.*

All diary writers reiterated the claim made by caregivers who participated during individual interviews and focus group discussions that they use medicinal plants in relation to HIV/AIDS. The diary writers supported these claims by taking photographs of the useful plants found in their gardens. Some of the medicinal plants which they photographed were ones mentioned by caregivers during individual and focus group discussions such as medicinal plants like *Umhlonyane (Matricaria nigellifolia)*, *Iperepesi (Clausena anisatar)*, lavender and comfrey confirming that these plants were used by caregivers. The pictures in appendix 7 are examples of medicinal plants that were photographed by caregivers.

4.4.2.2 Caregivers not using medicinal plants

G.C1, G.C4 and G.C3, who participated in individual interviews, indicated that they did not use medicinal plants. Their claim about not using such plants in relation to HIV/AIDS was evidenced by two caregivers from Focus Group discussions 1 and one from Focus Group Discussion 2 (see appendix 5, AM1.c).

4.5 INFLUENCES ON TRADITIONAL FOOD AND MEDICINAL PLANT USE PRACTICES AS SHARED BY CAREGIVERS.

4.5.1 Influences on traditional food use practices as shared by caregivers

4.5.1.1 Nutritional value

Although evidence from diary writers indicates that wild vegetables were not used all the time, this was due to poor availability, as they understood that the foods had nutritional value. Similarly, with other traditional dishes, availability was the factor preventing use. Evidence from four caregivers who participated in individual interviews indicates how caregivers feel after eating these foods i.e. feeling fresh, strong and healthy:

After eating isigwamba I feel fresh and right (G.C 6)

Isigwamba makes you feel strong (G.C7).

Changes my health and I feel healthy and strong when I finish eating (G.C3).

They make us healthy and we must use them everyday (G.C1).

I triangulated the data on the benefits of traditional foods with focus group discussion data. The responses obtained from the focus group discussions concerning the benefits of traditional vegetables confirmed results from the individual interviews. During Focus Group discussion 2, five of the eight participants in that discussion indicated that they got strength from eating traditional foods. Only two actually explained the benefit of traditional foods in terms of their nutritional components, as is evident below:

These foods have nutrients and vitamins so I get strength and healthy (Participant D).

As people living with HIV we should eat vegetables because they have vitamins that are good for us (Participant G).

During Focus Group discussion 1, five of the caregivers gave responses that were consistent with what was said by caregivers who participated during individual interviews and who gave descriptions of how they felt after eating such foods. However, three participants were able to name the nutritional elements of the food, as confirmed below:

Isigwamba is a mix of vegetable and one gets proteins and nutrients from it because it is a mix of Irhawu (Urtica dioica) and Umsobo (solum nigrum). (Participant A).

You get proteins from isigwamba (Participant B).

Isigwamba is a body builder and one gets energy and carbohydrates (Participant C).

Data from GDW1 and GDW2 reiterated findings from the individual interviews when their diary entries recorded how they felt after eating *Isigwamba*, as shown by the following:

Sifumana izakha mzimba ukondleka komzimba sondleke phangaleleya' (translated 'we get strength from eating isigwamba) (GDW1).

Our body needs green vegetables so that we look healthy... (GDW2).

The reasons for using *Umphokoqo* were not very different from the ones that were given for the use of *Isigwamba*, for example, that they get strong and feel refreshed from eating the food. Some of the participants during the Focus Group discussions 1 and 2 specified the nutritional components of the *Umphokoqo*, as illustrated below:

Umphokoqo helps a lot because it has starch which helps in your body as a person living with HIV/AIDS. One must always eat something with starch so that the immune system can be strong (Participant A, Gfg.2)

Amasi which is used for umphokoqo is milk from the cow; we get calcium there, magnesium and phosphorus from it (Participant B, Gfg.1)

Amasi is milk from the cow which when you leave it to stay for some time it changes to amasi. We get nutrients from there (Participant C, Gfg.1)

One of the participants during the first focus group discussion cautioned that one should not over eat *Umphokoqo*, because the milk sometimes causes upset stomachs. She said, “*Umphokoqo is very good and Amasi helps a lot but you should not over eat for you will have a running stomach*”. Grahamstown diary writers also recorded that they use *Umphokoqo* for its starch and protein value which is needed by people living with HIV/AIDS. Diary writer 3 indicated that she uses *Umphokoqo* because she finds it refreshing on a hot day.

Umxhaxha is used mainly because of *Intyabontyi*, which caregivers indicated is nutritious:

There are vitamins in intyabontyi and my mother used to encourage us saying eat this food there are vitamins in this food which will build your body and now I know pumpkins are good for your health (G.C4).

There are vitamins in intyabontyi (G.C2).

Umxhaxha keeps us strong (G.C5).

The use of *Umxhaxha* among caregivers was noted during the focus group discussions, with four of the caregivers in Focus Group 1 agreeing on the importance of using *Umxhaxha* for people living with HIV/AIDS. Three diary writers confirmed that *Umxhaxha* is amongst the favourite Xhosa dishes, because of its nutritional value.

4.5.1.2 Medicinal value

Two caregivers who participated during individual interviews, G.C2 and G.C7, indicated that they use traditional foods such as vegetables because they know that they have medicinal properties. G.C2 said ‘*Spinach makes the body strong and boosts the immune system*’. The notion that vegetables have medicinal properties was reiterated by G.C7, who said: ‘*These traditional vegetables and other vegetables prevent my child from getting disease*’.

During a key informant interview, G.K3, indicated that HIV positive people are prone to infection by many diseases, and vegetables and fruits help their immune systems to fight such diseases as they provide nutrients. This is an argument which concurred with reasons given by caregivers G.C2 and G.C7 for their use of traditional vegetables or any other vegetables that were mentioned in the study. During Focus Group discussion 1, three of the caregivers confirmed what has been said by caregivers G.C7 and G.C2, that some of the foods contain medicinal properties:

Isigwamba is the vegetable that will give you strength. If you have chest problems the water coming out of it when cooked can help you. Even if you have pains in the body, the water will help you (Participant D).

A melon is a vegetable and it has nutrients that fight the disease in your body (Participant A).

Melon is good as it has water and water is medicine to your body because it activates your body (Participant G).

In Focus Group Discussion 2, five participants had this to say regarding the benefits of traditional food having medicinal properties:

These foods are very important especially the green foods, like cabbage and carrot which helps with your eyes (Participant E).

Imbikicane (Chenopodium album) fights diseases in the body (Participant B).

Iminqathe (Carrots) give you strength and help you to see well. As a result of the virus it is important to eat it raw most of the time (Participant H).

Irhawu (Urtica dioica), raises the CD4 count in the body (Participant A).

This finding that traditional foods have medicinal properties was reiterated by diary writer 3, when she recorded that *Irhawu (Urtica dioica)*, a wild vegetable as one of the medicinal plants she uses. Diary writer 2 also indicated that vegetables boost both her daughter's and her own immune systems:

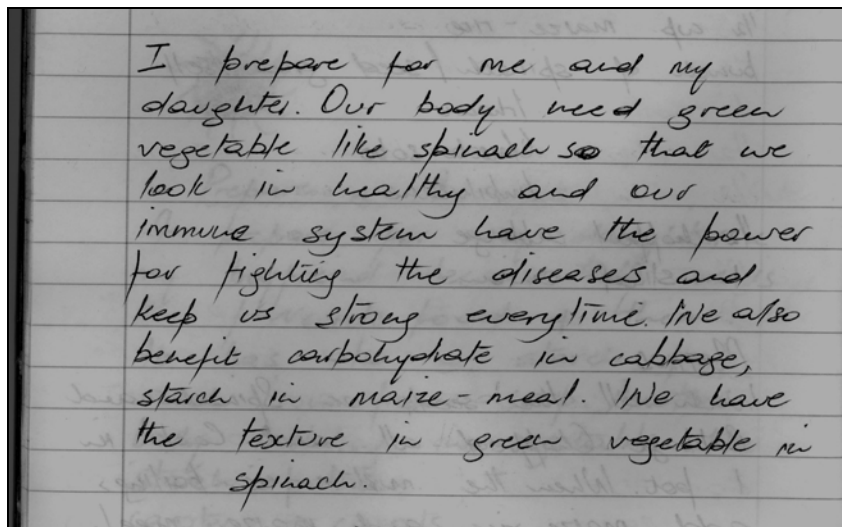


Figure 4.5 GDW2 explains why she uses *Irhawu (Urtica dioica)*.

4.5.2 Influences on medicinal plants use or non-use practices as shared by caregivers

4.5.2.1 Medicinal plants are helpful

Six caregivers who participated in Focus Group 1 pointed out that they were aware that the medicinal plants which they used do not cure HIV/AIDS. However, those same medicinal plants were helpful in curing opportunistic infections and boosting their immune systems as the following comments confirm:

These medicinal plants do not cure AIDS but they weaken the virus. I say these medicines help because my sister was in bed and she had oral thrush and was helped by these traditional medicines (Participant A).

They help you feel better even if they do not cure for they increase your CD4 count, specially the recipe [xxx] is talking about of garlic helped to increase my C.D 4 count from 256 to 350 (Participant E).

African potato really helped me when I had thrush. Yes they are not going to cure you but they weaken the virus (Participant F).

Everything that is called medicine helps because it really brings you back from death (Participant G).

Diary writers 1, 2 and 3 confirmed the usefulness of medicinal plants, as they wrote about the medicinal plants they were using, and their benefits. GDW2 indicated that the reason why she uses medicinal plants in her garden is that when she does not have money to buy medicine, she can just use those in her garden and she believes that they are just as good as non-traditional medicine.

4.5.2.2 Medicinal plants can not be used together with ARVs

G.C1 and G.C3 indicated that they refrain from using medicinal plants when they are on ARVs:

I do not use medicinal plants because I am on ARVs and we were told not to use Xhosa medicine by the doctors.

Myself I am on ARVS and I am not supposed to take these medicinal plants because the doctors told us not to mix Xhosa medicine with ARVs.

The above examples seem to suggest that caregivers are following advice given by health professionals about not using medicinal plants in combination with ARVs. This claim by G.C1 and G.C3 was supported by one of the key informants, G.K1, who indicted that caregivers refrain from using medicinal plants when they are told to do so:

The problem is that at the clinic when people are ready for ARVs they always say you must stop whatever you were using especially African Potato. You mustn't so there is a conflict of messages. On the one hand these people say these herbs are

beneficial and then the nurses on the other hand say stop using these herbs. What happens is that people end up getting confused so they say rather than making a mistake they stop using altogether that what is happening.

Two key informants revealed a further reason as to why people living with HIV/AIDS are discouraged to use medicinal plants. They noted there could be possible interaction of medicinal plants with ARVs, and that could be the reason why health professionals advise people on ARVs not to use medicinal plants:

I am not a specialist in medicinal plants but what I know is the current stand of the Department of Health as far as the use of traditional medicine is concerned and people who are HIV positive especially on ARVs, is that we advise caution because of possible interaction of medicinal plants as they are usually used in high concentrated amounts and we don't even know what chemical interactions could occur. Some of them are actually harmful (GK.3).

Garlic should however not be used when you are on ARVs because it will kill ARVs and ARVs will kill garlic so it's just a waste so you better just take ARVs alone (G.K2).

One of the caregivers, G.C4, during an individual interview indicated that she only used medicinal plants for ailments that she thought were not related to HIV/AIDS, like coughing, as she said: *"I use Umhlonyane (Matricaria nigellifolia) for coughing only but not other medicinal plants because the doctors told us not to mix Xhosa medicine with ARVs"*.

4.6 SUSTAINABILITY PRACTICES ASSOCIATED WITH THE PLANTS THAT CAREGIVERS USE

4.6.1 Practising correct harvesting methods

One of the objectives of this study was to explore sustainable practices used by caregivers related to plants which they indicated that they used (see section 1.5). Evidence from five caregivers indicates that caregivers were practising sustainable practices through the way they harvested these plants. This was evident during individual interviews:

I know that when you are harvesting these plants you just have to pick up the leaves (G.C7).

When harvesting Umsobosobo (solum nigrum) you just pick up the leaves and leave the roots and I was taught by my parents how to harvest (G.C8).

Yes I know how to harvest. I use Ulugxa it is good for harvesting. I do not harvest all. I think about the others, they need the medicine. I harvest what I need. I never learnt, I have just know that if I can harvest like this it will be fine (G.C6).

I know how to sustainably use these plants you just pick up Isigwamba (G.C5).

The claim of sustaining plants through the way caregivers harvest was confirmed by key informant G.K2, when she said, *“I know that for the plants that we use to be sustainable you only have to pick the leaves and leave the stem so that others can harvest as well”*.

Another interesting finding emerged from G.C3 who participated in an individual interview, and who said that she was an herbalist. She explained how, as an herbalist, she had been taught to harvest medicinal plants without destroying them. She believed that when one is harvesting, for instance, roots of a plant, only two roots out of five should be taken and the other three left. She would replace the two she had taken with two beads from her necklace. She believed that by replacing the roots with beads, more medicinal plants would be revealed to her. This, therefore, suggests her beliefs deterred her from over-harvesting plants, as the destruction of whole plants would ultimately be a loss to herbalism, as more herbs would not be revealed to her by her ancestors.

One of the caregivers, G.C1, indicated that, for her, sustainability means drying wild vegetables when they are in season, so that she could use them out of season, as she pointed out: *“I conserve Imifuno by drying the leaves so that I can eat them when they are not available. I was told by my mother”*. Other caregivers revealed a lack of knowledge about how they could sustain the plants they were using, because they claimed not to be the ones who were involved in the actual harvesting of the plants:

No I do not have knowledge about sustainable use of these plants because it has always been my father who harvest for us (G.C4).

The plants that I use I am not the one who harvest them it is my aunt who does it for me (G.C2).

This lack of knowledge about sustainability practices was also evident during Focus Group discussions 1 and 2, when the responses given about sustainability practices only referred to watering of the plants. This suggests that the caregivers lacked knowledge on how to properly sustain the plants that they use.

4.7 CONCLUSION

This chapter presented findings from the Raphael Centre Community of practice in Grahamstown. Interpretive analysis of the data was done using inductive analysis and aspects of the community of practice framework as described in section 3.3. The use of quotations from participants provided a thick description of the case adding to trustworthiness of the study.

The following chapter presents the findings from Keikamma Art Project and Keiskamma Health Centre communities of practice.

CHAPTER FIVE

KEISKAMMA ART PROJECT AND KEISKAMMA HEALTH CENTRE COMMUNITIES OF PRACTICE

5.1 INTRODUCTION

This chapter presents the research findings of Keiskamma Art Centre and Keiskamma Health Centre communities of practice in Hamburg. As in the case of Chapter 4, the data used to compile the chapter is based on interviews, focus group discussions and diaries of caregivers. The data was organised into analytical memos using categories that emerged from the data sources, as reported in section 3.7.2 and is presented according to themes as described in section 4.1.

5.2 BACKGROUND TO THE KEISKAMMA ART PROJECT COMMUNITY OF PRACTICE

In 2000, Doctor Carol Hoffmeyer started the Keiskamma Art Project with a group of women in the rural areas of Hamburg (Keiskamma Trust 2008). This was after she observed that many women in the area were not employed and they were struggling to make a living out of poaching abalone and subsistence farming. The project was started with the aim of providing art skills and generating income.

At the time of this research, the project had over one hundred women who are skilled in art and embroidery, and is said to have given hope and self-respect to women who were previously living in abject poverty. These women are now able to provide for themselves and their families (Keiskamma Trust 2008).

Most of the art works done by these women are inspired by their local knowledge and as a result their work depicts the way *amaXhosa* people live. The art and embroidery is sold both locally and overseas. The project is managed by three women who have gained experience over the years since 2000. They have been working with the project with the assistance of two graduate artists for this time. Four caregivers who participated in this study work at the Keiskamma Art Project. One of the reasons for the establishment of the Keiskamma Trust (2008, p. 1) was to fight "...the battle against HIV/AIDS in rural South Africa..." The project document (Keiskamma Trust, 2008) notes that the founders realised that HIV/AIDS could not be addressed by medical intervention alone.

5.2.1 Reasons for joining Keiskamma Art Project

During Focus Group Discussion 1, six participants indicated that one of the reasons why they joined the centre was to have employment so that they could support themselves and their families:

I was not working and needed to fend for myself (Participant A).

I came here because I like sewing and want to better my skills so that I can bring bread home (Participant B).

I was not working so I came to learn and earn some money also (Participant C).

To be trained in hand work so that I can take care of my family (Participant D)

I came here for many reasons that include mixing with other women, getting skills and also fighting poverty (Participant G).

The responses confirm the stated objectives of Keiskamma Art Centre which is to fight HIV/AIDS by reducing poverty. Caregivers are now able to earn a living and thus take better care of patients in their homes. Focus group discussion 1 also indicated that participants are women who faced challenges of poverty prior to joining the Centre.

During individual interviews which I conducted with four of the caregivers at Keiskamma Art Project, who were purposively selected (see chapter 3, section 3.5.1), I was able to confirm that four of them were taking care of relatives who were living with HIV/AIDS. As with the case of Grahamstown, at the Raphael Centre, I also noted characteristics which identified women at Keiskamma Art Project as a community of practice (see Chapter 4, section 4.3).

5.3 LEARNING INTERACTIONS OF HIV/AIDS CAREGIVERS

5.3.1 Caregivers learning in a community of practice

5. 3.1.1 Art work and embroidery 'domain'

From the interviews that I had with four caregivers at the Keiskamma Art Project, it is evident that the main objective which brought them all together at the Keiskamma Art Project (domain) was to do art work and embroidery to earn a living. However, as I was interested in finding out whether they were learning about HIV/AIDS' caregiving, I explored their learning at the centre on issues of HIV/AIDS. Responses from H.C1, H.C 2, H.C3 and H.C4 indicate that although their main business at Keiskamma Art Project was to learn about embroidery and Art work, they were indeed learning about some aspect on HIV/AIDS caregiving.

5.3.1.2 Caregiving domain

Evidence from the individual interviews indicates that all four caregivers who participated from the Keiskamma Art Project were caring for someone living with HIV/AIDS. Their responses to a question as to whether they were caring for someone living with HIV/AIDS are:

I am taking care of my husband's brother (HC1).

I care for my young brother and our parents passed away (HC2).

I am a grandmother caring for my granddaughter (HC4).

I am caring for my son and he is very sick at the moment (HC3).

Besides these women caring for people living with HIV/AIDS, data from individual interviews that I conducted with them indicate a trend in their stories about how they felt about their caregiving, as discussed below.

5.3.1.3 Shared repertoires of stories

Evidence from individual interviews indicates that caregivers at the Keiskamma Art Project shared stories of unhappiness caused by looking after someone living with HIV/AIDS. HC.4 and HC.3 indicated that their source of unhappiness was caused by their fear of losing a loved one through death. H.C4 feared she would lose her child. She said: *"It is so painful for someone of my age to be looking after a son living with HIV/AIDS, who will probably die before me"*. H.C3, who fears losing a grandchild, said: *"My grandchild is only fourteen years of age and I don't even know when she was infected"*.

Lack of knowledge on how to optimally care for someone living with HIV/AIDS was a cause of unhappiness for some. For example, caregiver H.C2 has just finished school, aged 21 years, and was already taking care of her brother who was living with HIV/AIDS. That was a cause of unhappiness for her as she said: *"Sometimes I do not even know what to do with my brother"*. She elaborated her own pain that her brother was always sick:

I felt hurt during that time because we were always at the hospital and we only got to know about it later because at first we were told he was suffering from TB and it was only when he became very sick that we were told he is infected with HIV.

It seems that in the case of H.C2, the really prolonged nature of the illness was a truly painful experience for her. This was also relevant for caregiver H.C1 who said:

I am taking care of my husband's elder brother and he is mentally disabled as a result of this disease. I have cared for him for three years. At first I did not have problems with him but as time passed by he became very weak. He is not able to

walk and I help him with everything. Sometimes I feel angry with him. His situation has affected me and I have high blood pressure now. I feel hurt.

In the case of H.C1 it also seemed as though it was social imposition for her to give care and was causing unhappiness. She also said:

I do not think that I am the one who is suppose to look after him but he just came at our place when he was ill and there is nothing I could do but look after him because he is my husband's brother, and yet sometimes he does not even care that I am looking after him as he sometimes shout at me.

5.3.1.4 Learning through informal sharing

As the Keiskamma Art Project is linked to the Keiskamma Health Centre, there was some evidence that caregivers besides learning about embroidery and art, also learn about HIV/AIDS caregiving through sharing and learning from other people who were in similar situations: *"We usually share information about the disease as we will be doing our work because most of the families are affected with this disease so we share knowledge about it"* (H.C1).

Apart from sharing and learning through informal discussions, there was evidence of caregivers learning through formal meetings which are arranged every Wednesday at the Health Centre, as H.C2 says: *"At the moment I am not on my own because here at the project we meet every Wednesday to learn about HIV/AIDS and they teach us about what people living with HIV/AIDS should eat and many other things concerning HIV/AIDS"*.

The expression that she used, *"I am not on my own"*, seems to suggest that she appreciated the value of informally learning from others and that made her feel part of a group who faced challenges posed by HIV/AIDS.

5.4 BACKGROUND TO THE KEISKAMMA HEALTH CENTRE COMMUNITY OF PRACTICE

The Keiskamma Health Programme was born because many people in Hamburg did not have adequate health facilities at that time. Patients had to travel long distances to get treated (pers comm., F. Zita, 7 January 2008). Founders of the Keiskamma Art Project agreed that it was not enough merely to provide an income generating project without taking into account the health needs of the people, especially those who were living with HIV/AIDS. The Health centre was established so that it could house people who were sick with HIV related diseases, but could not get help from the community or the government health

system. The Health centre is sponsored by two major donors, several smaller donors and individuals. It is managed by a Board of Directors and employs a registered nurse, with voluntary workers assisting.

Four of the eight participants who were interviewed in Hamburg emerged as a community of practice of their own. Three of them were employed at the Keiskamma Health Centre as HIV/AIDS caregivers, by Hospice. Another participant who was, initially not part of the sample group but was included in this community of practice, was the Sister in Charge at the hospice. The reason for including her in the study was because her name kept being mentioned by participants as one of their sources of information.

5.4.1 Reasons for joining the Keiskamma Health Centre

Although participants at the Health Centre work to produce income, evidence from the data collected during individual interviews indicated that participants H.C5, H.C6 and H.C7 had joined the Health Centre for other reasons. These included the desire to help others because they were personally infected, or because they had a relative who was living with HIV/AIDS. When I asked them why they had decided to work at the Health Centre I was told:

I wanted to help others because I know how it is to be HIV positive as I am also HIV positive (H.C6).

I met Dr Becker in 2000... and when I retired she thought of this treatment centre. She approached me as somebody who had insight on this and asked me to be part of the centre in 2005 (H.C7).

I joined Keiskamma Health Centre because I wanted to make a difference for I know that a person who is HIV Positive needs to be loved (H.C5)

H.C8 joined the Health Centre because she was trained to be a caregiver. She said: *'I am a monitor and caregiver because I trained as a health worker and I found a job here'.*

5.5 LEARNING INTERACTIONS OF HIV/AIDS CAREGIVERS

5.5.1 Caregivers learning in a community of practice

5.5.1.1 Caregiving domain

From the individual interviews it is apparent that participants H.C5, H.C6, H.C7 and H.C8 shared the same domain, of caregiving for people who were infected with HIV/AIDS. The caregiving aspect emerged to be three dimensional in that community of practice.

- *Professional caregiving*

Results from individual interviews reveal that participants H.C5, H.C6, H.C7 and H.C8 were all professional caregivers for people living with HIV/AIDS. Although the intention of this study was not to investigate professional caregivers, H.C5, H.C6, H.C7 indicated that whilst they were caring for members of their own families who were HIV-positive, they were also professionally caregiving at the Keiskamma Health Centre.

- *Caring for oneself*

H.C6, a twenty six year old caregiver, indicated during an individual interview that although she was a professional caregiver she was also taking care of herself because she was HIV positive. When I asked her what is it like to be looking after people living with HIV/AIDS, she said: *"I like this job and can feel the pain of others as I know how it feels to be living with HIV/AIDS"*.

- *Caring for family members*

Three participants indicated that they were caring for family members who were HIV positive. Participant H.C6 was caring for her cousin; H.C5 for her niece aged five years; H.C8 for her brother.

The domain of self-care and caring for relatives was not the reason that brought the participants together. Rather, it was their professional caregiving careers that united them and enabled them to learn more about caregiving.

5.5.1.2 Shared repertoires of stories

Stories, which were narrated by four caregivers who participated in this study, indicated that because they had learnt so much about caregiving in their occupation as caregivers they were finding it most satisfying that they were able to help others. H.C7 indicated that her experience enabled her to help others when she said, *"When I see them going home carrying bags on shoulders waving goodbye I feel I have made a difference in someone's life because of my experience here at the centre"* (H.C7).

H.C8 indicated that she was learning at the Health Centre in that when she first joined the Centre she had been scared to help the patients, but through learning she is now used to the job. She said: *"Firstly I was so scared but now I am used to the job"*. H.C5 and H.C6 echoed what was said by caregivers H.C7 and H.C8. During individual interviews they said:

I learned more information from the centre about HIV/AIDS and now I know more than I used to know (H.C5).

I am honoured to be using the knowledge that I have acquired from this centre that has helped me to help my cousin and those that are at this centre to fight the disease (H.C6).

These responses indicate that learning through the centre had made caregivers realise that they were able to help people living with HIV/AIDS, and to improve their lives, and that in turn gave them a sense of satisfaction in their work of care giving.

5.5.1.3 Mutual engagement

Evidence from the data indicates that participants were learning at their work. The knowledge that they gained from their work experience helped them to take better care of themselves and their relatives.

- *Learning by attending workshops*

To improve their knowledge, participants H.C5, H.C6, H.C7 and H.C8 were attending workshops conducted by external experts from nearby cities. In such workshops, caregivers indicated that they learned about all issues pertaining to providing care to people living with HIV/AIDS, including their treatment and the correct food that they should be given. Such learning about caregiving from external experts was summarised by caregiver H.C5: *“Most of the time we are helped by [xxx] to get more information on HIV/AIDS. There is also a lady who is a counsellor who helps us so much from the cities”.*

From what participant H.C5 said, they learned more from experts in the field of HIV/AIDS. H.C7 from whom they are all learning, said: *“When I was trained as a nurse there was no AIDS so we are also learning about this disease and there is someone who come here and holds workshops with us”.*

- *Learning through support groups*

During Individual Interviews, caregivers H.C5, H.C6, H.C7 and H.C8 said that they had organised a support group of their own. In that support group, they discussed their work and the challenges that they faced as they cared for patients at the Health Centre. This enabled them to cope with the task of caregiving. H.C7 and H.C5 said:

At work also we have support group and work shops (H.C5).

I started a support group here because I thought it would be helpful for us here to learn from each other. From my previous experience, support groups have always been there. If you look at the society there are women’s groups called Manyano, guilders, those are all support groups where Christians talk about Christianity, and also here I thought we could share on issues of HIV/AIDS as we are all learning about it (H.C7).

5.5.1.4 Learning by observation

Lave and Wenger (1996, p. 91) say “The practices of the community create the potential ‘curriculum’ in the broadest sense...”. In this study there were indications that the practices at Hamburg Hospice in caring for HIV/AIDS people created a curriculum where participants were able to learn more about caregiving. Although caregivers were learning more so that they would be able to perform duties at Hamburg efficiently, they recognised the benefits for themselves as caregivers at home.

During Individual Interviews, two of the caregivers, H.C5 and H.C6, said that they had not received any form of formal training as caregivers but that they were learning through observation and asking for advice, as they performed their day-to-day duties at the Health Centre from the sister-in-charge and also the doctors there. These caregivers believed that they have learned a great deal about care giving. For instance, caregiver H.C6 said:

When I first came here I was just a voluntary worker but I have learnt so much through the help of the sister and just through doing the job I now know a lot about looking after someone who is HIV/AIDS [positive] and myself too as I am also infected.

Learning through observing other more experienced or knowledgeable caregivers was reiterated during an Individual Interview by caregiver H.C5 who said:

I learn more information from the centre and I feel that I have more information about caring for people than before. I know how to handle someone who is HIV positive and that has helped me to give better care to my cousin. I am working with sister [xxx] who has more knowledge and the doctors as well.

Although caregiver H.C8 indicated that she had received training in Port Elizabeth she also indicated that she was still learning about caregiving at the Health Centre. Her words were:

I first learnt about care giving when I went for training in Port Elizabeth as a care health worker. I still learn more here as I do my work and watching the more experienced like doctors and nurses. Most of the time we are helped by [xxx] to get more information.

5.5.2 Caregivers learning in the community

5.5.2.1 Caregivers sharing knowledge and learning from other caregivers.

Participants H.C2, H.C4 and H.C5 indicated during individual interviews that they had learnt about useful medicinal plants to use from interacting with other people in their home communities. For instance, when participant H.C2 was asked how she learnt about a medicinal plant called *Inongwe* (African potato), she said: “I heard from the people in the

community talking about it". This is a reflection of how, when a problem arises, people try to find solutions, and they share their knowledge with others.

H.C2 said: *"HIV/AIDS is something that is among us now"*, and this fact has certainly caused people to seek further for answers and solutions to problems, hence the community's sharing of information on medicinal plants which are helpful.

H.C4 said: *"Ndifunde Kwezendalo/ nakumagela okufundisa"* (Support groups) meaning, *"I learn from the support groups"*. H.C5 referred to her friends as being a source of information about medicinal plants which are useful to people living with HIV/AIDS. She said: *"learnt about medicinal plants I can use for HIV/AIDS from my friends"*.

5.5.2.2 Caregivers learning from the media

Two participants, H.C5 and H.C8 mentioned during individual interviews that they had learnt about caregiving and all the information that they could learn about HIV/AIDS from reading books which have been written on HIV/AIDS. Four of the caregivers mentioned that they learned from the radio and television (see appendix 5, AM2.a). Observations which I did when I was visiting their homes for interviews confirmed that most of them, although they are in a rural setting, own radios and televisions sets, which suggest that it is possible that they have learnt certain information about HIV/AIDS from such sources.

5.5.2.3 Learning from elderly family members

Of the eight caregivers who participated during individual interviews conducted in Hamburg, six of them (H.C1, H.C2, H.C4, H.C5, H.C6 and H.C8) indicated that their knowledge about traditional food had been learned from their parents, grandparents or older members of the family as reflected in the following:

From my mother I grew up eating them (H.C1).

I grew up with my mother cooking them for us (H.C2).

We grew up eating these foods (H.C4).

I learnt about imifino from my aunt who would tell me about them and I would watch her as she prepares them sometimes (H.C5).

I grew up with my grandmother and learned all this from her and my grandmother has them in her garden (H.C6).

My mother was the one who taught me about all these plants and food (H.C8)

The trend of knowledge being transferred from older family members was confirmed at Focus Group discussions 1 and 2 when participants agreed that knowledge about traditional

foods is something which they had learned from their parents either through being told about it or just by having observed as they were growing up (see appendix 5, AM, 2a).

Three diary writers (HDW1, HDW2 and HDW3) confirmed the findings from individual interviews and focus group discussions concerning the transfer of knowledge from the older generation to the younger, as their diaries recorded that they had learnt about the food they were preparing from their mothers and grandmothers.

I, however, noted that some of the caregivers, like caregivers H.C4, H.C 6, H.C8 and H.C1, reported during individual interviews that although they had learnt about traditional food from the elderly, their knowledge about the usefulness of these foods to people living with HIV/AIDS was something they had learnt from the clinic, school and the Keiskamma Health Centre. These were their responses to the question as to how they had learnt about the benefits of traditional foods which they had mentioned:

From my mother I grew up eating them but when I was growing up I did not know that it is good for our health I only got to know it from Keiskamma Health Centre (H.C1).

We are also taught here (meaning at the Keiskamma Health Centre) about the benefits of imifino (H.C6).

I learnt about the benefits of these foods from health education at school (H.C4).

About the benefits of these foods was something new that I was taught by my teachers (H.C8).

Senior members of a family were referred to as major players in the transmission of knowledge about medicinal plants and their cure to the younger generation. Data from three Individual Interviews show a trend of caregiver learning about medicinal plants and their uses from older members of the family:

I learnt from my mother because her mother has these plants in her garden (H.C8)

I learnt from my father who had knowledge about medicinal plants (H.C3)

I grew up knowing them (H.C6)

Data from two participants in Focus Group discussion I confirmed that older members of the family were enabling caregivers to learn about the uses of medicinal plants. HDW2 indicated that senior family members were the ones who transferred knowledge to her about medicinal plants. She wrote:

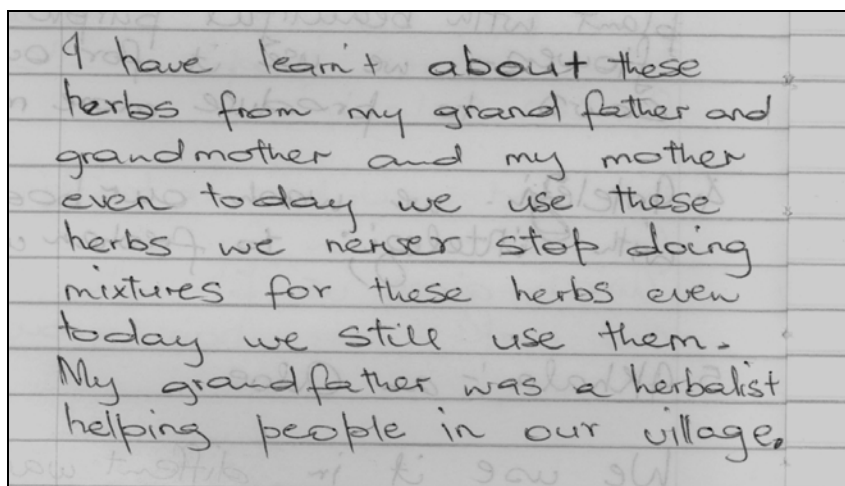


Figure 5.1 HDW2 explains how she learnt about medicinal plants from elderly members of her family

Individual interviews and focus group discussion indicated that learning from the elderly also included knowledge about the sustainability of plants which they were using, as one of the participants, A, in Focus Group discussion 2 summarised the views of other caregivers: "We get to learn about sustainable use of plants from our parents. Like poaching animals, our parents used to tell us not to kill the young ones, but only the grown ones, so that the young ones are kept for the future".

However, her example of hunting to illustrate how they were learning about sustainable practices from their parents also suggests that the practice is no longer a sustainable one, as illustrated by her use of the word 'poaching', which means that the animals are already in short supply when hunted in this area. HC.6 said this about her learning about sustainable use of plants which she used: "I was taught by my grandmother... I grew up using these plants and she has them in her garden".

5.5.2.4 Learning from conservation officers

Nature conservation officers seemed to be playing an important role in the learning experiences of women caregivers as many of them indicated that they had been learning about sustainable use of plants from conservation officers. Focus Group discussion 2 participants confirmed this. Two caregivers from Focus Group 1 also indicated that they were learning about sustainable use of plants in a similar manner (see appendix 5. AM2.c).

5.6 CAREGIVERS PRACTICES RELATED TO THEIR USE OF TRADITIONAL FOODS AND MEDICINAL PLANTS

5.6.1 Caregivers practices related to their use of traditional food

5.6.1.1 Use of imifuno (wild vegetables)

From the data which was gathered from six of the caregivers who participated in individual interviews, there was an indication that caregivers use wild vegetables as food. This finding was confirmed by participants in Focus Group discussions 1 and 2, where there was a general consensus that wild vegetables are used as food to prepare a dish called *Isigwamba*. This is what they said:

I usually like to prepare Isigwamba by mixing Umcazi, Imbikicane (Chenopodium album), Umsobosobo (Solanum nigrum) and Irhawu (Urtica dioica) (H.C5).

Gooseberry, Ihlabi (Sonchus asper), Umsobo (Solanum nigrum) and Irhawu (Urtica dioica), Itswele (Tulbaghia sp). I use them when I am preparing Isigwamba and pour mealie meal and rice and salt (H.C6).

I use Imifuno like Umsobosobo (Solanum nigrum), Ihlabi (Sonchus asper) and Imitwane (Cucurbita pepo) and sometimes mix it with pumpkin leaves (H.C4).

I know Ihlabi (Sonchus asper), Imbikicane (Chenopodium album) and Utyuthu (Amaranthus hybridus), that's what I use (H.C2).

I use Utyuthu (Amaranthus hybridus), Umsobo (Solanum nigrum) Urhalijane (Urtica urens) and mix with spinach (H.C1).

From individual interviews and Focus Group discussions, I collated about thirteen species of wild vegetables which caregivers were using in Hamburg (see appendix 6. table 5). Unlike in the case of Grahamstown, where caregivers indicated that their use of wild vegetables was seasonal, mainly during the rain season, participants in Hamburg nurture these plants in their gardens. Diary writer 2 said: *"In our gardens at our homes we plant these vegetables and indigenous plants, we never stop eating these because they are naturally good for our health".*

The above claim was substantiated by photographs taken by diary writers 2 and 3 of their gardens, showing that wild vegetables were left to grow in their gardens (see appendix 7). Evidence from the dishes that were prepared and recorded by diary writers also illustrates that wild vegetables are part of the diet of these caregivers.

5.6.1.2 Umphokoqo

As with Grahamstown (see section 4.4.1.2) caregivers H.C1, H.C2, H.C4, two caregivers from Focus Group one and three caregivers from Focus Group 2 in Hamburg indicated that traditional food, *Umphokoqo*, to which they gave a different name, *Umvubo*, is good for people who are living with HIV/AIDS. This was confirmed by the HDW2's diary extract Figure 5.2.

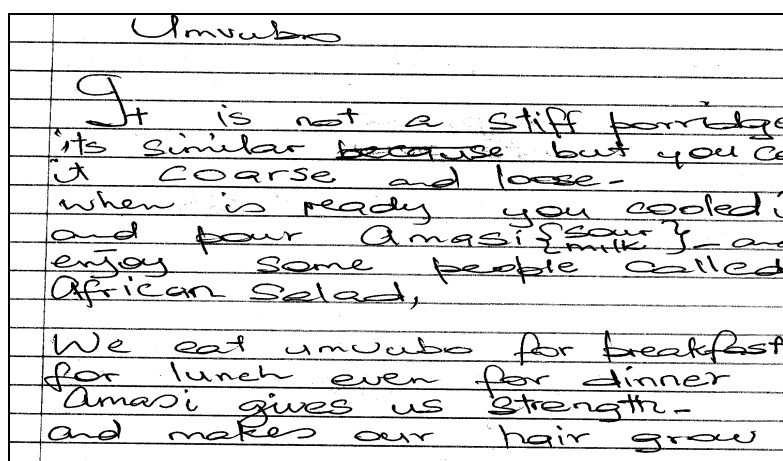


Figure 5.2 HDW2 explains how she prepares Umvubo

5.6.1.3 Umngqusho (samp)

Diary writer 1 wrote on several days that she had prepared *Umngqusho*. This is similar to the claims made by H.C3 in individual interviews, two caregivers from Focus Group discussion 1 and four participants in Focus Group discussion 2, who all said that they use *Umngqusho*.



Figure 5.3 Photograph by HDW1. Umngqusho prepared in an iron pot

5.6.1.4 Umxhaxha

As in the case of Grahamstown, *Umxhaxha* emerged as a popular dish among the Hamburg caregivers, with H.C3 and H.C6 from individual interviews and three caregivers from Focus Group discussion 1 and five participants from Focus Group discussion 2 indicating that they use *Umxhaxha*.

5.6.1.5 Wild fruits

During Focus Group discussions, Hamburg caregivers mentioned that they use a variety of wild fruits as food when they are in season. I collated information on nineteen fruits which caregivers reported as being good for the health of people living with HIV/AIDS (see appendix 6, table 3). Fruits were not mentioned during individual interviews, perhaps because I did not explicitly ask caregivers about their use of fruits. However, the long list that came to light indicates that caregivers in Hamburg rely on natural resources for caregiving practices.

5.6.1.6 Non-use of traditional food

During individual interviews caregiver H.C3 indicated that she was no longer using traditional food: *'My grandmother used to cook them when she was alive but now I am no longer using isigwamba. "These days indigenous foods no longer have any value. They were of value in the past but now we are no longer using them".'*

5.6.2 Caregivers practices related to their use of medicinal plants.

As was the case in Grahamstown (see section 4.4.2) two groups of Hamburg caregivers emerged from individual interviews and focus group discussions: those who use medicinal plants and those who do not.

5.6.2.1 Caregivers using medicinal plants

Four of the Hamburg caregivers who participated during individual interviews (H.C6, H.C2, H.C 4 and H.C 8) indicated that they were using medicinal plants to treat several ailments from which they suffered. However, it was clear that some of them although they were using medicinal plants did not consider themselves to be using medicinal plants in relation to HIV/AIDS. Because HIV/AIDS manifests itself through many different illnesses, participants in this case study mentioned about twenty medicinal plants which they were using for curing several illnesses (see appendix 6, table 2). The results of the data indicated that there are

some medicinal plants which were used to cure more than one illness. Use of medicinal plants was confirmed by the following discussion with Focus Group 2:

The aloe, it helped me with sores. I never went to the clinic again for sores but it stinks (Participants A).

Umthuma (Solanum aculeastrum) when one has a drop you use a syringe to put in Umthuma and take out the blockage (Participants B).

Igwetyibe it is round and red with big leaves, it helps children with stomach aches. African potatoes it helps when my feet are hurting you boil water and put it in the boiling water and rub your feet in it (Participants D).

Gumtree leaves- it heals fever, you can cover yourself over boiling water with it or drink it (Participants E).

A similar discussion, like the one above, was evident in Focus Group discussion 1, which indicated that caregivers use medicinal plants:

Spring onion the virus gets weaker in the blood with it, Aloe lowers the blood sugar levels in the body (Participant A).

Inongwe (Aloe) boost the immune system, as well as Impempe (Helichrysum gymnocomum), Aloe, Umhlonyane (Matricaria nigellifolia) (Participant B).

Iginger is for fever (Participant C).

Iqwili (Alepidea amatymbica) (immune booster) and African potato is used for lots of different sicknesses, Iqwili (Alepidea amatymbica), Intelezi (Aloe), African potato brings back strength (Participant D).

The data was triangulated by diaries that were written by caregivers 1, 2 and 3. They revealed that the caregivers were knowledgeable about medicinal plants and they used them. However, there seemed to be confusion among this group of caregivers, as some of them like, H.C 1 and H.C2, despite having indicated earlier that they use medicinal plants as caregivers, they then further elaborated and said that they only used medicinal plants when they perceived that the disease someone was suffering from had nothing to do with the fact that they were HIV positive. These were their responses:

For my brother I use Inongwe (Aloe) for skin problems but I do not use other Xhosa medicine is too strong for people with HIV/AIDS (H.C2).

Umhlonyane (Matricaria nigellifolia) for coughing but I use it only for fever not for HIV/AIDS because it is not allowed to use other medication when you are on ARVs (H.C1).

5.6.2.2 Caregivers not using medicinal plants

H.C1, H.C2, H.C5, and H.C7 indicated that they did not encourage people for whom they care to use medicinal plants. There was no evidence of non-use of medicinal plants in focus group discussions or diaries. This may indicate that the majority of Hamburg caregivers, who participated in this study, were using medicinal plants.

5.7 INFLUENCES ON TRADITIONAL FOODS AND MEDICINAL PLANT USE PRACTICES AS SHARED BY CAREGIVERS

5.7.1 Influences on traditional foods practices as shared by caregivers

5.7.1.1 Nutritional value

Five participants who took part in individual interviews had this to say as to the reasons for their using traditional food in relation to HIV/AIDS:

It makes one strong and healthy (H.C5).

They have proteins (H.C4).

I think the vegetables are good and healthy. The body needs healthy and fresh food especially when you are sick (H.C2).

The food is good for the body (H.C3).

Isigwamba makes you strong and healthy (H.C6).

Focus group discussions 1 and 2 confirmed that caregivers think that traditional foods are nutritious and are good for people living with HIV/AIDS. During Focus Group discussion 2, participant B explained in detail why she preferred traditional foods. Other participants agreed with her explanation. This is what participant B said:

Even if you would ask someone to choose between Umxhaxha (that is melon and pumpkin) and what we have been eating (referring to cheese sandwiches and tea that was served during the focus group discussion) they would choose Umxhaxha because it goes a long way. Maize is maize that has not been grinded by machines. Bread flour has things in it. It is not the same as my melon from the garden. Proteins that we get from the vegetables in the garden are more nutritious than those of the vegetables in the cans. For instance, the canned beans are not as nutritious as the ones fresh from the garden.

I also noted that other participants in the individual interviews and in Focus Group 1 were not as articulate about the nutritional components of the food. However, participants in Focus Group discussion 2 were different in that they were able to mention the nutritional components of the foods they said they used (see appendix 5, AM2.b). This could be

attributed to the fact that most of them were monitors at the Keiskamma Health Centre and they attend workshops there every last Thursday in a month, which suggests that they learned about caregiving and nutritional value of food in those meetings.

5.7.1.2 Medicinal value

The importance of traditional foods in terms of their medicinal value was mainly mentioned in relation to the use of wild vegetables. H.C6 said, *“Imifuno fights virus within your body”*. H.C7 resonated this claim by saying: *“They must eat lots of green vegetables which have nutrients that help because this virus is fond of destroying the cell, white and red cells are easily destroyed by this disease”*.

This was confirmed by two caregivers who participated in Focus Group discussion 2. The responses of the caregivers seems to suggest that caregivers’ practises are a direct response to HIV/AIDS being a disease that weakens the immune system, as they also tried to identify food they believed would boost the immune system.

5.7.2 Influences on medicinal plant use practices as shared by caregivers

5.7.2.1 Medicinal plants can not be used together with ARVs

As in the case of Grahamstown (4.4.2.2) caregiver H.C2 in Hamburg was not using medicinal plants because her brother was on ARVs. Caregivers like H.C3 and H.C5 were not using medicinal plants as they perceived them too strong for people who are living with HIV/AIDS. Caregiver H.C7, who is also a nurse by profession, explained in detail why she discouraged people from using medicinal plants:

The disease is new and people who know about traditional medicine they do not know about this disease. To me there is no possibility that there has been provision for that disease. Even modern medicine has not discovered the cure yet, even ARVs they do not kill the virus they just make it to be unable to function, but when you stop using them they come up, those people who start by using Xhosa medicine when they come here you can see that it has delayed them getting ARVs treatment. You feel ashamed.

H.C7’s view is that people living with HIV/AIDS should not use medicinal plants, because people who are knowledgeable about medicine, like herbalists and traditional healers, have not been trained to treat HIV/AIDS. She pointed out that using medicinal plants only delays people from going to the clinics and hospitals and they only come to formal health care facilities when the disease is at an advanced stage. Another reason for not using medicinal plants was given by H.C1, who indicated that she did not use medicinal plants because of

her religious background. However, she was the only one who mentioned this reason, which might suggest that many caregivers who participated in this study did not consider religion when making a choice about whether or not to use medicinal plants.

5.8 SUSTAINABILITY PRACTICES ASSOCIATED WITH THE PLANTS THAT CAREGIVERS USE

5.8.1 Practising proper harvesting methods

Four caregivers who participated in individual interviews indicated that they were knowledgeable about the importance of using the plants in a sustainable way. They said that the plants were very important for people's survival. The women reported that they harvested in such a way that they left the plants to grow again, so that they could harvest again. H.C8 said that there were some plants she would not harvest during winter because she knew that by doing so the plants would not grow. In other words, they are using their environment in a way that preserves its long term ecological integrity, rather than exploiting it as illustrated by the following citations:

When I am harvesting for example if it is a tree I take few branches, if its roots I take one and leave others, I even help those who do not know how to do it (H.C3).

By not chopping them down and pick off all their leaves (H.C4).

If we destroy them they will be finished and I have some in my garden that I use for flu (H.C5).

When you collect it you should make sure you do not destroy it. You must just pick as much as you want to use, like what you do when collecting fruits, so that it remains there and can be used by others that want to. For example, in winter you have to take the dry branches and leave the other so that it will grow more in summer. Also these herbs are the same, you should do the same especially in winter you should not touch them (H.C8).

The sustaining of plants by the way people harvest was confirmed in both focus group discussions 1 and 2 (see appendix 5, AM2.c). There was general consensus during Focus Group discussion 2 that the drying of plants when they were in season was a sustainability practice, as they would then be able to use the plants when they were out of season.

5.9 CONCLUSION

This chapter presented the findings from data generated in two communities of practice in Hamburg. Data was interpreted using categories as explained in Chapter 3 and thick descriptions were provided. As I indicated there were some similarities in the data in the different communities of practice, but also differences, indicating contextual influences on caregiving practices.

In Chapters 4 and 5, I reported how women caregivers are learning about caregiving from the perspective of how they use traditional foods and medicinal plants in HIV/AIDS caregiving. The results indicate that women caregivers learn in a community of practices, as evidenced by the fact that they had been sharing stories, had similar domains, mutually engaged and had a joint enterprise. However, although the study was influenced by the community of practice theoretical framework there was evidence that women are also learning in a multitude of ways, for example, through non-governmental organisations, churches, media and on their own, and women were drawing their knowledge about traditional food and medicinal plants from inter-generational sources as well as experiences.

The next chapter presents a discussion on the findings presented in this chapter.

CHAPTER SIX

LEARNING, PRACTICES AND INFLUENCES ON LEARNING AND PRACTICES

6.1 INTRODUCTION

This chapter discusses the data presented in Chapters 4 and 5. The discussion of the data draws on Wenger's 1998 communities of practice theory as well as on other perspectives in literature as presented in Chapter 2. Analytical statements are used firstly to examine evidence in relation to learning (see section 6.2) amongst the caregivers. This is followed by a review of specific care-giving practices related to traditional foods and medicinal plant use (see section 6.3). The discussion ends with the factors that influence the learning and practices of caregivers (see section 6.4). Analytical statements are supported by the evidence reported in Chapters 4 and 5, and afford me the opportunity to discuss findings and to address the aim of the study which was: to explore how women caregivers at Raphael Centre in Grahamstown and Keiskamma Art Project and Keiskamma Health Centre in Hamburg learn, as communities practising caregiving, to use traditional food and medicinal plants when caring for people living with HIV/AIDS. As discussed in Chapter 3, I used analytical statements to make 'fuzzy generalizations' of the research findings after Bassey, (1999) (see section 3.9.4).

6.2 LEARNING IN A COMMUNITY OF PRACTICE

In this section I discuss three main findings related to learning in a community of practice. They are:

- Participating in a community of practice can provide a mechanism for supporting learning.
- Different learning processes are possible in communities of practice.
- Practices need not only be learnt in a community of practice context.

Analytical Statement 1: Participating in a community of practice can provide a mechanism for supporting learning.

Participation as a mechanism for supporting learning was evident in the case of Keiskamma Health Centre. Caregivers indicated that they learnt a great deal about HIV/AIDS' caregiving through participation in workshops, where they invited people that were more knowledgeable in HIV/AIDS caregiving (see section 5.5.1.3). Caregivers at Keiskamma Health Centre community of practice realised that they needed to learn from experts if they were to perfect their skills, and they did that through participating in organised workshops.

The case of caregivers in Grahamstown also revealed that participation in a community of practice is a mechanism for supporting learning. In the case of Raphael Centre community of practice, there is evidence of mutual engagement in the joint enterprise by women caregivers (see sections 4.3.1.3 and 4.3.1.4) which allowed women to actively participate in a community of practice. Women were able to learn through participation in formal meetings, preparation of their own food at the Raphael Centre and attendance at workshops conducted at that Centre. It is evident that participation in those activities and meetings enhanced the women's knowledge on HIV/AIDS caregiving, as they indicate that their knowledge about usefulness of traditional foods and medicinal plants for people living with HIV/AIDS had increased. This is in agreement with Lave and Wenger's (1991) argument that members of a community of practice learn best through participation. This also concurs with Wenger's (1998, p. 55) argument that participation "...refers to a process of taking part and also to the relations with others that reflect this process. It suggests both action and connection".

Another aspect which shows that participating in community of practice facilitates learning is the evidence of repertoires of 'shared stories' (Wenger 1998, p.127). In the case of Keiskamma Health Centre in Hamburg, caregivers shared stories of having developed "...new identities through the process of engagement in actions and interactions" (Wenger 1998, p. 13) (see section 5.5.1.2). Caregivers in this study identified themselves as different from what they used to be, a change which resulted from participating in a community of practice.

A similar pattern of caregivers sharing repertoires of stories was evident in the case of Raphael Centre community of practice in Grahamstown, where women caregivers identified themselves as confident caregivers - an identity which they would not give themselves prior to their access to and participation in a community of practice (see section 4.3.1.2). The process of change of identity which happens when members participate and learn through participating in a community of practice is best described by Creese (2005, p. 61) when she

says that newcomers are "...inducted into communities of practice and continue to acquire competence and status within them".

Evidence obtained from participants at Keiskamma Art Project also supports the contention that participation in a community of practice enables members to learn the practice. In this case it is evident that caregivers are not interacting with each other to share knowledge specifically about HIV/AIDS caregiving. In this community of practice caregivers share stories but do not show evidence of development of new identities (see section 5.3.1.3) as is the case in the other communities of practice in this study. The stories of these four caregivers seem to suggest caregivers who are struggling to provide care to people living with HIV/AIDS. For instance caregiver H.C 3 indicated that she was still angry with her brother-in-law whom she had looked after for three years by the time of the interview. HC.3 and H.C 4 did not indicate evidence of people who are participating in a community of practice, as their fears that their granddaughter and son were going to die shortly are an indication of people who lack the understanding that people living with HIV/AIDS can live a long life if they are properly cared for.

This phenomenon could be explained by using Wenger's (1998) concept of participation, which he developed from his earlier work with Lave (Lave & Wenger, 1991). In relation to the concept of participation as a mechanism which allows people to learn in a community of practice for them to develop identities Wenger (1998, p.164) addresses the concept of non-participation. He states that non-participation is also responsible for shaping who people are when he said that:

We do not only produce our identities through the practices we engage in, but we also define ourselves through practices we do not engage in. Our identities are constituted not only by what we are but also by what we are not.

His argument is true in the case of caregivers in the Keiskamma Art Project, who showed a lack of confidence in the practice of caregiving.

Analytical Statement 2: *Different learning processes are possible in communities of practice.*

- *Collaborative learning processes*

The data reveals that learning at the Raphael Centre and the Keiskamma Health Centre involves participants coming together in the form of support groups to hold meetings and

share ideas. Learning from one another enhances caregivers' knowledge about HIV/AIDS caregiving.

In the case of Raphael Centre, the importance of support groups, as a learning platform which allows collaborative learning processes, was evident when caregivers revealed that one of their reasons for coming to the Raphael Centre was to join support groups, so that they were able to learn with other people who shared the same experience as their own (see section 4.2.2). This relates to the assumptions made by Smith and MacGregor (1992) about collaborative learning: that it is social and active. As revealed in this study; caregivers made an active decision that they wanted to learn, and that their learning was social, and took place amongst people who shared the similar circumstances. Pinhero and Cassel cited in Carter (1994, p. 2) stated that:

Support groups can help caregivers meet the challenges of social isolation and lack of a support system and reduce stress, enhance coping skills, and avoid burnout. Groups enable caregivers to discuss their concerns with others sharing the same experiences and emotions and to work out complex feelings of worthlessness, frustration, or alienation...

Pinhero and Cassel's argument as cited in Carter (1994, p. 2) relates to what was said by caregivers in this study (section 4.2.2) when they pointed out that it was stress which prompted them to join the Centre.

The idea of caregivers collaboratively learning through support groups is also evident in the case of Hamburg, at the Keiskamma Health Centre community of practice (see section 5.4.1). The importance of a support group, in that instance, is that it enabled professional health caregivers (such as nurses) and untrained caregivers to engage on the same platform and to share knowledge as equals.

The collaborative engagement of caregivers relates to the assumption made by Smith and MacGregor (1992) concerning collaborative learning as being dependent upon rich context. Glasser (2007) also argues that co-learning is learning that occurs through collaboration (see section 2.10.1). Women caregivers in the Keiskamma Health Centre community of practice realised that they could learn more from one another's experiences when they worked together as a team (Glasser, 2007). What is also evident with the case of Keiskamma Health Centre community of practice is that collaborative learning was characterised by an absence of a teacher or expert who might be assumed to 'know it all' and students who assimilate knowledge. There I found both qualified nurses and voluntary workers learning together. What is emphasised here about collaborative learning is that learners find solutions to real life challenges by engaging with people who face similar challenges (Smith & MacGregor, 1992).

The existence of collaborative learning processes in a community of practice through support groups is supported by Lather and Smithies (1997, p. 188). They discuss the importance of HIV/AIDS caregivers' support groups, and they said that: "Open discussions are often a catalyst for self reflection, spiritual growth, deepening sisterhood and renewed resolve to make one's life meaningful".

- *Observational learning processes*

Data from the caregivers in Keiskamma Health Centre in Hamburg indicate that women caregivers from the Keiskamma Health Centre community of practice were able to benefit from more experienced caregivers, like nurses and doctors. The caregivers in this study indicated that by observing their experienced colleagues at work, this allowed them to improve their practices both at work and at home (see section 5.5.1.4). The idea of observing and learning is also evident in the case of Raphael Centre caregivers' community of practice. Caregivers here indicated that by interacting with other caregivers at the centre they learned through witnessing how others were coping (4.3.1.5).

Evidence from the Keiskamma Health Centre is that caregivers there learn by observation and by asking for assistance from trained professionals. This concurs with McGregor (2007, p. 352) who understood Bandura's (1977) concept of observational learning in the sense that learners can learn "...through observing the experiences of credible others".

However, McGregor's understanding of observational learning captures the observation part of learning in a community of practice, but does not address the entire process of what caregivers in this study reported to be happening in their learning process. These caregivers indicated that they did not only observe but they also participated in the learning process, through asking questions from 'credible others'. Their learning process corresponds well with Lave and Wenger's (1991) explanation of legitimate peripheral participation (see section 2.9.4) where newcomers or a novice, learn through the process of observing as well as taking part in a practice.

Analytical Statement 3: Practices need not only be learnt in a community of practice context.

In all the communities of practice identified in this study it was evident that women caregivers were not only learning about caregiving practices of using traditional foods and medicinal plants from their communities of practice namely Raphael Centre, Keiskamma Art Project or the Keiskamma Health Centre but they also learned from a diversity of sources.

- *Learning from mass media*

Evidence from the study of caregivers at Raphael Centre in Grahamstown indicated that mass media such as the radio, television and relevant literature are a source of information for caregivers (see section 4.3.2.2). This was also evident in the case of communities of practice in Hamburg (see section 5.5.2.2). Thus it is clear that learning does not only happen when people interact directly with others in similar positions but that the media plays a considerable role in enabling people to learn (Bandura, 1977, Glasser, 2007) (see section 2.10.1). However, I noted in this study that although women were learning from the mass media and printed material as a source of information it was not particularly significant for the following reasons:

- 1) It was evident from the data that language played an important role in the learning process. Caregivers in this study indicated that they preferred materials written in their home language (which in their case was *isiXhosa*) other than most of the materials that they said were written in English,
- 2) Few women in this study indicated having a culture of reading. This suggests that interactive methods of educating women can be more useful.

- *Inter-generational knowledge transfer*

Evidence from the study of Keiskamma Art Project and Keiskamma Health Centre caregivers' communities of practice indicates that caregivers there learnt most of what they know about traditional foods and medicinal plants from elders in the family. This is an indication that the learning of caregivers is not restricted to a community of practice (see section 5.5.2.3). Similar findings were revealed at Raphael Centre caregiver's community of practice in Grahamstown, where there is an indication that members of a community of practice know about traditional foods and medicinal plants as they had learnt about them from their family elders (see section 4.3.2.3).

For example, caregiver DWR3 made it clear that her knowledge of *Igcukuma* (*Carpobrotus edulis*) as a medicinal plant which she used to alleviate thrush in HIV/AIDS patients was something that she had learnt from her mother who used it for children who had thrush when teething. This finding resonates with what Illeris (2006, p. 17) says about adult education: "Adults draw on the resources that they already have in their learning".

Kelly (2005, p. 18) also had this to say concerning knowledge and practice:

Practice is what we do when we adopt previously established conventions of behaviour through which we enact social roles and their attendant meaning (which are usually not of our own meaning or choice). Practices are for the most part not

novel or new but rather draw on established and often historically meaningful repertoires of action.

- *Learning from other organisations*

It is evident from the study of the Raphael Centre caregivers' community of practice in Grahamstown that caregivers also learn from sources other than a community of practice. Such sources include Non-Governmental Organisations, clinics and hospitals, churches, support groups, schools, traders and traditional healers (4.3.2). This finding is also evident in the research data from the Keiskamma Art Project and Keiskamma Health Centre in Hamburg, where caregivers also learnt from other caregivers and conservation officers (see section 5.5.2).

The evidence of caregivers learning from other organisations could suggest that in any type of crisis, communities mobilise. To support this contention, is the existence of a wide range of organisations or institutions addressing the issue of HIV/AIDS. Applying Wenger's (1998, p.126) idea of constellations of communities of practice, which he defined as "...configurations that are too far removed from the scope of engagement of participants, too broad, too diverse, or too diffuse to be usefully treated as single communities of practice". I viewed the related organisations where women are learning about caregiving as constellations of communities of practice given that they are all concerned with providing services to HIV/AIDS sufferers and they share members, as suggested by the data obtained in this study.

This finding corresponds with the work done by Birdsall and Kelly (2005) in Grahamstown, Obanjeni and Volslooms on community responses to HIV/AIDS in South Africa. Although they were not exploring learning, as was the case in this study they observed that there were different organisations which were working in different capacities to fight against the scourge of HIV/AIDS. They concluded that societies with people who share information and responsibilities are healthier than the ones who do not.

6.3 PRACTICES OF WOMEN CAREGIVERS

This section discusses the results of caregivers' practices related to their use of traditional food and medicinal plants. The section discusses results on sustainability practices associated with the plants that caregivers use. The results reveal that women in the study were beginning to re-value traditional knowledge and practices in the context of HIV/AIDS.

Another significant result which emerges from the data is that women caregivers were not explicitly learning about the sustainable use of the plants they were using.

Analytical Statement 4: Women caregivers can learn to revalue their traditional knowledge and practices in the new context.

From the data reported in Chapters 4 and 5, it is clear that women caregivers are learning to re-value traditional knowledge of foods and medicinal plants. Realisation of the nutritional value of these foods, and that good nutrition is helpful to people living with HIV/AIDS, were reasons given by caregivers for their use of traditional food. In the case of Keiskamma Health Centre in Hamburg, one of the caregivers elaborated on her reasons as to why it was better to use traditional foods than shop bought food. She indicated that traditional foods were good for people living with HIV/AIDS as they were usually harvested in their natural forms and were not refined or covered in pesticides like Western food (see section 5.7.1.1).

The case of Raphael Centre caregivers in Grahamstown also indicates that the nutritional and medicinal value of traditional foods as well as the usefulness of medicinal plants for people living with HIV/AIDS is resulting in caregivers re-valuing their practices (see section 4.5.1.1 and 4.5.1.2). The re-valuation of foods which are nutritious is not surprising in the context of HIV/AIDS, where nutrition is of paramount importance in maintaining the health status of someone living with the disease (see section 2.6.2).

The opinions of caregivers concerning the nutritional value of traditional foods which they used such as wild vegetables, concurs with the study of Husselman and Sizane (2006) where they analyzed the nutritional components of *Imifuno* (wild vegetables). The researchers show that wild vegetables have a higher nutritional value than most of the cultivated vegetables. Several other studies have shown that traditional food has a high nutritional value (see section 2.6.1).

Although women, caregivers in this study could not comment on the actual nutritional components of the traditional foods they were using, but they were able to elaborate on the benefits that people could get from using traditional foods (see section 4.5.1.1 and 5.7.1.1), such as feeling strong and healthy. However, it is important to note that the non-existence of a terminology to explain their traditional knowledge in terms of nutritional components of traditional food is not unique to the studied groups of caregivers. Milburn (2004, p. 422) in his paper entitled '*Using traditional food knowledge to solve contemporary problems*', indicates that:

...in the case of nutrition it is not necessary to understand the molecular components of food in order to gain knowledge of the relationship between food and health and to

develop a diet from the resources of the bioregion that can meet basic nutrition needs.

Milburn further explains his point by providing an example in story form about Vitamin C and scurvy. He shows how North American Indians have always known which foods prevent scurvy although they were unable to express their knowledge in terms of the nutritional components of the foods.

Besides re-valuing traditional foods because of their nutritional value it is evident from both cases in this study that women were attaching value to the use of traditional foods for people living with HIV/AIDS, because the foods have medicinal value, as indicated in section 4.5.1.2 and 5.7.1.2. The medicinal value of traditional foods is also discussed by Tredgold (1986) and Maundu, et al. (1999) (see section 2.6.3).

In this study of Keiskamma Health Centre and Keiskamma Art Project in Hamburg caregiving communities of practice, their re-valuation of traditional foods was evident in their leaving wild vegetables to grow in their gardens. This suggests that the vegetables were important in their diets (see appendix 7). However, this is contrary to the literature which indicates that in South Africa the use of traditional vegetables, especially wild ones, was on the decrease particularly as using them is associated with being poor (see section 2.6.1).

Although insignificant, there is also evidence from the research that some women still tend to look down upon their traditional knowledge despite all the positive factors that can come from re-valuing these traditions, particularly in helping to address contemporary problems. In the case of Keiskamma Art Project, there is evidence that the younger generation no longer appreciate traditional foods, as one of the caregivers said *'these days traditional foods no longer have any value. They were of value in the past but now we are no longer using them'* (see section 5.6.1.6).

Despising of one's traditions in favor of the Western way of doing things is viewed by Wilson (2004, p. 359) as something which "...springs from the disaster, resulting from centuries of colonialism's efforts of methodically eradicating our ways of seeing, being and interacting with the world". Similarly, Ngugi wa Thiong'o as cited in Wilson (2004, p. 360) talks of a "cultural bomb" as being a weapon that was used by the imperialists against the colonized. He says:

The effect of a cultural bomb is to annihilate a people's belief in their names, in their language, in their environment, in their heritage of struggle, in their unity, in their capacities and ultimately in themselves

The above quotation may explain why youth in this study no longer valued their traditional knowledge as they associated it with being 'backward', instead they favoured Western tradition believing they were 'civilized'.

Analytical Statement 5: Women caregivers are not learning explicitly about sustainable use of plants.

From the data obtained from the Raphael Centre Community of practice in Grahamstown, it is evident that very few caregivers were knowledgeable about sustainable use of plants (see section 4.6). Although there were a few caregivers who mentioned that they practice harvesting sustainably, there was evidence that some had the plants in their gardens the number of those who were practicing sustainability was insignificant with only 7 out of a total of 19 women caregivers practising sustainability. Other evidence from this study indicates that women were not learning explicitly about sustainability; for example, one caregiver referred to her beliefs as the source of knowledge that made her practice sustainable harvesting of plants (see section 4.6). This is an indication that her learning about sustainable use of plants was not explicit.

Evidence of women not learning explicitly about the sustainable use of plants is also evident from Keiskamma Art Centre and Keiskamma Art Project communities of practice, where sustainability was only mentioned in terms of how someone harvests the plants (see section 5.8). This finding is understandable in the case of a rural setting where people tend to be more reliant on natural resources (see Chapter 2, section 2.7.1) and over the years they may have learnt how to harvest in a preservative way. However, the absence of other sustainable practices in all cases suggests that they were not learning explicitly about the sustainable use of plants. Although they mentioned conservation officers as sources of information, there is still no evidence to indicate that they had learnt any other sustainable practices apart from proper harvesting methods.

Although learning from an older generation plays a vital role in sustainability practice, one would also expect existence of other organisations contributing to the learning of caregivers who indicated that they use medicinal plants. This is because in the context of HIV/AIDS, studies have indicated that the disease has contributed to overharvesting of medicinal plants Keirungi & Fabricius (2005) and Wiersum et al. (2006) (see section 2.6.4), and a subsequent loss of access to this valuable resource.

6.4 INFLUENCES ON LEARNING AND PRACTICE

Analytical Statement 6: Ambivalent messages arising in learning processes can influence practice.

Empirical evidence from the case of Raphael Centre community of practice in Grahamstown indicates that there were ambivalent messages concerning the use of medicinal plants from individuals serving at different institutions involved in alleviating HIV/AIDS. For example, in section 4.3.1.3, caregivers at the Raphael Centre talk of workshops where they attend and learn about the use of medicinal plants. In section 4.5.2.2 caregivers indicated that they were not allowed to use medicinal plants because that is what they had been told by health professionals.

The argument of ambivalent messages causing confusion amongst caregivers is also revealed at Keiskamma Art Project in Hamburg, where certain caregivers also indicated that they used medicinal plants, not for HIV/AIDS but for other illnesses (see section 5.6.2.1). Caregivers H.C1 and H.C2 gave contradictory answers about whether or not they use medicinal plants. It appeared as if they wanted to be perceived as not using medicinal plants for people who are living with HIV/AIDS and, yet at the same time, they had specific ailments which they were treating by using medicinal plants.

Evidence from the data reveals varied reasons why caregivers were receiving contradictory messages about use of medicinal plants. In the case Keiskamma Health Centre in Hamburg, one of the caregivers who was against the use of medicinal plants by people living with HIV/AIDS indicated that HIV/AIDS is a new disease and as traditional healers have not been trained to treat this disease, they cannot claim to have the knowledge to treat or cure the disease.

The same caregiver indicated that the use of medicinal plants tended to delay people from seeking medical care from hospitals and they only get to clinics and hospitals when the illness is at an advanced stage (see section 5.7.2.1). This reason for discouraging the use of medicinal plants by people living with HIV/AIDS is consistent with work done by Bodeker et al. as cited in Langloise–Klassen, Kipp and Rubbaale (2008) who also argue about “...possible delays in seeking ART because of unsubstantiated claims that traditional medicine can cure AIDS”.

At Raphael Centre community of practice in Grahamstown, there is another reason which was given by those who were against the use of traditional plants by people living with HIV/AIDS. This was the possibility of medicinal plants interacting negatively with ARVs,

which they believed would only lead to more problems (see section 4.5.2.2). This is substantiated by Nattrass (2008, p17) who noted that scientific research has shown that herbal remedies can interact adversely with HAART'. For instance, co-administration of ARV drugs with the herbal medicine African potato (*Hypoxis hemerocallidea*) may be harmful (Langlois-Klassen, et al., 2008).

One of the diary writers in Hamburg said that '*we have always used these medicinal plants*' (see section 5.6.2.1) which seems to sum up a possible reason why those who advocate the use of medicinal plants continue to do so. This argument is consistent with the literature, which indicates that medicinal plants have always been used by the *AmaXhosa* and that they work (see section 2.6.4) which explains why people continue using them.

Another possible reason for the continued use of medicinal plants could be the financial gains which some get from selling the traditional medicinal plants as indicated in the case of Raphael Centre in Grahamstown where some of the caregivers indicated that there are shops that specialize in the sale of these plants (see section 4.3.2.6). This is consistent with the arguments of Ashforth as cited in Nattrass (2008, p. 8) who observed that "...business for healers of all descriptions has been booming as a consequence of the AIDS epidemic". As a result such people will encourage people to use medicinal plants.

From the above discussion it is apparent that confusing messages created a sense of ambivalence among the caregivers in this study. This is probably why there were so many diverse opinions amongst caregivers on the use of medicinal plants in relation to HIV/AIDS. Bauman (1990, p. 231) in his explanation of ambivalence said:

Ambivalence of knowledge constantly prompts efforts to 'fix' certain as obligatory and unquestionable – as orthodoxy; to force through a belief that this knowledge and this knowledge alone is faultless, beyond reproach, or at any rate better (more trustworthy, reliable, and useful) than its competitors; and to degrade by the same token the alternative forms of knowledge to the inferior, derisible status of superstition, prejudice, bias or manifestation of ignorance.

In other words, Bauman says that ambivalence of knowledge comes about as a result of those who hold different opinions on similar issues pushing their ways of thinking onto others who differ from them. Lotz-Sisitka et al. (2006) discuss the ideological ambivalence with which sustainable development educators in southern Africa have to deal. They illustrate their argument by giving an example of how sustainable development educators grapple with maintaining human right and at the same time respecting culture when addressing issues of HIV/AIDS explicitly.

Analytical statement 7: Power relationships between caregivers and health practitioners influence the learning and practice of caregivers.

Bauman (1990, p. 113) defined power "...as the ability to act – both in the sense of choosing freely the ends of any action and of commanding the means which make such ends realistic". Bauman understood that people have power, depending on their resources. For instance, the more resources they have the more they are likely to have freedom to do something. The European Science Foundation (1999) noted that each and every one of us occupies a certain position in a network of power relationships. They argue that in power relationships, we either hold positions of authority or are subjects of it.

Foucault cited in Gordon (1980) indicates that our power to choose what course of action to take is determined by the belief systems of the society in which we belong. These are belief systems that would have gained entry in a society and have been accepted by the majority as truths. These 'truths' tend to exclude certain ways of thinking and acting. In other words, people's practices and values are a result of trying to fulfil the belief system of a society as a power holder and in that way attain their values (Bauman, 1990).

Power relationships between caregivers and health practitioners, as an influencing factor in the practices of caregivers is evidenced at Raphael Centre community of practice in Grahamstown (see section 4.5.2.2). It is apparent that caregivers did not have the freedom to use medicinal plants, especially those who were also using ARVs, as illustrated by G.K1 in section 4.5.2.2. The possible reasons for this lack of freedom may be related to health practitioners being highly regarded and respected by the caregivers who participated in this study, so much so that they found it difficult to question their authority. The inability to question an authority or openly communicate with health professionals concerning the use of medicinal plants in relation to HIV/AIDS was also noted in a study done in Uganda by Langlois-Klassen et al. (2008) where patients could not communicate freely with health practitioners on the use of medicinal plants in relation to HIV/AIDS. Langlois-Klassen et al. (2008, p. 173) referred to this as "culture of hierarchical obedience", where people do something because it has been said by an individual who holds a respectable position in a society. Tusting (2005) also argued that in communities of practice some people's voices are promoted better than others as it was evident in this study that the voices of health practitioners appeared as if they are the ones that are more prominent than the voices of women caregivers hence they influence what is learnt about use of medicinal plants and traditional food (see section 3.10.3). The above arguments show how uneven power-relations influence the practices of caregiving.

Analytical Statement 8: Experience appears to be a key influencing factor in learning.

It was apparent from the data that experiences that caregivers gained from the practice of caregiving through using traditional foods and medicinal plants is a key factor influencing their practices. Despite other factors which have been discussed as influencing the learning processes of women, such as ambivalent messages and uneven power relations, these are overridden by the experiences that women have. Women are more likely to respond or reject the messages depending on their own experiences be it with medicinal plants or traditional foods.

Evidence from Raphael Centre community of practice in Grahamstown reveals that experiences which caregivers have in practising the use of traditional foods and medicinal plants have more impact on their learning processes as it is evident that they would accept advice about whether or not they should use medicinal plants, dependent upon the experiences they may have with those plants themselves, or they might want to experience the benefits for themselves before they accept what they have been told (see section 4.5.2.1). For instance, G.C6 wanted to experience the effectiveness of *Inongwe* (Aloe) first, before she could believe what she had been told during workshops (see section 4.3.1.3). G.C6's view was shared by other caregivers when they were explaining the reason why they use medicinal plants. They made it clear that although they were aware that medicinal plants do not cure HIV/AIDS, their experiences in the practise of using these plants was enough to permit them to continue using them, as they had seen that they are useful (see section 4.5.2.1).

Experience as the element of the learning process of caregivers is also evident from the way caregivers explained the reasons for their use of traditional foods. Their explanations were not based on what they had been told by someone but rather on their actual experiences (see section 4.5.1). To clarify, experience appears to be a key influence, as G.C8 indicated that caregivers through their actions rejected some of the teachings they received at the Centre (see section 4.3.1.3). Evidence from the data shows that "the division of experts as legitimate 'truth holders' on one hand and laymen on the other' (Fadeeva, 2007, p. 255) is inapplicable in the studied communities of caregivers. This is because caregivers were not only practicing what they were told by nurses but were also practicing what they also believed was good for them.

The finding that experience is a key influencing factor in learning is also evidenced from the Keiskamma Art Project community of practice in Hamburg, where caregivers were using traditional foods and medicinal plants because of their own experience with using them (see

section 5.6.2 and 5.6.2). Wenger (1998, p. 52) sums up how learning through practice happens when he says “practice is about meaning as an experience of everyday life”. Thus caregivers learn about what to do through the experiences that they have as they are engaged in practice.

Evidence from Keiskamma Art Project revealed that caregivers’ experiences of difficulties caused by poverty were a key influence to their learning as it was the reason why they came to the community of practice in the first place (see section 5.2.1). Experiences of difficulties related to being HIV positive or caring for someone living with HIV/AIDS and poverty were also a key factor in influencing caregivers to join communities of practice and learn from them was also evident at Raphael Centre community of practice in Grahamstown (see section 4.2.2). This is consistent with the arguments of Wals and van der Leij (2007) concerning learning and sustainability that they arise from difficulty, tensions and conflict. (see section 2.7.1).

Analytical Statement 9: Exposure to and incorporation of knowledge can influence practice.

Although the studied caregivers indicated that they learnt from experience, it is also evident from the data that they had been exposed to new knowledge as HIV/AIDS caregivers. At Keiskamma Health Centre in Hamburg and Raphael Centre community of practice in Grahamstown, women caregivers indicated that they had incorporated new knowledge about what they should eat by showing considerable knowledge about the types of food they should eat and the nutritional value of the food. Caregivers in this instance were able to express the benefits of traditional foods with specific reference to HIV/AIDS (see section 4.5.1 and 5.7.1). This is an indication that even in a community of practice people can learn from experts.

Besides incorporating knowledge they had received about the benefits of traditional foods, caregivers indicated that they had incorporated knowledge about the effects of using medicinal plants and knowledge of nutritional value of food in one community of practice which influenced their practices, as some of them stopped the practice of using medicinal plants (see section 4.5.2.2 and 5.6.2.2).

Analytical Statement 10: Visible symptoms of illness appear to be a determining referent for practices.

At Keiskamma Art Project community of practice in Hamburg and Raphael Centre community of practice in Grahamstown although many caregivers did talk about HIV and

were conscious of it, they preferred to refer use of medicinal plants in relation to HIV/AIDS with visible symptoms, and said they were using medicinal plants in relation to those ailments such as headache and stomach pains (see appendix 6, table 1) This could suggest that people may talk about other illnesses rather than HIV/AIDS, as it is a disease which manifests itself in a variety of ailments that can possibly be cured. It could also mean that women were hiding the disease by concentrating on visible symptoms, perhaps because these were more acceptable in society.

The issue of stigmatisation is evident in the research data of caregivers in Grahamstown. Although caregivers, in this case, were free to discuss that they were HIV/AIDS caregivers or living with HIV/AIDS themselves, they did mention that they were facing the problems of stigma and discrimination in their communities. One of the caregivers said that she was learning from other caregivers in her community on how to deal with stigma and segregation that they faced in their community (see section 4.3.2.1). The issue of HIV/AIDS stigmatisation is consistent with the literature which shows that stigmatisation is still prevalent in South Africa (Makoe et al., 2007; Ncama et al., 2008; Simbayi et al., 2007).

6.5 CONCLUSION

This chapter shows that women were learning in a community of practice and that there were several learning processes in their community of practice, as revealed by women having a sense of belonging and formation of identities which happened as a result of learning the practice of the community. However, the chapter also indicates that women were learning away from the community of practice and were bringing their new knowledge to these communities. This chapter also shows that women caregivers were beginning to re-value their traditional knowledge. There were four factors which were influencing the practices and learning of women caregivers, namely: ambivalent messages, power relations, visible symptoms of HIV/AIDS and past experiences of women caregivers.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

This chapter concludes the research and draws upon the research findings to suggest recommendations. Recommendations associated with each research goal posed in Chapter 1 (Section 1.5) are given. The chapter begins with a summary of the research findings and then provides recommendations regarding findings on learning interactions among caregivers which shape their caregiving knowledge within a community of practice (see section 7.2 and 7.3). This is followed by recommendations pertaining to findings on traditional food and medicinal plants used by caregivers including sustainability practices associated with utilising plants in relation to HIV/AIDS (see section 7.3). The chapter then provides recommendations on findings associated with the influences of practices and learning of caregivers which includes ambivalent messages, caregivers' experience and power relations (see section 7.5). Recommendations for further research are also provided (see section 7.6). The chapter ends with a presentation of reflections of this study including the limitations of the study (see section 7.7). Section 7.8 concludes the whole study.

7.2 SUMMARY OF THE RESEARCH FINDINGS

Community of practice theory has informed this research into exploring how women caregivers learn about the practice of HIV/AIDS caregiving with reference to knowledge of traditional foods and medicinal plants. The research clearly shows that belonging to the Raphael Centre and the Keiskamma Art and Health Centre communities of practice (which provide HIV/AIDS care) is an opportunity for caregivers to actively participate in informal meetings and workshops which enhance their knowledge of caregiving. This was observed of caregivers who participated in workshops at the Raphael Centre who learnt about medicinal plants being useful to people living with HIV/AIDS. It is also by organising and attending workshops that caregivers at the Keiskamma Health Centre reported to have learnt more about caregiving.

Throughout the research participation emerges as an essential component in fostering learning in communities of practice. Two important factors observed from this study

concerning participation are that firstly, participation is enabled by access – as a result of an individual actively making a decision to join the Raphael Centre or Keiskamma Health Centre to learn methods to improve the quality of life of those living with HIV/AIDS. Secondly, when joining the community of practice participants are involved in activities at the Centres which make them interact with people facing the same challenge as theirs. In the context of HIV/AIDS this study has shown that there is value in learning from people who are in similar situations. This finding was confirmed by the formation of HIV/AIDS support groups intending to educate caregivers about HIV/AIDS caregiving by sharing stories and experiences with one another.

Another important finding that emerged from the data is the existence of diverse learning processes that exist within communities of practice which include collaborative learning and observation. There is evidence from the study which suggests that the caregivers are actively contributing to each other's learning by sharing knowledge amongst themselves, over and above what they are expertly taught.

The research also shows that while caregivers were learning through participating in a community of practice, they also learnt much by informally interacting with others within their own communities. Mass media and other organisations like churches, Non governmental organisations, schools as well as hospitals and clinics were also central in the learning processes of caregivers with regards to how food and medicinal plants can improve well-being.

There is evidence of caregivers using the knowledge of traditional foods and medicinal plants that they have been taught through the generations to solve contemporary problems like HIV/AIDS. For example, certain medicinal plants that have always been used to cure certain ailments are now being used to cure similar ailments of people suffering with HIV/AIDS.

Again there is evidence that learning from real life experience is a motivating factor for some of the caregivers who learn how best to care for people living with HIV/AIDS by using the ideas that have worked on others.

There is also substantial evidence in this study that points to caregivers beginning to re-evaluate and value traditional foods. This finding is contrary to previous studies which reveal that people tend to favour exotic food to traditional food (Section 26.1). Re-evaluating traditional food in this study is relative to the learning within the communities of practices as well as information from health practitioners. Caregivers seem to have learnt that traditional food, especially traditional vegetables, have nutritional components which are vitally

beneficial to those living with HIV/AIDS. Caregivers in this study seem to also strongly believe that traditional foods have medicinal properties which prevent people living with HIV/AIDS from easily contracting opportunistic infections. However, scarcity of some of the traditional foods which are seasonable is the main determining factor of the caregivers' use of the food.

The study showed varying views concerning the use of medicinal plants by caregivers: some believe the plants are useful based on experience; others claim that the use of medicinal plants for specific ailments may not have the same effect on ailments directly linked to HIV/AIDS; and finally, there are caregivers who have made a decision to not use medicinal plants at all.

The reason for this diversity of opinion amongst caregivers regarding medicinal plants seemed to be related to the different messages being passed on to caregivers by stakeholders in the field of HIV/AIDS. In the case of the Raphael Centre, caregivers indicated that they learnt from individuals and non-governmental organisations about medicinal plants that are believed to be beneficial but the health practitioners seemed to discourage the use of any medicinal plants. Respect for authority and stigma attached to HIV/AIDS are other factors which influence the learning and practices.

It is also evident that caregivers are not explicitly learning about how to sustain plants which they utilise. In all cases (Raphael Centre in Grahamstown and Keiskamma Art Project and Keiskamma Health Centre in Hamburg) caregivers only indicated that they practice sustainability through harvesting practices. Although the existence of medicinal plants and traditional vegetables in some of the caregivers' gardens might be considered as a sustainable practice, their growth of plants is limited to common plants such as *Umhlonyane* (*Matricaria nigellifolia*) which is used as a cough mixture. These practices cannot therefore be considered as a significant sustainability practice.

7.3 RECOMMENDATION ON LEARNING INTERACTIONS

7.3.1 There is a need to encourage and strengthen learning in caregiving communities of practice

As discussed above, participating in communities of practice enables caregivers to learn more about caregiving. This is evident at the Raphael Centre and Keiskamma Health Centre where caregivers interacted with each other over a significant period of time. The research therefore recommends that there is a need in the field of education and environmental

education to strengthen learning through participation in communities of practice. Caregivers need to be encouraged to share and learn from others who have similar experiences as this study has proven it to be beneficial. HIV/AIDS educators should encourage and strengthen communities of practice in the form of support groups which play a vital role in enhancing the education of caregivers.

7.3.2 There is a need to encourage diverse learning processes in a community of practice

As is clear from the evidence in the study, there are many varied learning processes in a community of practice (such as learning through collaboration and observations in the Raphael Centre and Keiskamma Health Centre) and the study therefore recommends that educators in the field of HIV/AIDS and environmental education should encourage different levels of participation. Passive social learning (Glasser, 2007) should be encouraged as it seemed to allow caregivers to learn effectively. For example, there were caregivers at the Raphael Centre community of practice who indicated that they were inspired to learn more simply by observing older members of the communities of practice and how they have dealt with HIV/AIDS. At Keiskamma Health Centre observing experts was part of a curriculum for some of the caregivers.

There is also evidence of active participants at the Raphael Centre who were not only satisfied with learning but took the initiative of going out of their communities of practice and sharing what they have learnt with other people within their communities. This group of caregivers should be encouraged to assist more actively within their communities of practice. This group of caregivers could also be given leadership roles during discussions and meetings.

The role of coordinators in communities of practice should also be strengthened. In communities of practice such as the Raphael Centre, counsellors who have received training on HIV/AIDS become coordinators of meetings. Other members that are interested in the activities of a community of practice, such as non-governmental organisations and individuals who come to the Raphael Centre to conduct workshops on the use of medicinal plants should also continue to be encouraged to do so as this seems to contribute meaningfully to the learning of the members within the community of practice.

At the Keiskamma Health Centre individuals who are able to conduct workshops which enhance women's skills in caregiving should be encouraged to continue to do so. Keiskamma Art Project should encourage individuals who are experts in the field of HIV/AIDS and are capable of conducting workshops and meetings to do so as this will allow

women at this Centre to learn more about caregiving - those that specifically seem to be struggling with caregiving at present.

7.3.3 There is a need to encourage and strengthen caregivers' learning outside of their community of practice

As seen in the research, women were not only learning from a community of practice but also directly from their communities. It was also noted that there was a significant number of caregivers who use media as a source of information. This research therefore recommends that educators use other forms of media to transmit information regarding HIV/AIDS – that which will engage the learners and seem to affect them more. This research also recommends that media such as books, pamphlets and posters be produced in local languages as some caregivers indicated that they prefer (or are only able to) read materials written in their local language.

In Hamburg there is also a need to have more of these support groups – not only based at Keiskamma Health Centre but also catering for caregivers who are not professional caregivers. This is important as the caregivers at Keiskamma Art Project are not as educated about HIV/AIDS caregiving due to their organisation not being directly involved with the HIV/AIDS aspect.

7.4 RECOMMENDATIONS ON PRACTICES

7.4.1 There is a need for strengthening HIV/AIDS caregiving options by drawing on experience and knowledge of caregivers

The collaborative interaction between caregivers and health professionals at the Raphael Centre community of practice and Keiskamma Health and Art Centres has been important in bringing together different knowledge systems towards a common cause, HIV/AIDS. Caregivers use their indigenous knowledge of healthy foods for livelihood sustenance. Health professionals are beginning to acknowledge and recommend the nutritional value of traditional foods. This recognition supports and validates the work of caregivers. The research therefore recommends that there is a need for continued collaborations of these two parties – caregivers and health practitioners – as their partnership seems to be enhancing the education of caregivers and as shown in the study this contributes to well-being of people living with HIV/AIDS and the caregiving process.

This research also recommends that educators in environmental education and health recognise and build on existing traditional knowledge. They should work to extend the

knowledge of caregivers who already are knowledgeable about traditional foods and medicinal plants and prefer to learn from life experience. An example would be to extend existing knowledge of traditional foods by clarifying nutritional values of these foods, thus deepening and extending caregivers' knowledge and abilities to make choices in their caregiving practices.

7.4.2 There is a need for stakeholders in the HIV/AIDS field to encourage and strengthen options that encourage caregivers to be self sustaining to improve their caregiving practices

At the Raphael Centre caregivers indicated that they are educated about gardening. It might be wise for stakeholders that are involved at the Centre to also encourage and support caregivers to grow traditional vegetables in their gardens. The introduction of traditional vegetables is likely to be positively embraced by caregivers as they have shown that they are knowledgeable about the benefits of using these vegetables. In Hamburg, the traditional vegetables found in caregivers' gardens are those that grow at free will and the caregivers should be encouraged to be actively involved in tending to and assisting the growth of traditional vegetables.

Sustainable gardening practices can improve practices of caregivers in their endeavour to provide care to people living with HIV/AIDS. The benefits of nutritional plants produced by such gardens have previously been proved by a programme such as the project '*Jardins et Elevages de Parcelle*' (JEEP) in Kinshasa, Democratic Republic of Congo (Mboyi & Paulos as cited by Gockowski, Mbazo'o, Mbah & Moulende, 2003). Gardens might allow caregivers at Raphael Centre to become more self-sustainable rather than depending on the centre for food, which is currently the case. This practice will improve the consumption of traditional vegetables at Keiskamma Art Project and Keiskamma Health Centre communities of practice, as growing them is likely to improve the use and intake during plant shortages in the dry season. Encouraging and supporting caregivers by providing them with seed and technical knowledge on how to grow the plants may also in a small way be a conservation strategy for some of the plants.

7.5 RECOMMENDATIONS ON INFLUENCES OF PRACTICES AND LEARNING

7.5.1 There is a need for different stakeholders to be alert to and address ambivalence on use of medicinal plants

One of the findings in this study indicated that caregivers at the Raphael Centre are receiving contradictory messages from stakeholders responsible for their learning process concerning the use of medicinal plants. This research therefore recommends that different organisations need to be aware of differences in opinion concerning the use of medicinal plants and need to collaborate with each other so that the same message is given to the caregivers.

7.5.2 There is a need to strengthen programmes that enable women to learn about new information on HIV/AIDS

Caregivers at the Keiskamma Health Centre and the Raphael Centre stated that they have learnt and embraced new knowledge from more knowledgeable caregivers on how best to care for people living with HIV/AIDS. This finding shows that it is worthwhile to support women caregivers to expand their HIV/AIDS caregiving, which is both exciting and reassuring. In this sense the research recommends that the strengthening of existing programmes at the Raphael Centre and Keiskamma Health Centre which will enable women to embrace new knowledge.

7.6 RECOMMENDATIONS FOR FURTHER RESEARCH

Recommendation 1: Further exploration of how learning happens in broader social context

This research reflected that women caregivers learn in a community of practice as well as from broader social contexts (see section 6.2). More research is needed, however, to explore the influence of the broader social context as Wenger's communities of practice did not provide adequate analytical tools to rigorously explain their influence on social learning in a community of practice. The research did, however, identify some aspects of the broader social context that influenced the learning process, such as stigmatisation and stress associated with HIV/AIDS and conflicting messages arising from different health promotion discourses. These and others similar aspects can, however, be researched in more detail and depth. Further research to investigate how caregivers learn about HIV/AIDS caregiving in broader social context can be done by complimenting Wenger's (1998) communities of practice with sociocultural theory as suggested by Tusting (2005) (see section 3.10.3).

Recommendation 2: Exploration on how power and conflict influence learning in communities of practice

This research shows that issues such as power, ambivalence and experiences of caregivers influence practices and learning of women caregivers in a community of practice (see section 6.4). These issues were, however, not investigated thoroughly as the communities of practice framework (see section 3.10.2) does not provide adequate investigation tools for such analysis. Socio-cultural historical activity theory (as recommended by Tusting, 2005), and discourse analysis studies that identify power-knowledge relationships at play (Tusting, 2005) would extend the current findings generated from working with the communities of practice framework. Future studies could focus more on the way in which issues of power and conflict in a community of practice influence social learning processes in communities of practice.

Recommendation 3: Need to investigate learning and practice of home and community gardening

It is evident from the research that women caregivers were beginning to re-value traditional vegetables as a result of having learnt about their importance through learning in caregiving communities of practice. The study was able to show that learning in a communities of practice through participation can influence change in people (see section 6.2). This finding points to another potentially interesting and rich area of investigation that was not covered in this study in any depth, namely researching learning and practices of home and community gardening in relation to caregiving practices. This research into home and community gardening could be used to develop frameworks that will promote self-sustenance and resilience of caregivers and lead to improvement of their caregiving practices.

Recommendation 4: Need to investigate traditional conservation practices related to traditional food and medicinal plants

One of the findings in this research indicated that women were not explicitly learning about resource conservation, despite their use and dependence on the natural resources for food and health related caregiving practices. This indicated that resource management is not of importance in HIV/AIDS caregivers communities of practice discourses. However, this study shows that there is need for HIV/AIDS caregivers communities of practice to learn more about the sustainable use of the resources that they are using. From this finding it could be

necessary to investigate traditional and modern conservation practices related to traditional food and medicinal plants and how that knowledge is being transmitted.

7.7 REFLECTIONS AND LIMITATIONS

In reviewing this research reflexively as suggested by Lather (1986) who argued that it is an important exercise that needs to be undertaken by every researcher in ensuring trustworthiness of their research, I present some of the challenges and limitations that I faced during the process of this research.

One of the major challenges I faced during data collection was failure on the participants' part to articulate how they had learned some of the practices. I recognised, however, that this problem is not unique to this research as Eraut (2000) cited in Martin (2005, p. 146) states that there are difficulties which researchers face when attempting to investigate learning using interviews, as quoted:

There are possible epistemological difficulties with a methodology which explores learning through reportage. Eraut argues that it is easier to report – that is, recall and reflect on formal learning which is explicit and deliberative, while it seems to be considerably more difficult to report on non formal learning such as reactive and tacit learning. He argues that the learning process and range of learning can be investigated only with data capturing the actions and language of the learning events.

In this research I could tell that it was a difficult task for participants to tell me how they had learnt tacit knowledge by their response “I just know!” This does not, however, mean that the study was not fruitful as I still gathered much information with regards to learning of caregivers within a community of practice, and the use of traditional foods and medicinal plants in relation to HIV/AIDS. I do still feel that more depth would have been present if the study was conducted as an in-depth ethnographic study, although this would have presented ethical difficulties, given the sensitive nature of the topic.

Another challenge I faced with regards to this study was finding the scientific names for medicinal plants, wild vegetables and fruits that were mentioned by the caregivers. The reason for this could possibly be that I relied on the names that were supplied by participants due to the interpretive nature of the study which calls for an understanding of the world from the perspective of the people under investigation, as discussed in Section 3.2.

This method was, however, loaded with difficulties as I could not identify some of the scientific names of the local names provided by the participants, hence the incompleteness of the tables in Appendix 6. Bofolo and Ngwenya as cited in Mtshali (1994) suggests a

possible reason for my struggle to identify scientific names which is the fact that one wild plant can have several local names and one local name can also refer to different plants.

I believe that this problem could have been eradicated if I had collected plants for identification at the herbarium during the course of the data collection. In my opinion this does not compromise the quality of the study as it was not intended to be a botanical study which Tarr and Ngwenya as cited in Mtshali (1994) states it requires provision of scientific names as one of the requirements. Rather this study's focus was to look at how caregivers learn about the use of these plants with specific reference to their benefits to people living with HIV/AIDS.

Upon reflection I am convinced that if I had transcribed my own data I would have had an opportunity to analyse my data earlier as data analysis can begin as early as during the process of transcription. I found my limitation of the Xhosa language hindering as I am not Xhosa speaking and the data collection was done in Xhosa.

Another challenge which I faced with this study was a direct result of the choice of the Keiskamma Art Project research site because I felt that participants were somewhat reluctant to participate in the study. During interviews I sensed that they were not as enthusiastic as the participants at Raphael Centre in Grahamstown. I felt that the women I interviewed no longer found researchers to be interesting due to them being exposed to many researchers before. I noticed whilst having a conversation with one of the shop workers at the Centre that the moment I mentioned I was from Rhodes University they concluded that I was there to do research. At one point, upon introduction of myself and my expectancies from this study one of the participants indicated to me that I need not trouble myself as they already knew about these things.

7.8 CONCLUSION

This research provided a critical examination of sociological learning processes and interactions of women caregivers in three communities of practice (Raphael Centre, Keiskamma Art Project and Keiskamma Health Centre) in Grahamstown and Hamburg respectively in the Eastern Cape Province. The research provided a critical view of how learning occurs in caregiving communities of practice and how participation of caregivers in communities of practice enables learning. Drawing on Glasser's (2007) view that social learning occurs when there is 'capacity building', caregivers in this study had to be willing, prepared and had to put effort into being able to learn more about caregiving.

The fact that caregivers were also learning from experts in communities of practice also shows that there is need for considering a balance between co-learning and hierarchical learning in social learning processes, as discussed by Glasser (2007, see section 2.10.1). Caregivers benefited from learning from other caregivers' as well as from learning new knowledge from more knowledgeable others. This led to caregivers' change and transformation in some aspects of caregiving such as the appreciation of the value and use of traditional food and medicinal plants.

Although the study was able to show to some extent that social learning occurs in communities of practice where people share goals, share better ways of achieving their goal and end up sharing repertoires, it also showed that caregivers learn in diverse ways such as through media, family, churches, health professionals and non-governmental organisations. The broader social context or learning environment is characterised by stigma, ambivalence and stress, and this has an influence on the learning and practice of caregivers. The study therefore reveals that HIV/AIDS caregiving is embedded in political, social and economic issues. This therefore means when doing research into HIV/AIDS caregiving practices and learning, contextual factors should be considered.

The findings of this study led to the formulation of the following recommendations for HIV/AIDS education research and practice.

- Encourage and strengthen learning in and outside of communities of practice
- Be alert of issues of ambivalence, stigma, and experience when addressing issues of HIV/AIDS caregiving and learning as these issues influence both practice and learning.
- Develop a deeper understanding of how power, conflict, language and social context influence social learning processes in communities of practice.

It is hoped that this research may be able to inform environmental education and health education practitioners on social learning processes by drawing their attention to aspects of social learning that influence practices that may not have been addressed previously in the research at the interface of environmental and HIV/AIDS education research.

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9.0 APPENDICES

APPENDIX 1

Interview guide for individual interviews

Ingabula zigcawu

Injongo yoludliwano ndlebe kukuxhasa uphando lwam olungqamene nendlela abasebenzi basetyhini abangabaniki nkathalo abathi bafunde ngayo ukukhathalela abantu abaphila nentsholongwane kagawulayo nesandulela sayo kwanedlela abalusebenzisa ngalo ulwazi lwabo ekutyeni namachiza emveli. Eyona njongo iphuhlileyo ngoluphando kukkwandisa ze uphucule umgangatho wempatho ntle kwabantu abaphila nentsholongwane kagawulayo nesandulela sayo nje ngenye indlela yokulwa ugawulayo kwaneengcebiso ezamkelekileyo kwabezempilo nabahlohi bokusingqongileyo ze lwande luqonde ngqo ulwazi lwabo ekusetyenzisweni nogcino lwamachiza nokutya kwemveli ngokungqamene no gawulayo.

Okucelwayo ukuba ukwenze:

Nceda uphendule yonke imibuzo kangangolwazi nokuqonda onako yaye qaphela azikho iimpendulo ezichanekileyo nezingalunganga kwimibuzo ekoluphando.

Okokuqala ndixelele:

Ngawe?

Ube lilungu njani lalo mbutho?

Uziqaphela njani izinto ezintsha ebomini?

Umsebenzi njegomnikezeli nkathalo

Ingaba ukhona na umntu omkhathalelayo ophila nentsholongwane kagawulayo nesandulela sayo?

Luyintoni unxibelelwano lwakho kulo mntu?

Kunjani ukukhathalela imntu ophila nentsholongwane kagawulayo nesandulela sayo?

Indlela yokuziphatha nonxibelelwano

Ingaba usebenzisa ukutya kwemveli kulomsebenzi wonikezelo nkathalo?

Luhlobo luni lokutya kwemveli okusebenzisayo?

Zizathu zini ezibangela ukuba usebenzise okanye ungasebenzisi olu hlobo lokutya?

Waze njani ngenzuzo yolu hlobo lokutya ngokubhekisele ngakubantu abaphila nale ntsholongwane?

Uyawasebenzisa na amachiza emveli?

La machiza emveli anyanga ziphi izigulo?

Ingaba ikhona indlela oyenzayo yokugcina unonophele olu hlobo lwamachiza nokutya okuchazileyo ngentla apha?

Uzigcina njani ezi zityalo?

Ufunde njani ngononophelo nokhathalelo lwezizityalo ozisebenzisayo

Translated interview guide

Introduction

The purpose of this interview is to support my research which is looking at how women caregivers learn about caring for people living with HIV/AIDS and how they draw on knowledge of traditional foods and medicinal plants. The broader purpose of the study is to enhance the quality of caring for people living with HIV/AIDS as another dimension of fighting against HIV/AIDS through recommendations for environmental educators and health workers that would make them more effective in sharing knowledge on the use of traditional food and medicinal plants and their sustainable use in relation to HIV/AIDS.

What you are being asked to do:

Please answer all questions to your best knowledge and understanding and note that there are no 'right' or 'wrong answers' to the questions in this research.

To start with tell me about:

Yourself

How you came to be a member of this organisation?

How do you learn about new things in life?

CAREGIVING

Are you caring for someone who is living with HIV/AIDS?

What is your relationship to that person?

How has it been to care for someone living with HIV/AIDS?

PRACTICES AND LEARNING INTERACTIONS

Do you use traditional food for caregiving?

What traditional food do you use?

What are your reasons for using/not using these foods?

How did you learn about traditional foods?

How did you learn about the benefits of these foods in relation to people living with HIV/AIDS?

Do you use medicinal plants?

What ailments do they cure?

Do you practice conservation of the medicinal plants and food plants that you have indicated?

How do you conserve the plants?

How did you learn about conservation of the plants that you use?

APPENDIX 2

2. a) A selected individual interview with one of the caregivers in Grahamstown case study

CG.6

Venencia: Can you tell us about yourself?

Caregiver G.C6: I am (Name of the caregiver). I am staying at ext 7, (Number of the house) I am living with this disease. I arrived 2004 September the 4th I came here because there is a Support group made out of many people instead of being stressing yourself. I was born in 1964, 25 February; I was born here in Rini

Venencia: Are you caring for someone living with HIV/AIDS?

Caregiver G.C6: Yes, But I was the first one diagnose HIV, but there is the other one who is HIV positive from his working around. He come back home after he was missing for a while and told us that he was sick, of HIV

Venencia: What is your relationship to her?

Caregiver G.C6: She is my sister.

Venencia: How has it been to look after your bother?

Caregiver G.C6: He went to the clinic and took blood for test, it's what he told us and the clinic asked him to come back for the results. He went back for the results, when he comes back he told us that the clinic told him that he is HIV positive.

Venencia: And how did you feel about it?

Caregiver G.C6: I felt painful, the same feeling I had when they told me that I am HIV positive. I never knew that it will be someone else living with HIV. It seems that everyone will have this disease because now it's me and him living with this disease at home

Venencia: How are you helping your brother to cope with HIV?

Caregiver G.C6: I've tried to help him, we are getting tablets from the clinic, so when I talk to him when they said he is HIV positive, I've told him to adhere to his medication and respect the instruction from the clinic because they told him the same thing they told me. Whatever is happening I told him that he should take his tablets on the same time everyday. At some time he got sick and end up admitted at Hospital from there to Themba hospital. At

Themba they took the blood and found out that his CD4count is low and the doctor told him to start with ARVs, now he is taking ARVs. Before I come here I make sure he has taken his medication. I think my advice is very helpful because sometimes he looks fine but when he was not yet started with ARVs, he was hopeless. I can see he is getting better and he is now able to fetch water from the tap a tghing he never used to do because he was very sick and weak. I feel happy that I have been able to help him and even himself. He is always saying me, my sister the way you are looking after me I am very grateful. He is free now to talk and me too I am happy he is better than before.

Venencia: Do use traditional food to care for your brother?

Caregiver G.C6: Yes I do when I find them.

Venencia: Can you tell me some of the food that you use?

Caregiver G.C6: I use isigwamba (imifino) that I pick from the garden and from the open field like utyuthu, irhawu, ihlaba and umsobosobo, you cut all this fine, put it the pot and mix with mealmeal or you don't mix with m/meal, you take the meal and stumped it and then when is fine you strained it and mix it with isigwamba, other one is umdoko (amarhewu) there is something called inconco you put in the m/meal in warm water and stir it and leave for overnight and then in the morning you make your porridge and will have that sour taste like a vinegar. Umphokoqo, Umxhaxha Umxoxozi, Umcuku, Sweet-potatoe, Ingubela

Venencia: How did you learn about these foods?

Caregiver G.C6: We grew up eating these foods and we still eat them today. My father who grew up on a farm is the one who used to show us especially the vegetable (imifino). I sometimes even pick isgwamba from this garden here (at the Centre) and take it home for cooking, but I don't do inconco.

Venencia: What do you think are the benefits of this food to your brother?

Caregiver G.C6: I cook isigwamba for myself and bother, the rice they have cook I don't eat, I eat my isigwamba, after eating isigwamba I feel fresh and right I can do everything in the house because of energy, even if they asked me to push the cupboard I can push it because I am strong. With traditional food you don't have to go to town to buy, if you planted or not planted you just go to picking up isigwamba and because I don't have money to buy I will eat, that is the difference. Xhosa food is healthy and makes you active and also the English one, although the English food you have to buy. For sick people like my brother, this food helps to improve their health status.

Venencia: How did you learn about the benefits of traditional food?

Caregiver G.C6: I got this from my mothers and grandmothers and also from the clinic they teach us.

Venencia: Who else do you share knowledge with about care giving?

Caregiver G.C6: There is lady where I stay, she told me that she is sick of this, when we met in a tax going home and I told her I was also sick with this disease, I used to eat rice and potatoes all the time and did not like the food and it was only when my friend advised me that I should try porridge in the morning. If we have spinach at centre I bring it to share with her so she can cook it and mixed with imifino from the garden in one pot and then you'll enjoy it, so she fine and I encourage taking tablets on right time

Venencia: What do you learn here at Raphael Centre about nutrition and traditional food?

Caregiver G.C6: We learn about nutrition, HIV on how to look after yourselves when you are HIV positive, nutrition you must eat food that build your body and you must be clean all the time. They encourage us, to eat green stuff, fruit, drink with no acid, red meat not allowed but we can eat only chicken.

Venencia: Do use medicinal plants for your brother and yourself?

Caregiver G.C6: One thing I know as an HIV positive, is a root called inogwe(African potatoe) you just dig underground and it comes with roots, before you use it , wash inogwe and grind it rough and pour it in the bottle and put it together with garlic and water and wait until get strong. You can drink a spoon, in the morning, dinner and it can release all the pains in your body at least it goes down and also helps when your knees are very weak. It gives you a lot of energy. That's what I know as I am HIV positive. *Matricaria nigellifolia* helps coughs and chest problems. *Umhlonyane* helps the body to be healthy and you will feel fresh.

Venencia: How did you learn about these medicinal plants?

Caregiver G.C6: I heard from someone who came to run a workshop and tell us about inongwe traditional medicine not the other medicine. He said we can use inongwe also for our faces, since then I started trying to use inongwe to check for myself if is it true what he taught us about inongwe. So I've done it, I went to harvest it, and did what he told us and I trust him and worked very well.

Venencia: Do conservation these plants you have just mentioned?

Caregiver G.C6: I use *ulugxa* it is good to harvest, I do not harvest all I think about the others, and they need the medicine. I harvest what I need

Venencia: How did you learn about that?

Caregiver G.C6: By observing the parents as I was growing up. I never learnt, I have just think if I can harvest like this it will come up and it comes up smoothly

Key to Interview preliminary analysis

Colour Code	Category
Red	Reasons for joining the centre
Green	Caregiving domain
Pink	Stories
Yellow	Sustainable practices
Dark yellow	Learning interactions
Turquoise	Use of traditional foods and reasons for the practice
Grey	Use of medicinal plants and reasons for the practice

2. b) A selected individual interview with one of the caregivers in Hamburg

case study

Venencia: Can you tell me about yourself? *Kwawundixelele ngawe?*

Caregiver H.C5: *Igama lam ngu..... Ndineminyaka engama shumi amathathu anesithoba yaye ndinabantwana abathathu. Ndisebenzela umbotho ozimeleyo ongekho ngaphantsi korhulumente ogama liyi (Hamburg) ojongene nabantu abagulayo nabasecicini lokufa njengo mniki nkathalo. Ndisebenza ngabantu abachatshazelweyo sisifo sika gawulayo nesandulela sayo yaye nditshatile. My name is (Name of the caregiver) I am 39 years and have three children. I am working for an NGO (Hamburg) hospice and I am a career. I am looking after patients who are infected by HIV. I am married.*

Venencia: How do you learn about new things in life? *Ufunde njani ngezinto ezintsha ebomini?*

Caregiver H.C5: *Ndifumene ulwazi oluthe vetshe noluphangaleleyo ngakubi ngale ntsholongwane apha kulo mbutho ndikuwo. Ndiyakwazi ukukhathalela umthu one ntsholongwane ngolwazi endilufumene esibhedlela, kwiincwadi endizifindayo, kubahlobo, koomabonakude kwakunye noonomathotholo. I learn more information from the centre I have more information about HIV/AIDS than before. I know how to care for someone who is HIV. Hospital, I also use to read books and also chat with friends, From TV/radios*

Venencia: Where else do you learn about caregiving? *Ngeyiphi enye indawo ofunde kuyo ngalo msebenzi uwenzayo?*

Caregiver H.C5: *Nanje ngoko besele nditshilo umongikazi u Zita unolwazi olu phangaleleyo ngesisifo kwakunye nooGqirha. Ixesha elinzi sifumana uncedo kuZITA ngeendlela ekufunekasibancede ngayo abantu abaphila nalengumthuthuzeli nomcebisi eliphuma esixekweni elinamava nolwazi ngentsholongwane kagawulayo. Kwakhona xa ndithe ndabona incwadi engalentsholongwane ndiyayifunda ndiyigcine. Nase msebenzini xa sinendibano yombutho wokuxhasana okanye ukwabelana ngolwazi nenge ndlela esthi esi sifo sosuleleke ngayo ebantwini nendlela esithi sichaphazele ngayo kakubi ukusebenza kwamajoni omzimba. Siyaphinda kwakhona sixhobisane ngeendlela amabaphathwe ngayo abantu abachaphazelekayo. Kodwa ke ixesha elininzi ndifunde ku Zita. Ngamanye amaxa ziye ziqumbe ngamandla izigulane kodwa ke kufuneka wean ube nendlela yokubabonisa imfuneko yokutya amayeza yaye ube nendlela yokusombulula iingxaki ezi lolu hlobo. As I said I am working with sister zita who has more knowledge and the doctors as well. Most of the times we get help from (name given) about how we should care for people living with*

HIV/AIDS. There is also a lady who is a counsellor she is helping us so much she is from the cities so she is more knowledgeable about HIV. When I see a book about HIV I also keep it and read it. At work also when we have support group and workshops where we learn about how HIV is transmitted and how it affects the immune system. We also discuss how people with HIV must be treated, that they must be loved. But most of the time I learned from (name). Sometimes the patient become very angry you need to be patient. Some do not want to eat their treatment and you will need to convince them. You need to know how to deal with these problems.

Venencia: What is it like to be a caregiver? *Kuba njani ukuba ngumncedi?*

Caregiver H.C5: *Ndiyakonwabela endikwenzayo ndisazi ukuba ndenza igalelo elenza umahluko ngexa ndikwanikezela ngothando kulowo unentsholongwane kagawulayo.* I am glad to be doing what I am doing because I know I make a difference a person who is HIV positive needs to be loved.

Venencia: Have you been trained to be a caregiver? *Uqeqeshiwe koluhlobo lomsebenzi?*

Caregiver H.C5: *Hayi.* No

Venencia: Are you taking care of someone who is infected with HIV/AIDS? *Ingaba ukhona umntu omongayo nochatshazelweyo ngugawulayo?*

Caregiver H.C5: *Ewe.* Yes.

Venencia: What is your relationship to that person?. *Nidityaniswa yintoni?*

Caregiver H.C5: She is my niece. *Ungumtshana wam.*

Venencia: How has it been to care for your niece?. *Kunjani ukonga umthu ongumtshana kuwe?*

Caregiver H.C5: *Kwakunzima kuqala kodwa ngoku ngenxa yoncedo nenkxaso endiyifumene embuthweni nook kungcono kunangaphambili.* It has been difficult at first but now with all the knowledge from the centre I feel I am managing very well

Venencia: How it is like to be working as a caregiver at the Centre? *Kunjani ukusebenza njengo mniki nkathalo kule ndawo ukuyo?*

Caregiver H.C5: *Ndiziva ndonwabile kuba ndiyawuthanda lo msebenzi ndiwenzayo yaye ndiyazi ukuba nabagulayo bayafuna uthando. Umntu onentsholongwane unqwenela uthando kwaye maxa onke banqwenela ukwazi ukuba bathandwa kangakanani an.* I feel so

glad because I like this job because I know patients need to be loved. A person who is having HIV always need to be loved and he/she wants to how much care you are giving to them.

Venencia: Do you use traditional food? *Uyakusebenzisa ukutya kwemveli?*

Caregiver H.C5: *Ewe. Izinto ezinto nesigwamba, umcazi, imbikixane okanye irhawu ndiyaziphekela usapho lwam kwanomtshana wam ngokunjalo. Ndiyabakhuthaza abaguli endisebenza ngabo ukuba bazipheke ezi zinto ndizikhankanye ngentla xa bebuyela emakhayeni abo kwanemifuno equka isispinatshi, iminqathe, ibeetroot kwakunye ne turnips. Yes like isigwamba umcazi imbikikane umsobosobo irhawu I prepare them for my family and for my niece too. I also encourage my patience to prepare these when they go back home and also vegetables like spinach carrot beetroot and turnips*

Venencia: What are your reasons for using traditional food you have just mentioned?. *Zizathu ziphi ezibangela usebenzisa olu hlobo lokutya okukhankanyileyo ngentla apha?*

Caregiver H.C5: *Oluhlobo lokutya lwenza abantu abagulayo babanamandla yaye babesempilweni.* They make sick people strong and healthy.

Venencia: Do you use traditional medicine? *Uyasebenzisa na amayeza esintu?*

Caregiver H.C5: *Hayi.* No

Venencia: Why? *Ngoba?*

Caregiver H.C5: *Ndicinga ukuba anamandla gqitha okokuba angasetyenziswa ngabantu abanesifo sika gawulayo kananjalo anakho ukubangela utyatyazo olunokumenza umguli angomeleli angabinamandla.* I think they are too strong for people that are infected with HIV. They can cause running stomach, a person will become weak.

Venencia: Although you do not use medicinal plants do you know how they should be conserved? *Nangona ungawasebenzisi amayeza esintu ingaba uyayazi indlela yokuwaqcina?*

Caregiver H.C5: *Ndiyazi ukuba xa enokuchithwa angabikho anokutshitsha aphele kodwa ke ndinawo akhoyo esitiyeni sam nendiwasebenzisa xa ndihlaselwa yingqele.* I just know that if they are destroyed they would be finished. I have some in my garden that I use for flu.

APPENDIX 3

Ingabula zigcawu (Interview guide for the Focus Group Discussion)

Injongo yoludliwano ndlebe kukuxhasa uphando lwam olungqamene nendlela abasebenzi basetyhini abangabaniki nkathalo abathi bafunde ngayo ukukhathalela abantu abaphila nentsholongwane kagawulayo nesandulela sayo kwanedlela abalusebenzisa ngalo ulwazi lwabo ekutyeni namachiza emveli. Eyona njongo iphuhlileyo ngoluphando kukkwandisa ze uphucule umgangatho wempatho ntle kwabantu abaphila nentsholongwane kagawulayo nesandulela sayo nje ngenye indlela yokulwa ugawulayo kwaneengcebiso ezamkelekileyo kwabezempilo nabahlohi bokusingqongileyo ze lwande luqonde ngqo ulwazi lwabo ekusetyenzisweni nogcino lwamachiza nokutya kwemveli ngokungqamene no gawulayo.

Okucelwayo ukuba ukwenze:

Nceda uphendule yonke imibuzo kangangolwazi nokuqonda onako yaye qaphela azikho iimpendulo ezichanekileyo nezingalunganga kwimibuzo ekoluphando.

Kwawundixelele ngezi zinto zilandelayo:

Ngawe kwakunye nezizathu zokuba ube lilungu lalo mbutho ukuwo?

Kolo luhlo lokutya kwemvelo kokuphi okusebenzisayo?

Irhawu, Ihlabi, Umsobo, Utyuthu, Urhalinjane, Isigwashumbe, Imbikicane, Imbuya, Imitwane, Ikhaphetshu, Impinda, Uzifo-zonke, Umcazi, Umnqathe, Ibhetruthi, Isigwambha, Isophu, Gooseberry, Turnips, Umphokoqo, Intyabotyi, Umbona, Ibhatata, Itapile

Ulufumene njani ulwazi ngokutya kwemveli?

Nzuzo ni ethi ixhanyulwe ngabantu abaphila nalentsholongwane koku kutya kwemveli?

Ulufumene njani ulwazi?

Uyazisebenzisa na iingcambu zemveli yaye uzisebenzi koluphi uhlobo lwesigulo?

Zithini izizathu zakho ezibangela usebenzilse lama chiza esintu ngokubhekisele kubantu abaphila nale ntsholongwane ugawulayo nesandulela sayo?

Ingaba uyayeza na indlela yokugcina la machiza nokutya kwemveli owakhankanyileyo kokhuselekile yaye kufumaneka?

Chaza uhlobo olusebenzisayo ukugcina olu hlobo lokhutya?

Waze njani ngohlobo lokugcina ukhusele olu hlobo lokhutya?

Translation of Interview guide for the Focus Group Discussion

Introduction

The purpose of this interview is to support my research which is looking at how women caregivers learn about caring for people living with HIV/AIDS and how they draw on knowledge of traditional foods and medicinal plants. The broader purpose of the study is to enhance the quality of caring for people living with HIV/AIDS as another dimension of fighting against HIV/AIDS through coming up with recommendations for environmental educators and health workers that would make them more effective in sharing knowledge on the use of traditional food and medicinal plants and their sustainable use in relation to HIV/AIDS.

To start with tell me about:

Yourself and your reasons for being members of this organisation

From this list which traditional food do you use?

Irhawu, Ihlabi, Umsobo, Utyuthu, Urhalinjane, Isigwashumbe, Imbikicane, Imbuya, Imitwane, Ikhaphetshu, Impinda, Uzifo-zonke, Umcazi, Umnqathe, Ibhetruthi, Isigwambha, Isophu, Gooseberry, Turnips, Umphokoqo, Intyabotyi, Umbona, Ibhatata, Itapile

How did you gain the knowledge about these traditional foods?

What are the benefits of these traditional foods to people living with HIV/AIDS?

How did you learn about that knowledge?

Do you use medicinal plants and for what ailments?

What are your reasons for using medicinal plants in relation to people living with HIV/AIDS?

Do you practice conservation of the medicinal plants and food plants that you have indicated?

How do you conserve the plants?

How did you learn about conservation of the plants that you use?

APPENDIX 4

4. a) FOCUS GROUP DISCUSSION 1 (GRAHAMSTOWN)

SELF INTRODUCTIONS

a] Igama lam ndinguNomsa Mtika apha eRaphael Center ndifike ngo 2002 nge3rd ka March.

b] Ndingu Ntombekhaya Mpolweni apha eRafiel Center ndifike 2004 nge 4 kaSeptember. Imbangi yokubaba ndize apha yeyokuba ndeva ngentombazana ekuthiwa nguNontobeko, esithi ukuba phaya eRafiel Center kuho isupport group. Kukho abantu abaninzi enikwaziyo ukuba manincokole ungacingi.

c] Mna ndinguPhumeza Maholo ndihlala kwa 6 e"O" street. Ndeva ngeRafael ngoYuda, wathi uYuda kuyatestwa nokutestwa apha eRafiel Center. Ndaza ndafika apha ndakhanselishwa ndatesta ndafumanisa ukuba ndiPositive. Kwasele kuxelwa ukuba uyakwazi ukujoyina xa ungaphngeli, nam ndahlala iveki yanye ndeza ndazakujoyina. Kunesupport group apha kuysfundiswa, kwakusekho usisi Nosipho Xhayimpi ke ngoko. Esifundisa izinto ezibalulekileyo, kufike noMthathi like igadi yayingekho ekhaya kodwa ngoku ikhona ngeenxa yoMthathi project nezinye izinto esizifumanayo apha like i Home baseizinto ezibalulekileyo.

d] NdinguNontobeko Mali, mna njengokuba ndilapha eRafiel Center ndaxelelwa ngu Nopinki Manase osisihlobokazi sam. Phofu ke sasindibona uukuba andiphilanga imeko yayikekele ke nyani, wandixelela ukuba Nontobeko khawukhe uye kuzitesta. Ndazitesta ke mna ekliniki eJoza, kusekho uSister Gran ngeloxesha . Wandicebisa ukuba uNopinki mandingahlali elokishini kuba ndizakuba nestress and kukho abantu abathanda ukolatha abantu. so mandiy eRafiel Center ndaza ke nyani ndadibana nezihlobokazi zam ezininzi zandamkela ngobubele. Ndafika ke eRafiel Center ndandingazazi kahulu izinto ezininzi, ndafundiswa ke ngu Ms Xhayimpi malunga nokuziphatha xa umntu e Positive kufuneka uziphathe njani na zintoni ekufuneka uziyekile zintoni ekufuneka ungaziyekanga. Ndandingumntu othanda utywala ke, ndandiyiPlay-girl. Ndadropa kubuPlay-girl nalapha ekuseleni ndakhonza kuba ndisakhonza nangoku, kuba ndindim nje Nontobeko Mali.

e] Mna ndingu Betty ndihlala eExt. 8 kwa7000, ndeza apha eRafiel Center kuba ndandi stressed ndingayamkeli iHIV. Ndafumana uMama uXhayimpi wandixelela ukuba kukho indawo ekuthiwa yiRafiel Center. Ndafika apha ndabaright mpela zimfundiso zika Ms. Xhayimpi ndabaright ke ngoku istress saphela till bandiselapha nangoku.

f] NdinguNomvuyiseko Magobiyane ke mna ke ndihlala eJoza, apha Erafiel ndifike ngo 2006. Irafiel ndiyive ngo sisi Zonke xa wayethetha konongendi ndamamela ke ndaphanda seza ke apha ndayi member yalaph. Apha ke ndifunde lukhulu, kuba ndifike apha abantu bekwazi ukuthetha ngeHIV/AIDS. into mna ebendingakwazi ukuyenza. Ngoku ndiyakwazi uku Discloser, yonke into ndiyakwazi ukuyenza. Ke mna ndisuka emaphndleni e Glenmore qha ke ndiyayithanda into eyenziwa apha eRhini.

Question: Chaza iindidi zokutya kwakwaNtu ozaziyo

Responses:

a] Litapile, isigwamba, intyabontyi, umbona, umphokoqo no mxhaxha ukutya kwkwantu.

b] Ngumphokoqo, sisigwamba, ngumbona, ngumcuku nezinye ke.

c] Ukutyakwkwantu Ngumphokoqo, ngumxhaxha, sisigwamba, umxoxozi, umcuku, ibhatata ne ngubela.

d] Umphokoqo, umngqusho no mqa kukutya kwkwantu. Umbona sisi tarch namazimba, ubisi lolu ulufumana enkomeni okanye ebhokhweni kodwa olubisi xa luhleli kwaggitha iintsuku ezithile luye lubengamasi. Umthubi ke ngulouwufumana ebisini phezulu lo wenza iibhotolo neetshizi. Isigwamba ke ngumfuno.

m Ungqusho sisi tarch, isophi nayo sisi tarch, intyabontyi yiVerge , ithanga yiVerge umbona yiVerge.

e] Ukutya kwkwantu endikwaziyo mna ngumbona, amazimba, ubisi, umthubi, isigwamba

f] Ukutya endikwaziyo mna ngumngqusho ne sophi ne ntyabontyi nethanga ne nkobe. Umngqusho sisi starch, umqa sisi tarch then umqa uyakwazi ukuwudibanisa neoyile xaufuna qick food. Umcuku sisi tarch, umbona sisi starch

g] Nam ndazi umphothulo nemingqusho, isigwamba, imixoxozi namathanga namabhatata. Umxhaxha ngumfino, ngoba lithanga elidibene nombona, isigwamba ngumfino, umxoxozi nawo ngumfino kuba yintyabontyi edibene ne milimili, ibhatata yiVerge.

h] Ngumfuno ibhatata isigwamba intyabontyi umbona, umphokoqo wona yi Xhosa salad.

Umphokoqo udibanisa wona anmasi uwupheke. Yintoni yiVerge okanye? hayi, sisi starch.

Question: Ukwaze njani oku kutya?

- a]** Okukutya sikwaze kuba singamaXhosa simnyama, sikhule emakhaya kuphekwa okukutya. Sabakanti siyakwazi ke oloholobo.
- b]** Okukutya sikwaze ngokuthi simane ukuya eziholideyini ezifama, apho kusetyenziswa ukulima ukuze ke sikwazi ukutya oku kutya kwasezigadini.
- c]** Sikhulela kuko oku kutya, kuba sisakutya nangoku okunye kwako.
- d]** Sikhulela kuko oku kutya, njengombona sisawutya nomqa but umqa wona kufuneka uwenze mnandi ugalele ibisto kwelixesha likhoyo. Kudala ubusela nengubela kodwa ngoku ubaright.
- e]** Umanotata bandondla ngoku kutya ndithetha ngako kwakwantu, kwaye okunye kwako ndandingakwazi ndakufundela esikolweni.
- a]** Isweetpotato sisi tarch ufumana ienergy because inalandawo isweet.
- b]** Isweetpotato sisi tarch ufumana ienergy.
- c]** Isweetpotato sisi tarch uhlala usempilweni.
- d]** Isweetpotato sisi tarch ine carbohydrates.
- f]** Isweetpotato sisakha-mzimba womelele xa uyityile uzive usemandleni.
- a]** Isigwamba yiVerge, yimix of different meals, and kwisigwamba ufumana iproteins nenutrients uyazifumana phaya kwisigwamba. Yimix yesipinatshi, ihlaba, umsobosobo nerhawu nembikiqana.
- b]** Sidityaniswa nesipinatshi nomilimili, apho ke kuso ufumana iiproteins uzive usemandleni
- c]** Isigwamba sisakha-mzimba. Udibanisa isipinatshi, itswele, sometimes itapile udibanise umilimili. Ufumana ienergy kuba ndiyahlutha ne carbohydrates.
- d]** Isigwamba siyiVerge, sinika amandla. Ngamye amaxesha ukuba thi usele lamanzi aso mhlawumbi unguntu wesifuba siye sidlale indima ekuncedeni. Naxa unedawo ebuhlungu apha emzimbeni usele la manzi ubasemandleni.
- e]** Xa ubutye isigwamba uyozele, loo nto ke ithetha ukuba zazinto ziphaya kwesasi gwamba zihamba egazini, ukuvuka kwakho uvuka ufresh.

a] Intyabontyi yiVerge, inezakha-mzimba sometimes izifo ezininzi awuzifumani njengokuba usitya intyabontyiso izakha-mzimba ezivela kwityabonyi zilwa nezifo apha emzimbeni. Intyabontyi ke yona idityaniswa nomilimili ibe mnandi.

b] Ndingathi mna intyabontyi yi Verge , nayo ke inika amandla. Uyakwazi ukuyidibanisa iMilirice ugalele umilimili, zahlukile iindidi zokupheka intyabontyi kodwake inika amandla.

c] Intyabontyi yiVerge and isisakh-mzimba. Uyakwazi xa uyiphekile uwakhme amanzi uwaphunge kwenzela ukuba ubenamandla.

d] Intyabontyi yiVerge. Ibalulekile kuba iluhlaza umbala wayo. Thina maXhosa sithanda ukuyidibanisa nomilimili, ne Milirice okanye neRice ukuze ityeke. Uthi chatha ibhotolo.

e] Intyabontyi yiVerge, yayithandwa kude kudala phaya kodwa ngoku inqabile. Yayiphekwa kamnandi igalelwe iswekile, igalelwe iMilirice ixhoxhwe ibe mnandi. Uthi xa uyityile uzive usemandleni amakhulu.

f] Intyabontyi yiVerge. Xa uzivile uyakwazi ukusela la manziayo. Xa uyipheka uyagubela ngomilimili, ngeMilirice okanye ngeRice. Kukwakho isi tarch kwapha kula Rice.

g] Njengokuba ubutshilo igood la manzi wayo, kuba iye ibe namanzi amaninzi so uthatha la manzi wayo akwaliyeza apha kuwe emzimbeni because they activate your body.

a] Umbona sisi tarch, ufumana ienergy emboneni. Ngelinye ixesha uakwazi ukudibanisa

Umbona nee mbotyi wenze isophi. Ngelinye ixesha uwupheka nje uwenze iinkobe, siyawusebenzisa kakhulu kwiFunerals umbona.

b] Umbona ndingathi sisitatshi, uyakwazi ukuwupheka uwodwa okanye uwu uxube mhlawumbi nee mbotyi ugalele ibhotolo okanye iAromat.

c] Umbona sisitatshi esisakhi-mzimba.

d] Umbona uyabiliswa uthi xa uvuthiwe uwuthathe uwupholise uwubeke ecaleni udibanise neRama okanye iAromat uwudle ubemnandi.

e] Umbona uyawustampisha kuphume iintsipho ekuthiwa ngumbona kuze ke kwenziwe umqombothi lo usetyenziswa emasikweni. Uphinde ke uwt ye uwudibanise nethaga okanye wenze isophi. Yonke lo nto yenziwa ngumbona.

f] Umbona uyakwazi ukuwupheka ungavuthwa ncam ugalele amasi utye.

g] Yonke la nto umilimili, umngqusho nenkobe zizalwa ngumbona. Because uplanta umbona emasimini, uwupheke njengnkobe okanye uwungqushe wenze umngqusho, kanti uyakwazi ukuwu sila ube ngumilimili.

a] Amasi lubisi oluvela enkomeni, sifumana izakha-mzimba ezizi Calcium, Mugnazium ne Phosphorus.

b] Amasi lubisi oluvela enkomeni, lubekwe phaya lude luvuthwe kuthiwe ngamasi. Upheke upheke umphokoqo wakho ugalele amasi utye, sisakha-mzimba ke eso.

c] Amasi avela ebisini mhlawumbi ukuba ubisi luhleli iintsuku luyajika lubengamasi.lusisakha-mzimba.

f] Amasi avela ebisini, amasi endiwaziyo ngala siqhele ukuwathenga ezivenkileni, azange ndiwafumane awenkomo.

g] Amasi mgamsi avela ebisini, awenkomo okanye awebhokhwe. Kuba namasi ebhohwe ayajika abe ngamasi kodwa ke phaya kwantu. Ayanceda kakhulu ke amsi kodwa akufuneki uwatye kakhulu because ayahambisa. Kufuneka uwatye ngomlinganiselo. Amasi ke ayawakha umzimba.

h] Amasi aluncedo xa uwatyile kuba uziva uhluthi

i] Amasilubisi oluvela enkomeni luze luvuthwe kuthiwe ngamasi lawo.And lomeleza amathambo.

a] Ibeef ivela enkomeni, kwiBeef sifumana iProteins ne Iron ukulungissa igazi eli lakho.

b] Ibeef siyifumana enkomeni, naxa upheka ukutya ugalele iBeef stock kubemnandi ukutya kwakho ubenamandla.

c] Ibeef siyifumana enkomeni naxa sipheka sigalele iBeef stck ekutyeni yenza ukuba ukutya kubemnandi.

d] Ibeef ivela enkomeni, thina bantu baHIV positive kufuneka siyitye xa ivuthiwe ithe pecu asinalunggelo lokuyitya phofu at all.

e] Njengokuba ebesetshilo ugxa wam, ewe yona inyama yenkomo siyayithanda kodwa thina bantu baphila nengculaza akufuneki siyityile inyama ebomvu.Kuba kaloku ibangela ukuba ingculaza iphkame ibe phezulu.

f] Nam ndizakubangathi ndithetha into enye kodwa akufuneki siyitye inyama yenkomo.

g] Uthe phaya Beef/meat, which is nayiphina inyama. Kethina maXhosa siyayithanda inyama. Beef or no Beef iyafunwa ngumzimba wethu.

h] Kuthiwa inyama yenkomo singayitya kodwa hayi kakhulu kuba inetyuwa eninzi lo nto ithoba iCD4 count yethu.

a] Izakha-mzimba ndizifundele esikolweni nakwi Pamphlets nalapha eRafiel Center ngokuthi sifundiswe zii Cancellors.

b] Oku kutya kwakwantu ndikufundele eMthathi prject nalapha eRafiel Center ngokuthi uMthathi wayemana enkqunkqa apha sifundiswa ukupheka siboniswe yonke into.

c] Oku kutya ndikufundele komama nakomakhulu, kuba ndisafunda ndikuthanda.

d] Oku kutya ndikhula kuphekwa, kuba ndisakutya okunye kwako nalapha ke eRafiel Center noMthathi project. Ndikufundele esikolweni, esikolweni bendisenza iAgricultural Science ezinye ke njengokuba kungafunekanga ukuba nditye inyama yenkomo ndiyifundele apha eRaphael Center.

e] Oku kutya konke kwakwantu sakufundela esikolweni, ngamanye amaxesha sifundiswe ngomama. Kakhulu kakhulu ngokusingene kulomhlaba walapha eRafiel Center kwa Mthathi lowo uyithathile indima kuthi, esifundisa ngoku kutya kwakwantu.

f] Oku kutya mna ndikufundele ekhaya apho ndizalwa khona kuba sasihlala ezifama. kuplantwa phaya izityalo, ndiye ndiyokubuza ukuba le yintoni ? Le into yenziwa njanina Andixelele umama no tata, xa behlakula nam ndiyahlakula. Ndakuqhela ngolohlobo ukutya kwesiXhosa.

g] Hayi, injalo nam ndikufundele ekhaya oku kutya. Bendisithi xa ndisitya isigwamba, umngqusho okanye amasi andixelele umama ukuba ndiza kubanamandla. Athindiza kukhula nokuba ndiyatala mna ndizixelele ukuba andiyifuni le nto, athi ndizakukhula as undibona ukuba ndomelele.

h] Nam oku kutya ndakufundela kubazali bam. Kwakulinywa ndafundela phaya ekhaya. Ndafika apha eRafiel ndafundiswa kwangoku kutya.

a] Ihlaba, utyuthu , umsobo, isipinatshi, igwashumba nembikicane.

b] Isipinatshi, utyuthu , umsobosobo.

c] Utyuthu ,isipinatshi no msobosobo.

d] Ihlaba, utyuthu no msobosobo.

- e]** Isipinatshi, umsobosobo ne hlaba.
- f]** Umsobosobo, ihlaba ne sipinatshi.
- g]** Ikhaphetshu, isipinatshi, utyuthu ne rhawu.
- h]** Isiqwashumbe, irhawu, ihlaba no krakrayo.
- i]** Imbikicane, iqwashumbee, no tyuthu ne rhawu ne hlaba.
- a]** Umhlonyane unceda xa ukhohlela, uyawupheka uwusele xa upholile.
- b]** Nguhlonyae, uthi ke uwupheke uwusele xa upholile. Unceda za ukhohlela.
- c]** Iperepesi, iyafana nayo nomhlonyane. Uyayipheka uyisele kwehle ukukhohlela.
- d]** Igalic, uyayisika wenze amanzi eswekile uzigalele ebhotileni, ukhamele amanzi eLemon. Iyanceda kwi CD4 count ukuba inyuke. Akukho sidingo sayo xa usebenzisa iARV's.
- e]** Ilavenda, siyifumana apha egadini yeyokwenza iVaseline. Ukuba unamaqhakuva okanye unomlomo obuhlungu iyanceda kakhulu. Nomzimba obuhlungu uwurabhe ngayo ukhululeke.
- f]** Igcegcelele, iluncedo kakhulu emntwaneni omncinci. Xa umntwana enendlebe, abamabantwana ndasoloko ndibancedangato. Uthatha lagcegcelele uyibilise, ungayenzi strong xa iqala ukubila uyikhuphe ugalele kwi teaspoon uthi chotho chotho ezindlebeni.
- g]** Inkunzane, ufumana isicakathi for umntwana usandula ukuzalwa. Ukuze angaqhini aklineke. Ibe nguhlawuvuthwa, unceda kumathumba. Uqhawula igqabi uligqatse emlilweni ubohpe ngalo ithumba ukuze ligqabhuke msinyane.
- h]** Utyuthu, igcukuma inceda amava emntwaneni. Uyayityumza uyifake emanzini ukhuhle amavila kusuke elakhoko emlonyeni womntwana.
- c]** Itswele lo mlambo, linceda xa umntwana ephethwe zizinto zase busuku. Uyalityumza ukhamele umntwana ezindlebeni nase buhotsheni nalapha ezimpundwini. Elinye itswele eli silityayo, uyakwazi ukulichuba libe zizilayi ulifake kwi container ye plastic, uyivale ungagaleli manzi yibeke phaya, inceda ukukhohlela. Eyesithathu lihlaba, xa unesiluma uyalipheka, ulistreyine umane usela la manzi sobe uphinde ube nesiluma.
- d]** Ikhala, lisetyenziswa kuMagogotha, Magogotha lo uyasanceda kwizinto zonke. Uhlisa iswekile, iHigh blood umzimba obuhlungu elakhala ke lisetyenziswe kakhulu phaya kuMagogotha. Naxa mhlawumbi isisu sakho simdaka ikhalla liyakuklina.
- b]** Uzifozonke, uyanceda xa unesisu usele yena kuphele isisueso.

h] Isityalo esincedayo yiCarrot, xa unogawulayo unesisu sukusela izinto zokuklina isisu kufuneka utye iminqathe ibe mine, kube kanye ngeveke uyitye ikrwada. Okanye iintanga zethanga.

e] Isipinatshi, siyanceda kuthi bantu baphila nogawulayo. Xa usipheka uthatha amanzi aso uwasele phambi kokuba usitye.

f] Enye into encedayo ngunga, uxobula ela xolo liphaya ngasengcambini ulipheke xa unesisu segazi, esasisu sithi xa usiya etoilet ube namatheketheke, so xa uthe wasela la nto isisu siyaphela.

a] Ewe, akhona kodwa ayathomalalisa awayinyangi iHIV/AIDS.

b] Mna ndithi hayi alikho elinyangayo ngaphndle nje kuba linqumamisa intsholongwane.

c] Mna ndithi likhona, okokuqala kufuneka ukuba ozamkele xa ufumanisa ukuba une HIV zixelele ukuba ndinayo sisifo sam esi. Xa uzamkele uya uphile, xa ungazamkelanga awuphili.

d] Ndizakuthi nam iyazama ukunceda, ugogotha thi ubulele phantsi ungakwazi kuzenzela nto kodwa akuvuse, uthi na xa ubune spots, ndibone kusister wam ebelele phantsi egcum-gcum ngamaqhakuva ene Oral crash kodwa wathi wokufumana iresipi kamagogotha waphakama kangokuba sihamba naye namhlanje.

e] Mna ndithi hayialikho elikhoyo liyathomalalisa and amayeza akhoyo athomalalisa ukuba agcine iCD4 count inyukile. Eyokuqala eyam iresipi le ibithethwe nguPhumeza yeGalic.

Mna yandinceda ndiseza kutya iARV's kwathiwa iResults zam zilahlekile. Yabuya iCD4 count yam ixhumile yayisithi 256 yabuya isithi 350 something.

f] Ikhona lanto, yabona naxa unamaqhakuva nalapha ebusweni, izinto ezifana neenongwe noomavumbuka ziyayinceda lanto. So aluncedo amayeza asuka emifunweni. Ngoba ke soze uthi ylisele ungancedakali, whereas ingazokuyisusa ingazokuyisusa total intsholongwane kagawulayo kodwa ke iyakunceda lanto.

g] Kum lonke into ekuthiwa liyeza iyakunceda, andikwazi ukuthi alikuncedi kuba likuvusa ekufeni.

Question: Uwakhathalella njani lamachiza?

Responses :

a] Xa ukhathalela ezi zityalo umhlaba lo ulinywe kuzo kufuneka ulunge ube right. Okwesibini, kufuneka ugalele ifertilizer emhlabeni. Okwesithathu, kufuneka ibekanti ezi zityalo sikwindawo ezizakufumana ilanga no moya ne mvula, uzinkcenkceshele regularly.

b] Ndingathi mna uzilondoloza ngokuthi unkcenkceshele rhoqo, unike no moya kwenze ukuba kubekhona umoya apha ezityalweni

c] Kukusoloko uzilondolozile ngokususa iweeds le iphakathi kwezityalo ukuze zibethwengumoya nokuzinkcenkceshela rhoqo, kwenzela zikwazi ukukhula.

d] Kufuneka uzilondoloze izityalo kuba izityalo zibalulekile zifana nje nabantu. Uyazifida uzinika amanzi, umana ukuyokuziphethuphethula phaya egadini ngeflokher yakho ukuzezihlale kakuhle amanzi abenokungena phaya ezityalweni zakho.

e] Owu! Izityalo zifana nosana, ukuba ukokose izityalo ukokose usana kuba zifuna ukukhathalelwa kakhulu, kwaye zifuna ukuhlala kwindawo ecocekileyo kufuneka usoloko uzicoca uzilondoloza uthethe nazo ziyava ziyaphefumla nazo

f] Izityalo ziyinto ethandekayo kakhulu kufuneka xa uphethe izityalo uthethe nokuba awuvulimlomo, umane uhlakula uzakuzibona izityalo zakho zizakukhula. Kufuneka uyive nalapha kuwe nalento ndiyenzayo ndiyayithanda. Nalapha kumnwana xa encanca uva kamnandi kunjalo nalapha kwizityalo.

g] Injalo loo nto, kuba ke okokuqala uyazilima xa sele zikhona apha kuwe eyadini uzibiyelekakuhle uzibeke kwindawo esafe, and then uzame ukuba umhlaba wakho utyebe uyaqonda? uze uzikhathalele ngokuzinkcenkceshela kungabikho weeds phakathi kwazo so that zikwazi ukukhula kakuhle zityebe zilungele ukunyanga umntu.

h] Molweni! Izityalo zibalulekile and kufuneka uzithande okokuqala, xana ngaba uzilimile kufuneka ukuba uzilime kwindawo obonayo ukuba ifumile, and uyazi ukuba njengokuba ndisifaka apha isityalo kufuneka ukuba ndisinkcenkceshele ukwazi ukuba sikhule kakuhle and xa kushushu kufuneka ufake inethi ngaphezulukwenzele ukuba zingafunyanwa lilanga kakhulu zife.

i] And some of them zikholwa kukubasemthunzini, zikhona ezilungayo emthunzini, zikhona ezilungayo elangeni so ke ziyafuneka both ezozinto ezo

Question: Ingaba uyalwenza na ulondolozo kwizityalo ezisegadini?

Responses: Ewe! Kuba iiplants zifuna yonke into oku komntu, ziyawafuna amanzi, ziyalifuna ilanga nomoya.

b] Ewe ndiyalwenza kuba izityalo ndizithanda kakhulu.

Ufunde njani ngoko?

a] Ndifunde ukwazi ukuba wenza kanjani ukuphatha intyatyambo, izityalo. Loo nto yonke ndiyifunde esikolweni, yandinceda ukuba ndiyazi ukuba what is going on about my nature?

b] Ndifunde lukhulu kuba ke ndisafunda nangoku.

c] Ndifunde lukhulu kakhulu kuba ezinye izinto bendingazazi, ndithe ndakubalapha ndafumanisa ukuba ezinye izinto ndiyazazi, kanti zezi zinto ndidlulaa kuzo ndingazikhathalelanga.

d] Ngokuthi nam ndiplante phaya emhlabeni. Ndiqale ngokubona kubazali phaya emakhaya kweza isikolo ke ngoku, after isikolo yanguMasifunde yayi Rafael Center yanguMthathi trough iRafael Center. Ndiyayazi indlelaemandiphathe ngayo umhlaba izityalo ezikula kuwo.

e] Ndifunde kakhulu kuba bendingazi nto ngokulima, nokuba zenza ntoni izityalo kukho izityalo ekufuneka uzingenise apha endlini kukho izityalo ekungenakwazi ukuba zingene endlini. Ndifunde kakhulu ukuba xa uplantayo uthini bendingayazi kodwa ndiyazi ngoku.

Kubalulekile ukulondoloza izityalo?

a] Ewe kubalulekile ukuba uzilondoloze izityalokuba ke ziyafuneka ehlabathini.

b] Njengoko besenditshilo ukuba sibalulekile isityalo, kubalulekile ukulondoloza izityalo kuba ziyanceda ekutyeni nasempilweni yethu. Ndifunde kakhulu ke kulendawo yomnga bendingayazi ukuba uyanceda bendiciga ukuba yinto yokubasa qha.

Focus Group Discussion 2 (Hamburg).

a] Imifino, iindidi zemifino yakwantu. Imboya, ngumsobo, irhabu.

b] Sisiqwashume, irhabe lihlaba abanye bathi lirhabe abanye bathi lihlaba. Imbuya , abanye bathi ngutyuthu. Itswele lesiXhosa itswele elingabinagaqa. Libaluhlaza libenengcanjana ezininzi phaya ezantsi. Amagqabi alo abhityile kunawesilungu l**istrong** ivumba lalo. Irhawu. Yimifino yonke leyo.Irhawu xa ulipheka ubilisa amanzi ufake irhawu ugalele umgubo ukugcina elabala lihlaza. Umgubo ke usila umbona akusasilwa ke kwezintsuku kodwa ke kwakusilwa kudala.

a] Iqumatana. Uthatha iinkozo zamazimba uzibilise ugalele neeertyisi. Ingxangxa ziinkobe uzigalele amasi. Inyovu ziinkobe ezinohluzi.

b} Umxhaxha, kuphekwa iinkobe kunqunqwe intyabontyi zidityaniswe, okanye iitapile nethanga.

a} Kwisophi ufumana indidi ezimbini. Kumbona ufumana ukutya okwakha umzimba.

iimbotyi sifumana i*proteins* si fumana i*carbohydrates* ne*proteins*.

b} Kwisigwamba ufumana i*vitamins* i*lrons* ikhoba ichlorophil.

c} Kwezankobe zinamasi sifumana i*calcium*.

d} Ndinayo into endifuna ukunazisas yona ebendingayazi mna. Besifikelwe ngabantu base England ndathi kumelwane wam makandiphekele intyabontyi. wandiphakela ndeza nayosatyeeni sonke. Lo ke ibingumqa kuba ibinomgubo. Kuba ke ngoku kungasasilwa siyesigalele imilirice. Nabuza ukuba ingaba nicinga ukuba inganceda njani kumntu oHIV positive ? Bathi nesi starch silapha siluncedo kakhulu. Nabantu bakudala babezizigantsontso ngenxa yoku kutya. Nokuba ubunokuthi umntu makakhethe phakathi komxhaxha nalento besiyitya apha, umntu angakhetha umxhaxha kuba unesixa. Umbona ngumbona awutyiwanga ngomatshini. Like ibradflour inezinto enazo phaya kuyo ayifani nala ntyabontyi yam ikhiwe egadini yaphekwa. I*proteins* ezifumaneka kwiverge esuka egadini ziyazodlula eziya ezikhenishiweyo. Nje nge Beans ezikhenishiweyo azifani neziya zisuka egadini. Umphothulo ngumbona ongavuthwanga kakuhle uwusile ugalele amasi phaya. Xa ubuya esikolweni uthatha esastya ukhulule iuniform uyiphose emseleni utye. Imifino, umqa isasetyenziswa isophi isasetyenziswa nenconco isasetyenziswa Inconco uthatha umgubo nentwana yamanzi abandayo ingabimanzi uzamise uze ugaleleamanzi ashushu uyigqume overnight izakubila inyuke. Kusasa ubilisa amanzi upheke ipapa ngala paste ubuyenzile imnandi kakhulu.

a} Wild fruits – Amaqoga, amagontsi , umshulube, idumbe

b} Unontshani. If your boyfriend did not chop unontshani for you, you would not help him carry his books from school.

7 a} Amayeza avela kwizityalo. Ikhala landinceda esilondeni andizange ndiye ekliniki ndancedwa likhala but ke liyaluma.

b} Umthuma unceda xa umntu enedrop uye acime ngayo kuphume ezazinto zixingileyo.

c} Kwa umthuma lowo ubunceda xa umntu enezinyo kukhanyelwe wona apha ezinyweni kuphume intloko zemibungu emnyama

d} Igwetyibe iligaqa elibomvu amagqabi ayo asixaba, inceda ekucimeni umntwana onesisu.

e} Impepho indinceda xa iinyawo zam zibuhlungu, ubilisa amanzi ugalele ipepho uthobe ngawo la manzi anempepho.

f} Igumtree inceda ifiva uthi ufuthe ngayo uphinde uyisele.

G} Isicakathi sisezwa umntwana osandula kubelekwa ikhuphe la nto iphaya kuye imdaka

h} Nengcambu zomvenyathi sisebenza kwa into enye nenkuzane.

I} Imbuya ikhiwa isentsha ingekadubuli, uyomise nje ngecuba uze uyipheke nentyabontyi uyayisika uyenze umqwayito xa kubanda uyipheke oku komqa.

8) How did you learn about these plants?

a] Ukulima sifunde ebazalini bethu.

Appendix 5

ANALYTIC MEMO (AM.1) COLLATING RESPONSES FROM INDIVIDUAL INTERVIEW, FOCUS GROUP DISCUSSIONS AND DIARIES OF CAREGIVERS IN GRAHAMSTOWN

Table AM.1a A summary of the main issues emerging from the individual interview, focus group discussions and diaries of caregivers:

(How and what are caregivers learning? – leading to section 4.1 and 4.3)

Category	Response in summary	Respondents (caregivers) (Numbers brackets are frequencies of the response)
Background of a community of practice	- A non-profit organisation that offer voluntary counselling and HIV testing to people. -First HIV/AIDS centre in Grahamstown <i>How do people get to know about the centre</i> - Family members and friends - Being referred by clinics - Local radio and newspaper	G.K1 G.K2 G.C1,G.C5,Gfg.1(1),Gfg.2 G.C3, Gfg.1, G.C4, G.C6, G.C2 G.C7, G.K1, G.C8
	<i>Reasons for joining the community</i> - Seeking for assistance after a serious sickness - To get food and food parcels - To join a support group -We are taught many things during support groups -Spport groups help me not to think a lot The are lots of people to talk to in the support group - Seeking a way of dealing with stress after being diagnosed to be HIV positive - Training on life skills and home-based care	G.C1 Gfg.1(1).Gfg.2,GC.3 GDW2 and 3 Gfg.1(1).,G.C.6,G.C.2 G.C.5,Gfg.1 (3),Gfg.2 (2) Gfg.2(5)

Evidence of learning in a community of practice	<i>Care giving domain</i> - Caring for oneself - Caring for one's child aged between 3 to 10 years -Caring for one's relatives like sisters and brothers	G.C.8,G.C.6,G.C.5, G.C.7,G.C.1,G.C.2 G.C.5,G.C.7, G.C.1 G.C.4, G.C.6
	<i>Mutual engagement</i> 1) Formal A module that facilitate learning of caregivers - Need to drink a lot of water, use melon and drink its water - Eat healthy food like vegetables and fruits - Avoid alcohol, fat, red meat and caffeine - Eat regularly e.g about four times a day - Washed and well cooked food Learning through workshops conducted by NGO's and individuals: - Learning about use of medicinal plants and how to conserve the plants from the NGO called Umthathi training project through workshops conducted at the centre and also individual conduct workshops on use of medicinal plants	G.K.I, G.K.2 G.C.5,G.C.7 GC.2,G.C.5,G.C.7,G.C.6, G.C.1,G.C.3,G.C.2, GC.8,G.fg.1,G.C.5,G.C.7 G.C.2, G.C.2, G.C.8, Gfg1 G.C.2,Gfg.1, G.C.8 GDW3 G.C6, GK.I Gfg 1(3)
	<i>Joint enterprise</i> Preparation of meals by participants <i>Shared repertoires of stories</i> - Painful at first because of fear that the child will not live for long and physical pain caused by the disease. Pain resulting from failing to accept the HIV status - Gaining confidence after have learnt about care giving and receiving counselling at the centre that others are now sharing information with people in the same situation as theirs	G.K.1Duty Roaster Diary writer two G.C.5,G.C.7.G.C3 G.C.2 G.C.8 G.C.6 G.C.4 and G. C.1 G.C.8,G.C.6,G.C.1

	<i>Observation</i> - By observing the positive attitude of others who were in the same situation as mine made me want to learn more about how to care for my child and myself	G.C.1
	<i>Printed information</i>	G.C3, G.C5
Caregivers learning in the community	<i>Caregivers sharing knowledge and learning from other caregivers</i> - Learning from a cousin sister who is much better now, other mothers who are looking after their children and sharing with neighbour where one about one status and how to live a fulfilling life with HIV/AIDS by using the right foods and adhering to the medication - Sharing about issues of how to look after people living with HIV/AIDS without segregating them and how to deal with some of the opportunistic infections	G.C8,G.C1 G.C6andG.C5 G.C4,G.C1 G.C2 andG.C7
	<i>Learning from support groups</i> - Joined, learn and share information with support group that are educating and visiting people in their homes	G.C4 G.C5, G.K3 and G.C3
	<i>Learning from media</i> - listening to the radio on programmes discussed on HIV/AIDS ,watching TV, reading pamphlets, books and posters in clinics and hospitals	G.C8,G.C4,G.C3, G.C2,G.C7and G.C5
	<i>Learning from family members</i> - Learning from parents, grandparents, family members like aunts and husbands about traditional food, how they are prepared and their benefits to health. It is something that we grew up eating. I grew up in the farm that is why I know about these foods - About medicinal plants and their uses - About conservation of plants	G.C8,G.C6,G.C4,G.C3,G.C2,G.C7,Gfg2(4) and Gfg1 (7)GDW1,2 and3 G.C8 G.C5,G.C7 G.C1, GDW3,GDW1,GDW2 G.C8 G.C1

<i>Learning from church</i> - Sharing and learning from people at church about HIV/IDS on issues that have to do on how to care for people living with HIV/AIDS without segregating them and any other problems that are associated with having HIV/AIDS or caring for someone living with the disease	G.C8 andG.C4
<i>Learning from Non-Governmental Organisations</i> - Learning through attending meetings organised by TCA where issues concerning food and how to deal with disclosure about one's status to close relatives and also learning about opportunistic infections like cancer and TB.	G.C2,G.C1 and G.C5
<i>Clinic</i> - Learning from the clinic about HIV/AIDS and issues of treatment	G.C7, G.K3 andG.C5
<i>Learning from Traditional Healers and Traders</i> - Learning about medicinal plants and their uses from traditional healers and traders that come from nearby farms	G.C1, GDW2
<i>Learning from schools</i> - Learning about the nutritional value of foods from school through for example subjects like agricultural sciences -Learning about conservation of plants from school	Gfg2 (4) and Gfg 1 (3) GDW1 and 3

ANALYTIC MEMO (AMib) COLLATING RESPONSES FROM THE INDIVIDUAL INTERVIEW, FOCUS GROUP DISCUSSIONS AND DIARIES OF CAREGIVERS IN GRAHAMSTOWN

Table AM.1b: Summary of the main issues emerging from the individual interview, focus group discussions and diaries of caregivers:

(What are the practices of caregivers and reasons for practices in use of traditional food? – leading to section 4.4.1 and 4.5.1)

Category	Response in summary	Respondents (caregivers) (Numbers in brackets are frequencies of the response)
What traditional foods are caregivers using and the reasons for their practices	<i>Wild vegetable (imifino)</i> - I mix <i>imbikikane utyuthu</i> and <i>ihlaba</i> Pick <i>imifino</i> from the garden and use them - I cook stiff pap with wild vegetables - I know <i>isigwambwa</i> - Cut vegetables like <i>irhawu</i>, <i>bhatata</i>, <i>umhlabangulo</i> - We prepare <i>isigwamba</i> I use <i>isigwamba</i> - Use spinach when wild vegetables are not in season	G.C1,G.C2,G.C3,G.C5.G.C6 and G.C8 Gfg1(2) Gfg 2(6) GDW1,2 and 3
	<i>Reasons for using isigwamba</i> <i>Used for their nutritional value</i> - I feel fresh and right - It makes me strong - Changes my health - It gives me strength - These vegetables have nutrients and vitamins - You get proteins from the vegetables - <i>Isigwamba</i> is a body builder and one get energy	G.C4, G.C6, G.C7, G.C5 and G.C1, Gfg2(5) Gfg1(2) Gfg2 (3) G.C2,G.C7,Gfg1 (4) GDW1,2

	<i>Medicinal properties</i> Spinach boost the immune system Prevent my child from getting illnesses Chest problems can be solved my eating traditional vegetables Melon is a vegetable and fights disease and activates your body When I am feeling ill I drink water from <i>isigwamba</i> it helps <i>Imbikicane (Chenopodium album)</i> fight disease in the body Carrots help when you have problems with eyes <i>Irhawu</i> helps raises CD4 count	G.C2, G.C7, G.K3 Gfg2 (5) GDW2 and3
	<i>Use of umphokoqo</i> I use <i>umphokoqo</i> <i>Umphokoqo</i> is good for us	G.C4,G.C5 and G.C8 Gfg.1(6), Gfg2 (5)
	<i>Reasons for use of umphokoqo</i> Gives strength and freshens It had starch It has calcium, magnesium and phosphorus and nutrients especially from amasi <i>Change in the use of umphokoqo</i> Sour milk that they use	GDW2, 3,and 1 Gfg2(4) Gfg1 GDWR3
	<i>Umnqa (stiff pap)</i> I use stiff pap Used mainly for its starch	Gfg1 (1) Gfg2 (2) G.C1, G.C5 and G.C8
	<i>Umqusho</i> I use <i>umgqusho</i>for its starch and it gives strength	G.C4 and G.C5 Gfg2 (1) Gfg2 (5) DWR1,2

	<i>Amarhewu</i> <i>Iperepare amarhewu</i> for my child sometimes. I use <i>amarhewu</i>	G.C8, G.C6, G.C2
	<i>Umxhaxha</i> I use <i>umxhaxha</i> which is prepared by <i>intyabontyi</i>	G.C5,G.C3, G.C7,G.C2, G.C1 and G.C4
	<i>Reasons for using Umxhaxha</i> Keeps us strong Has vitamins It has nutrients It fight disease	Gfg1 (4) GDW1,2,3 G.C4, G.C2, G.C5 Gfg2 (2) Gfg1 (3)

ANALYTIC MEMO (AMic) COLLATINGH RESPONSES FROM THE INDIVIDUAL INTERVIEW, FOCUS GROUP DISCUSSIONS AND DIARIES OF CAREGIVERS IN GRAHAMSTOWN

Table AM.1c: A summary of the main issues emerging from the individual interview, focus group discussions and diaries of caregivers:

(What caregivers are doing and their reasons for using of medicinal plants as well as sustainable practice of plant use? – leading to section 4.4.2, 4.5.2, 4.6)

Category	Response in summary (Numbers in brackets are frequencies of the response)	Respondents (caregivers)
Caregivers who use medicinal plants in relation to HIV/AIDS	- I use garlic for thrush. I also use garlic mixed with ginger, green pepper and cucumber. I grind them together and boil, let them cool and put in the fridge and use it daily for swollen glands - I melt Vaseline and take plantain, comfrey and lavender and put it in the Vaseline and boil until it is green and use it for rash. I also use it for these black marks that you see on my face and they are beginning to vanish - I use steaming medicine to take out all the dirt from my body called <i>ngumfazi onengxolo</i> and vomiting medicine to take out the dirt from the stomach - I use <i>umhlonyane</i> for coughing - I use African potato and garlic to make myself strong One thing I know as HIV positive person is that there is a root called <i>inongwe</i> African potato. I drink the water from this root and it just releases the pain in my body. It also helps when my knees are weak. It gives me a lot of energy - I know <i>Ikhalakhulu</i> (aloe) it helps with coughing - I use the avocado pear inner for my face. When I started with this disease my face was looking terribly black like this tape recorder and things have since changed when I started using this medicinal plants and I am still using it	G.K2 G.C2 G.C4 G.C5 G.C6 G.C7 G.C8 GDWR2, GDWR1, GDWR3

	<i>Iperepesi</i> mixed with <i>Umhlonyane</i> helps with coughing and problems with throats From the mimosa tree you take the bottom bark of the tree and make medicine for running stomach African potato helps when you have pimples on your face <i>Igceleleya</i> help with ears problems you will never go to the clinic with that problem Roots of <i>umnga</i> help with stomach aches <i>Ihlaba</i> boiled together is good for coughing	Focus group 1
	If you are coughing you just boil wild wormwood <i>Iperepesi</i> is like wild wormwood helps with coughing <i>Igcegecelele</i> helps with ear problems We get lavender in the garden it helps a lot when one has rash. If the body is sore it helps <i>Inkunzane</i> is good medicine for constipation <i>Solume nigrum</i> help children with mouth infection Aloe is an all purpose medicine helps with many infections like it lowers blood pressure, diabetes and stomach aches This medicinal plants do not cure AIDS but they weaken the virus I say these medicine helps because my sister was in bed and she had oral thrush and was helped by these traditional medicine they help you feel better even if they do not cure for they increase your cd4 count specially the recipe Pumeza is talking about of garlic helped to increase my C.D 4 count from 256 to 350 African potato really helped me when I had rash, yes they are not going to cure you but they weaken the virus Everything that is called medicine helps because it really brings you back from death	Focus Group 2
Caregivers who do not use medicinal plants	Do not use medicinal plants because I am on ARVs and we were told not to use Xhosa medicine by the doctor I use <i>umhlonyane</i> for coughing only but not other medicinal plants because the doctors told us not to mix Xhosa medicine with ARVs	G.C1

	Garlic should however not be used when you are on ARVs because it will kill ARVs and ARVs will kill garlic so its just a waste so you better just take ARVs alone Myself I am on ARVS and I am not suppose to take these medicinal plants I am not a specialist in medicinal plants but what I know is current stand of the department of health as far as the use of medicinal medicine is concerned and people who are HIV positive especially on ARVs is that we advice on caution because of possible interaction of medicinal plants and they are usually used in high concentrated amounts and we don't even know what chemical interactions could occur and some of them are actually harmful The problems is that at the clinic when people are ready for ARVs they always say you must stop whatever you were using especially Africa Potato you mustn't so there is a conflict of messages. On the one hand these people say these herbs are beneficial and then the nurses at the other hand stop using these herbs what happens is that people end up getting confused so they say rather than making a mistake they stop using altogether that what is happening	G.C4 G.K2 G.C3 G.K3 G.K1
Sustainable practices	I know that when you are harvesting these plants you just have to pick up the leaves When harvesting <i>umsobosobo</i> you just pick up the leaves and leave the roots and I was taught by my parents how to harvest Not sure about the sustainable use of these plants I conserve <i>imifino</i> by drying the leaves so that I can eat them when they are not available, a skill she was taught by her mom Yes I know how to harvest. I use <i>ulugxa</i> it is good for harvesting. I do not harvest all I think about the others, they need the medicine. I harvest what I need. I never learnt, I have just think if I can harvest like this it will be fine The plants that I use I am not the one who harvest them it is my aunt who does it for me I know that for the plants that we use to be sustainable you only have to pick the leaves and live the stem so that others can harvest as well No I do not have knowledge about sustainable use of these plants because it has always been my father who harvest for us I know how to sustainably use these plants you just pick up <i>isigwamba</i>	G.C7 G.C8 G.C1 G.C6 G.C 3 G.C2 G.K2 G.C4

	During focus group one and two the women the responses that were given by women indicated that they understood sustainable as watering of plants and giving them all the necessary requirements like sunlight good soil. These women did not answer referring their practices to plants that they were saying they harvest in the field.	Gfg1 Gfg2
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ANALYTIC MEMO (AM2.a) COLLATING RESPONSES FROM THE INDIVIDUAL INTERVIEW, FOCUS GROUP DISCUSSIONS AND DIARIES OF CAREGIVERS IN HAMBURG

Table AM.2a: A summary of the main issues emerging from the individual interview, focus group discussions and diaries of caregivers:

(How and what are caregivers learning? – leading to section 5.1, 5.4 and 5.5)

Category	Response in summary	Respondents (caregivers)
Background of Keiskamma Art project and Hamburg Hospice	N/A	N/A Information was from the literature
	<i>Reasons for joining Keiskamma Art Project</i> - I did not work and came here so that I can be able to fend for myself - I came here to earn some money - I had no job - To be trained in hand work, so that I can take care of my family - It is because I like sewing, I want to better my skills so that I can bring bread home - To fight poverty and mix with other people	Hfg.1

Evidence of learning in a community practice	<i>'domain'</i>	HC.1
	<i>Art Work and Embroidery</i>	
	- We make bed covers and beads here at Keiskamma Art Project	HC.4
	- I am the artist here	HC.3
	- I do embroidery	HC.2
	- I am doing beads mainly and hand bags made of beads	
		HC.1
	<i>Care giving Domain</i>	HC.2
	- I am taking care of my husband's brother	
	- I care for my young brother because our parents are dead	HC.4
	- I am a grandmother caring for my granddaughter	HC.3
	- I am caring for my son and he is very sick at the moment	
	<i>Mutual Engagement</i>	
	1) Informal conversations	
	- We usually share about the disease as we will be doing our work	H.C1
	2) Formal meetings at the project enabling mutual engagement	
	- At the moment I am not on my own because here at the project we meet every Wednesday and there we are taught about HIV/AIDS and how to care for those at home living with HIV/AIDS	H.C2
	<i>Shared repertoires of stories</i>	
	- I am afraid my son will die earlier than me	H.C4
	- It pains me that I do not even know when my grandchild was infected	H.C3
	- I am not experienced in this work and it is difficult for me	H.C2
	- I have developed high blood pressure because of this care giving	H.C1

Background of Keiskamma Health Centre	N/A	N/A Information was from the literature
	<i>Reasons for joining Keiskamma Art Project</i> - Wanted to help others in the same situation as hers - Had retired and was approached - Wanted to help for she know that people living with HIV/AIDS needs to be loved - She was trained for the job ad happened to find employment there	H.C5 H.C7 H.C6 H.C8
Evidence of learning in a community of practice	<i>Care giving Domain</i> - Caring for self - Caring for a relative - Professional care giving	H.C6 H.C5,H.C.6 and H.C8 H.C5,H.C6, H.C7 and H.C8
	<i>Mutual Engagement</i> Learning through observations - I have learnt so much from the help that I get from the sister in charge her - I have learnt from the doctors as well - Most of the time I am helped by experienced caregivers to get more information Workshops -There are workshops that are conducted here in which we learn from about how to care for people living with HIV/AIDS Support groups -We learn through support groups. It's a concept that I learnt from church where you find groups like Manyano that help each other	H.C6 H.C5 H.C8 H.C5,H.C6, H.C7 and H.C8 H.C5,H.C6, H.C7 and H.C8

	<i>Shared repertoires of stories</i> - I used to be afraid but now I am not - I get satisfied when I see people that I have helped from the experience I get here recovering - I have gained more here such that I am to help my brother better as well as others that I deal with here at the centre - Feel honoured to have learnt here and using the knowledge for helping others	H.C8 H.C7 H.C6 H.C5
Caregivers learning in the community	<i>Learning from elder members of the family</i> - We grew up eating these foods - I learnt from my mother - I learnt from my aunt - I grew up with my grandmother and that is how I learnt about these foods - I learnt from my parents - I grew up seeing it from my parents About medicinal plants - I learnt from mother who had knowledge about medicinal plants - I grew up knowing them - My father had knowledge about these plants Sustainable use of plants - Our parents taught us - My grandmother is the influence to my learning - Learning about usefulness of traditional food from School and Keiskamma Health Centre	H.C1,H.C2,H.C3, H.C4,H.C5,H.C6 and H.C8 Hfg1 (5) Hfg2 (8) HDW1, HDW2, and HDW3 H.C3,,H.C6 and H.C8 Hfg1 (2) HFG1 (2) Hfg2 (6) H.C4 and H.C8 H.C1 and H.C6
	<i>Learning from the media</i> - Reading books written in HIV/AIDS - Some of these things we learn from the radio and television - There are programmes in the television where we also learn about these things on how to care for people living with HIV/AIDS	H.C5, H.C8 H.C2, H.C3, H.C4, and H.C6, Hfg1(2)

	<i>Learning from conservation officers</i> - We learn from conservation officers - There are conservation officers here in Hamburg they teach us about these things	Hfg1(2) and Hfg2 (6)
	<i>Learning from other caregivers</i> - Interacting with friends and sharing on medicinal plants useful to people living with HIV/AIDS - Interacting with other during support group and get to learn about these plants - Knowledge that is well known in the community you get to know about it	H.C2, H.C4 and HC.5

ANALYTIC MEMO (AM2b) COLLATING RESPONSES FROM THE INDIVIDUAL INTERVIEW, FOCUS GROUP DISCUSSIONS AND DIARIES OF CAREGIVERS IN HAMBURG

Table AM.2b: A summary of the main issues emerging from the individual interview, focus group discussions and diaries of caregivers:

(What are the practices of caregivers and reasons for practices in use of traditional food? – leading to section 5.6.1 and 5.7.1)

Category	Response in summary (Numbers in brackets are frequencies of the response)	Respondents (caregivers)
What traditional foods are caregivers using and the reasons for their practices	<i>Wild vegetables</i> - I usually like to prepare isigwamba by mixing umcazi, imbikicane (<i>Chenopodium album</i>), umsobosobo and irhawu. - Gooseberry, inhalaba, umsobo and irhawu, istwele I use them when I am preparing isigwamba and pour mealie meal and rice and salt. - Most of the patients that we have cannot afford expensive food so we encourage them to use imifino and even to drink the water from the boiled imifino and also to eat them normally without adding mealie meal. During the the rainy season there is lot of	H.C5 H.C6 H.C7

	imifino but they must add spinach -I use imifino like like umsobosbo, ihlaba and imitwane and sometimes mix it with pumpkin leaves - know ihlaba, imbikicana and utyuthu and that what I use - I use utyuthu, umsobo urhalijane and mix with spinach - I prepare isigwamba its our traditional food we have it in our gardens and we eat them	H.C4 H.C2 H.C1 H.C8 HDW2 , DWR3
	Reasons for using isigwamba <i>Used for their nutritional value</i> - It makes one strong and healthy - Isigwamba makes you strong and healthy - They have proteins - I think the vegetables are good and healthy for the body needs healthy and fresh food especially when you are sick -The food is good for the body -Sick people need to eat healthy food they become healthy and strong because of the vitamins and proteins in the vegetables - It keeps the body healthy In umphokoqo we get carbohydrates in maize and sour milk we get calcium - I also get nutrients like proteins and vitamins -We get vitamins proteins and carbohydrates and irons also - To keep us strong and healthy	H.C5 H.C6 H.C4 H.C2 H.C3 Hfg1 (6) Hfg2 (8)

	<i>Medicinal properties</i> - Imifino fight virus within your body - They must eat lots of green vegetables which have nutrients that help because this virus is fond of destroying the cell, white and red cells are easily destroyed by this disease. -The immune system gets stronger because of nutrients that are in the vegetables - Build up our bodies and immune system	H.C6 H.C7 Hfg2 A
	2) Use of umphothutulo Reasons for use of umphothulo Iron you get your immune system strong	H.C 4, Hfg1(2) Hfg2 (3) HDWR1 and HDWR2 H.C1, H.C2
	Umqa wethanga - vitamins	H.C4, Hfg1(2)
	Umqusho There are generally carbohydrates and gives us strength	H.C3 Hfg1(2) Hfg2 (4) HDWR1 and HDWR 2
	Isophu	H.C3, H,C6,Hfg1(2), Hfg2 (5),DWR2
	Umxhaxha:It keeps us healthy and strong	H.C3, H.C6,Hfg1(3), Hfg2 (5)

ANALYTIC MEMO (AM.2c) COLLATING RESPONSES FROM THE INDIVIDUAL INTERVIEW, FOCUS GROUP DISCUSSIONS AND DIARIES OF CAREGIVERS IN GRAHAMSTOWN

Table AM.2c: A summary of the main issues emerging from the individual interview, focus group discussions and diaries of caregivers:

(What are the practices of caregivers in the use of medicinal plants and why? – leading to section 5.6.2 and 5.7.2)

Category	Response in summary (Numbers in brackets are frequencies of the response)	Respondents (caregivers)
Caregivers who use medicinal plants in relation to HIV/AIDS	- Inongwe for skin problems - Umhlonhayane it cures coughing, - Inongwe it makes one's immune system strong - Umhlonyane for coughing. But I use it only for fever not for HIV/AIDS because it is not allowed to use other medication when you are on ARVs - Some plants are helpful especially istwele lomlambo is good for fever.you boil and drink the water - A- The aloe, it helped me with sores. I never went to the clinic again but it stinks - B- Umthuma when one has a drop you use a syringe to put in umthuma and take out the blockage - C- Can also used when someone has a tooth ache, the juice of umthuma would be squeezed into the tooth and small heads of black worms would come out - D- Igwetyibe it is round and red with big leaves, it helps children with stomach aches. African potato it helps when my feet are hurting. you boil water and put it in the boiling water and rub your feet in it - E- Gumtree leaves- it heals fever, you can cover yourself over boiling water with it or drink it.	- H.C2 - H.C4 - H.C4 - H.C6 - H.C8 - Hfg2 (8)

	F- Isikacathi- it takes out dirt things from newly born baby, this plant is weed like G- the roots of umvenyathi helps the same	
	A- Spring onion the virus gets weaker in the blood with it. Aloe lowers the blood sugar level in the body B- Inongwe boost the immune system, Aloe impempe, umlonyane C- Iginger umkuhlane fiver D- Unoboyana, iqwili (immune booster) and African potato(lots of different sicknesses) E- Iqwili, Intelezi (stomach aches), African potato (brings back strength) -Uthatha umhlonyane uwudibanise netwele lomlambo ne fish oil engesebenzanga. Ugalele amanzi uzibilise wakugiqiba uthatha 2 spoons usele -Translated you mix umhlonyane and istwele lomlambo with fish oil and boil together then take 2 spoons per time for a cure of coughing - I use iqwili for stomach pains Aloe I use it because it lowers the blood pressure and also cure diabetes. The liquid from aloe I also use for skin problems.	
Caregivers who do not use medicinal plants	My church does not allow me to use medicinal plants My brother in on ,medication Xhosa medicine is too strong for people with HIV/AIDS I do not use medicinal plants because I think they are too strong for a person with HIV/AIDS and they can cause a running stomach The disease is new and people who know about medicine they do not know about this disease. To me there is no possibility that there has been provision for this disease. even modern medicine has not	HDW1 H.C1 H.C2 H.C3 and H.C5

	discovered the cure yet even ARVs they do not kill the virus they just make it to be unable to function, but when you stop using them they come up, those people who started to use Xhosa medicine when they come here you can see that it has delayed them getting ARVs treatment. You feel ashamed you can smell that they are smelling from the cracks they have been using	H.C7
Sustainable practices	- Have no idea about how to preserve medicinal plants - When I am harvesting for example if it is a tree I take few branches, if its roots I take one and live others I even help those who do not know how to do it - By not chopping them down and pick off all their leaves - If we destroy them they will be finished and I have some in my garden that I use for flue -When you collect it you should make sure you do not destroy it. You must just pick as a much as you want to use like what you do when collecting fruits so that it remains there and be used by others that want to. For example ion winter you have to take the dry branches and live the other so that it will grow more in summer, that also the these herbs are the same you should do the same especially in winter you should not touch them -The participants talk about drying the vegetables so that they can have them when they are not in season -We do not destroy them we only take few leaves and roots not on the same plant so that it can grow -When you are harvesting take the leaves or the part that you are going to use not the whole plant,-Use only full grown plats Hfg1-We dot destroy them when we picking them we take a bit and left some leaves	H.C2 H.C3 H.C4 H.C5 H.C8 Hfg2 (2) Hfg1 (3)

APPENDIX 6

Table. 1: An inventory of medicinal plants used by caregivers in Grahamstown

Xhosa/English/ Scientific name	What it treats as perceived by the caregiver
Wild wormwood	Coughing
Iperepes/ <i>Clausena anisata</i>	Coughing
Garlic	Increases CD4 count
Lavenda	Rash and sores
Igcegeceleya/ <i>Azima tetraacantha</i>	Ear problem
Inkunzane/ <i>Emex australis</i>	Constipation
Umsobosobo/ <i>Solanum nigrum</i>	Mouth infection
Spring onion	Help children with mouth infection
Ikhala/Aloe	Diabetes, high blood pressure, stomach aches
Inongwe/ African potato	Help when you have rash on the body
Umhlonyane/ <i>Matricaria nigellifolia</i>	Coughing
Ihlaba/ <i>Sonchus asper</i>	Coughing if it is mixed with umhlonyane
Leaves of peach tree	Ear infection
Igcukuma/ <i>Carpobrotus edulis</i>	It helps when you have sores around your mouth
Umhlawuvuthwa/ <i>Ricinus communis</i>	
Sunflower	Used for healing sores
Roots of umnga/ <i>Acacia karroo</i>	Helps with stomach aches
Plantain	
Comfrey	
Ukrakrayo/ <i>Leucas martinicensis</i>	Helps with stomach aches
Isicakathi/ <i>Agapanthus africanus</i>	

Umthafathafa/ <i>Parmelia sp</i>	
Umavumbuka/Ganoderma sp. Sracophyte sanguinea sparm	
Bottom buck of Mimosa thorn tree.	Running stomach
Rosemary	
Avocado pear	Clears black spots caused by herpes
Garlic, Cucumber, Ginger	The boiled mixture is used for swollen glands
Comfrey, Lavender, Plantain	It helps with rash and clearing black spots black spots
Umabalabala/ <i>Polygala myrtifolia</i> L	Stops vomiting
Ngumfazi onengxolo	steaming medicine

Table. 2: Inventory of medicinal plants used by caregivers in Hamburg

Xhosa/English/ Scientific name	Use of the plant
Umhloniyane/(<i>Matricaria nigellifolia</i>)	Coughing
Inongwe/Aloe	Skin problem, coughing and boost immune system
Itswele Lomlambo/ <i>Tulbaghia sp</i>	Coughing
Umbangandlela/ <i>Heteromorpha arborescens</i>	Cancer
Intelezi/Aloe (<i>generic</i>)	Tonsils
Igcukuma/ <i>Carpobrotus edulis</i>	Ulcers, thrush
Impepho/ <i>Helichrysum gymnocomum</i>	Ulcers, help with stress
Ikhala/ Aloe	Sores
Inxina/ <i>Mentha aquatica</i>	Gout and arthritis
Imbuya/ <i>Amaranthus hybridus</i>	Asthma
Iqwili/ <i>Alepidea amatymbica</i>	Stops running stomach

Umkhwenkhwe/ <i>Pittosporum viridiflorum</i> <i>Sims</i>	Asthma
Umnonono/ <i>Celtis africana</i>	Stomach aches
Lily	Cancer
Igotyiba/ <i>Watsonia sp</i>	Thrush
Iswadi	Wounds
Gumtree leaves	Fever
Umathunga/ <i>Asparagus africanus</i>	Strengthen the bones
Umthombothi/ <i>Acalypha glabrata</i>	Rush
Inkunzane/ <i>Emex australis</i>	Cleansing
Impempo/ <i>Helichrysum</i>	Boost immune system
Umthuma/ <i>Solanum aculeastrum</i>	Tooth ache

Table.3: An inventory of wild fruits used by caregivers in Hamburg

Xhosa	English/ Scientific name
Liqitunzi	
Isiphingo	<i>Canthium inerme</i>
Itolofiya	<i>Opuntia sp</i>
Amaqunube	
Amaqckuma	
Ihatowa	
Intlolokotshane	<i>Rhus</i>
Amaqowa	
Unonqguthi	
Lingwenye	

Isiduli	<i>Brachylaena discolor</i>
Imvomvo/ <i>Aloe sp</i>	
Intunzi	
Ingwenye	<i>Harpephyllum caffrum</i>
Umbongise	
Amagontsi	
Iqhobo	
Unontshani	

Table. 4: An inventory of wild vegetables used by caregivers in Grahamstown

Xhosa/	English name
Ihlaba	<i>Sonchus asper</i>
Umsobo	<i>Solanum nigrum</i>
Irhawu	<i>Urtica dioica</i>
Itswele lomlambo	<i>Tulbaghia sp</i>
Utyuthu	<i>Amaranthus hybridus</i>
Urhalinjane	<i>Urtica urens</i>
Isiqwashunbe	<i>Arctotheca calendula</i>
Imbikicane	<i>Chenopodium album</i>
Imbuya	<i>Amaranthus hybridus</i>
Imithwane	<i>Cucurbita pepo</i>
Impinda/maphindamshaye	<i>Araujia sericifera</i>
Umcazi	

Table. 5: An inventory of wild vegetables used by caregivers in Hamburg

Xhosa/	English name
Ihlaba	<i>Sonchus asper</i>
Umsobo	<i>Solanum nigrum</i>
Irhawu	<i>Urtica dioica</i>
Itswele lomlambo	<i>Tulbaghia sp</i>
Utyuthu	<i>Amaranthus hybridus</i>
Urhalingane	<i>Urtica urens</i>
Isiqwashunbe	<i>Arctothecacalendula</i>
Imbikicane	<i>Chenopodium album</i>
Imbuya	<i>Amaranthus hybridus</i>
Imithwane	<i>Cucurbita pepo</i>
Impinda/maphindamshaye	<i>Araujia sericifera</i>
Umcazi	
Umhlabangubo	<i>Bidens Pilosa</i>

Source of Scientific names:

Dold, A.P., & Cocks, M.L., (1999). Preliminary list of Xhosa Plant names from Eastern Cape, South Africa. *Bothalia.*, 29,(2): 267-292

APPENDIX 7

Practices of caregivers at Raphael Centre in Grahamstown: Medicinal plants grown in their gardens



Rosemary



Comfrey



Lavender

A mixture of comfrey, lavender and rosemary helps with thrush and clearing of black spots



Umhlonyane (*Matricaria nigellifolia*)



Iperepesi (*Clausena anisata*)



Itswele Lomlambo (*Tulbaghia* sp)

The above pictures of medicinal plants are used for coughing and they can be mixed together for the same purpose

Practices of Keiskamma Art Project and Keiskamma Health Centre in Hamburg



A garden of maize and in between the rows of maize diary writer indicated that she left a wild vegetable called *Umsobo* (*solum nigrum*).
 Photograph taken by HDW2

In this garden of carrots *Imbikane* (*Chenopodium album*) is left to grow which diary writer 2 indicated that it is usually cooked together with other vegetables like *umsobo* (*solum nigrum*) and *ihlaba* (*Sonchus asper*). Photograph taken by HDW2



In HDW3'S garden of onions there is a wild vegetable called *ihlaba* (*sonchus asper*).

Appendix: 8 Menu and examples of copies taken from files used during meetings at Raphael Centre

RAPHAEL CENTRE - DAILY MENU

MONDAY:

Spinach with Onion & Potatoes
Mielie Meal or Mielie Rice

TUESDAY:

Rice with Lentils umngqusho omhlophe nevege
Tomatoes, onion and pumpkin

WEDNESDAY:

Rice with Green Pepper and Pilchards
Cabbage

THURSDAY:

Samp and Beans
Mixed Vegetables

FRIDAY:

Rice with Soya Mince
Carrots and potatoes

Fruit twice a week!

*Chicken once a month (Friday or Monday)

*Milk and Maas once a month?