# THE ATTITUDES OF PHYSIOTHERAPISTS IN GABORONE AND RAMOTSWA, BOTSWANA, TOWARDS TREATING PEOPLE LIVING WITH HIV/AIDS.

**By**

**MERCY MULENGA KAMBOLE**

**STUDENT NO: 2634767**



**A mini-thesis submitted to the Faculty of Community and Health Sciences of the University of the Western Cape in partial fulfillment of the requirement for the degree of Magister Scientiae (Physiotherapy).**

**Supervisor: Prof. Patricia Struthers**

**November 2007**

## KEYWORDS

- HIV
- AIDS
- Attitudes
- Physiotherapist
- Treatment
- Fear
- People living with HIV/AIDS
- Qualitative research
- Gaborone
- Ramotswa
- Botswana

**ABSTRACT**

Background: Physiotherapists are increasingly treating people living with HIV/AIDS. However, there is little information which has been reported on their attitudes in providing treatment to people with HIV/AIDS or what facilitates positive attitudes. The aim of this study was to determine attitudes of physiotherapists towards treating people living with HIV/AIDS in Botswana. Method: A qualitative approach was used. A purposive sample of 10 physiotherapists working in public hospitals and private clinics in Gaborone and Ramotswa, participated in the study, in January, 2007. This involved individual in-depth interviews utilising an interview guide. The interviews were tape-recorded and the responses obtained were transcribed verbatim. The data was analyzed, grouped into categories and a theme. The results demonstrated that most physiotherapists had a positive attitude towards treating people living with HIV/AIDS. The positive attitude was associated with interrelated factors such as their experience with PLWHA; knowledge of HIV/AIDS; job satisfaction; and belief in a duty to treat. A few physiotherapists had negative attitudes to treating PLWHA. This appeared to be influenced by some difficulties that the physiotherapists were experiencing in treating PLWHA including the risk-fear of infection; emotional stress of handling patients with emotional problems; understanding patients' cultural beliefs; increasing workload and delayed referrals. In conclusion, negative attitudes can lead to poor health services and unwillingness to care and treat PLWHA. Therefore, there is a need to address difficulties which the physiotherapists encounter in treating PLWHA.

## DECLARATION

I declare that this mini-thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by complete references and that this work has not been submitted before for any other degree at any other university.

Name: Mercy Mulenga Kambole Date:

Signed: ……..

## DEDICATION

This research is dedicated to my husband, Sunday for his constant love and support throughout my studies.

**ACKNOWLEDGEMENTS**

Firstly, I would like to acknowledge Jehovah, God almighty for His sufficient grace in my life and studies. To Him be glory, honour and praise.

My deepest gratitude goes to the following people for their contributions:

Prof. Patricia Struthers, my supervisor for your intelligence, love and support throughout the research process.

All the staff in physiotherapy department at UWC, especially Prof. Julie Phillips and Mandy for your love and support.

My husband Sunday for your financial support and taking care of our children Zanga, Taizya and Kasuba.

My mom and my sister, Silvia for your encouragement and support.

Colleagues at UWC Joseph, Lucas, Hassan and Margret.

All the participants for your time and sharing your experiences with me.

**CONTENTS**


| | | |
|---|---|---|
| TITLE PAGE | | I |
| KEYWORDS | | II |
| ABSTRACT | | III |
| DECLARATION | | V |
| DEDICATION | | VI |
| ACKNOWLEDGEMENTS | | VII |
| CONTENTS | | VIII |
| LIST OF TABLES | | X |
| LIST OF FIGURES | | X |
| LIST OF ABBREVIATIONS | | XI |
| CHAPTER ONE: INTRODUCTION | | 1 |
| 1.1 | INTRODUCTION | 1 |
| 1.2 | BACKGROUND | 2 |
| 1.3 | PROBLEM STATEMENT | 3 |
| 1.4 | RESEARCH QUESTION | 3 |
| 1.5 | AIM | 3 |
| 1.6 | OBJECTIVES | 4 |
| 1.7 | SIGNIFICANCE OF THE STUDY | 4 |
| 1.8 | DEFINITION OF TERMS | 4 |
| 1.9 | OUTLINE OF THE THESIS | 5 |
| CHAPTER TWO: LITERATURE REVIEW | | 6 |
| 2.1 | INTRODUCTION | 6 |
| 2.2 | HIV/AIDS | 6 |
| 2.2.1 | Overview of HIV/AIDS | 6 |
| 2.2.2 | Culture and HIV/AIDS | 6 |
| 2.3 | THEORETICAL FRAMEWORK | 8 |
| 2.4 | ATTITUDES | 9 |
| 2.4.1 | Concepts of attitudes | 9 |
| 2.4.2 | The attitudes of healthcare professionals | 10 |
| 2.4.3 | Negative attitudes | 10 |
| 2.4.4 | Positive attitudes | 11 |
| 2.4.5 | The relationship between knowledge and attitudes in HIV/AIDS | 12 |
| 2.5 | PHYSIOTHERAPY AND HIV/AIDS | 13 |
| 2.5.1 | Complications of HIV/AIDS and the role of physiotherapy | 13 |
| 2.5.2 | Physiotherapy and ethics in HIV/AIDS | 14 |
| 2.5.3 | Attitudes of physiotherapists | 14 |
| 2.6 | SUMMARY | 16 |
| CHAPTER THREE: METHODOLOGY | | 17 |
| 3.1 | INTRODUCTION | 17 |
| 3.2 | RESEARCH DESIGN | 17 |
| 3.3 | RESEARCH METHOD | 17 |
| 3.4 | RESEARCH SETTING | 18 |

3.5 PARTICIPANTS AND SAMPLING 19
3.5.1 Inclusion criteria 19
3.6 DATA COLLECTION PROCEDURE 19
3.6.1 Interview guide 20
3.7 TRUSTWORTHINESS 20
3.7.1 Credibility 21
3.7.2 Transferability 21
3.7.4 Confirmability 21
3.8 REFLECTION ON INTERVIEWS 22
3.9 DATA ANALYSIS 22
3.10 ETHICAL CONSIDERATIONS 23
3.11 SUMMARY 23

CHAPTER FOUR: RESULTS 24
4.1 INTRODUCTION 24
4.2 DEMOGRAPHIC PROFILE OF PHYSIOTHERAPISTS 24
4.3 THEME AND CATEGORIES 26
4.4 ATTITUDES OF PHYSIOTHERAPISTS 27
4.4.1 EXPERIENCES AND FEELINGS ABOUT PEOPLE LIVING WITH HIV/AIDS 27
4.4.1 Judgemental and non-judgemental attitudes 28
4.4.2.1 Judgmental attitudes 28
4.4.2.2 Non-judgmental attitudes 28
4.4.3 WILLINGNESS TO TREAT PLWHA 29
4.4.4 FACTORS LEADING TO A POSITIVE ATTITUDE TO TREAT PLWHA 30
4.4.4.1 Experience with PLWHA 30
4.4.4.2 Knowledge of HIV/AIDS 30
4.4.4.3 Job satisfaction 31
4.4.4.4 Duty to treat 31
4.4.5 CHALLENGES TO TREATING PLWHA 31
4.4.5.1 Risk-Fear of infection 31
4.4.5.2 Emotional stress for physiotherapists 32
4.4.5.3 Patients with emotional problems 32
4.4.5.4 Understanding patients' cultural beliefs 32
4.4.5.5 Increased work load 33
4.4.5.6 Delayed referrals 33
4.4.6 COPING STRATEGIES 33
4.4.7 SUGGESTIONS FROM PARTICIPANTS 33
4.4.7.1 Counselling training 34
4.4.7.2 Physiotherapists need to face the HIV/AIDS challenges 34
4.5 SUMMARY 35

CHAPTER FIVE: DISCUSSION 36
5.1 INTRODUCTION 36
5.2 PHYSIOTHERAPISTS' EXPERIENCES OF AND FEELINGS ABOUT PLWHA 36
5.3 PHYSIOTHERAPISTS' PERCEPTIONS ABOUT PLWHA 38
5.4 PHYSIOTHERAPISTS' WILLINGNESS TO TREAT PLWHA 40
5.4.1 Experience with PLWHA 31

5.4.2 Knowledge of HIV/AIDS 42
5.4.3 Job satisfaction 42
5.4.4 Duty to treat 43
5.5 CHALLENGES PHYSIOTHERAPISTS FACE IN TREATING PLWHA 43
5.5.1 Risk-Fear of infection 43
5.5.2 Emotional stress for physiotherapists 44
5.5.3 Patients with emotional problems 44
5.5.4 Patients' cultural beliefs 45
5.5.5 Increased work load 46
5.5.6 Delayed referrals 46
5.6 COPING STRATEGIES 47
5.7 SUGGESTIONS FROM PARTICIPANTS 48
5.8 SUMMARY 49
5.9 REFLECTION ON MY EXPERIENCES WITH PLWHA 49
5.10 CONCLUSION 50

CHAPTER SIX: SUMMARY, LIMITATIONS, CONCLUSION AND RECOMMENDATIONS 52
6.1 INTRODUCTION 52
6.2 SUMMARY 52
6.3 STUDY LIMITATIONS 53
6.4 CONCLUSION 53
6.5 RECOMMENDATIONS 54

REFERENCES 56
APPENDICES 64

## LIST OF TABLES


| | | |
|---|---|---|
| Table 4.1 | Demographic Profile of Physiotherapists | 24 |
| Table 4.2 | Demographic Profile of Physiotherapists | 25 |
| Table 4.3 | Summary of Categories and Themes | 26 |


## LIST OF FIGURES


| | | |
|---|---|---|
| Figure 2.1 | Theory of Reasoned Action | 9 |

## LIST OF ABBREVIATIONS

| | |
|---|---|
| **AIDS** | Acquired Immune Deficiency Syndrome |
| **ARV** | Anti retroviral |
| **HIV** | Human Immunodeficiency Virus |
| **PLWHA** | People living with HIV/AIDS |
| **TRA** | Theory of Reasoned Action |
| **UNESCO** | United Nations Education, Scientific and Cultural Organization |
| **UNAIDS** | Joint United Nations Programme on HIV/AIDS |
| **WHO** | World Health Organisation |

# CHAPTER ONE

# INTRODUCTION

## 1.1 INTRODUCTION

The Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has become one of the most challenging global health problems. The multi-presentation of this condition calls for multidisciplinary interventions that include physiotherapy management. This study focuses on attitudes of physiotherapists in Gaborone and Ramotswa, Botswana towards treating people living with HIV/AIDS.

The introduction of the anti-retroviral drugs (ARVs) has been reported to improve the life span of many people living with HIV/AIDS (Palella, et al. 1998). As people are living longer, they are beginning to have more chronic health problems (Wood, et al. 2000). According to Rusch et al. (2003) the prevalence of disability among the people with HIV/AIDS is also increasing. Consequently, physiotherapists are seeing an increasing number of people with HIV/AIDS related conditions in their practice (Gale, 2003; Salati, 2004). Some of the conditions that HIV/AIDS present with, that require physiotherapy intervention, include peripheral neuropathies, stroke, cerebral palsy, neuralgia, and respiratory conditions.



The rationale for this study comes from frequent findings of negative attitudes among health professionals due to associated fear of infection (Hodgson, 1998; Reis, et al. 2005). Treating people with HIV/AIDS is challenging due to its multidisciplinary nature, its medical complexity, the physical manifestations, the associated stigma and the need for infection control (Balogun, Kaplan & Miller, 1998).

Although physiotherapy practice involves direct contact with patients in treatment procedures such as soft tissue manipulation, chest physiotherapy and passive physiological movements, physiotherapists are at low risk of contracting HIV/AIDS from patients, especially with considerations of universal precautions (Voors, 2000). The risk of HIV infection from needle injury exposure is 0.33% while the risk of infection with body fluids exposure, not involving a cut is much lower, about 0.04% (Fitch, Alvarez, Medina & Morrondo, 1995).

## 1.2 BACKGROUND

HIV/AIDS is one of the most complex and prevalent conditions in the world. The UNAIDS/WHO Report (2005) describes the progressive increase of HIV/AIDS in sub-Saharan Africa. Despite sub-Saharan Africa having just over 10% of the world's population, it has about 64% of the new infections occurring globally. According to UNAIDS (2006) Global Aids Epidemic Report, by the end of 2005, Botswana had a population of about 1,640,115 people and about 270,000 were living with HIV/AIDS. The report indicates the national adult HIV infection prevalence rate is 24.1%, which suggests Botswana is among most severely affected of all countries.



According to the Botswana Medical Council (2006) records, there were about 102 registered physiotherapists in the country in 2006. About 23 of them were in public hospitals with the rest being in private clinics, private hospitals, and non-governmental organisations or not working. The physiotherapy personnel include both locals and expatriates. Currently, 2007, Botswana has no institution that trains physiotherapists.

## 1.3 PROBLEM STATEMENT

Although extensive research has been done on the attitudes of health workers, very few studies have been undertaken among physiotherapists (Voors, 2000; Worthington, Myers, O'Brien, Nixon & Cockerill, 2005). Despite the fact that physiotherapists are at low risk of becoming infected with HIV at work, negative attitudes have been reported in some studies (Puckree, Kasiram, Moodley & Singh, 2002; Useh, Akinpelu, & Makinde, 2003). Handling people with HIV/AIDS related conditions is emotionally challenging. One might not be infected, yet still be affected either positively or negatively. However, negative attitudes may affect the willingness and capacity of the physiotherapist to provide good quality care for people with HIV/AIDS. These attitudes may also negatively affect valuable health services and are not in line with the professional ethics of caring for patients (Kunzel & Sadowsky, 1993). Therefore, in order to overcome barriers that block access to effective HIV prevention, treatment, care, and support of people living with HIV/AIDS among physiotherapists, it is important to investigate their attitudes.



## 1.4 RESEARCH QUESTION

What are the attitudes of physiotherapists in Gaborone and Ramotswa, Botswana, towards treating people living with HIV/AIDS?

## 1.5 AIM

To determine the attitudes of physiotherapists in Gaborone and Ramotswa, Botswana, towards treating people living with HIV/AIDS.

## 1.6 OBJECTIVES

1. To determine physiotherapists' experiences of and feelings about people living with HIV/AIDS.
2. To determine physiotherapists' perceptions about people living with HIV/AIDS.
3. To determine physiotherapists' willingness to treat people living with HIV/AIDS.
4. To determine the challenges physiotherapists face in treating people living with HIV/AIDS.

## 1.7 SIGNIFICANCE OF THE STUDY

As indicated above, there are few studies carried out on the attitudes of physiotherapists and yet they are increasingly treating people living with HIV/AIDS. In addition, no published research on attitudes of physiotherapists in Botswana was found. This study explored the attitudes of physiotherapists in Gaborone and Ramotswa, and identified what facilitates the development of positive attitudes among physiotherapists to treat PLWHA. As HIV/AIDS is now a chronic health problem, physiotherapy services are vital in enhancing the quality of life among the PLWHA.



## 1.8 DEFINITION OF TERMS

**Physiotherapy** is a "health care profession concerned with human function and movement and maximising potential. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking account of variations in health status. It is science-based, committed to extending, applying, evaluating and reviewing the evidence that underpins and informs its practice and delivery" (CSP, 2002a p. 4).

**Attitude** is an evaluative negative or positive response referring to specific situations, people or issues (Eiser & Van der Pligt, 1988).

**Culture** is a shared pattern of behaviours and interactions, cognitive constructs, and affective understanding that are learned through a process of socialization (Olweny, 1994).

**HIV** is Human Immunodeficiency Virus, the virus that causes AIDS

**AIDS** is Acquired Immune Deficiency Syndrome, a clinical condition that results from long term infection with HIV (Schoub, 1999).



## 1.9 OUTLINE OF THE THESIS:

**Chapter one** presents the background, research question, aim, objectives and significance of the study.

**Chapter two** presents a review of the literature of concepts related to HIV/AIDS and attitudes from previous studies.

**Chapter three** discusses the research methodology used in this study.

**Chapter four** presents the results of this study according to the categories and theme that emerged during the interviews.

**Chapter five** discusses the results.

**Chapter six** presents the summary, limitations, conclusion and recommendations.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 INTRODUCTION

This chapter reviews literature on concepts of HIV/AIDS, the theoretical framework used and attitudes. It reviews healthcare professionals' attitudes to PLWHA and the relationship between knowledge and attitudes in HIV/AIDS. Lastly, physiotherapy and HIV/AIDS including the role of physiotherapy, ethics in HIV/AIDS, and attitudes of physiotherapists are reviewed.

## 2.2 HIV/AIDS

### 2.2.1 Overview of HIV/AIDS

HIV is an epidemic causing disease and death across the globe. Infection with the HIV virus leads to changes in the immune system that can result in a cluster of symptoms known as AIDS (De Gans & Portegies, 1989).



The first cases of HIV/AIDS were discovered in 1981, among homosexuals in United States of America (O'Malley, 1989). However, HIV/AIDS is now associated with heterosexuals as well, affecting people of different ages and gender. The way in which the disease has been described and classified reflects social and cultural prejudices that made the disease shameful (Barnett & Blaikie, 1992). Consequently, PLWHA are stigmatized by society (Massiah, et al. 2004).

### 2.2.2 Culture and HIV/AIDS

Culture is considered as one of the factors influencing what motivates attitude and behaviour towards people with HIV/AIDS. This is because it is a determinant of

socially accepted behaviour, value systems, beliefs, and practical knowledge (Surbone, 2004). It provides human beings with both their identity and a framework for understanding experience (Marshall, 1990). Culture is deeply rooted in all aspects of a society, including local perceptions of health and illness and health seeking behaviours (Rothschild, 1998). Each cultural group has its own views about health, illness, and health care practices (Kleinman, Eisenberg & Good, 1978). These views affect how individuals respond to illnesses (Chrisman, 1977). According to UNESCO (1982), culture broadly includes traditions, taboos, religious affiliations, gender roles, marriage, sexual norms and practices, family structures, languages and means of communication.

> Culture provides people with a way of perceiving the world at large and with ways of coming to terms with the problems they face; [such as] attitudes about the body and ways in which a person should be treated when ill (Heggenhougen, 1991).

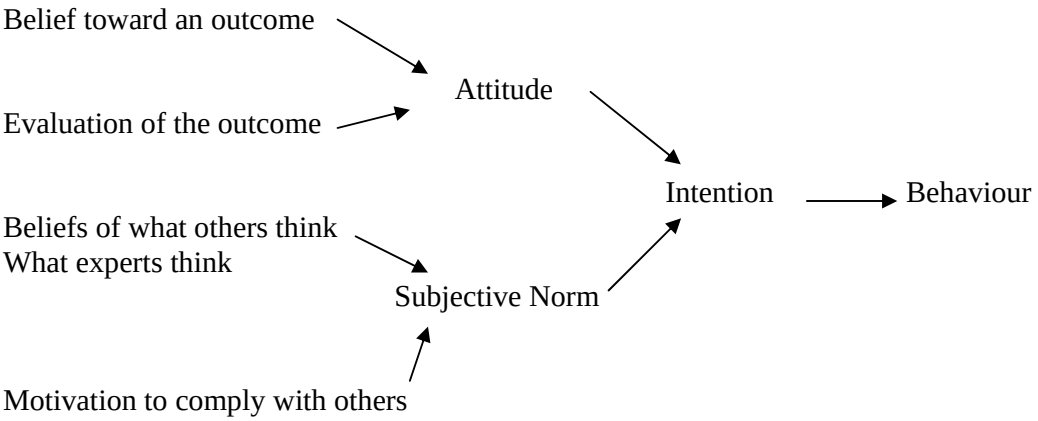
Discussion on HIV/AIDS is sensitive because it is commonly transmitted through sex (Songwathana & Manderson, 1998). Culturally, sexual involvement can be seen by religions, cultures, families and individuals as wrong, as a necessary evil, as an act that can be engaged in morally or immorally, or as a sacred act reserved for specific contexts or persons (Leclerc-Madlala, 2002). Furthermore, there is often a silence related to sexual practices (Songwathana & Manderson, 1998). Consequently, although HIV/AIDS is a medical condition, it is largely viewed as a human sexuality issue. In religious circles, it is considered as a punishment from God for the immoral corruption of humankind (Kaijaleena, Serlo, & Aavarinne, 1999) or bad luck depending upon social and cultural context (Hodgson, 2000).

Although culture provides human beings with their identity and a framework for understanding experience (Marshall, 1990), individuals or groups do not always adhere to their own culture (Surbone, 2004). This is because cultures are dynamic and interdependent on other cultures. Cultural changes tend to be influenced by global communication and increasingly demographic mobility (Surbone, 2004).

## 2.3 THEORETICAL FRAMEWORK

The Theory of Reasoned Action (TRA), shown below on figure 2.1, forms the theoretical frame work of this study. The theory assumes that people rationally weigh up the costs and benefits of engaging in an action. Attitudes toward a particular action are influenced by beliefs about the outcome of the action, whether likely or unlikely and evaluation of the potential outcome, whether it would be positive or negative. The more positive the belief a person has, the more positive the attitude this will create (Ajzen & Fishbein, 1980). The theory also states that attitudes of significant others, such as professional role models, and motivating factors influence the development of personal attitudes and intentions. Role models' perceptions, norms, values, and evaluations are likely to exert influence on one's attitude formation (Ajzen & Fishbein, 1980). The individual's attitude toward the behaviour includes: Behavioural belief, evaluations of behavioural outcome, subjective norm, normative beliefs, and the motivation to comply.

**Figure 2.1 Theory of Reasoned Action**




(Ajzen & Fishbein, 1980, 62-67)



## 2.4 ATTITUDES

### 2.4.1 Concepts of attitudes

Attitude is an individual's evaluative positive or negative way of responding to people, views and situations (Ajzen & Fishbein, 1980; Eiser & Pligt, 1988). Attitudes are mechanisms for dealing with reality and the inner demands of individuals towards something. They function to protect and support one's beliefs and values (Ajzen, 2001). Individuals develop attitudes through experiences, information and sometimes attitudes can be self generated. Since attitudes can be expressed in interaction and action, they can also be changed by information and experiences of individuals (Eiser & Pligt, 1988). Some early social psychologists held theories that comprised of three integral components including a cognitive component, an affective component and a behavioural component. The cognitive component includes beliefs and ideas about something. The affective component includes emotions or feelings such as fear, sympathy. The behavioural component includes intentions and actions (Rosenberg &

Hovland, 1960). However, recent research emphasises that attitudes can be based on just one or two of the components (Eagly & Chaiken, 1993).

### 2.4.2 The attitudes of healthcare professionals

Attitude has been one of the central areas of study in HIV/AIDS due to the impact it has on health service. Various studies on healthcare professionals, in relation to HIV/AIDS, have been undertaken for the purpose of effecting attitude change. Researchers have however, mostly reported on the attitudes of nurses and doctors (Robinson, 1998) and very seldom on physiotherapists despite their increased contact with PLWHA (Voor, 2000).



### 2.4.3 Negative attitudes

For more than two decades, people with HIV/AIDS have suffered from the negative attitudes of both the general public and health workers (Hodgson 1998; Reis, et. al. 2005; Taerk, Gallop, Lancee & Coates, 1993). Some negative attitudes include: isolation of PLWHA; beliefs about testing patients for HIV antibodies and the right to know patient's antibody status; whether PLWHA deserve care like any other patient; and the rights of healthcare professionals to refuse care (Horsman & Sheeran, 1995). Besides dealing with trauma of being infected by an immune system destroying virus, PLWHA also face humiliation. HIV/AIDS leaves them not just physically vulnerable, but also emotionally vulnerable (Green & Platt, 1997).

Negative attitudes toward PLWHA may be caused by perceived characteristics of the disease or perceived characteristics of the people who are affected by it (Connors & Hely, 2007; Dijker, Kok & Koomen, 1996; Lieber, Wu, Rotheram-Borus & Guan,

2006). Some perceived characteristics of the illness are whether people believe that the disease has severe physical consequences and whether there is a treatment available for it (Mawar, Sahay, Pandit & Mahajan, 2005). Negative attitude toward people PLWHA may also be influenced by cultural, moral and religious beliefs about the transmission of the disease (Letamo, 2005). The infected people are analysed as to whether they seem to be responsible for contracting the disease, and whether they are part of a particular group which is believed to be responsible for the spread of infection (Herlitz & Brorsson, 1990).

Crandall, Glor and Britt (1997) argue that in the case of a serious disease like HIV/AIDS, attitudes towards PLWHA will mainly be based on the perceived risk of contracting the virus. The fear of infection is mostly related to the procedures involved in the care of infected patients (Green & Platt, 1997). Healthcare professionals such as nurses and doctors, who practise the most invasive procedures, have been reported to have the highest level of concern (Jovic-Vranes, Jankovic, Vukovic, Vranes & Miljus, 2006). Fear is intensified by the possibility of contracting HIV through contact with infected blood and body fluids (Taerk, et al. 1993). However, Hodgson (1997) and Robinson (1998) argue that the comparative unwillingness to care for the infected person is usually exaggerated compared to the actual real risk of getting the virus.



### 2.4.4 Positive attitudes

Although healthcare professionals' attitudes towards PLWHA have been mostly unfavourable (Hodgson, 1998), some recent studies (Martin & Bedimo, 2000; Salati, 2004; Sheen & Green, 1996; Walusimbi & Okonsky, 2004) report positive attitudes.

Some factors leading to favourable attitudes are found to be associated with the internal working environment while others are external (McCann, 1997). Some of the positive elements are empathy, self-fulfilment, confidence and the belief in duty to treat (Salati, 2004; Smit, 2005). Healthcare professionals who are at risk but have the most experience in treating PLWHA tend to have a reduced risk perception, less fear of infection and consequently a positive attitude to treat (Kunzel & Sadowsky, 1993).

### 2.4.5 The relationship between knowledge and attitudes in HIV/AIDS

Knowledge is considered as one of the components of attitude formation (Ajzen & Fishbein, 1980). Lohrmann et al. (2000) report that increased or extensive knowledge of HIV/AIDS could help alleviate negative attitudes associated with care of infected patients. Oyeyemi, Oyeyemi and Bello (2006) in Nigeria found that adequate knowledge and a positive attitude are significant factors in providing competent and compassionate care to patients. Healthcare professionals who are well informed have shown more favorable attitude and care towards patients with HIV/AIDS in Zimbabwe, Nigeria and Hong Kong (Useh, et al. 2003; Lau, Cheung & Lee, 1996). In the study of health care worker relationships with HIV infected patients, Vallejo-Aquilar, Navarrete-Navarro, Martinez-Aquilar and Santos-Preciado (1992) reviewed literature and found various studies indicating that the willingness to care for these patients is related to the amount of HIV/AIDS education. They concluded that there is a positive correlation between knowledge about universal precautions and mechanisms of transmission with the willingness to care for HIV infected patients. Olley (2003) in Nigeria found that the greater the number of years of education the more positive the attitudes, and as a result increased willingness to care PLWHA. However, Uwalaka and Matsuo (2002) found no correlation between attitude and

knowledge in Nigeria. Salati (2004) also reported such findings Zambia. Their results do not support the argument that HIV/AIDS knowledge positively influences people's attitude toward PLWHA.

## 2.5 PHYSIOTHERAPY AND HIV/AIDS

### 2.5.1 Complications of HIV/AIDS and the Role of physiotherapy

Although AIDS is an immune system disorder, it also affects the nervous system and can lead to a wide range of neurological disorders (Ernst, 2002). The virus affects the health function of the nerve cells causing inflammation, which damages the brain and spinal cord. As the result, an infected person develops symptoms such as behavioural changes, progressive weakness, stroke or cerebral palsy (Schoub, 1999). The infection or treatment complications may cause neurological complications such as peripheral neuropathy, neuralgia, incoordination, anxiety disorders, depression and gait disorders (Coates, 1990; De Gans & Portegies, 1989; Ernst, 2002). These disorders related to HIV/AIDS cause impairments that range from mild or moderate, to severe dysfunction (Rusch, et al. 2003). The dysfunction usually reduces quality of life, increases disabilities and leads to an increased death rate (De Gans & Portegies, 1989; Ernst, 2002).



Studies have however reported that physiotherapy contributes to the multidisciplinary management through neuromuscular rehabilitation, respiratory care and pain control (Gale, 2003; McClure, 1993; Ondoga, 2002; Sacky, Shanle & Hobbs, 1998). In chronically ill bedridden patients, early physiotherapy intervention reduces the complications such as muscle wastage, contractures, bedsores and stiff joints, improving quality of life (Jose & Balan, 2002).

### 2.5.2 Physiotherapy and ethics in treating PLWHA

Physiotherapists have an obligation to observe ethical principles in care and treatment of patients (Sim, 1997). However, in the case of HIV/AIDS, this duty has been a challenge considering the fear of infection and issues related to attitudes attached to the disease (Voors, 2000). Ethically, physiotherapists have no right to refuse to work with a particular person based on their diagnosis (WCPT, 1995). They have a moral and ethical responsibility to care for all people, including those with HIV/AIDS (Sim & Purtilo, 1991). They are responsible for adhering to and promoting ethical practice. This includes obligations to render optimal safe, effective physiotherapy care and treatment to the patient by recognizing the unique health needs of patients (WCPT, 1995). Besides their obligation to the patient, a physiotherapist is obligated to uphold the dignity and honour of the profession by practising in accordance with its standards and values (CSP, 2002). The Chartered Society of Physiotherapy (CSP, 2002) in the Rules of professional conduct states that:

> 'If … the reason for not wishing to treat a patient is because of his/her sex, religion, race, sexual orientation or medical condition, it is unlikely that any change of physiotherapist would be appropriate or should be tolerated' (Rule 2.4, p. 18).



### 2.5.3 Attitudes of physiotherapists

Salati (2004) in a qualitative study investigated physiotherapists' HIV/AIDS knowledge and their attitudes towards people with HIV/AIDS in Lusaka, Zambia. Individual interviews were used in a purposive sample of 12 physiotherapists. These results indicated there were positive attitudes among physiotherapists, though their knowledge of HIV/AIDS was poor and they had concerns of occupational risk of HIV infection.

Useh et al. (2003) conducted a comparative cross-sectional study on the level of knowledge, roles and attitudes of physiotherapists towards people with HIV/AIDS in Nigeria and Zimbabwe. A sample of 207 registered physiotherapists, including 62 from Zimbabwe and 145 from Nigeria were included in the study. All the respondents in Zimbabwe indicated that they had treated AIDS patients, compared with 43% of their counterparts in Nigeria. About 68% in Nigeria and 75.8% in Zimbabwe indicated that they would not want to work in a special care centre for AIDS patients.

Puckree et al. (2002) determined physiotherapists' HIV/AIDS knowledge in South Africa, their attitudes towards HIV/AIDS patients and how they coped as individuals. A questionnaire was used to collect data from 114 physiotherapists in Durban, South Africa. The results showed that only 38% of physiotherapists were comfortable with treating PLWHA, though 98% of the participants indicated that physiotherapy is part of the multidisciplinary team of caring for PLWHA. The participants' knowledge was reported as very low.



Sheen and Green (1996) studied physiotherapists' attitudes towards PLWHA in a convenience sample of 144 chartered physiotherapists, United Kingdom. A questionnaire was used for data collection and the results indicated varied attitudes. Women had more positive attitudes than men. Physiotherapists aged less than 40 years had more positive attitudes than those above 40 years. Those who worked with PLWHA had more positive attitudes than those who did not. There was no significant difference found between physiotherapists who had HIV/AIDS training and those without.

## 2.6 SUMMARY

This chapter has described concepts of HIV/AIDS, the theoretical framework used and attitudes. Relevant literature on attitudes of healthcare professionals and physiotherapists towards PLWHA has been reviewed. Few studies on attitudes of physiotherapists have been reported, although more extensive research on other healthcare professionals has been done. Most reports show negative attitudes with fewer positive responses. Generally, negative attitudes have been most frequently associated with fear of infection among physiotherapists and other healthcare professionals.

# CHAPTER THREE

# METHODOLOGY

## 3.1 INTRODUCTION

This chapter describes the qualitative methodology used in the current thesis. It explains its rationale and approach. The procedures used for data collection, data analysis and ethical considerations will be addressed.

> "Everywhere our knowledge is incomplete and problems are waiting to be solved… the role of research is to provide a method for obtaining those answers by inquiringly studying the evidence within the parameters of the scientific method" (Leedy, 1997).

## 3.2 RESEARCH DESIGN

A qualitative approach was used to determine the attitudes of physiotherapists towards treating people living with HIV/AIDS. The design was found ideal for the current study due to its naturalistic approach that tries to understand phenomena according to a specific setting and situation (Patton, 2001). It focuses on subjective experiences and interpretations of the world for the people being researched rather than that of the researchers. This consequently gives the researcher an opportunity to gain a deeper understanding of participants' views and experiences, resulting in rich information (Cresswell, 1994). The paradigm acknowledges that there are various ways of making sense of the world and its flexible characteristic makes it essential (Britten, 1995; Denzin & Lincoln, 1994) in this study.



## 3.3 RESEARCH METHOD

Individual in-depth interviews were conducted with physiotherapists working in hospitals and clinics. The technique was used due to its basic principle of profound personal contact with the intention of gaining insight into the individual's experiences

and perspectives on given issues. In this sense, in-depth interviews yield rich information (Rubin & Rubin, 2004; Cresswell, 1994). The fact that you are dealing with one person, gives you enough time to discuss a particular topic in details and in a flexible manner (Denzin & Lincoln, 1994) whilst giving an interviewee full attention (Neuman, 1997). This data collection technique is also widely used by healthcare researchers in relation to health and healthcare delivery issues (DiCicco-Bloom & Crabtree, 2006). The limitation of the interviews is however, that the information is self-reported. The genuineness of information given depends on a participant's truthfulness because sometimes what people usually report may not be what they actually do, or feel or believe (Krueger & Casey, 2000).



### 3.4 RESEARCH SETTING

The study was carried out in Gaborone and Ramotswa, Botswana. The reasons for selecting these places are described below:

Gaborone has the biggest referral hospital in the country, Princes Marina Hospital, which covers a very big population of patients. Princes Marina Hospital has the highest number of physiotherapists in the country. At the time this study was taken, the hospital had ten physiotherapists. Gaborone has also one private hospital with various private physiotherapy clinics. It was therefore, considered that the chances of finding many willing participants at these two hospitals could be high.

The other setting was Ramotswa, which has a public hospital, Bamalete Lutheran Hospital. Ramotswa Hospital was included for the purpose of having a good number of participants from hospitals which provide health services to the general public.

However, by the end of the day the overall target was to have physiotherapists from various working environments to enrich the data.

## 3.5 PARTICIPANTS AND SAMPLING

Purposive sampling was used to select participants (physiotherapists) in this study. Patton (1990) says this sampling technique targets a particular group of people with certain characteristics for a specific purpose. Purposive sampling is best used with small numbers of individuals or groups for understanding human perceptions, experiences and environments. This justifies its use in a qualitative study. The research usually aims to reflect the diversity within a given sample (Kuzel, 1992).

A purposive sample of ten physiotherapists was selected to participant in the study.



### 3.5.2 Inclusion Criteria

1. Only registered physiotherapists working in hospitals and clinics, both public and private were included.
2. Only physiotherapists who had work experience with people living with HIV/AIDS were included.
3. The study considered participants of different gender, age and work experience for the purpose of enriching data.

## 3.6 DATA COLLECTION PROCEDURE

The collection of data was from 10th to 24th January, 2007.

Individual interviews were conducted in English with 10 selected participants for approximately 45 minutes per interview. The interviews took place within physiotherapy departments, during participants' free-time. The interviews were

recorded using tape recorder and note taking. The tape recorder helped to capture what participants said in details and accurately. Notes were taken by the researcher occasionally to help take note of something that needed to be verified and come up with some further questions.

### 3.6.1 Interview Guide

A predetermined semi-structured interview guide (Appendix G) with mainly open ended questions informed by existing literature on the subject was used to direct the interviews. The interview guide consisted of a first section for obtaining demographic data such as age group, nationality, years of service, the level of education and the clinical area of practice of the participants. The other sections had questions on the experiences and feelings, treating, and difficulties the participants faced in the treatment of PLWHA. Patton (1987) says good questions are open ended, neutral, sensitive, and clear to the interviewee. Questions were allowed to flow naturally depending on information provided by the respondents. The interview guide was also arranged in a way that enabled probing to clarify the participants' responses and consequently obtain more information (Britten, 1995; Patton, 1987). The format helped to have purposeful conversations with systematic flow of information (Patton, 1990).



## 3.7 TRUSTWORTHINESS

Trustworthiness is an essential component of qualitative research. Its aim is to support the argument that the findings reflect the reality of the experience (Lincoln & Guba, 1985). It is based on systematic collection of data and allowing the procedures and findings to be open to critical analysis from others. To establish trustworthiness, the

concepts of credibility, transferability, dependability, and confirmability have been described as essential decisive factors for quality in qualitative research (Denzin & Lincoln, 1994; Patton, 1987; Lincoln & Guba, 1985). The way this study addressed these concepts to ensure trustworthiness is described below.

### 3.7.1 Credibility

Credibility is an evaluation of whether or not the research findings represent the actual interpretation of the data collected from the participants (Lincoln & Guba, 1985). It depends on the richness of the information gathered and on the analytical abilities of the researcher (Patton, 1990). To attain credibility in this study, the research process and analysis have been described in details. The participants' words have been interpreted and quoted verbatim.



### 3.7.2 Transferability

Transferability refers to the degree to which the results of qualitative research can be generalized to other contexts. According to Lincoln and Guba (1985), the role of the researcher in enhancing transferability is to provide adequate information that can be used by the reader to determine whether the findings are applicable to the new context. This research has given a full account of the research context, the theory and procedure that was central to ensure transferability.

### 3.7.4 Confirmability

Confirmability determines how the research findings are supported by the data collected. Lincoln and Guba (1985) refer to the extent to which the researcher can show the neutrality of the research interpretations, through confirmable audits.

Confirmability was ensured in this study by making the raw data available to my supervisor for verifications of the findings and come up with changes that reflected the raw data.

## 3.8 REFLECTION ON INTERVIEWS

Before starting the interviews, I became concerned whether or not I was going to manage to have enough willing participants, due to the sensitivity of the topic. Nevertheless, the response from most physiotherapists was so overwhelming. It was like a long awaited interview for most of them. I felt more motivated and confident to look into their experiences and perceptions. In one interview I faced difficulties with the recorder. I unknowingly pressed on a pause button, and only to realise at the end of the interview that most of the discussion was not recorded. Unfortunately, I did not have enough notes to back up. Fortunately, the participant was very understanding such that I had to make another appointment for interviews. The recording problem made me understand Lincoln and Guba (1985) who say the recorder is likely to encounter technical failure.

On the whole, the interview process gave me an opportunity to have different experiences with physiotherapists. After each interview I had to reflect on how the interview went, and difficulties faced. The process facilitated creativity, critical thinking and contributes to the trustworthiness of the analysis (Jasper, 2005).

## 3.9 DATA ANALYSIS

Data analysis identifies the meaning in the information gathered in relation to the purpose of the study (Rubin & Rubin, 2004). The analysis was done manually and it started during interviews. After interviews the transcribed notes were read and the

audio tapes were repeatedly listened to, in order to myself familiarize with the content and have clear understanding of the data (Marshall & Rossman, 1999). The analysis process involved identifying codes in the content. Various codes were compared based on differences and similarities and sorted into categories. Then the categories were put into a theme.

### 3.10 ETHICAL CONSIDERATIONS

Permission to conduct the study was obtained from the University of the Western Cape; Research Unity, Ministry of Health, Botswana; Management of Princes Marina Hospital; and Bamalete Lutheran Hospital. Participants were given request letters which clearly stated the aim and significance of the study. They were requested to sign a consent form to confirm their voluntary participation. Permission for audio recording of interviews was sought from participants. They were assured of confidentially of information obtained and all the participants were informed that they were free to withdraw from the study. The findings have been reported with pseudonyms to maintain confidentiality.



### 3.11 SUMMARY

This chapter discussed the qualitative methodology used in the study. The research was conducted in Botswana among physiotherapists using individual in-depth interviews. The findings of the study are presented in the next chapter.

# CHAPTER FOUR

# RESULTS

## 4.2 INTRODUCTION

This chapter presents the findings of the individual interviews obtained from 10 participants (physiotherapists) in Botswana for the purpose of addressing the research objectives. The data is described under the themes and categories that emerged from the summative analysis of physiotherapists' experiences and views. The results have been reported with pseudonyms for the physiotherapists, for ethical reasons.

## 4.2 DEMOGRAPHIC PROFILE OF PHYSIOTHERAPISTS

**Table 4.1**

| **Gender** | **Number of Physiotherapists (N=10)** | **%** |
|---|---|---|
| Male | 4 | 40 |
| Female | 6 | 60 |
| | | |
| **Age group** | | |
| 22 – 27 | 3 | 30 |
| 28 – 33 | 3 | 30 |
| 34 – 39 | 1 | 10 |
| 40 and above | 3 | 30 |
| | | |
| **Country of origin** | | |
| Botswana | 4 | 40 |
| Zimbabwe | 2 | 20 |
| India | 2 | 20 |
| Zambia | 1 | 10 |
| Kenya | 1 | 10 |

**Table 4.2 DEMOGRAPHIC PROFILE OF PHYSIOTHERAPISTS**

| **Physiotherapy qualification level** | **Number of Physiotherapists (N=10)** | **%** |
|---|---|---|
| Diploma | 2 | 20 |
| Degree | 7 | 70 |
| Masters degree | 1 | 10 |
| **Work experience in years** | | |
| 1 – 5 | 5 | 50 |
| 6 – 10 | 1 | 10 |
| 10 and above | 4 | 40 |

## 4.3 THEME AND CATEGORIES

**Table 4.3.1 Theme and Categories**

| THEME | CATEGORIES |
|---|---|
| **Attitudes of physiotherapists** | **Experiences and feelings about PLWHA:** Sadness, pain, empathy, sympathy, neutral<br><br>**Judgmental and non-judgmental attitudes**<br><br>**Willingness to treat PLWHA**.<br><br>**Factors facilitating a positive attitude to treat:** Experience with PLWHA, HIV knowledge, job satisfaction and duty to treat.<br><br>**Challenges**: Risk-Fear of infection, emotional stress for physiotherapists, patients with emotional problems, understanding patients' cultural beliefs, increased work load and delayed referrals.<br><br>**Coping strategies.**<br><br>**Suggestions from participants:** counselling skills, physiotherapists need to face up to the HIV/AIDS challenges |

## 4.4 ATTITUDES OF PHYSIOTHERAPISTS

### 4.4.1 EXPERIENCES AND FEELINGS ABOUT PLWHA

Physiotherapists indicated that they had wide experiences of PLWHA: from home, in the community and at work. Whilst all of them indicated that they often treated PLWHA, most physiotherapists had relatives and close friends who were HIV positive. These kinds of experiences made one participant compare HIV in Botswana to flu infection, because it is so common.

*HIV/AIDS in Botswana is like flu... It is so close. (Tsidi)*

These physiotherapists were moved that many people infected were young and in the prime stages of productivity, where they had not maximised their life's potential. On the whole, they expressed sadness and pain towards PLWHA because of the nature of HIV/AIDS. Also there were expressions of sorrow as some people infected were their loved ones, those they lived and socialised with.



*You feel sad... see... they are young people age 20, 25. (Vimkita)*

*It is painful and sad ... these are young people very close to you. (Mpho)*

In addition, physiotherapists said they empathised and sympathised with PLWHA: They understood and accepted the condition of PLWHA. Their responses showed compassion.

*I empathise and sympathise with them ... (Kenn)*

On the other hand, there were also physiotherapists who indicated that their feelings towards PLWHA were neutral. They felt HIV/AIDS was just like any other infectious disease. Therefore, they did not express any special feelings for the PLWHA.

*My feeling about them is just the same as I feel for other patients with communicative diseases. (Linda)*

*... I look at them just like any other patient with a different name of infection. (Phiri)*

### 4.4.2 JUDGMENTAL AND NON-JUDGMENTAL ATTITUDES

Physiotherapists perceived PLWHA differently depending on whether they thought those infected were responsible for the transmission of the virus or not. Their views were classified as either judgemental or non-judgemental.

#### 4.4.2.1 Judgmental attitudes

Some physiotherapists stated that there was so much information given to the public in Botswana on HIV/AIDS. However, the rate of infection was still high. As a result, some PLWHA were blamed for being careless and lack commitment to the prevention of the disease.

*Some people especially men get it out of negligence ... (Arishina)*



#### 4.4.2.2 Non-judgmental attitudes

Some physiotherapists believed that PLWHA should not be blamed because no one deserved to be sick. Furthermore, they found it unnecessary to know how a person got the infection as that led to victimisation. They felt that what was vital was to offer support once a person was found HIV positive.

*I do not want to know how somebody got the disease because you end up putting judgement on them. (Tsidi)*

*... what is important is to make this person live positively. (Linda)*

These physiotherapists expressed their reasons why they thought that people infected with HIV should not be blamed. Firstly, certain physiotherapists said there was a problem of family structure in Botswana. Most children are raised by single mothers or grandmothers. In addition, a husband or wife working for the government in

Botswana could be posted anywhere in the country irrespective of where the spouse lived. Physiotherapists believed such a system contributed to unfaithfulness in marriages, hence spreading HIV.

> *Most children are raised by single mothers...*
>
> *For a couple working in the government, the husband can be posted in Francistown and the wife in Gaborone, increasing the probability of cheating. (Taji)*

Furthermore, one physiotherapist believed that HIV was originally created in the laboratory by people from the Western world. The intentions for making HIV were to wipe out Africans so that the perpetrators could take hold of the natural resources in Africa. This participant thought that the virus could have come to Africa through free condoms and food aid from donor countries, consequently causing high infection rates, especially in sub-Saharan region.

> *I believe countries that get food aid from outside seem to be affected mostly. It is possible that the food could be with some virus ... the virus is a laboratory issue. It has an artificial coating... can also come through these free condoms distributed. (Phiri)*



However, some physiotherapists also showed that they had mixed attitudes towards PLWHA. They felt that although PLWHA could not be blamed, they were responsible for getting infected.

> **…** *sometimes you feel they have got themselves into such condition, but you can not blame them. (Vimkita)*

### 4.4.3 WILLINGNESS TO TREAT PLWHA

All the physiotherapists indicated their willingness to treat PLWHA. The physiotherapists said they realised that despite having HIV, people infected were persons like anyone else who needed care and support.

> *They are also human beings and they need us to be more caring towards them. (Vimkita)*

*I just treat them like any other patient and take precautions where is necessary. (Kenn)*

### 4.4.4 FACTORS LEADING TO A POSITIVE ATTITUDE TO TREAT PLWHA

Physiotherapists' positive response to treating PLWHA appeared to be influenced by a number of factors: their experience with PLWHA; knowledge of HIV/AIDS; feelings of job satisfaction; and duty to treat PLWHA.

#### 4.4.4.1 Experience with PLWHA

Some physiotherapists spoke of their experiences with relatives or friends suffering from HIV/AIDS which helped them have compassion for PLWHA. They explained that experiences with family and friends boosted their confidence to treat those infected like any other patients.



*My experience with infected friends and relatives makes me to understand what they are going through and confidently treat them like any one else. (Edwin)*

#### 4.4.4.2 Knowledge of HIV/AIDS

Physiotherapists stated that a number of years ago, treating patients with HIV was frightening. However, they indicated that it was no longer so frightening because of the HIV/AIDS information that is available.

*HIV/AIDS knowledge has helped us improve to handle these patients in better way (Linda).*

*It was scary many years ago... but now with a lot of information every where, you know that you can not get it that easily. (Vimkita)*

#### 4.4.4.3 Job satisfaction

Some participants said they felt fulfilled when they saw the health of their patients improve as a result of their treatment.

> *Knowing that I had made some positive change in one's life sometimes gives me a job satisfaction. (John)*

#### 4.4.4.4 Duty to treat

Physiotherapists stated that it was their responsibility to treat, irrespective of the patient's condition. They believed they had no option of refusing any patient treatment.

> *A patient is a patient, whether HIV positive or not, you do not need to discriminate. (Kenn)*
>
> *If you as a health worker can not treat an HIV/AIDS patient, then you are in a wrong field. (Edwin)*



### 4.4.5 CHALLENGES TO TREATING PLWHA

Although physiotherapists indicated a willingness to treat PLWHA, they also spoke about the challenges they were facing. These included: risk-fear of infection; emotional stress for physiotherapists; handling patients with emotional problems; understanding patients' cultural beliefs; increased workload and receiving delayed referrals.

#### 4.4.5.1 Risk-Fear of infection

Some physiotherapists indicated that they felt unsafe treating PLWHA. They spoke of having a fear of occupational infection despite taking precautions. Their perceived risk was associated treating large numbers of infected patients.

> *I do not think we are safe ... the infection rate is just too much around us. (Tsidi)*

#### 4.4.5.2 Emotional stress for physiotherapists

Physiotherapists mentioned that the rate of recovery of PLWHA from conditions related to AIDS was slow compared to people without the HIV infection. Although physiotherapy treatment helped with certain conditions that PLWHA presented with, the participants found the sluggish rate of improvement difficult to handle. They also indicated that they felt confronted with illness and death of PLWHA especially when they attended to patients for long periods of time.

> *...for anyone it could be emotionally draining to treat patients struggling and fighting for survival. (Taji)*
>
> *We are dealing with these people for months. (Mpho)*
>
> *There are times the progress becomes so slow with HIV patients compared to other patients with similar conditions like stroke but without HIV. (Vimkita)*
>
> *... That is draining... sometimes I feel helpless. (John)*

#### 4.4.5.3 Patients with emotional problems



Participants said that patients who had emotional problems were challenging. Despite giving the necessary support, some patients failed to cope with their condition. Physiotherapists found it hard handling such patients.

> *Though they have gone through counselling and you have tried your best but they can't just come to terms. (Linda)*

#### 4.4.5.5 Understanding Patients' cultural beliefs

Some physiotherapists found it difficult to understand the cultural beliefs of patients with HIV. This was because patients were found to have mixed feelings about their HIV status. Some of those patients believed that they were sick because they had just been bewitched. As a result, the patients were receiving treatment services from physiotherapists and at the same time consulting traditional healers.

> *People have got certain beliefs and fears from society on HIV. (Edwin)*

*Even if some one has been told you are HIV positive, they still feel they have been bewitched. (Linda)*

#### 4.4.5.6 Increased work load

Some participants indicated that the influx of patients into the hospitals with HIV/AIDS related conditions had increased their workload. In addition, they stated that being understaffed worsened the situation.

*Even though we want patients to be referred, sometimes the load is just too much to us. (Linda)*

*... imagine covering the southern part of the country. (Mpho)*

#### 4.4.5.7 Delayed referrals

Physiotherapists indicated that PLWHA were not referred for physiotherapy treatment early enough.

*Doctors delay referring patients for physiotherapy. (Kenn)*

*... if we were involved earlier on, things like muscle wasting and other complications can be avoided or delayed. (Mpho)*



### 4.4.6 COPING STRATEGIES

Physiotherapists spoke how they coped with their challenges by sharing with colleagues difficult encounters and understanding the nature of HIV/AIDS.

*In my mind I say this is a chronic disease. (Mpho)*

*I just open up to my colleagues and talk about where I need help. (John)*

### 4.4.7 SUGGESTIONS FROM PARTICIPANTS

Physiotherapists made some suggestions that they thought could help to enhance the care of PLWHA.

#### 4.4.7.1 Counselling training

Almost all the physiotherapists suggested that there was a need for provision of counselling training for physiotherapists. Physiotherapists usually had long treatment programs for patients including those with HIV related conditions. Participants stated that sometimes their patients just needed to be talked to besides treatment. They said that counselling skills would help them in handling patients and relatives.

> *We need to be taught how to counsel patients. (Vimkita)*
>
> *We spend most of the time with our patients ...we need counselling knowledge so that we are able to put people at easy, both a patient and relatives. (Kenn)*



#### 4.4.7.2 Physiotherapists need to face up to the HIV/AIDS challenges

Some participants suggested that physiotherapists needed to take up their responsibilities and face the challenges they encountered. This was because physiotherapists were mostly found to play a low profile in the HIV/AIDS situation. Participants felt that physiotherapists needed to get up and make a contribution in order to make a difference. One participant described how physiotherapists could make a positive difference in HIV/AIDS.

> *You have got to make an initial step to face the problem and you can deal with it. The moment you take that giant step to accept it, it becomes easier and you can understand it more. (Edwin)*

## 4.5 SUMMARY

The findings of this study have been presented according to the experiences and views of physiotherapists. The study identified factors that influenced a positive attitude to treating PLWHA and challenges physiotherapists were facing. Suggestions to enhance care of PLWHA among physiotherapists have been outlined. The discussion of these results will be presented in chapter five.

# CHAPTER FIVE

# DISCUSSION

## 5.3 INTRODUCTION

This chapter discusses the results in relation to the research question, objectives and relevant literature. Four objectives were set to answer the research question: "What are the attitudes of physiotherapists in Gaborone and Ramotswa, Botswana, towards treating people living with HIV/AIDS?"

1. To determine physiotherapists' experiences of and feelings about people living with HIV/AIDS.
2. To determine physiotherapists' perceptions about people living with HIV/AIDS.
3. To determine physiotherapists' willingness to treat people living with HIV/AIDS.
4. To determine the challenges physiotherapists face in treating people living with HIV/AIDS.



## 5.2 PHYSIOTHERAPISTS' EXPERIENCES OF AND FEELINGS ABOUT PLWHA

The findings highlight the situation in Botswana where the wide spread prevalence of HIV/AIDS has increased physiotherapists' chances of knowing and treating PLWHA. Although the physiotherapists in this study came from different countries, the findings show that they all had experiences of working closely with a lot of patients who were infected with HIV. Furthermore, the majority of these participants were Africans who said they all had relatives or close friends who were HIV positive or who had died from HIV/AIDS. Similarly, Oyeyemi, Oyeyemi and Bello (2006) in Nigeria found

that the majority (52·4%) of nurses who were respondents in their study knew family members or another person who had AIDS. Smit (2005) also found that nurses in South Africa had a lot of experiences with PLWHA, where one in every four patients they admitted was HIV positive. These experiences of knowing and treating PLWHA reflect the high prevalence of HIV in Africa, especially Southern Africa.

The findings also show that the participants' feelings were influenced by their experiences. For instance, some participants with Indian origin testified that initially, when they started treating PLWHA in Botswana, they were very scared of contracting HIV from patients. This was because they came from a country where the HIV prevalence was low. However, their great experiences with PLWHA enabled them to understand more about the condition and overcome their fears. Consequently, these participants together with some African participants felt compassion towards PLWHA. A few of the physiotherapists indicated no special feelings about PLWHA. These responses were consistent with findings from Salati (2004) with physiotherapists in Zambia and Smit (2005) on nurses in South Africa, where sadness, pain, empathy, sympathy as well as neutral feelings were found in their studies.



The experience with PLWHA leads to a more positive attitude to treating people who are suffering from HIV related conditions. This is because the exposure enables one to realise that irrespective of the HIV status, those infected still remain same people with desire to be loved and accepted. Through experience, one learns to understand more about HIV/AIDS condition and consequently reducing the perceived risk level of occupation infection (Kunzel & Sadowsky, 1993).

## 5.3 PHYSIOTHERAPISTS' PERCEPTIONS ABOUT PLWHA

It is evident in this study that although HIV/AIDS is a medical condition, at times the HIV status is linked to moral values. Physiotherapists expressed both judgmental and non-judgmental perceptions about PLWHA. Their perceptions were related to whether or not they thought the infected people were responsible for the transmission of the virus. The prevalence of such views could be due to the fact that HIV is usually sexually transmitted (Schoub, 1999). HIV status may be viewed by some healthcare professionals and the general public as consequence of engaging in what society considers immoral or illegal behaviours, including homosexuality, sex work, promiscuity and drug use (Valdiserri, 2002). Lau and Tsui (2005) confirmed judgmental perceptions in Hong Kong, where many respondents perceived PLWHA as promiscuous and that they were simply receiving the punishment which they deserved.



However, some physiotherapists with non-judgmental attitudes in this study believed no one deserved to have HIV. This view was also found from the student nurses in Germany (Lohrmann, et al. 2000) where 95% of the students disagreed or strongly disagreed that homosexuals contracting HIV/AIDS were getting what they deserved. But this could be because the society in Germany has a more general accepting attitude towards homosexuals. In the current study, some participants considered some external factors which they believed played a major role in spreading the virus as the problem. They believed most children are raised in single mother or grandmother headed homes, without a father figure. However, most of these children grow up without fatherly love and attention which is later compensated with health risky behaviours. A lack of the two parent family structures sometimes leads to poverty which is the main contributing factor to the spread of HIV/AIDS in Africa. As much as the African continent

represents a rich part of the world in terms of natural and human resources, a large proportion of the people in sub-Saharan Africa live in extreme poverty. Historically, colonialism and economic exploitation have caused the poverty situation (Klepp, Masayu, Setel & Lie, 1999). The Botswanan government migrant labour system was also blamed for not considering married couples in employee placement. Migrant labour has contributed to HIV spread in Southern Africa. This system was also found in South Africa (Heywood, Schaay and Clifford, 2001) where many families had to live apart from one another. Away from home, men often had multiple sexual partners. The multiple sexual relationship places the people involved at risk of HIV infection, as well as the primary partners.

Other participants argued that the prevalence of HIV/AIDS especially in the sub-Saharan region required more explanation than the mere biomedical facts. More information on the nature of the virus and its transmission modes was needed. For instance, one participant believed that "HIV was just created in the laboratory and it could have come through free condoms and food aid from donor countries". These views reveal that, irrespective of the information available on HIV, some healthcare professionals still embrace contradictory beliefs about the condition. Such beliefs are also found in the general public though not common in Botswana. However, no literature was found in this study to back up the above beliefs. But then, Kermode, Holmes, Langkham, Matthews, Thomas, & Gifford (2005) found that a substantial proportion of health care workers in India believed HIV could be transmitted by casual contacts such as mosquitoes, saliva, urine and faeces, coughing and sharing eating utensils. Songwathana & Manderson (1998) reported that HIV/AIDS was believed, in

Buddhist concepts, to be a fate derived from one's past actions in existing or a previous life.

A combination of judgemental and non-judgemental attitudes were similarly found in a qualitative study by Salati (2004) where a few of the physiotherapists felt some PLWHA should be blamed for contracting HIV infection and majority of the physiotherapists felt no one deserves to be infected. Despite available judgemental attitudes, all the physiotherapists were reported that they were willing to treat and they all had positive attitudes towards PLWHA.

## 5.4 PHYSIOTHERAPISTS' WILLINGNESS TO TREAT PLWHA

Although healthcare professionals are there to serve all the people, their willingness to treat gets challenged in situations where patients have HIV/AIDS. However, the findings from this study indicate that all the participants were willing to treat PLWHA. This is a positive attitude that the physiotherapists displayed. Physiotherapists said that PLWHA were human beings just like any other person and therefore, deserved to be cared for and treated as other patients. Similar findings have been reported from other qualitative studies (Smit, 2005; Salati, 2004) and also from quantitative studies (Olley, 2003; Baylor, 1996; Laschinger & Goldenberg, 1993). In contrast, Lau, Cheung and Lee (1996) reported an unwillingness to care for patients with AIDS among health workers in Hong Kong. Unwillingness to care for PLWHA was associated with higher perceived vulnerability to becoming infected with HIV; lack of experience of working with PLWHA; a lack of confidence in providing AIDS-related services; a lack of knowledge about HIV transmission and the management of AIDS.

The findings highlight several interrelated factors that can influence whether the physiotherapist has a positive attitude to treating PLWHA. These factors include: experience with PLWHA; knowledge of HIV/AIDS; job satisfaction; and belief in a duty to treat.

### 5.4.1 Experience with PLWHA

Physiotherapists indicated that their experiences with PLWHA helped them to have compassion and to willingly treat those infected with HIV. The experience of caring for loved ones with HIV, of loosing them through HIV/AIDS and the pain and grief associated with it made most of the participants empathetic. The physiotherapists who had worked with many PLWHA also expressed confidence in treating and caring for people who are infected. Similarly, Kermode et al. (2005) associated previous experience of caring for someone with HIV strongly with providing care and treatment for PLWHA. Kaijaleena & Aavarinne (1999) also found that nursing students in Finland changed their attitudes towards greater understanding of PLWHA with treating increased numbers of PLWHA. Thus the findings suggest that increased experience with PLWHA would enable physiotherapists and other healthcare professionals to have a better understanding of healthcare needs of those infected with this condition and lead to a more positive attitude. Williams et al. (2006), on the other hand, found that nurses' experiences with PLWHA had no influence on developing positive attitudes to treat. Instead, they found that the more patients with HIV/AIDS nurses had cared for, the more knowledgeable they became about HIV/AIDS.

### 5.4.2 Knowledge of HIV/AIDS

Some participants stated that an increased knowledge of HIV/AIDS improved the way they treated PLWHA. Their attitude changed as their knowledge and experience increased. Similarly, Walusimbi and Okonsky (2004), Uwakwe (2000), and Held (1993) found an association between high levels of knowledge and positive attitudes. McCann (1997) found that insufficient knowledge of HIV/AIDS would lead to fear of infection and consequently a negative attitude towards treating PLWHA. Lohrmann et al. (2000) also reported that increased knowledge could lead to non-judgmental attitudes and improved quality care for PLWHA. On the other hand, Kermode et al. (2005) found that HIV/AIDS knowledge did not influence attitudes positively towards treating PLWHA. Further more, Brett (1999) reported that increased knowledge, alone, did not appear to decrease fear or change attitudes towards caring for patients with AIDS.



### 5.4.3 Job satisfaction

Although caring for patients with HIV/AIDS may be physically and emotionally draining, some participants found fulfilment when they contributed to some positive change in a patient's life. Smit (2005) found a similar experience with nurses. For instance, the nurses found it rewarding when they made a patient comfortable, supported a patient emotionally and observed a patient's appreciation for the care received. The process of trying to find fulfilment of work enables the healthcare professional involved to offer quality health services. It reinforces a positive attitude towards treating.

### 5.4.5 Duty to treat

Duty to treat is considered an ethical obligation for physiotherapists and other healthcare professionals. However, in the case of HIV/AIDS, this duty has been questioned by some healthcare professionals due to the social stigma and fear of infection that surround the disease. Physiotherapists in this study believed they could not choose to refuse any patient treatment. On the other hand, Kermode et al. (2005) reported that amongst some categories of healthcare workers, as many as 15% of the healthcare workers believed they should have a right to refuse care for PLWHA. Lohrmann (2000) found that 36% of nursing students supported the decision to have the right to refuse to work with PLWHA, though 92% of the nurses still indicated that they would not refuse to care for a person with AIDS. In addition, 89% of the nurses either disagreed or strongly disagreed with the suggestion that health care institutions should have the right to refuse to provide care for PLWHA. Forty six percent of the nurses agreed or strongly agreed that care for individuals with AIDS should be entirely on a voluntary basis.



The findings show that a positive attitude to treat PLWHA is associated with a combination of several interrelated factors, not one alone: experience with PLWHA; knowledge of HIV/AIDS; job satisfaction; and belief in a duty to treat.

## 5.5 CHALLENGES PHYSIOTHERAPISTS FACE IN TREATING PLWHA

### 5.5.1 Risk-Fear of infection

Although most physiotherapists were comfortable with treating PLWHA, a few of them felt at risk of occupational infection. From the findings of this study it is evident that fear of infection is always present in the care of PLWHA. Earlier studies in

different countries in Africa (Salati, 2004; Useh, et al. 2003; Puckree, et al. 2002) report the same concern from physiotherapists. Apparently, the fear of infection could be more psychological than real, as physiotherapists are not really at risk. Physiotherapists do not carry out invasive procedures which can expose them to infection. Although they are usually in physical contact with patients, the risk is very small with considerations of the universal precautions.

### 5.5.2 Emotional stress for physiotherapists

Emotional stress was one of the problems participants faced. It is not surprising that physiotherapists could have such an experience. Typically, physiotherapy treatment programs continue for long periods. Sometimes rehabilitation of patients can take weeks or months. During this time physiotherapists can have a very close "therapist-patient" relationship. The physiotherapists felt challenged by the sluggish pace of recovery during treatment of PLWHA compared to patients without HIV. Yet, factors such as anxiety, overwork and death of a patient could cause physiotherapists to be emotionally stressed as well. One participant expressed that sometimes they felt drained and helpless. Smit (2005) found that majority of the nurses experienced the same feelings of helplessness. Nurses' feelings were associated to the fact that there is no cure available for HIV/AIDS. Other studies of healthcare professionals working with PLWHA report similar findings (Olivier & Dykeman, 2003; Sherman, 2000; McKusick & Horstman, 1986).



### 5.5.3 Patients with emotional problems

Some physiotherapists found it difficult to treat patients with emotional problems. Physiotherapists may have inadequate skills for handling patients with emotional

problems. Although the physiotherapy profession uses physical approaches to promote, maintain and restore physical, psychological and social well-being of a person (CSP, 2002a p. 4), the skills of physiotherapists are limited in relation to emotional care. Counselling skills, which most physiotherapists lack are needed in treatment of patients with emotional problems. Brett (1999) reported that nurses found it difficulty to handle some patients with AIDS due to their limited skills and negative attitudes.

### 5.5.4 Understanding patients' cultural beliefs

Findings show that participants found it difficulty to understand patients' cultural beliefs related to HIV/AIDS. For instance, some participants said that despite some patients knowing that they were HIV positive, they still believed they had been bewitched. But this is because culture is deep-rooted in individuals' lives (Rothschild, 1998). In the current state where there is no cure for HIV/AIDS, cultural beliefs have become even more important for some individuals to make sense out of HIV/AIDS situation. However, physiotherapists have also their own cultural beliefs. The differences between patients and physiotherapists' cultural beliefs can be a hindrance to proper health service delivery, if no adjustments are made from both sides. In certain instances, it is essential for physiotherapists to understand the societal context and culture of their patients. This will help them to develop a good patient relationship which will enable such patients to appreciate the biomedical viewpoint of HIV/AIDS and lead to successful physiotherapy treatment. The Commission for Africa (2005) reported that dealing with HIV/AIDS requires a holistic response for treatment, prevention and care that recognizes the wider cultural and social context and which is supported by well functioning health systems.

### 5.5.5 Increased work load

Patients with HIV related conditions have increased the work load for physiotherapists. Participants reported that the situation had worsened with more patients becoming ill. In Botswana there are very few physiotherapists and they are increasingly expected to attend to many more patients. However, this challenge was only faced by physiotherapists working in a public hospital. This seems to be a common experience for healthcare professionals in Southern Africa working in public health institutions as described by Smit (2005) on nurses in South Africa. This increased workload can lead to emotional stress, fatigue, and negative attitudes towards treating PLWHA. The prevalence of HIV infection, especially in Southern Africa, is increasing. Thus, as long as the rate of the pandemic keeps on progressing, healthcare professionals will still encounter increasing numbers of people with HIV/AIDS related conditions. USAID (2003) describes the shortage of health workers in African countries and explains that the cause is budgetary difficulties and fiscal squeeze imposed by structural adjustment programs. Government restructuring and civil service reform programs have also in part been blamed. Shortage of healthcare workers could be caused by the migration of these professionals to developed countries for better working conditions. The reduced number of physiotherapists in Botswana is worsened by the fact that there is no institution that trains physiotherapists.



### 5.5.6 Delayed referrals

The delayed referral of PLWHA by doctors for physiotherapy treatment was another challenge most participants faced. When patients are referred after their condition has already deteriorated, they do not easily respond to the treatment. As a result, the

physiotherapists become drained and sometimes frustrated, especially that they need to attend to these patients for longer periods. Delayed referral may be because healthcare professionals responsible for referring patients are unsure of the physiotherapy benefits for PLWHA. Alternatively, it could be due to poor communication within the hospital system. Similar findings have been made in another qualitative study (Worthington, et al. 2005). Their findings indicate that different groups of people such as physicians, counselors, community agencies, or people living with HIV lacked awareness of and had inadequate information on rehabilitation services. However, the increased chronicity observed among PLWHA (Wood, et al. 2000) demands long-term management and rehabilitation for patients with AIDS.

The findings show various challenges physiotherapists were facing in treating PLWHA including risk-fear of infection; emotional stress; handling patients with emotional problems; understanding patients' cultural beliefs; increased workload and receiving delayed referrals.



## 5.6 COPING STRATEGIES

With all their challenges, the participants stated that they only coped by sharing their concerns with colleagues and taking precautions against infection. However, some physiotherapists with a few years of experience in the profession showed that they had difficulties coping with the challenges of treating and caring for PLWHA. The coping strategies physiotherapists used in this study were also described in a quantitative study with health care workers by Nashman and Heddesheimer (1990). But several ways of coping were described: support from colleagues (21%), support from spiritual

beliefs/religion (20%), learning about the disease (17%), stress reduction techniques (13%), interactions with patients (11%), time away/setting limits (10%) and systematic practice of infection control (10%). Only 27% of the healthcare workers had in-house support groups available to them. Smit (2005) recognized the need for institutional support systems to help nurses cope with occupational stress and emotional concerns. Some strategies Smit recommended for nurses were stress management courses, emotional support groups, and acknowledging valuable occupational contributions of workers.

## 5.7 SUGGESTIONS FROM PARTICIPANTS

Two suggestions were made by participants. Firstly, the participants recognized the need to be empowered with counselling knowledge and skills related to HIV/AIDS in order to improve their service delivery for PLWHA. Participants said they spent a lot of time with patients trying to understand their needs and counsel them. Kumar et al. (2002) confirmed that psychosocial support is an integral part of patient management. This recommendation is supported by Szybek, Gard and Linden (2000) who recognized that quality counselling in physiotherapy treatment is necessary for a successful therapeutic process.

The second suggestion from the participants was that there is a need for physiotherapists to take up challenges of HIV/AIDS and make a positive difference. This includes HIV/AIDS challenges associated to their work and communities.

## 5.8 SUMMARY

The findings show that most physiotherapists had a positive attitude towards treating PLWHA. Their attitude was influenced by factors such as experience with PLWHA; knowledge of HIV/AIDS; job satisfaction; and belief in a duty to treat. On the other hand, a few physiotherapists displayed a negative attitude to treat PLWHA, due to fear of infection. Physiotherapists with the negative attitude to PLWHA blamed some infected people for not taking responsibility to prevent HIV infection. These findings have confirmed the Theory of Reasoned Action which says positive beliefs about the outcome are more likely to lead to positive attitude and a positive result in the evaluation of the outcome is more likely to lead to a positive attitude. The positive attitude of physiotherapists (role models) also affected other physiotherapists to carry on positively even in challenging situations.



## 5.9 REFLECTION ON MY EXPERIENCES WITH PLWHA

I had my first experience of treating a patient with known HIV status in 1999. Sadly, this patient happened to be one of my colleagues. At times I struggled to treat her because I was not sure if I was safe from getting infected. Unfortunately this patient passed away shortly afterwards. I felt guilty that the patient died when I never even gave my best treatment services because of fear of infection. From that time I made up my mind to treat a patient whole heartedly irrespective of their condition.

Despite having experiences of treating PLWHA, I never realized how painful it was to have a beloved one die from HIV/AIDS. Not until December 2006, when my lovely sister passed away. This experience is so traumatic because my sister died very young, losing her skills, intelligence, and leaving my mother a grand child to take

care of. You would wish you could do something to reverse the situation, but sadly, it is impossible.

A month after my sister died, I began data collection. At certain times I felt challenged with the in-depth interviews because they reminded me of my sister's death. Most participants with HIV positive relatives talked about their HIV situation and how they had helped their relatives to carry on with life. At times this used to make me feel horrible especially that I never had an opportunity to help my sister.

However, my experiences affected the way I conducted the interviews. Sometimes I asked participants biased questions and certain negative responses from participants about PLWHA made me feel bad. Maybe it is because I expected every participant to have compassion for PLWHA. My experiences might have as well affected the analysis of this study. However, to ensure trustworthiness, the study contexts and procedures of data collection have been fully described, reflective journals have been presented, the Theory of Reasoned Action was employed to identify the important factors which were central in influencing attitudes of the participants, my supervisor confirmed the analysis of data by looking at the transcripts, and participants' words were quoted verbative.



## 5.10 CONCLUSION

This chapter has discussed the findings under four sections related to the objectives of the study namely: physiotherapists' experiences of and feelings about PLWHA; physiotherapists' perceptions about PLWHA; physiotherapists' willingness to treat PLWHA; and challenges physiotherapists face in treating PLWHA. The aim of this

study was to determine the attitudes of physiotherapists towards treating PLWHA. The findings show that most physiotherapists had positive attitude towards treating PLWHA. The chapter has further presented recommendations from physiotherapists, a summary of attitudes of physiotherapists, and reflections on my experiences with PLWHA. The next chapter presents the summary, conclusion and recommendations.

# CHAPTER SIX

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 6.1 INTRODUCTION

This chapter presents the summary of the study, limitations, conclusion, and lastly recommendations. The study determined the attitudes of physiotherapists in Gaborone and Ramotswa, Botswana, towards treating people living with HIV/AIDS.

## 6.2 SUMMARY

A qualitative approach with individual interviews was used. The study consisted of 10 physiotherapists from public and private hospitals and clinics. The analysis of the results was presented under a theme, attitudes of physiotherapists. The findings demonstrate that most physiotherapists had a positive attitude towards treating PLWHA. The physiotherapists realized that PLWHA are also human beings with desire to be cared for and treated like any person without HIV infection. Thus, they all indicated a willingness to treat PLWHA, even though some physiotherapists showed negative attitudes, due to fear of occupational infection. The findings highlight factors such as experience with PLWHA; knowledge of HIV/AIDS; job satisfaction; and belief in a duty to treat as affecting attitudes and willingness to treat. The findings also identified difficulties physiotherapists experienced in treating PLWHA including risk-fear of infection; emotional stress for physiotherapists; handling patients with emotional problems; understanding patients' cultural beliefs; increased workload and receiving delayed referrals. The physiotherapists coped by sharing their difficulties with colleagues and taking precautions against HIV infection. They suggested counselling training to be provided among physiotherapists and also recognised the

need for physiotherapists to take up their responsibilities and face the challenges they encountered.

## 6.3 STUDY LIMITATIONS

I acknowledge that my own experiences and views of PLWHA have influenced the research process. My interpretations and inferences as a researcher are vital components of the thesis.

The study, however, makes a contribution to addressing the gap in the literature with regard to attitudes of physiotherapists in Botswana towards treating people living with HIV/AIDS.



## 6.4 CONCLUSION

In conclusion, the objectives set in this study have been fulfilled. The study has identified that positive attitudes to treat PLWHA are facilitated by experience with PLWHA; knowledge of HIV/AIDS; job satisfaction; and belief in a duty to treat. Although positive attitudes have been found in the current study, some physiotherapists had negative attitudes and fear of occupation related infection. With all the agonizing impacts of HIV/AIDS, negative attitudes towards treating PLWHA should never be condoned among physiotherapists, as they affect the delivery of quality health services and they can lead to unwillingness to treat. Therefore, there should be a way of addressing some difficulties physiotherapists experience in treating PLWHA.

## 6.5 RECOMMENDATIONS

**Recommendation 1**

There is a need for physiotherapists to be provided with counselling skills through professional workshops. This will enable physiotherapists to deliver better services for PLWHA, as counselling is part of patient management.

**Recommendation 2**

There is a need for physiotherapists to be updated regularly with relevant HIV/AIDS knowledge. This is because physiotherapy is an essential component of patient management in most HIV related conditions. Improved HIV/AIDS knowledge will contribute to building the confidence and positive attitude of physiotherapists to treat PLWHA.



**Recommendation 3**

The stresses of AIDS care giving and treatment needs the provision of an emotional support system for physiotherapists through individualized counselling or support groups.

**Recommendation 4**

There is a need to improve the referral system of PLWHA to physiotherapy. Early physiotherapy intervention in HIV related conditions should be made available. Health professionals such as doctors responsible for referring should be made aware of the need for early referral of PLWHA.

**Recommendation 5**

There is a need for increasing the number of physiotherapists in public hospitals in Botswana to reduce work load.

**REFERENCES:**


Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behaviour*. Englewood Cliffs, NJ: Prentice-Hall.

Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology, 52*, 27–58.

Balogun, J.A., Kaplan, M.T., & Miller, T.M. (1998). The effect of professional education on the knowledge and attitudes of physical therapist and occupational therapist student about Acquired Immunodeficiency Syndrome. *Physical Therapy, 78(10),* 1073.

Barnett, T., & Blaikie, P. (1992). *AIDS in Africa: its present and future impact.* London: Bellhaven Press.

Baylor, R.M. (1996). Nurses' attitudes toward caring for patients with acquired immunodeficiency syndrome. *Journal of Professional Nursing, 12(2),* 99-105.

Brett, M. (1999). Attitudes of nurses towards AIDS Patients. *AEJNE, 4,* 2.

Brissette, M., Iafolla, B., & Lux, M (1990). Physical Therapists and AIDS knowledge. *Clinical Management, 10(1)* 27-29.

Britten, N. (1995). Qualitative Research: Qualitative interviews in medical research. *BMJ, 311*, 251-253.

Chartered Society of Physiotherapy. (2002a). *Curriculum Frame work for qualifying programmes in physiotherapy*. Retrieved: *13/04/07.*
http://.*www.CSP.org.uk/physiotherapy/what is physio.cfm*

Chartered Society of Physiotherapy. (2002b). *Rules of Professional Conduct*, CSP. London.

Commission for Africa. (2005). Our Common Interest: report of the Commission for Africa. Commission for Africa. London.

Cresswell, J.W. (1994). *Research design: Qualitative and quantitative approaches.* CA: Sage.

Chrisman, N.J. (1977). The health-seeking process: an approach to the natural history of disease. *Cult Med Psychiatry, 1*, 351-77.

Coates, R. (1990). HIV infection and AIDS: A guide for physiotherapists. *Australian Journal of Physiotherapy, 36(1),* 17-21.

Connors, J., & Hely, A. (2007). Attitudes toward PLWHA: A Model of Attitudes to Illness. *Journal of Applied Social Psychology, 37(1),* 124–130.

Crandall, C.S, Glor., J., & Britt, T.W. (1997). AIDS-related stigmatization: Instrumental and symbolic attitudes. *Journal of Applied Social Psychology, 27,* 95-123.

De Gans, J., & Portegies, P. (1989). Neurological complications of infection with human immunodeficiency virus type 1: a review of literature and 241 cases. *Clinical Neurology & Neurosurgery, 91,* 199-219.

Denzin, N. K., & Lincoln, Y. S. (1994). Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA., London & New Delhi: Sage.

DiCicco-Bloom, B., & Crabtree, B. (2006). The qualitative research interview. *Med Educ, 40,* 314-21.

Dijker, A.J., Kok, G., & Koomen, W. (1996). Emotional reactions to people with AIDS. *Journal of Applied Social Psychology, 26 (73),* 1-748.

Dworkin, J., Albrecht, G., & Cooksey, J. (1991). Concern about AIDS among hospital physicians, nurses and social workers. *Soc. Sci. Med, 33,* 239.

Eagly, A.H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.

Eiser, R.J., & Van der Pligt, J. (1988). *Attitudes and Decisions*. London: Routledge.

Ernst, T. (2002). Abnormal brain activation on functional MRI in cognitively asymptomatic HIV patients. N*eurology*, *59,* 1343-1349.

Fitch, K.M., Alvarez, L.P., Medina, R.A., Morrondo, R.N. (1995). Occupational transmission of HIV in health care workers. *European Journal of Public Health, 5(3),* 175-186.

Gale, J. (2003). Physiotherapy intervention in two people with HIV or AIDS-related peripheral neuropathy. *Physiotherapy Research International, 8(4),* 200–209.

Gifford, A.L., & Groessl, E.J. (2002). Chronic disease self-management and adherence to HIV medications. *J Acquire Immune Defic Syndrome, 15(31),* S163–S166.

Green, G., & Platt, S. (1997). Fear and loathing in health care settings reported by people with HIV. *Sociology of Health & Illness, 19 (1),* 70-92.

Heggenhougen, H.K. (1991). Role of anthropological methods to identify health needs. In C.A.K. Yesudian (Ed.), *Primary Health Care* (pp 68-76). Bombay: Tata Institute of Social Sciences.

Held, S.L. (1993).The effects of an AIDS education program on the knowledge and attitudes of a physical therapy class. *Physical Therapy, 73 (3),* 156-159.

Herlitz, C., & Brorsson, B. (1990). Facing AIDS: Reactions among police officers, nurses and the general public in Sweden. *Soc Sci Med, 30,* 913-8.

Heywood, A., Schaay, N., & Clifford, M. (2001). *Management for Health Promotion*. A module of the Postgraduate Certificate in Public Health. Bellville: School of Public Health, UWC.

Hodgson, I. (2000) Culture, meaning and perceptions: explanatory models and the delivery of HIV care. Abstract MoPeD2772, XIIIth International AIDS Conference, Durban: South Africa, July 14th-19th.

Hodgson, I. (1997). Attitudes towards people with HIV/AIDS: Entropy and health care ethics. *Journal of Advanced Nursing,* 26(2), 283-288.

Horsman, J.M., & Sheeran, P. (1995). Health Care Workers and HIV/AIDS: A Critical Review of the Literature. *Soc. Sci. Med, 41(11),* 1535-1567.

Jasper, M.A. (2005). Using reflective writing within research. *Journal of Research in Nursing*, *10,* 247-260.

Jose, J., & Balan, B., (2002). Physiotherapy and HIV/AIDS: Adding life to years. *Int Conf AIDS 14(G12520),* 7-12. Abstract retrieved 06/07/06. Medline

Jovic-Vranes, A., Jankovic, S., Vukovic, D., Vranes, B., & Miljus, D. (2006). Risk perception and attitudes towards HIV in Serbian health care workers. *Occup Med, 56(4),* 275-8.

Kaijaleena, L., Serlo, R.N., & Aavarinne, R.N. (1999). Attitudes of university students towards HIV/AIDS. *Journal of Advanced Nursing*, *29(2),* 463–470.

Kermode, M., Holmes, W., Langkham, B., Mathew, S., Thomas, M.S., & Gifford, S. (2005). HIV-related knowledge, attitudes & risk perception amongst nurses, doctors & other healthcare workers in rural India. *Indian J Med Res, 122,* 258-264.

Kleinman, A., Eisenberg, L., & Good, B. (1978). Culture, illness and care: Clinical lessons from anthropologic and cross-cultural research. *Ann Intern Med, (88),* 251-8.

Klepp, K., Masayu, M., Setel, P.W., & Lie, G.T. (1999). Ch 4 - Maintaining Preventive Health Efforts in Sub-Saharan Africa. AIDS in Tanzania. In N.M. Bracht, *Health Promotion at the community level 2* (pp.155-174). California: Sage Publications.

Krueger, R.A., & Casey, M.A. (2000). *Focus Groups: A Practical Guide for Applied Research.* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Kumar, S.K., Solomon, S., Ganesh, A.K., Mani, L., Thomas, S.A., D'Souza Yepthomi, R., & Mayer, K.H. (2002). HIV/AIDS counselling by nurses and health care workers - A YRG CARE Experience. *Int Conf AIDS*, YRG CARE, Chennai, India, 14.

Kunzel, C., & Sadowsky, D. (1993). Predicting Dentists' Perceived Occupational Risk for HIV Infection. *Social Science & Medicine, 36*, 1579-1586.

Kuzel, A.J. (1992). Sampling in qualitative inquiry. In Crabtree B.F. Miller, W.L (eds.), *Doing qualitative research*. London: Sage.

Laschinger, H., & Goldenberg, D. (1993). Attitudes of practicing nurses as predictors of intended care behaviour with person who are HIV positive: Testing the Ajzen-Fishbein Theory of Reasoned Action. *Research in Nursing and Health, 16*, 441-450.

Lau, J.T.F., & Tsui, H.Y. (2005) Discriminatory attitudes towards people living with HIV/AIDS and associated factors: a population based study in the Chinese general population. *Sex Transm Infect, 81,* 113–119.

Lau, J.T.F., Cheung, J .C.K., & Lee, S.S. (1996). Attitudes and training of health care workers in AIDS in Hong Kong. Retrieved: 07/05/06. http://ww.csu.med.cuhk.edu.hk/hkaids/crp/2.htmhttp://ww.csu.me d.cuhk.edu.hk/hkaids/crp/2.htm.

Leedy, P.D. (1997). *Practical Research: Planning and Design*. N.J: Prentice Hall.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Inquiry*. London: Sage.

Leclerc-Madlala, S. (2002). Youth, HIV/AIDS and the importance of sexual culture and context, Centre for Social Science Research, Aids and Society Research Unit. CSSR working paper, *no. 9*.



Letamo, G. (2005). The discriminatory attitudes of health workers against people living with HIV. *PLoS Med, 2(8),* e261.

Lieber, E., Wu, L.Z., Rotheram-Borus, M.J., & Guan, J. (2006). HIV/STD Stigmatization, Fears as Health-Seeking Barriers in China. *AIDS & Behaviour, 10(5),* 463-471.

Lohrmann, C., Vilimaki, M., Suominen, T., Muinonen, U., Dassen, T., & Peate, I. (2000). German nursing students' knowledge of and attitudes toward HIV and AIDS: Two decades after the AIDS cases. *Journal of Advanced Nursing, (31),* 696-703.

Marshall, P. (1990). Cultural influences on perceived quality of life. *Semin Oncol Nurs, (6),* 278-84. Retrieved: 05/04/07. MEDLINE

Marshall, C. & Rossman, (1999). *Designing Qualitative Research* (3rd ed.). London: Sage.

Mawar, N., Sahay, S., Pandit, A., & Mahajan, U. (2005). The third phase of HIV pandemic: Social consequences of HIV/AIDS stigma & discrimination & future needs. *Indian J Med Res, (122),* 471-484.

Martin, J.E., & Bedimo, A.L. (2000). Nurse practitioner, nurse midwife and physician assistant attitudes and care practices related to persons with HIV/AIDS. *Journal of American Academic Nurse Practitioner, 12(2),* 35-41.

Massiah, E., Roach, T.C, Jacobs, C., St. John, A.M., Inniss, V., Walcott, J., & Blackwood, C. (2004). Stigma, discrimination and HIV/AIDS knowledge among physicians in Barbados. *Rev Panam Salud Publica, 16(6),* 295-401.

McCann, T.V. (1997). Willingness to provide care and treatment for patients with HIV/AIDS. *Journal of Advanced Nursing, 25(5),* 1033–1039

McClure, J. (1993). The role of physiotherapy in HIV and AIDS. *physiotherapy,* 79(6), 388-393. Retrieved 06/07/06. Abstract-MEDLINE

McKusick, L., & Horstman, W. (1986). The impact of AIDS on physician. Los Angeles: University of California Press.

Nashman, H.W., Hoare, C.H., & Heddesheimer, J.C. (1990). Stress and satisfaction among professionals who care for AIDS patients: An exploratory study. *Hosp. Topic, 68,* 22.

Neuman, L.W. (1997). *Social Research Methods: Qualitative and Quantitative Approaches* (3rd ed.). City: State.

Olivier, C., & Dykeman, M. (2003). Challenges for HIV service provision: the challenges for nurses and social workers. *AIDS Care 15(5),* 649–663.

Olley, B.O. (2003). Investigating attitudes towards caring for people with HIV/AIDS among hospital care workers in Ibadan, Nigeria: the role of self-efficacy. *Af J AIDS Research, 2(1),* 57-61.

Oyeyemi, A., Oyeyemi, B., & Bello, I. (2006). Caring for patients living with AIDS: knowledge, attitude and global level of comfort. *Journal of Advanced Nursing, 53(2),* 196–204.

Olweny, C. (1994). The ethics and conduct of cross-cultural research in developing countries. *Psycho Oncology, 3,* 11–20.

O'Malley, P. (1989). *The AIDS Epidemic: Private Rights and the Public Interest*. Boston, MA: Beacon Press.

Ondoga, P.O. (2002). The effect of different chest physiotherapy schedules on progress of chest infections in Ugandan children living with HIV/AIDS. *Int Conf AIDS,* 14(B10543), 7-12. Abstract retrieved 06/07/06. Medline

Palella, F.J., Delaney, K.M., Moorman, A.C., et al. (1998). Declining morbidity and mortality among patients with advanced HIV infection. *N Engl J Med, (338),* 853–860.

Patton, M.Q. (2001). *Qualitative Research and Evaluation Methods* (3rd ed.). Newbury Park, CA: Sage.

Patton, Q.M. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.). London: Sage.

Patton, M.Q. (1987). *How to use qualitative methods in evaluation*. London Sage.

Puckree, T., Kasiram, R., Moodley, M., Singh, R.M., Lin, J. (2002). Physiotherapists and human immunodeficiency virus/acquired immune deficiency syndrome: knowledge and prevention. *Journal of Rehabilitation, 25(3),* 231-234.

Reis, C., Heisler, M., Amowitz, L.L., Moreland, S.R., Mafeni, J.O., Anyamele, C., & Iacopino, V. (2005). Discriminatory attitudes and practices by health workers toward patients with HIV/AIDS in Nigeria. *PLoS Medicine, 2(8),* e246 0743.

Robinson, N. (1998). People with HIV/AIDS: Who cares? *Journal of Advanced Nursing, 28 (4),* 771-778.

Rosenberg, M. J., & Hovland, C. I. (1960). Cognitive, affective, and behavioral components of attitudes. In M. Rosenberg, C. Hovland, W. McGuire, R. Abelson, & J. Brehm (Eds.), *Attitude Organization and Change* (pp. 1-14). New Haven, CT: Yale University Press.

Rothschild, S.K. (1998). Cross-cultural issues in primary care medicine, *Dis Mon, 44(7),* 293-319.

Rubin, H.J., & Rubin, I.S. (2004). *Qualitative interviewing: The art of hearing data* (2nd ed). CA: Sage.

Rusch, M., Nixon, S., Schilder, A., Braitstein, P., Chan, K., Hogg, B. (2003). Disability among people living with HIV in British Columbia: The unacknowledged epidemic. *Can J Infect Dis, 14(Suppl A),* 17aP.

Sacky, K., Shanle, D., & Hobbs, J. (1998). Just sweat it out: physical therapy's role in the HIV pandemic. *Res Initiat Treat Action, 4(4),* 8-10.

Salati, F. (2004). Knowledge and Attitudes of Physiotherapists towards Treating HIV/AIDS patients. Unpublished MSc Thesis, University of the Western Cape.

Schoub, B.D. (1999). *AIDS & HIV in Perspective, a guide to understanding the virus and its consequences* (2nd ed.). United Kingdom: University Press Cambridge.

Sherman, D.W. (2000). Experiences of AIDS-dedicated nurses in alleviating the stress of AIDS Care giving. *Journal of Advanced Nursing, 31(6),* 1501-1508.

Sheen, D., & Green, A. (1996). Are you positive? AIDS, attitudes and physiotherapy. *Physiotherapy, 83(4),* 190-196.

Sim, J. (1997). *Ethical Decision Making in Therapy Practice*, Butterworth Heinemann: Oxford.

Sim, J., & Purtilo, R.B. (1991). An ethical analysis of physical therapists, duty to treat persons who have AIDS: Homosexual patients as a test case. *Physical Therapy, 71, (9),* 650-655.

Smit, R. (2005). HIV/AIDS and the workplace: perceptions of nurses in a public hospital in South Africa. *Journal of Advanced Nursing, 51(1),* 22–29.

Songwathana, P., & Manderson, L. (1998). Perceptions of HIV/AIDS and caring for people with terminal AIDS in southern Thailand. *AIDS Care, 10 (2),* 155-165.

Surbone, A. (2004). Cultural competence: Why. *Annals of Oncology, (15),* 697–699.

Szybek, K., Gard, G., & Linden, J. (2000). The physiotherapist-patient relationship: applying a psychotherapy model. *Physiotherapy Theory and Practice, 16,* 181 –193.

Taerk, G., Gallop, R.M., Lancee, W.J., & Coates, R.A. (1993). Recurrent themes of concern in groups for health care professionals. *AIDS Care, 5,* 215-22.

UNAIDS/WHO. (2005). *Report on the global HIV/AIDS epidemic*. Geneva. Retrieved 02/06/06 from http://www.unaids.org/

UNAIDS. (2006). *Report on the Global AIDS Epidemic.* Retrieved 10/12/06 from http://www.unaids.org/

Useh, U., Akinpelu, A.O., & Makinde, G.B. (2003). HIV/AIDS pandemic: Comparative knowledge and roles of physiotherapists in two African Countries. *Physiotherapy, 89(12),* 720-727.

U N E S C O. (1982). Mexico City Declaration on Cultural Policies: World Conference on Cultural Policies. Mexico City, 26 July - 6 August, Paris.

USAID. (2003). HIV/AIDS and the Workforce Crisis in Health in Africa: Issues for Discussion white paper, Document prepared under the auspices of the Support for Analysis and Research in Africa (SARA) Project.

Uwake, C. (2000). Systematized HIV/AIDS education for student nurses at the University of Ibadan, Nigeria: impact on knowledge, attitudes and compliance with universal precautions. *Journal of Advanced Nursing, 32(2),* 416–424.

Uwalaka, E., & Matsuo, H. (2002). Impact of knowledge, attitude, and beliefs about AIDS on sexual behavioural change among college students in Nigeria: the case of the University of Nigeria Nsukka. *West Africa Review,* 3, 2.

Vallejo-Aquilar O., Navarrete-Navarro S., Martinez-Aquilar G., & Santos-Preciado, J.I. (1992). Health care worker relationship with HIV infected patients or AIDS patients. *AIDS Care, 49(9),* 610-7

Valdiserri, R.O. (2002). HIV/AIDS stigma: An impediment to public health. *American Journal of Public Health, 92(3),* 341–342.

Voors, M. (2000). The Duty to treat: Ethics and HIV/AIDS. *Physiotherapy, 86(12),* 640-644. Retrieved: 10/05/06. Science Direct.

Walusimbi, M., & Okonsky, J.G. (2004). Knowledge and Attitude of Nurses Caring for Patients with HIV/AIDS in Uganda. Applied *Nursing Research, 17, (2),* 92-99.

Williams, A.B., Wang, H., Burgess, J., Wu, C., Gong, Y., & Li, Y. (2006). Effectiveness of an HIV/AIDS educational programme for Chinese nurses. *Journal of Advanced Nursing, 53(6),* 710–720.

Witt Sherman, D. (2000). Experiences of AIDS-dedicated nurses in alleviating the stress of AIDS care-giving. *Journal of Advanced Nursing, 31 (6),* 1501–1508.

Wood, E., Low-Beer, S., Bartholomew, K., Landolt, M., Oram, D., O'Shaughnessy, M.V, et al. (2000). Modern antiretroviral therapy improves life expectancy of gay and bisexual males in Vancouver's west end. *Canadian Journal of Public Health, 91,* 125–128.

World confederation of physical therapy. (1995). Declaration of Principle and position statements. Approved at the 13th World confederation of Physical therapy.

Worthington, C., Myers, T., O'brien, K., Nixon, S., & Cockerill, R. (2005). Rehabilitation in HIV/AIDS: Development of an Expanded Conceptual Framework. *Aids Patient Care and STDs, 19,* 4.

## APPENDIX A: APPROVAL FROM HIGHER DEGREES COMMITTEE

**APPENDIX B: APPROVAL FROM BOTSWANA HEALTH RESEARCH UNIT**

TELEPHONE: 3632000
FAX:3914467
TELEGRAMS:RABONGAKA
TELEX: 2818 CARE BD

MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE
BOTSWANA

REPUBLIC OF BOTSWANA
MINISTRY OF HEALTH

REFERENCE No: PPM&E 13/18 PS Vol I (52) January 5, 2007

Mercy Kambole
P.O. Box 404404
Gaborone

**Re: "Attitudes of Physiotherapists in Gaborone and Ramotswa, Botswana towards treating people living with HIV/AIDS".**

Your application for a research permit for the above stated research protocol refers. We note that you have satisfactorily revised the protocol as per our suggestions. **Permission is therefore granted to conduct the above-mentioned study.** This approval is valid for a period of 1 year effective January 5, 2007.



This permit does not however give you authority to collect data from the selected facilities without prior approval from the management of the facilities. Similarly, consent should also be sought from all participants.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal will need to be resubmitted to the Health Research Unit in the Ministry of Health.

Furthermore, you are requested to submit at least one hardcopy and an electronic copy of the report to the Health Research Unit, Ministry of Health within 3 months of completion of the study. Copies should also be sent to relevant authorities.

**Approval is for academic fulfillment only.**

PERMANENT SECRETARY
MINISTRY OF HEALTH
RESEARCH UNIT
05 JAN 2007
P/BAG 0038
GABORONE
REPUBLIC OF BOTSWANA

Thank you,

S. El-Halabi
For Permanent Secretary Ministry of Health

**APPENDIX C: APPROVAL FROM MANAGEMENT BAMALETE LUTHERAN HOSPITAL**

TELEPHONE: (267) 5390212
FAX: (267) 5390826

***BAMALETE LUTHERAN HOSPITAL***

P.O. BOX V6
RAMOTSWA
BOTSWANA

Ramotswa, 15/01/2007

Mercy Kambole
PO Box 404404
Gaborone



**RE: Request to do research at BLH**

Dear Madam,

Your request to conduct a research project at the Bamalete Lutheran Hospital has been discussed by management.

The request is granted.

You are asked to make prior arrangements so that the interviews do not interrupt patient services. Preferably the interviews have to be done in the afternoons. The relevant officers have to be identified for interview.

Furthermore you are requested to provide a copy of the research findings and report to the CMO office.
You are asked to fully share the results with the staff as soon as possible.

I wish you well for the research and hope you will be benefiting from the project as well as our institution.

Kind regards

Dr. Ruth Pfau
Chief Medical Officer

CHIEF MEDICAL OFFICER
DR RUTH PFAU
BAMALETE LUTHERAN HOSPITAL
P.O. BOX V6
RAMOTSWA
TEL: 5390212 FAX: 5390826

**APPENDIX D: APPROVAL FROM MANAGEMENT OF PRINCES MARINA HOSPITAL**

Princess Marina Hospital
P.O. Box 258
Gaborone Botswana

REPUBLIC OF BOTSWANA

Tel: 3621479, 3621797
Fax: 3973776
Email: ygureja@gov.bw (chairman)
chakawa@hotmail.com (secretary)

## PMH INSTITUTIONAL RESEARCH AND ETHICS REVIEW BOARD

Our Ref: PMH2/11B/I

Date:18/01/2007

**Mercy Kambole**
**P.O Box 404404**
**Botswana**

**Dear Ms Kambole**

**Re: Attitudes of Physiotherapists in Gaborone and Ramotswa, Botswana, Towards Treating People Living with HIV/AIDS**

I am pleased to communicate Ethics Committee's final approval of the protocol "Attitudes of Physiotherapists in Gaborone and Ramotswa, Botswana, Towards Treating People Living with HIV/AIDS."



The approval is effective from the date of this letter provided you comply with the list of conditions given below.

Committee expects you to: –

1. Resubmission for re-approval of the protocol if there is expected or unexpected change at any time of the study.
2. A copy of the report at the completion of the study

On behalf of the Committee, I wish you success in this important endeavour.

**Yours truly,**

**Chakawa Nthomiwa (Secretary)**
**Administration Block – 3rd floor**

**APPENDIX E: LETTER TO PARTICIPANTS**

University of the Western Cape,
Physiotherapy department,
PRIVATE BAG X 17,
Bellville 7535, South Africa.

……...

……...

……...

4th December, 2006.

Dear Sir/Madam,

**Re: Request for your participation in a research**

I am a postgraduate physiotherapy student at University of the West Cape. I intend to carry out a research on Attitudes of physiotherapists towards treating people living with HIV/AIDS in Gaborone and Ramotswa. This is in fulfilment with the requirements for a Masters Science degree in physiotherapy.

The significance of the research is to identify what facilitates development of positive attitudes which could be used to address the negative attitudes among physiotherapists.

I am requesting for your participation so that you can give your views on the subject. The discussion will last for about 30 to 45 minutes. It will be tape-recorded, though with your permission. Confidentiality will be ensured in the reporting of any information you provide to the researcher. Your participation is voluntary. You are free to withdraw from the study at any stage, should you feel uncomfortable during the discussion.

Thanking you in anticipation,

Yours sincerely,

Mercy Kambole (Master student)

**APPENDIX F: CONSENT FORM**

I…….freely and voluntarily consent to participate in a research under Ms. M. Kambole.

I understand the aim of the study is to establish the attitudes of physiotherapist towards treating people living with HIV/AIDS in Gaborone and Ramotswa. I understand that the study will identify what facilitates development of positive attitudes which could be used to address the negative attitudes among physiotherapists.

I understand that I might withdraw my consent and discontinue participation in this study at any stage without prejudice to me. I have read the contents of this form and I have received a copy.

| | |
|---|---|
| WITNESS | DATE |
| …….. | …… |
| PARTICIPANT | DATE |
| …… | ……. |

I HAVE EXPLAINED THE RESEARCH PROCEDURE TO WHICH THE PARTICIPANT HAS CONSENTED TO PARTICIPATE

**APPENDIX G: INTERVIEW GUIDE**

THE ATTITUDES OF PHYSIOTHERAPISTS

This discussion will be centred on your understanding, experiences, feelings, opinions, ideas about people living with HIV/AIDS and physiotherapy treatment.

**N.B:** There is no wrong or right answer. You are free to respond positively or negatively.

## 1. PERSONAL INFORMATION

Instruction

*Please tick in the blanks*

A. Gender male ( ) female ( )

B. Which age group do you belong to?
22 – 27 ( )
28 – 33 ( )
34 – 39 ( )
40 and above ( )

C. What is your nationality?

D. what is your highest physiotherapy qualification?

Diploma in physiotherapy ( )
Degree in physiotherapy ( )
Masters in physiotherapy ( )
and above

E. What are your years of work experience in physiotherapy?
1 – 5 ( )
6 – 10 ( )
10 years and above ( )

F. What is your clinical area of practice?
Public hospital ( )
Private hospital ( )
Private clinic ( )

## 2. EXPERIENCES AND FEELINGS

What are your experiences with people living with HIV/AIDS?
E.g. infected patients, friends, and relatives

**Probe:** How do you think about them?

**Probe:** How do you relate to them?

**Probe:** How do you feel about people who are HIV positive?

**3. TREATING**

Have you treated someone living with HIV/AIDS before?

**Probe:** What were your reactions when you realised they were HIV/AIDS positive?

**Probe:** How do you feel about treating people living with HIV/AIDS?

**Probe:** If no, how would you react to treating someone with HIV/AIDS?

**Probe:** How would you feel about treating infected people?

Do you feel it is safe for physiotherapists to treat people living with HIV/AIDS?

**Probe:** If yes, why?

**Probe:** If no, why?

What would be your reaction if you were to be treating people living with HIV/AIDS on a daily basis?

**Probe:** Why?

**4. Difficulties**

Would you expect to face some difficulties in the treatment of people living with HIV/AIDS?

**Probe:** What could be the cause for these difficulties?

Have you ever faced any of these difficulties?

**Probe:** If yes, how do you handle them?

**Probe:** if no, how would you handle the difficulties?



**5.** What changes would you like to see in Physiotherapy practise, which you think could help to improve the care of people living with HIV/AIDS?

**6.** What are your general additional comments concerning the topic?