

**An exploration of work environment adaptive mechanisms used
by women living with HIV/AIDS in Gaborone-Botswana**

Patrice Malonza
Student number MLNPAT009

Minor-dissertation submitted to the University of Cape Town in partial
fulfilment of the requirements of the degree MSc in Occupational Therapy
Faculty of Health Sciences
University of Cape Town

24 March 2017

Primary Supervisor: Dr Helen Buchanan
Co-supervisor: A/Prof Elelwani Ramugondo

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Dedication

To all the participants who told me their stories. Thank you for sharing your experiences.

Declaration

I, Patrice Malonza, hereby declare that the work on which this dissertation is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work or part of this has been, is being or is to be submitted for another degree in this or any other university.

I empower the University of Cape Town to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever

Signed by candidate

Signature

Date 15th March 2017

Abstract

Introduction: Women living with HIV/AIDS in Botswana face multiple challenges of living with this condition and negotiating return-to-work in the context of a poor healthcare system, poor remuneration and an unsupportive work environment. These factors may decrease their chances of adapting to their work environment in a positive way. Although occupational therapists may be called upon to intervene with return-to-work issues, many women living with HIV/AIDS have to devise their own work adaptive mechanisms. There is little information about how these women manage the return-to-work process or what enables them to stay employed after diagnosis with HIV. The study aimed to explore the work adjustment process of women living with HIV/AIDS living in Gaborone.

Method: A collective case study design was used. Purposive sampling with maximum variation was employed to select four participants from Gaborone's Infectious Disease Control Centre (IDCC). Data collection occurred through semi-structured interviews that were audio recorded. Verbatim transcriptions were reviewed and coded inductively. Confirmability was ensured through review of the coding and grouping of concepts by three researchers until categories and themes emerged. Summaries of the themes were sent to participants for verification.

Findings: The findings that emerged from this study highlight adaptive mechanisms used by participants and included personal work strategies, positive lifestyle changes and adherence to medical treatment.

Conclusion: Women living with HIV/AIDS in Botswana are developing strategies to enable them to reintegrate into their work environments with varying levels of success. The study findings will assist occupational therapists and other healthcare workers to understand the strategies used by women living with HIV/AIDS to fit well within their work environment. The findings should be used by government departments to formulate policies to support return-to-work in this group.

Acknowledgments

Thank you to the Infectious Disease Control Centre (IDCC of Princess Marina Hospital for allowing me to select participants from your centre and assisting me in the selection, booking and translation for my participants. Special thanks to Arnold and Phatsimo.

Thank you my family for allowing me to use family funds and for allowing me to be away from home while trying to complete this dissertation.

Thanks to all my colleagues at the Occupational Therapy department for the support, advise and critique at different stages of this journey.

Special thanks to you Prof Elelwani Ramugondo for your brilliant skill in guiding me through the mysteries of qualitative research.

To you Dr Helen Buchanan, it was more than support; you made sure that this journey became a reality notwithstanding the length and the challenges.

Finally, but most importantly, my sincere thanks go to Jill Stevenson who made my work to be coherent and ready for submission. Thank you.

Table of Contents

An exploration of work environment adaptive mechanisms used by women living with HIV/AIDS in Gaborone-Botswana.....	i
Dedication	i
Declaration.....	ii
Abstract.....	iii
Acknowledgments.....	iv
Table of Contents.....	v
List of Abbreviations	viii
Definition of Terms.....	ix
CHAPTER 1: INTRODUCTION	1
1.1 Background.....	1
1.2 HIV/AIDS and work	2
1.3 Women and Poverty	5
1.4 HIV/AIDS and gender in Botswana	6
1.5 The Significance of the study	6
1.6 Research Question	7
1.7 Aim and objectives:.....	7
1.8 Scope of the study	7
CHAPTER 2: LITERATURE REVIEW	8
2.1 Introduction.....	8
2.2 HIV/AIDS and work.....	8

2.3	Adaptation to the work environments	10
2.4	Botswana HIV/AIDS scenario.....	10
2.5	The employment and HIV context in Botswana	11
2.6	Strategies for returning to work	11
2.7	Adherence to medical treatment	13
2.8	Conclusions	15
CHAPTER 3: RESEARCH METHODOLOGY		16
3.1	Introduction	16
3.2	Study design	16
3.3	The case study context:	17
3.4	Study Population and case selection.....	18
3.5	Data collection methods.....	19
3.6	Data management	21
3.7	Data analysis	21
3.8	Ensuring scientific rigour: trustworthiness	22
3.9	Ethical considerations	24
3.10	Confidentiality	27
3.11	Justice	27
3.12	Conclusion.....	27
CHAPTER 4: FINDINGS		28
4.1	Introduction.....	28
4.2	Introducing the cases.....	28

4.3	Situating the cases within context	34
4.4	Themes.....	35
4.5	Reframing the disease	43
4.6	Summary of the chapter	45
CHAPTER 5: DISCUSSION.....		46
5.1	Introduction	46
5.2	Discussion of the main study findings	46
5.3	Limitations of the study	53
5.4	Summary	53
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS		54
6.1	Conclusion	54
6.2	Recommendations for further research	55
REFERENCES		56
APPENDICES.....		72
Appendix 1: Interview guide		72
Appendix 2: Information letter		73
Appendix 3: Consent form.....		77
Appendix 4: Letter requesting Ministry of Health’s Approval to conduct the study		80
Appendix 5: Approval from the University of Cape Town (UCT) Human Research Ethics Committee		81
Appendix 6: Approval from the Princess Marina Hospital, Gaborone.....		82
Appendix 7: Approval from the Ministry of Health, Gaborone, Botswana		83

List of Abbreviations

AIDS: Acquired Immunodeficiency Syndrome

HAART: Highly active anti-retroviral therapies

HIV: Human Immunodeficiency Virus

IDCC: Infectious Disease Control Centre

UNAIDS: The Joint United Nations Program on HIV/AIDS

Definition of Terms

Adaptation - "A change in functional state of a person as a result of movement towards relative mastery over occupational challenges" (Schkade & Schultz, 1992: 831).

Adaptive mechanisms - a series of transitions between different states used to cope with a problematic circumstance (Kezar, 2001; Schein, 2002).

Work - To work in paid employment is to become a part of our society, to be included rather than excluded, to have a chance to rise above poverty that is associated with dependence on state benefits." (College of Occupational Therapists and National Social Inclusion Program, 2007: 9).

Work environment- the physical, material and social contexts where work takes place. (Connecticut Department of Labor, 2011).

CHAPTER 1: INTRODUCTION

This study is a collective case study aimed at exploring the work adjustment process of women living with HIV/AIDS in Gaborone. It is the best fit for data collection for this study since a case study design can be extended to several cases while providing the researcher with an insight into the issue (Stake, 2008). My interest in this topic developed a long time ago during the time when I was recruited from Kenya to work for the Government of Botswana. One of the pre-employment conditions was to undergo a HIV test. A positive status would lead to disqualification and immediate deportation to the country of recruitment. That condition did not concern me much until I witnessed a female nurse, who had arrived with her three daughters, being deported to her country of origin after she tested HIV-positive. My concern was on how she could have adjusted to her new work environment had she not been sent back.

1.1 Background

Acquired Immune Deficiency Syndrome (AIDS) is a condition that can be experienced as disabling and has serious implications for the ability of some persons to participate in their work roles (Braveman et al., 2005). After persons are diagnosed with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), they can face a wide range of challenges that can have negative impacts especially on their ability to continue in previously established work roles (Braveman et al., 2005). Some signs and symptoms of HIV infection and related opportunistic infections include fatigue, muscle weakness, neuropathies, decreased sensation, bowel and bladder incontinences, persistent cough, weight loss, gross joint stiffness, problems with movement coordination, decreased endurance, heart problems and visual problems (Anandan et al., 2006). Some or most of those conditions have the potential to negatively affect a smooth integration into the work environment.

The introduction of highly active anti-retroviral therapies (HAART) has transformed HIV from a fatal disease to a chronic illness (Tiamson, 2002; Trujillo, 2010). As life expectancy increases, work starts to play an important part in improving the quality of life for people living with HIV (Salz, 2001). People who had already accepted and engaged in the process of

dying are now renegotiating engagement with living and especially re-entry into work environments (Carpenter et al., 1998).

1.2 HIV/AIDS and work

Success in work is a major source of fulfilment in life for many people in society (Judge & Watanabe, 1993). A persistent problem faced by many people entering or trying to remain at work after being diagnosed with HIV/AIDS is that of adaptation to the work environment. Workers, in an attempt to adapt to their work environment, exhibit varied responses (Schabracq, 1996). People living with HIV/AIDS who are working may need special skills not only to manage their medication and symptoms, but also to fit in to their workplace (Rajaraman, Russell & Heymann, 2006).

Apart from the direct complications of HIV/AIDS such as Kaposi sarcoma, tuberculosis meningitis, (Rasmussen et al., 2011) and the physical symptoms, of AIDS, such as rapid weight loss, recurring fever, prolonged fatigue and weakness (Maldarelli et al., 2014), depression and anxiety account for the bulk of the reasons why people living with HIV/AIDS require adjustment and adaptive mechanisms in order to remain employed (Bedell, 2008). Essentially, depression compounds the physical and emotional problems associated with HIV/AIDS infection (Lemsalu, 2014). Depression is associated with poor adherence to medical treatment leading to worsening of immune response with rapid progression of HIV (Lemsalu, 2014). Depression and anxiety are linked to increased HIV contraction and transmission risky behaviour. (Lemsalu, 2014). Depression has the potential of occluding positive appreciation of the material or financial gain that is added through employment. Severe depression can lead to low energy levels, energy that is vital for physical work activities like lifting, pushing and even walking. Webel et al. (2016) draw the connection between HIV and fatigue among HIV positive people and further detail the management of physical in activity among people living with HIV at their work place (Perazzo et al., 2017). Anton (2002) stated that people living with HIV experience remarkable interference with their career and life roles, hence affecting quality of life. Other reviews and studies that have addressed the health-related barriers include Martin et al. (2003), Brooks and Klosinski (1999), and Goldblum and Kohlenberg (2005). For example, Goldblum and Kohlenberg (2005) single out barriers that affect and are related to physical abilities such as strength,

physical endurance, and other medication side effects with related problems like fatigue and nausea. Hergenrather, Rhodes and Clark (2006) consider memory loss, concentration problems, depression and anxiety as some of the important medical issues faced by people living with HIV/AIDS.

Barker (2005) reports that some of the changing needs and concerns of people living with HIV/AIDS at their work place include fluctuation in health status, emotional aftermaths of AIDS compounded by fear of discrimination at the work place. Barkey et al. (2009) describe HIV/AIDS-related stigma and discrimination at the work place as major sources of poor adaptation to work place. They further state that stigma disguises physical deterioration and death, hence negatively affecting the ability to adapt well to the work environment.

Successful management of the work environment is not easy for people living with HIV/AIDS (Rau, 2005). With the introduction of HAART and other positive HIV/AIDS management strategies in Botswana, health workers are now able to help clients living with HIV/AIDS towards a possibility of good living and an improvement of functional abilities (Ramiah & Reich, 2005). Re-entering or remaining in the workplace remains a major challenge for people with HIV/AIDS (Breuer, 2005) and requires a process of adjustment to cope with the demands of the work environment. Since there has been no research on the work adjustment process of people living with HIV/AIDS in Botswana, this study is important to rehabilitation professionals working in return-to-work programmes, employers and people living with HIV/AIDS.

Factors like unequal employment opportunities; unequal access to land, wealth, and unfair division of household chores - compounded by unequal power relations between men and women - worsen the likelihood of women remaining employed. For example; women as mothers, wives and society members, are faced with a number of responsibilities (Phaladze & Tlou, 2006). Additionally, the gender ratio of HIV among boys and girls is 1:2 and the ratio rises to 1:3 as they grow into adulthood (United Nations development Programme, 2000).

Working women diagnosed as HIV-positive may experience less of an impact on their general functioning than those infected with AIDS disease; which can therefore affect the type of adaptation. Women, who are HIV-positive and those with a negative status, face varied responsibilities: they are tasked with the responsibility of child-care and household

management as well as providing for their families (Phaladze & Tlou, 2006). Women, whose partners have died due to HIV/AIDS, are further forced to head their households. This could possibly explain the enormous number of single-parent families in Botswana. It is also reasonable to point out that single women, following the death of their spouses due to HIV/AIDS complications, find it difficult to find suitable marriage partners within their society.

It can be assumed that, most of the time when women look for jobs; many will end up in low-profile, blue-collar jobs like cleaning, housework and messengers. However, these women still require adaptive skills in order to fit in well within their work environments. In desperation to find work, vulnerable women may be exploited by their employers and sometimes by their co-workers; in case the same women decide to venture into the business sector, many are only able to get involved in small, informal businesses like hawking, salon work and as small food vendors.

The vast majority of women living with HIV/AIDS at their work place are relatively uneducated. Many have only primary school or junior secondary school certificates with none or few with university qualifications (Fang et al., 2015; Greener, Jefferis & Siphambe, 2000). Due to poor access to education against a very competitive job market, women account for 50% or more of the government manual workers segment among people living with HIV/AIDS at the workplace (Werbner, 2010). Within the government manual-workers cadre, among people living with HIV/AIDS at their workplace, women account for 50% or more of the work force. Due to their poor educational background, they occupy low-paying posts like cooks, cleaners, porters, messengers, telephone operators and store keepers (Werbner, 2010).

Although the Botswana Government has, through the International Finance Corporation, invested much in education for poverty alleviation, it is still questionable whether the educational investments contribute to job creation (Fourie & Meyer, 2016). Gender social importance is also manifested within the public and private school systems in Botswana (Gidding & Hovorka, 2010). The increasing urban populations in Botswana of three-gendered abodes: the village home, the subsistence small-scale farming land home, and the cattle post home. The cattle post home is the preserve of men due to the traditional association of cattle with wealth and good social standing. (Gidding & Hovorka, 2010). On the other hand, the village home, and the subsistence small-scale farming land homes are associated with

women and children. The village home and the agricultural land homes depend heavily on the proceeds eked out from the cattle post, hence limiting women's financial independence (Maisel et al., 2013).

It can be assumed that, most of the time when women look for jobs; many will end up in low-profile, blue-collar jobs like cleaning, housework and as messengers. In Botswana radical feminism is a common practice in many institutions in Botswana which in turn becomes a constructed and sustained medium of oppression of females. For example, it is only 10% of girls who complete secondary school education compared to 36% of boys. This scenario replicates itself in the job market (Chilisa, 2002).

However, these women still require adaptive skills in order to fit in well within their work environments. In desperation to find work, vulnerable women may be exploited by their employers and sometimes by their co-workers; that is to say, they still require some adaptive skills to fit in the work environment. For those women who decide to venture into the business sector, many are only able to become involved in small, informal businesses like hawking, salon work, and small, food-service occupations. Due to job scarcity and poor remuneration among young graduates, many find it difficult to fit in well within the job market and therefore need to use some adaptive mechanisms.

Due to lack of transferable work skills, gaps in employment opportunities, among young people living with HI/AIDS, many find it difficult to fit in well within the job market (Ferrier & Lavis 2003; Martin et al., 2003). Other graduates accept jobs that are totally different from their line of competence still due to lack of transferability of work skills. The above scenario is, in some instances, the cause of rivalry among workers in their work environment. Hence HIV-positive women in this sector are likely to find it even more difficult to be integrated into the work environment.

1.3 Women and Poverty

The government of Botswana has devised a social welfare strategy to cushion against extreme poverty by initiating poverty eradication programmes that employ poor, jobless people in society (Rajaraman, Russell & Heymann, 2006). Additionally, Raditloaneng and Chawawa (2015) reported on a capacity-building project for sustainable development in a

community in D'kar, Botswana.

Due to the low remuneration rates in these programmes, more often than not, it is only women - especially from single-parent households - who register for these temporary and low-paying jobs. Notwithstanding their low-paying and basic employment, these women still require adaptive mechanisms to fit in their work environments. Despite this effort by government, there is still heightened vulnerability of women living with HIV/AIDS at their workplace, probably due to many factors which include social, economic and political reasons (Fourie & Meyer, 2016). Feminisation of poverty is a structural challenge in many African states brought about by unbalanced gender dynamics that relegate women to an inferior status compared to their male counterparts (Kang'ethe, 2014).

1.4 HIV/AIDS and gender in Botswana

In Botswana, although HIV/AIDS affects both men and women, women carry the heaviest burden (UNAIDS, 2014) with a prevalence of 20.4% compared with 14.3% in males (Kandala et al., 2012). While biological susceptibility to HIV and AIDS for both men and women are important, this is exacerbated by the social and economic inequalities between men and women. Factors like unequal employment opportunities, unequal access to wealth and unfair division of household chores, compounded by unequal power relations between men and women, worsen women's likelihood of remaining employed (Phaladze & Tlou, 2006). This makes it more important for women diagnosed as HIV-positive to employ strategies to adapt to their workplaces. Given the high prevalence of HIV among women in Botswana (UNAIDS, 2014; Kandala et al., 2012), the kind of support they need to negotiate the challenges of working to support a family while actively seeking medical care needs to be understood (Rajaraman, Russell & Heymann, 2006).

1.5 The Significance of the study

The adaptive mechanisms used at work by female workers can contribute, not only to guiding occupational therapists and other cadres dealing with HIV/AIDS at work, but can in turn benefit women wishing to re-enter the job market after HIV/AIDS diagnosis or after HIV/AIDS sero-conversion. The study also focuses attention on career concerns among people living with HIV/AIDS in Botswana. Again, it sheds some light on the deployment of

workers, and it assists in general resource development especially for HIV-positive workers. Work adaptive mechanisms can be seen as normal processes that arise from the interaction between people and their work environment and the person, leading to action in order to overcome the work challenge (Schkade & Schultz, 1992).

1.6 Research Question

What adjustment processes do women living with HIV/AIDS use to adapt to their work environments in Gaborone?

1.7 Aim and objectives:

This study aims to explore the work adjustment process of women living with HIV/AIDS in Gaborone.

The objectives are:

- To describe what participants' consider 'adequate adaptation' to the work environment.
- To explore and document participants' positive and negative experiences of returning to work.
- To explore and document participants' positive and negative experiences of remaining employed.
- To describe the strategies that participants use to return to work.
- To describe the strategies that participants use to remain employed.

1.8 Scope of the study

This case study was limited to an exploration of work environment adaptive mechanisms used by women living with HIV/AIDS in Gaborone, Botswana. The study explored work-adaptive mechanisms of four women who lived and worked in different areas of the service industry in Gaborone city. Three worked in the blue-collar job sector while one participant worked within the white-collar job sector. The study was bounded by four parameters for the participants namely; level of education, age, gender and location.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Acquired Immune Deficiency Syndrome (AIDS) is a condition that can be experienced as disabling and has serious implications on the ability of some persons to participate in their work roles (Braveman et al., 2005). After a person is diagnosed with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), they can have a wide range of challenges that can have negative impacts, especially on their ability to continue in previously-established work roles (Braveman et al., 2005). Some signs and symptoms of HIV infection and related opportunistic infections include fatigue, muscle weakness, neuropathies, decreased sensation, bowel and bladder incontinence, persistent cough, weight-loss, gross joint-stiffness, problems with movement coordination, decreased endurance, heart problems and visual problems (Anandan et al., 2006).

The introduction of highly active anti-retroviral therapies (HAART) has transformed HIV from a fatal disease to a chronic illness (Trujillo, 2010; Tiamson, 2002). As life expectancy increases, work starts to play an important part in improving quality of life for people living with HIV (Salz, 2001). People who had already accepted and engaged in the process of dying are now renegotiating engagement with living and especially re-entry into work environments (Carpenter et al., 1998).

2.2 HIV/AIDS and work

A search of online databases, with assistance from library staff; Academic Search Premier, Africa-Wide Information, Business Source, CINAHL, Health Source and Nursing Academic, Medline, PsychINFO and SOCIndex, yielded much information on HIV/AIDS in the work place. The following search terms were used:

Women OR feminist OR feminism OR gender OR women's studies

AND

AIDS OR acquired immunodeficiency syndrome OR Acquired Immune Deficiency Syndrome

OR Acquired Immuno-Deficiency Syndrome OR Acquired Immuno-Deficiency Syndrome OR HIV OR human immunodeficiency virus OR HIV infections

AND

Work* OR employ* OR job* OR "return to work" OR return-to-work) AND (adapt* OR adjust* OR self-management OR "self-management" OR self-care OR "self-care".

For example Trujillo (2010) and Tiamson (2002) reported how HIV/AIDS had been transformed from a fatal disease to a manageable chronic condition. In contrast, although this is true of HIV-positive working women in Gaborone, Tiamson (2002) failed to illustrate the importance of adaptive mechanisms in the work environment. The work of Schabracq (1996) amplifies the assumption that workers, in an attempt to adapt to their work environment, exhibit varied responses. Although this is true, the study does not describe the strategies that people living with HIV/AIDS use to remain employed.

Schkade and Schultz (1992) defined adaptation to work as a normal process born of the interaction between the work environment and the person, leading to a push for action in order to overcome the challenge. This definition fits well with the exploration of work adjustment processes of women living with HIV/AIDS. Participants in Schkade and Schultz's study found that adaptation to their work environments meant a more secure future; for instance, acquiring their own homes, having their own children, having their own businesses and getting better jobs. Beaudry and Pinsonneault's (2005) study connects well with Schkade and Schultz by defining adaptation as a cognitive and behavioural effort to cope with a significant event in the work environment. Moskowitz et al. (2009) indicated that living with HIV meant coexisting with many potential stressors, though direct action and positive re-evaluation are adaptive to psychological and physical environments because positive re-examination is associated with positive effects such as good health.

Rajaraman, Russell and Heymann (2006) rightly emphasised that people living with HIV/AIDS who are working may need special skills, not only to manage their medication and symptoms, but also to fit into their workplace. Unfortunately, this falls short of connecting those special skills with the management of medication. Significantly, their study certainly connects good adherence to medical treatment to adequate adaptation to work environments. Successful management of the work environment is not easy for people living

with HIV/AIDS, as Rau (2005) states, it is important to note that personal agency is equally as important as other strategies.

With the introduction of HAART and the use of other positive HIV/AIDS management strategies in Botswana, health workers are now able to help clients living with HIV/AIDS towards the possibility of good living and the improvement of functional abilities (Ramiah & Reich, 2005). Re-entering or remaining at the workplace remains a major challenge for people with HIV/AIDS (Breuer, 2005) and requires a process of adjustment to cope with the demands of the work environment. Certainly, the findings of Ramiah and Reich's study offer a solution to this problem. Whereas there is little research on the work adjustment process of people living with HIV/AIDS in Botswana, the works of Rosse and Miller (1984) provide some insight into work adaptation. Their study emphasised changing the working conditions leading to negative health outcomes, rather than focussing on people's adaptation to the workplace. For this reason the findings of our current study are important to the rehabilitation professionals, employers and people living with HIV/AIDS and will provide cognisance of the need to foster adaptive mechanisms in the workplace.

2.3 Adaptation to the work environments

The adaptive mechanisms utilised at work by female workers can contribute not only to the knowledge base of occupational therapists, but can in turn benefit the Botswana labour ministry with respect to legislative implications, especially for people with HIV/AIDS wishing to return to work after AIDS seroconversion. Furthermore, the findings of this study can be used in human resource processes. Work-adaptive mechanisms can be seen as a normal process born of the interaction between the work environment and the person, leading to a push for action in order to overcome the work challenge (Schkade & Schultz, 1992).

2.4 Botswana HIV/AIDS scenario

The reality is that the probable future ratio of women living with HIV/AIDS at their workplace will increase, hence the need to explore and document positive and negative experiences around remaining in the workforce. While an HIV infection may have a lesser impact on the general functioning of the affected women compared to those diagnosed with the AIDS infection; therefore, this can affect the type of adaptation required. All women face several

challenges, for example the responsibility of child-care and household management, as well as working to provide for their families (Phaladze & Tlou, 2006). Nevertheless, women living with HIV/AIDS are likely to require special adaptive skills within their workplace in contrast those living with HIV/AIDS but only involved in general occupations in their community. Women, whose partners have died due to HIV/AIDS, are furthermore forced to head the households. This could possibly explain the enormous number of single-parent families in Botswana. It is also reasonable to point out that single women, after the death of their spouses following HIV/ AIDS complications, find it difficult to find suitors to remarry within the society.

Because of job scarcity, young graduates find it difficult to find employment and might end up taking up a job to which they are not suited or something completely different from the field they were trained in. This scenario can cause rivalry among workers. HIV-positive women in this situation are likely to find it even more difficult. All the difficulties encountered by women living with HIV/AIDS, point to the importance of a study that focuses on the need for strategies to remain employed for women living with HIV/AIDS.

2.5 The employment and HIV context in Botswana

While Botswana has experienced good economic growth for many years, the benefits have not been evenly distributed; poverty, unemployment and inequity remain high particularly among women and female-headed households (Botswana Central Statistics Office, 2009). Reflecting on the weakness of agriculture, and the growth of mining, industry and service activities, Botswana has become more urbanised with high income inequalities. Although the Botswana National Policy on HIV/AIDS of 1998 counsels against pre-employment HIV testing, at present there is no law that prohibits employers from screening employees at the workplace. Some employers, including the government itself, have engaged in compulsory HIV-testing of employees, especially for expatriate staff, and dismiss and repatriate employees infected with HIV (Phaladze & Tlou, 2006).

2.6 Strategies for returning to work

Adaptive mechanisms in the work environment would be essential in overcoming most of the barriers that interfere with sustenance of work for women living with HIV/AIDS.

Understanding the obstacles to remaining employed for people living with HIV/AIDS at their work place is important in order to plan and implement adaptive strategies in future. Arns, Martin and Chernoff (2004) and Ezzy, De Visser and Bartos (1999) stated some physical symptoms related to HIV/AIDS, correlates with adjustment to work for example pain, fatigue and cognitive functioning.

Time management is an important aspect of agency used in the development of personal strategies, which in turn are essential for the development of adaptation mechanisms in the work environment. Time management has in the past received much attention among writers. For example Bliss (1976), Greene (1969) and Lakein (1973) provide most of this literature which investigates subjective evidence for the efficiency of time management. Extraordinarily enough, the literature is silent about time management as an integral part-of agency in the development of personal work strategies. In abovementioned studies, time management has been linked with personal work strategies that assist working women living with HIV/AIDS to adapt well into their work environment.

Britton and Tesser (1991) examined how time management practices affected student grades. Although the study demonstrated a positive relationship between good time management and improved college grades, more recent research would be required to establish the effect of good time management on adaptation to work environments.

In other words research work with the emphasis on sequencing of work tasks - probably according to task's complexities, timing, and importance - is recommended.

Pauses and breaks between tasks are important in that rest enables people to adapt well to their work environment (Nurit & Michal, 2003).

Although these pauses and breaks can be interpreted to affect the smooth running of the participants' work, the benefits of rest outweigh the anticipated losses in work hours. Nurit and Michal, (2003) maintain that the founders of occupational therapy depicted rest as one of the core performance areas of the profession. Balance between play, work, and rest, is assumed to be crucial to occupational balance and wellbeing.

The use of a pragmatic approach as a personal strategy in developing adaptive mechanisms in the work environment is applicable when the worker employs logical or sensible methods

when solving problems. Therefore, a pragmatic approach to any work environment-related dilemmas can be considered alongside other strategies; for example, pragmatism could be a key strategy that could help women living with HIV/AIDS at their work place, to opt into engaging in lifestyles that promote positive coping (Barkey et al., 2009) For instance, women living with HIV/AIDS at their workplace could choose to use HIV/AIDS education provided by peer educators to facilitate translation of knowledge into positive action.

Issues of HIV/AIDS disclosure are of decisive importance in a person's decision-making (Gahagan et al., 2006). Workplace accommodation is also important in choosing whether to keep the job or not (Timmons & Fesko, 2004). The importance of fear of humiliation and discrimination by relatives, workmates and even friends is common among the participants' narratives coupled with misconceptions and poor public knowledge about HIV/AIDS among workers. Other strategies that could be used alongside pragmatism could include; self-management strategies (Maticka-Tyndale, Adam & Cohen, 2002). For example, positive health habit changes, nutrition counselling, and physical exercise. Presence of children among participants exerted different influences. For example mothers living with HIV/AIDS are likely to worry about their children's welfare in the event that the mother passed on (Lindsey, Hirschfeld & Tlou, 2003). Care of the children of mothers living with HIV/ AIDS at their workplace allow the mothers to remain at work and financially support their children (Mayfield et al., 2008). Other factors that kept women living with HIV/AIDS at their work place include; being able to serve as role models to their children; and to ensure continued adequate support for their children by using family-focused perspectives of care (DeMarco, Lynch, & Board, 2002). Some participants described their children as the main reason why they continued to work. Others alluded to the fact that they wanted to set positive standards for their children, while still others expressed doubt and fear about inadequate child care as a barrier to work pursuits.

2.7 Adherence to medical treatment

Adherence to medical treatment in this context is defined as the extent to which participants take their medication or follow their doctors' advice.

Many healthcare providers prefer to use the term 'adherence' rather than 'compliance'. 'Compliance' is suggestive of the client passively following the doctor's orders whereas

adherence is more of a therapeutic treatment contract between the clinician and the patient (Miller & Rollnick, 2002). This assertion falls short of describing the relationship between the participants in this study. While Miller and Rollnick (2002) amplifies the bond between the clinician and the patient, in our study, the patient is submissive to an intolerant health care provider.

Poor adherence to treatment undermines the efficacy of current care for people living with HIV/AIDS. Women living with HIV/AIDS at their work place are not immune to the problems associated with poor adherence. Sackett, Haynes and Guyatt (1997) explored reasons for poor adherence. As in our study, those patients displayed knowledge about the dangers associated with poor adherence.

The complexity of ARV treatments, have led to the problem of or poor or non-adherence to HIV medical therapies. Chesney, Morin and Sherr (2000) linked social and behavioural activity to non-adherence to HIV medication. Their study was an exploration into the background literature reviews of social and behavioural science contributions towards non-adherence. In contrast, our study explored participants' knowledge about the dangers of poor adherence to HIV/AIDS medical treatment, and underscores the importance of participants' knowledge about the dangers of poor adherence.

A study by Golin et al. (2002) found that people on ARVs missed doses because they did not want to take their medication in public. They feared that taking medication in public would reveal their HIV status. The participants of the Golin et al. (2002) study further stressed the importance of privacy across a large number of health disciplines. Klitzman et al. (2004) alluded to how secrecy in taking ARVs contributes to poor adherence: their study confirms our assertion that seeking privacy in taking ARVs ensures good adherence to treatment.

Makoae et al. (2008), stated that positive lifestyle change has a positive impact on stigma towards people living with HIV/AIDS. Many other researchers, including Sniehotta et al. (2005), Epstein et al. (1982), and Lisspers (2005), focussed on benefits of positive lifestyle changes to varied health situations, for example coronary heart disease and diabetes. Cameron, Leventhal and Leventhal (1995) emphasised that for persons to actively seek medical care, they should be aware of the benefits thereof.

2.8 Conclusions

Acquired Immune Deficiency Syndrome (AIDS) is a condition that can be experienced as disabling and with negative implications on some persons to participate in their work roles. The literature reviewed in this chapter highlighted that, due to advances in medical treatment, HIV and AIDS is no longer fatal but it can have serious implications on an individual's ability to participate in their work roles. People living with HIV/AIDS who are working may therefore need to develop occupational work adjustments to enable them to reintegrate into their work environments. Coping strategies and adjustments are essential to enable reintegration into the workplace. Although information specific to Botswana was limited, studies from other contexts identified strategies used by people living with HIV/AIDS to enable them to adapt to the work environment. Occupational adjustment seems to be based on employee preferences, physical work demands, and the availability of an occupation. Some participants decided to transfer to their preferred occupations when the opportunity arose. Good adherence to medical treatment has direct or indirect connection towards the ability to adequately adapt to work environments while personal agency is equally as important as other strategies. It is also vital to note that it is critical to change the working conditions that have a bearing to negative health outcomes, rather than focusing on people's adaptation to the workplace only.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the study design, study population and sample selection. Data capturing for maximum variation is also presented. The research process (including participant selection and recruitment, data collection and analysis), sampling methods, data management and data analysis are presented. The strategies applied to ensure trustworthiness are discussed. Lastly, the ethical considerations for the study are described.

3.2 Study design

A qualitative paradigm was used to gather data about the positive and negative experiences of returning to work and remaining employed among women living with HIV/AIDS. Qualitative methods allow a researcher to acquire complex details about phenomena, such as emotions, feelings and thought processes that would otherwise be difficult to make sense of through conventional research methods (Strauss & Corbin 1998). Rich data about participants' experiences can only be collected through a qualitative paradigm (Creswell, 2012).

As the study required participants to 'explain' what they perceived as adequate adaptation to their work environments, language needed to be examined closely in the data analysis process. Furthermore, a map of connections amongst the data would have to be created. Thus, the strictly descriptive narrative and ethnographic approaches were not suitable due to their extremely broad nature (Creswell, 2012). Similarly, experience-rich phenomenology was also inappropriate since it mainly dwells on lived experiences and personal interpretations (Creswell, 2012). In a grounded theory, the researcher's limitation in time and resources would have created the risk of not arriving at sufficient data saturation; therefore it was also not selected. A collective case study design was the best fit for this study as the researcher aimed to understand the multiple realities of the phenomenon. According to Creswell (2012: 73) a collective case study approach is "the study of an issue explored through one or more cases within a bounded system". This design can be extended to several cases while providing the researcher with an insight into the issue (Stake, 2008). The choice of case study was informed by the work of Stake (2008) who views a case study as a

highly interpretive endeavour that can bring out the complexity and personal experiences of an identified issue. As this study attempts to find the relationships between the participants (Stake, 2008) while generating and conveying the lived experiences of the participants to be the main carrier of meaning, participants' explanations had to be recorded in a way that their stories described the issue of enquiry. Therefore, it fell under the explanatory protocol category (Arocha & Patel, 2008).

The 'case' in this study was a group of employed women living with HIV/AIDS. The case study is bounded by the social and physical context, and time. The study context, the city of Gaborone, Botswana, is described in the next section. Study participants had to have been in their work positions for at least six months from the time of being diagnosed with HIV/AIDS.

3.3 The case study context:

Gaborone, often described as one of Africa's fastest growing city, is also the capital, commercial hub, and seat of Botswana's government administration (Kent & Ikgopoleng, 2011). It is a small, fairly peaceful and wealthy city with shopping malls, located in the valley on the Notwane River, in the eastern corner of Botswana. The city has a population of 192,000 inhabitants (Botswana Central Statistics Office, 2009). This city had the first centre for free antiretroviral treatment in Botswana. A number of people living with HIV/AIDS in Botswana moved to Gaborone to benefit from free care. It is practical to focus this study on understanding the particulars of women living with HIV/AIDS and the complexity within their natural conditions or their own habitat as advised by Stake (2008). Customary practices that stigmatise and have a disempowering effect on woman are powerful drivers of HIV/AIDS in many communities in Botswana (Temah, 2007). At an individual level, women hold several roles simultaneously, for example, mother, sister, and wife, and are more actively involved in work and chores that maintain the society, such as the preparation of family meals and small-scale farming, than their male counterparts. As a result, the stigma of living with HIV/AIDS, coupled with the other existing gender inequalities, has the potential to worsen the HIV/AIDS epidemic since both have a disempowering effect on women (Zulu, Dodoo & Chika-Ezee, 2002). Stigma, fear of rejection, and discrimination are real barriers to participation in the work place. Voluntary or involuntary disclosure of one's HIV positive status at the work place can lead to stigmatisation and discrimination. Frequent absences

from work because of multiple illnesses can lead the employer and workmates to figure out the status of the worker leading to possible stigmatisation (Braveman et al., 2006).

3.4 Study Population and case selection

The cases are of prominent interest before formal study begins' (Stake, 2008: 129). The population of cases for this study are employed women meeting the following criteria:

- Aged from 21 to 50 years: In Botswana the official age of consent is 21 years, while official voluntary retirement starts from 50 years of age. This age range therefore represents the majority of workers.
- Employed for at least six months: although one year's employment would have been ideal, the probation period for the government of Botswana's employees was one year; therefore, a minimum of six months at work was considered sufficient for participants to have developed adequate adaptation mechanisms.
- Living in Gaborone: this is the sample-bounded area for the case study since city life has particular contextual issues, for example living conditions, transport to work and living arrangements.

Four participants were selected through purposive sampling. In purposive sampling the investigator selects elements from the population that will be most representative or informative about the topic of interest (McMillan & Schumacher 2001). 'The cases are expected to represent some population of cases' (Stake 2008: p129). Participants with diverse descriptive characteristics were selected to obtain as many perspectives as possible, as described in more detail below.

Participants were selected from the population of women receiving medical services at the Infectious Disease Control Centre (IDCC) at the Princess Marina Hospital. The IDCC is located a few blocks from the principal investigator's (PI) office (place of anticipated interviews), hence there was no risk of connecting the interviews with a participant's HIV/AIDS status. Nurses and auxiliary healthcare nurses within the IDCC attending to people living with HIV/AIDS were asked by the PI to recruit participants. The nurses and auxiliary healthcare nurses were further asked to recruit only willing women living with HIV/AIDS who

satisfied the descriptive characteristics for selection. Potential participants were enlisted for further vetting by the PI to ensure that a variety of characteristics were represented.

Maximum variation was used to ensure that the participants reflected diversity in their characteristics (Rudman, Cook & Polatajko, 1997; Mousavi et al., 2015). The characteristics for maximum variation include:

- A variety of age: 21-30 years, 31-45 years and 46-50 years of age.
- Education: one participant was included from each of the following categories:
 - did not complete junior secondary education
 - completed junior secondary
 - obtained a matriculation certificate
 - obtained a tertiary qualification.
- Living situation: participants were selected from each of the following groups:
 - lived alone
 - lived with a partner
 - lived with family or friends.

Current employment setting: participants were chosen from those employed in 'white collar' occupations (general administration, clerical, and office work) as well as 'blue collar' occupations (equipment technicians and maintenance workers). (United States Office of Personnel Management, 2009).

3.5 Data collection methods

Multiple sources of information were used to collect data; primarily via semi-structured interviews, inspection of documents (for example, government policies on HAART administration and status disclosure at work), and artefacts (such as AIDS campaign posters). The use of extensive, multiple sources of information in data collection provided an

in-depth picture of participants' experiences of returning to, and remaining at, work. As Stake (1995) asserts, through this method of data gathering, a comprehensive description of the case emerges as analysis of themes and interpretations or assertions about the case are made. After obtaining consent, interview times were arranged at a convenient time and venue for the participants. A letter explaining the purpose of the study was given to each participant after a verbal, detailed explanation by the PI (see Appendix 3).

Data was stored in a password-protected laptop and on the PI's desktop computer, which was also password-protected. As a backup the interview documents were also copied to a password protected flash drive. Both the laptop and flash drive were secured in a locked cupboard which was only accessible by the PI. After obtaining consent, interview times were arranged at a convenient time and venue for the participants. A letter explaining the purpose of the study was given to each participant after a verbal, detailed explanation by the PI (see Appendix 3).

The interviews started with introductions after which the PI explained the purpose of the interview and requested permission to record the interview and take notes (see Appendix 3). The PI audiotaped the interview and took interview notes (Asmussen & Creswell, 1995). The participants were assured of complete confidentiality, The PI avoided any notion that could insinuate any form of gender discrimination, by guaranteeing that their involvement would be in respectful manner, and that their contributions could affect many lives positively at all levels. The participants were further assured that their economic, social and political rights would be respected including their rights to making choices concerning their sexual and reproductive lives. The PI reassured the participants of his commitment to an interactive interview session free of discrimination in all levels of their lives irrespective of their culture, age, gender, HIV-status, social- or economic-standing in the society (Reverby, 2002). The interviewer used semi-structured, open-ended questions (see Appendix 1). The interview started with easier, straight-forward, non-threatening questions to make the participant feel comfortable and then moved to more in-depth questions. The participant and the PI then arranged for a second interview. The recorder was turned off after the last question had been answered followed by an informal chat with the participant before she departed. Participants were paid R30 for taxi fare after the interviews to cover their travel costs.

3.6 Data management

A verbatim transcription of the interviews was undertaken with the help of a research assistant who is fluent in both English and Setswana, as required by the Botswana Ministry of Health Ethics Committee. The PI listened to each recorded interview to ascertain that the transcriptions were accurate. Then, they were transcribed verbatim into text documents. The transcribed interviews became the documents used for data analysis. The documents containing the interviews were then stored in a password-protected laptop and on the PI's desktop computer, which was also password-protected. As a backup the interview documents were also copied to a password protected flash drive. Both the laptop and flash drive were secured in a locked cupboard which was only accessible by the PI.

3.7 Data analysis

A combination of listening to audio data and reading through all transcribed data presented a better insight of the information even before any data analysis. All observations recorded in the field notes and documents pertaining to the study were analysed the same way as the data from interviews. A description of each case was recorded systematically from the more general to specific recurring themes, patterns and categories which become evident (Creswell 2003). Details of the contextual richness of each participant's experiences, for example, what the participant regarded as a positive adaptation process and which strategies they used to return to work and remain employed, were explored and described. Attempts were made to actively seek to remove the power imbalance between researcher and participant by supporting the participants' standpoints (Harnois, 2010) and acknowledging them as the experts and authorities of their own experiences while analysing and interpreting the data. Data obtained from inspection of documents and artefacts was also described, interpreted and analysed.

3.7.1 *Within case Analysis*

As McMillan and Schumacher (2001) ascertain, data was pre-arranged in predetermined categories for each individual case emanating from the information source. Each category was labelled against each individual to aid data organisation. Emerging data trends were tabled for each case, for example, individual interview data was arranged in categories for

analysis through the inductive approach; and a deductive analysis was employed towards the end of the thematic analysis through the application of occupational adaptation theory in order to understand the emerging data (Pope, Ziebland, & Mays, 2000.)

3.7.2 Cross-case analysis

A cross-case analysis and interpretation of the meaning of the case was done, with case comparisons being made against categories to search for similarities and differences. This was followed by selecting pairs of cases and then listing the similarities coupled with intergroup differences. Data was divided based on data source to exploit the unique insights possible from different types of data collection. 'Lessons learned' from the cases as referred to by Lincoln and Guba, (1985) was used in the interpretive report.

3.8 Ensuring scientific rigour: trustworthiness

Commitment to rigour is an important step towards ensuring study trustworthiness. Mays and Pope (1995) argued that if rigour is adhered to strictly, then the same data could be analysed by different researchers and the same conclusions reached provided the researchers are knowledgeable of research methods. Rigour in qualitative research can be enhanced by ensuring credibility, transferability, dependability and confirmability (Creswell, 2012; Stake, 2008).

The researcher did not use a feminist lens at all, in interpreting data. However, through ongoing engagements with his two supervisors, who are both women researchers, the researcher was alerted to his sometimes patriarchal or heteronormative tone in his interpretive gaze and use of language.

3.8.1 Multiple data sources

Multiple data sources were used to ensure dependability. The data sources included semi-structured interviews, documents (for example government policy on HAART administration, policy on status disclosure at work) and artefacts such as AIDS campaign posters. Although these sources were not displayed in the write-up of this report, they helped in gaining multiple perspectives while at the same time determining consistency in emerging findings.

3.8.2 *Thick Descriptions*

A thick description, or detailed description of cases, was provided. These included the PI's interpretation as well as a thorough account of the methods and procedures used during and after data collection to strengthen transferability. This helped to convey the actual situations under investigation and the contexts that surrounded them.

3.8.3 *Member checking*

Member checking is a method of confirming the accuracy of data with participants while unofficially reviewing the data. Submitting drafts for review by participants is one of the most important forms of validation of qualitative research (Glesne & Peshkin, 1992; Lincoln & Guba, 1985). Member checking ensures credibility of data and was used to minimise the chances of misinterpreting the data. Participants were presented with the data generated from the interviews for verification as to whether it was a true representation of what was intended, and to suggest alterations to reflect their true position. Member checking included both review of transcripts by participants, and verbal inquiry by the PI. Two out of the four participants were able to verify the data from the interviews by reading, while the other two participants verified the data via verbal inquiry by the PI.

3.8.4 *Peer debriefing*

Discussing the research process with colleagues who are unbiased and knowledgeable in qualitative research processes provides credibility and dependability (Krefting, 1991). The PI's two supervisors formed the main debriefing team. Regular Skype and exchange of emails was used to critique the study by challenging the PI's assumptions and interpretations and to provide support by verbal and written feedback to the PI.

3.8.5 *Credibility*

Lincoln and Guba (1985) recommend the upholding of credibility as one way of ascertaining trustworthiness. In this study, triangulation through use of different data sources, as described previously, was used to boost the accuracy of the research findings to capture the perspective of study participants. Peer scrutiny of the research and advice was used to boost the study's credibility. The two supervisors' knowledge on qualitative research was allowed to

bring fresh perspectives to the study, consequently contributing to the study's credibility. Frequent discussions with the supervisors were employed with the aim of identifying flaws in the research process so that corrective action may be taken, hence contributing to the credibility of this study.

3.8.6 Transferability

Boundaries of the study were conveyed in sections 3.2 and 3.4, and information on data collection methods, number and length of data collection sessions, the time period over which data was collected, and the contexts in which it was collected were described in detail in this report. This was in order to enhance the ability to make judgements about the applicability of the study findings in other settings, contexts and/or populations.

3.8.7 Dependability

There is a close tie between credibility and dependability in that the demonstration of the former goes a long way to ensuring the latter, as stressed by Lincoln and Guba (1985). The process of this case study was reported in detail to allow readers of this research report to understand the methods used. Details of the procedure followed during data gathering, for example, participants experiences and contexts, were captured.

3.8.8 Confirmability

A record of all activities (audit trail) undertaken by the PI related to this study, particularly the data analysis method, was kept to establish confirmability of the study's findings.

3.9 Ethical considerations

This study sought to conform to the highest ethical standards in accordance with the Declaration of Helsinki of 1964 (Loff & Black, 2000).

Ethical approval was obtained in accordance with the Helsinki requirement that research protocols should be reviewed by an independent committee prior to initiation from the University of Cape Town (UCT) Human Research Ethics Committee, (HREC REF: 099/20 12) (See Appendix 5) and the Botswana Ministry of Health (HRU REF; PPME 13/18/1 PSV (219)) (See Appendix 6) and Princess Marina Hospital's Ethics Committee. (REF; PMH

5/79(1)) (See Appendix 7). Participants were respected and treated as autonomous beings throughout the study by employing the following measures to guarantee their protection:

Participants were assured of confidentiality and anonymity. To protect the identity of participant's, pseudonyms were used in all notes and transcriptions of interviews and no personal information was used. The data was locked away in a cupboard only accessible to the PI. Recruitment of, and appointments with, participants occurred at the IDCC but interviews were conducted in a location convenient to the participant to avoid the possibility of staff members linking the diagnosis of HIV/AIDS to participants. A verbal agreement of non-disclosure of HIV/AIDS status to third parties was entered into between the PI and the research assistants.

Arrangements were made with the psychologist at Princess Marina Hospital to attend to any participant who required psychological intervention as a direct or indirect effect of the study interview.

- Participation in this study was completely voluntary, and participants who wished to withdraw were allowed to do so at any stage of the study.
- Collected data - including audio-recordings - was kept safely locked away by the PI and destroyed twelve months after completion of the study.
- All participants were advised that complaints or comments about the conduct of the research should be submitted to the Ministry of Health Headquarters in Gaborone and/or to the Human Research Ethics Committee at UCT.
- All transcripts were anonymous and all research materials such as recordings and transcripts were securely stored with only the PI having access.
- A modest transport payment of R30 was paid to participants in line with the Botswana research ethical committee's regulation. The second interview session with the participant was communicated to her verbally in person or telephonically.
- Interviews were arranged for a time and location that was convenient to participants.

3.9.1 Informed Consent

During recruitment, potential participants received letters explaining the purpose, nature of the study and explicit expectations of participants prior to mentioning the risks and benefits and requesting their participation in the study. Once they had agreed to participate, they were required to complete the informed consent form prior to being interviewed (see Appendix 2). The study information was thoroughly explained to potential participants during the recruitment process. Participants were given a copy of their signed consent form on request.

3.9.2 Respect

As Stake (2008) argues, an institutional review board's authorisation does not form a license to invade the privacy of research participants. Respect for participants is paramount. The PI endeavoured to respect participants and avoided any behaviour or language that could stigmatise any participant based on gender, status, ethnicity, age, disability or condition, or that conveyed any value judgements.

3.9.3 Non-maleficence, Beneficence, Benefits and Risks.

While there were no foreseeable risks to the participants, effort was made towards ensuring that all ethical and legal requirements were met. Accurate and balanced information about the study was conveyed to the participants, so that they could to make decisions about their participation, and that the decision to participate was autonomous and voluntary. The PI ensured that all questions asked were pertinent and did not cause any discomfort to the participants, hence; this study did not expose the participants to any potential harm. Participants were assured that their HIV status would not be disclosed to third parties. Beneficence for people living with HIV/AIDS involves ethical assurance of their well-being. The PI is duty-bound to reduce harm while maximising benefits. Polit and Beck (2008: 191) assert that 'human research is meant to benefit participants or the society as a whole'. While there was no direct benefit to the participants, the outcome of this study would assist people living with HIV/AIDS, who wished to return to work, to adopt adaptive mechanisms in order to reintegrate into their workplaces.

Polit and Beck (2006: 79) advised that 'participants must not be subjected to undue risk or

harm or discomfort and that the study must be important or beneficial to the society'. The outcome of this study is important in that interventions leading to a better adjustment to work environments for people living with HIV/AIDS could be discovered.

3.10 Confidentiality

Confidentiality was maintained throughout the study process. Participants were asked to provide their preferred pseudonyms that were maintained throughout the study.

A verbal contract between the PI, peer-reviewers and research assistants was maintained. The identity of participants was kept confidential by all involved through use of pseudonyms. Information and materials pertaining to this were securely stored by the PI.

3.11 Justice

Justice to research participants, and especially for women living with HIV/AIDS, could be regarded as being synonymous with fairness. Gillon (1994) summarised justice as the moral obligation to act fairly between competing opinions. Kitchener (2000a, 2000b) further described justice as the foundation of equal treatment for all individuals. In the broadest sense, justice is dealing with others as one would like to be dealt with by others. Even though HIV/AIDS is common among men and women in Botswana, distributive justice is paramount for women due to their vulnerability, social and economic inequalities, (Phaladze & Tlou, 2006). The PI ensured that distributive justice prevailed throughout this research.

3.12 Conclusion

This chapter listed the aims and objectives of the study and described the research methodology that was adopted and the reason of settling for it. The chapter also explained the process of selecting and recruiting. Data collection, analysis, storage and disposal were also discussed. Finally, ethical considerations and research rigour were discussed.

CHAPTER 4: FINDINGS

4.1 Introduction

The presentation of findings in this chapter starts with an introduction of each case followed by situating the cases within context. Themes are presented in table form as they emerged from the data (Creswell 2012). Participant's quotations are also presented to support the themes and categories.

4.2 Introducing the cases

4.2.1 *Miss Dolly*

Miss Dolly is a 44-year old woman who lives with her two children in a high density township. She is the sole bread-winner in the family, takes her family responsibility seriously and is dedicated to caring for her family members. Although she is committed to her family responsibilities, she finds that covering her rent money is the main problem since her salary is not sufficient. She has realised that being poor leads to family feuds even over trivial things like food and cellular telephones. These fights could be a possible cause of family strife and provocations within the extended family. An example of family strife is fighting over inheritances. On the surface the family looks like it is close when it is actually far apart. Miss Dolly worries about what would happen to her family if she died. She is a friendly person who is full of fun and entertainment. She is also a playful, talkative person with a carefree attitude.

Miss Dolly is a cleaner with long experience within the government and private sectors. She cleans offices and passages and also makes tea for the officers. Miss Dolly has more responsibilities apart from being a cleaner. She is a jack-of-all-trades as she does more than just cleaning. Miss Dolly is a woman with big dreams but meagre earnings. At her workplace, Miss Dolly experiences negativity from her work colleagues who try to pull other people down. This is further complicated by an employer who is unappreciative of work that is well done. The problem of lack of appreciation applies to the entire work force; it is not particularly targeted at her. Miss Dolly refused promotion due her occupational preference to remain a cleaner rather than being promoted to a messenger. She is aware of abuses that

unsuspecting junior officers are subjected to by senior officers. The reality that cleaners can be laid off work at any time is a source of fear for her. She is afraid of losing her earnings as she is unmarried, has a young family, and lives in a poor neighbourhood. Miss Dolly describes herself as an organised and responsible worker who was “born busy”. She is committed to excellence and orderliness. Miss Dolly feels that the tough times are over since she accepted her HIV-positive status. Despite being a cleaner, she also undertakes other duties. For example she also makes tea for officers who are entitled to take tea, in addition to cleaning offices and passages.

At first, Miss Dolly started to experience facial blemishes but was unaware of her real diagnosis. Her family was concerned about her, especially her daughter, who is very inquisitive and suspicious about her mother’s medical problem. Miss Dolly initially distrusted expert opinion about her facial infection. She was unsupported during the HIV testing and almost gave up hope, especially shortly after she was diagnosed with HIV. When she was diagnosed, she was in denial, initially blaming her facial infection on parasitic attacks. Once she was convinced that the cause of her facial infection was HIV/AIDS, she accepted the diagnosis and her stress levels from hearing her HIV/AIDS diagnosis went down. Miss Dolly had no other complaints about her health. Although she is a person who does not volunteer personal information easily, she has a friend that comforts her in times of sorrow. The two have a mutually supportive relationship. They have developed a secret language and a cover up plan to avoid revealing their HIV-status to other people. Miss Dolly is a spiritual person. She has changed her lifestyle; for example, now she lives a positive life and uses nutrition for survival.

4.2.2 Miss Viata

Miss Viata is a 37-year old woman on whom her whole family depends despite her small salary. She cares for her two children, aged fourteen years and two years respectively. The youngest child is more demanding of care due to her young age. Miss Viata’s mother is a very outspoken person, although she has a heart problem. The situation at home is very bad because of her stubborn siblings and her mother. Her medical problem is exacerbated by the bad home conditions where her younger sister is very disrespectful but her mother does nothing about it. After work, in addition to having to care for her young baby, more work

awaits her at home. Home is the most depressing place especially because of her undisciplined siblings who create more stress for her. Her sisters do not contribute towards buying basic food stuffs and yet they partake in eating. She stays at her mother's home because she has no house of her own and she has nowhere else to go. Miss Viata is not able to afford to pay the rent from her small salary. She rarely goes to church because she has no free time. Miss Viata does not have enough money to care for her children as she would like, but she is ready to work even harder as a house keeper for the family who employ her.

Miss Viata started to work for her current employer in 2007. Every December, her employer leaves for his native country for one or two months while his wife comes for a three-month visit. Her employer's children are independent grownups who require no attention. In 2008, her CD4 count went low and her employer was concerned about her poor health. He advised her to go for HIV testing and even accompanied her to the testing centre. This is when she started on ARVS. Her employer has continued to provide her with both medical and social support and he also keenly monitors her progress. He encourages her to go to the clinic whenever she is ill and at times even accompanies her to make sure she receives good treatment. Although she has a small salary, her social welfare from her employer is good. She has full faith in her employer and relies on him for her up-keep. She is aware that some employers never treat their workers with dignity, for example employees may be asked to use different eating utensils because the employers fear they could get infected. She is also aware that many employers never allow their employees time off even for medical appointments.

Miss Viata takes comfort from her two children and her work. She chose to continue working despite all the challenges – in fact she has no choice but to work because she needs the money to take care of her children. Miss Viata is a committed worker who was determined to know her HIV status but partly blames herself for the diagnosis as she feels that she should have been more careful, especially with her previous sexual behaviour. She worries a lot about her children. She even fears what will happen to her and her children if her employer returns to his native country permanently. Not many people know about her HIV-positive status. Because of family mistrust, Miss Viata is unwilling to disclose her HIV status to her mother. Although her son knows his mother is on some medication, at fourteen years of age

he is considered to be too young to be informed about his mother's condition. Miss Viata really wants to move out of her mother's house but she has no money to rent her own house.

At work, she sometimes feels very weak, but at other times she has no problem at all. She often finds she has no appetite and does not eat properly which leads to dizziness. When this happens, she forces herself to continue. Before she decided to go for HIV testing, Miss Viata had started to experience headaches to the extent that she feared that she may have a stroke one day. She tires quickly and often experiences dizzy spells and migraines.

4.2.3. Miss P

Miss P is a 36-year old mother of three. She has one brother and a sister. Miss P's mother stays in the village with one of Miss P's children. Miss P's other two children live with her younger sister who supports and cares for them. Miss P regularly sends money to her sister for up keep of the children. Miss P lives with her brother in their mother's Gaborone house. She has a boyfriend who works in the army. The boyfriend lives alone and only visits occasionally and on invitation. She has a colleague at work who knows her status and they both support each other at work.

Miss P works in a salon in Gaborone. Initially, before the death of her father, she worked as a secretary in an electrical company. After her child's death, she discovered that she was pregnant by another man while she was still working for the electrical company.

She worked as a secretary despite being interested in manual work. However, because her father was opposed to her engaging in manual work; she switched occupations after her father died. After she gave up the secretarial job, she looked for work but could not find anything that interested her. She therefore started selling scones, cakes and other baked products, mainly to schools. She trained to plait hair from home but realised that working from home is unsustainable because customers are not willing to pay at the appointed time. Miss P finally secured a job in a salon where she plaits and relaxes hair for customers. At the workplace there are cleaners, and supervisors so her duty is only to go, sit and wait for customers in the salon. She has already started to buy some salon equipment in readiness for her future salon business.

Miss P discovered her HIV-positive status during her tertiary education. She and a friend

decided to be tested for HIV at the local testing centre. She later went to check her results and discovered that she was HIV positive. Her friend went later and also discovered she had tested positive. Both agreed to keep their HIV-positive status secret. Around that time, Miss P had a boyfriend who is the father of her two children. He had HIV/AIDS and stayed alone. He became very ill but refused to go to hospital for treatment, choosing to consult with traditional doctors instead. His mother was very concerned about his condition. He died in 2005 of AIDS related complications.

Miss P's first child died in 2005 about the same time that her boyfriend died. A short time after the death of her child, she started feeling ill. Her legs started to swell; she started to experience frequent headaches, especially when she talked too much, when she was stressed or when she had little sleep. She developed a weakness on one side and had terrible back pain. Miss P was counselled by a nurse and was put on TB-prevention prophylaxis. She was tested for pregnancy as well. The pregnancy test was negative although she was sure that she was already pregnant. Miss P's mother knows about her HIV-positive status and she also opened up to her young sister about her HIV status.

After she was diagnosed and after the death of her child and her boyfriend, she started to take anti-depressants. Every time she took the anti-depressants she felt dizzy, sometimes for a whole day. At work she realised that whenever she inhaled the strong manicure chemicals that they used, or whenever she was exposed to strong smells, she experienced flu-like symptoms and a blocked nose. She also developed migraines at night which meant that she would report late for work on the following morning. Once, when she reported late for work, her supervisor enquired about her health status, but she did not divulge that information. She is aware of her rights as a worker but she also believes that her health comes first. She always goes to the clinic whenever she is sick, and sometimes the doctor gives her sick leave.

4.2.4 Miss Moss.

Miss Moss is a 26-year old lady who is the only child of a caring and concerned mother. She always dresses well, mainly in sports gear. Miss Moss prided herself in her beautiful physical appearance. She is currently living with her fiancé who is widowed. Their relationship started off as platonic but developed into a love relationship. Miss Moss is a responsible and

exceptionally happy person with a positive attitude and a self-assured personality. She has no children of her own but hopes to have children of her own someday. She does, however, take care of her fiancé's children. Miss Moss has a caring fiancé who sacrifices much for her. He picks her up from work every day. She in turn works hard on the relationship. Miss Moss and her fiancé first had sexual intercourse when they went on holiday in Durban. They played a drinking game and she developed alcohol poisoning. He rushed her to hospital where she was treated and discharged. Miss Moss works out a lot and takes lots of water for rehydration.

Miss Moss is a university business information graduate who works as a bank teller. She once worked as a baby-sitter for her fiancé's late wife, where she also helped with household responsibilities. She has worked her way into a comfortable job in the banking industry. She has a good medical aid from the bank and a flexible work schedule which allows her time off to go to the clinic. The work of a bank teller requires keenness and good customer service; a lack of which can affect the bank's image. She serves and treats colleagues calmly. She is aware that a positive self-concept and attitude towards others is important in the workplace. The bank has rules and regulations that need to be followed, for instance, tellers are supposed to hand over the day's cash for safe keeping overnight. Her supervisors are good people who reassure her about her work, but there is no support from her fellow tellers. There is extremely poor teamwork and a lack of cooperation among the tellers, for example, arguments about how to keep money overnight.

Miss Moss is sceptical that the team-building trip that management is planning will have a positive outcome. Her doubts are informed by the level of gossip among the staff especially the tellers. The behaviour and bad attitude disheartens her. Miss Moss is a committed person who is working at bettering herself. Although she enjoys her work, she does not plan to stay in it long since it is not her field of training. Another factor is that the work of a teller is not a professional one so tellers can be laid off anytime. Therefore, Miss Moss is working towards getting a position in Information Technology which she feels will be better.

Initially Miss Moss always suffered from recurrent flu-like symptoms. She decided to go for a HIV test. The results were positive. At first she did well health-wise but later her CD4 count started to go down. After counselling from her mother she decided to start treatment. Her CD4 count went up from 190 to 506 and the viral load went down after she had completed

two years of treatment. She also started to gain some weight. Although she is not scared to reveal her HIV-positive status, she is hesitant to do so. She is however scared of death. Miss Moss and her fiancé talk regularly about current developments in the management of HIV/AIDS. Her fiancé distrusts the public medical system as he claims that patients' privacy is compromised.

4.3 Situating the cases within context

The women (the cases) originated from different villages in Botswana, but all live and work in the city of Gaborone. Their ages range between 26- and 47-years old. All the cases are single women living with children. Three cases work within the blue-collar sector, and one for a local bank.

There is agreement among the participants that there is poor public knowledge about HIV/AIDS matters in Botswana. For instance, the brother of one of the participants did not believe his sister was HIV-positive as he believes HIV-positive people look skinny, weak and depressed; he did not believe that a person living with HIV/AIDS could look so well. The participants also felt that there is inaccurate public knowledge on HIV/AIDS. For example, Miss Moss's fiancé believes HIV/AIDS is about a big cartel making money among the developed world.

The burden of HIV/AIDS in Botswana is complicated by a weak health system within an unhealthy society. The society is unhealthy since it is alleged that nearly everybody has some medical condition or another. The increase in non-communicable diseases identified in a World Health Organization report (Guthold et al., 2011) impacts the burden of disease in many African countries. Some suffer from hypertension; while others suffer from chronic conditions like diabetes. All of the cases work within this ailing work environment in which every worker has a health problem such as diabetes. The health system seems to have poor methods of disseminating health education information about HIV/AIDS. For example, HIV/AIDS posters are displayed behind other objects such as water fountains but are at times also vague. For example, the researcher observed that a poster displaying the ABC of HIV/AIDS (A for Abstain, B for Be faithful, and C for Condomise) is only partially visible. Resources to support people with HIV/AIDS seem to be declining. One participant reported that there was previously a HIV/AIDS counsellor at her workplace but is no longer one

available. The pharmacy at the IDCC is always full, with long queues, and is exacerbated by rude and impatient workers. Appointment times to see the consulting doctor to review patient's progress or lack thereof, and to renew prescriptions, are inflexible. Patients on ARVS are not allowed to send proxies to collect their medication, so they have to take time off work every time they need their prescriptions refilled. If they could send a third party, it would also help to reduce the stigma associated with HIV and AIDS as it would be difficult to ascertain which was a AIDS patient and which one is to 'collect medicines'. The economic context for most of the participants is poor, with almost all reporting receiving low salaries. This state of affairs applies to most people in their workplaces. The women are aware that poor pay and lack of progression at their different work environments applies to all employees and not necessarily only to them. They are also aware of the country's general economic recession.

Most of the cases live in townships, mainly in modest or poor family houses with limited development in the surroundings. In order to overcome this problem, there is a strong proposal from the participants that all employers, and particularly the government, should pay their workers well. There is agreement among participants that the government pays its workers poorly, which is probably due to the economic recession the country is experiencing. The cases indicated they have limited career prospects within their respective present positions, including the banking sector. There is a strong feeling that they are being paid poorly for the work they are doing compared to others in their different work environments (i.e. they are doing more work than they are paid for).

4.4 Themes

Three themes emerged from the data in the cross-case analysis:

THEME 1: Agency in developing personal work strategies

THEME 2: Adherence to medical treatment

THEME 3: A mind-shift: Lifestyle and occupational adjustments

A summary of the themes and categories is shown in Table 1 below. The themes are discussed in the subsequent sub-sections.

Table 1: Themes and categories for the cross-case analysis

Themes	Categories
Theme 1 Agency in developing personal work strategies	Time management
	Altering task sequence
	Resting
	Reducing work demands
	Prioritisation
	Taking a pragmatic approach
	Awareness of workers' rights
Theme 2 Adherence to medical treatment	Routine
	Awareness about food intake and medication
	Awareness about the dangers of poor adherence
	Seeking privacy to ensure compliance
	Actively seeking care
Theme 3 A mind-shift: Lifestyle and occupational adjustments	Choosing to live
	Life style adjustments
	Occupational adjustments
	Balancing work and social life

4.4.1 Theme 1: Agency in developing work strategies

The four participants in their endeavours towards ensuring adequate adaptation to their work environments, displayed agency in developing work strategies which included 'Time management', 'Altering task sequences', 'Resting', 'Reducing work demands', 'Prioritisation', 'Taking a pragmatic approach', and being 'Awareness of workers' rights'.

Time management: Participants used time management strategies to adapt to their different work environments; for instance some chose to be at work earlier so that they could rest between duties.

Miss Dolly: 'I start my work at 7, but I have to - as you know to be a good employee you have to come earlier, like - I can be here at half 6, so that when the officers came, they find that everything is ok.'

Altering task sequences: other participants choose to alter task sequences for example, sweeping the yard first and then the house.

Miss Viata: 'then sweep the yard, and then attend to the house.'

Other participants chose to start with the offices, then the toilets:

Miss. Dolly: 'I start by cleaning the offices then the toilets.'

Resting: Resting was a common strategy among the participants and mainly employed between work tasks or during breaks.

Miss Viata 'Mmm, working is never that easy, it's a bit hard. I work from 7am to 4pm, but obviously working comes first, but I believe it's my nature; I am a weak person- in my body/health wise. I suffer from fatigue, then it looks like there is a lot of work and I am overwhelmed by work. But it's not that bad; when I am tired they encourage me to rest when I feel unwell. I have to take a break.'

Reducing task demands: some participant reduced task demands. For instance; one participant swept the yard three times a week instead of every day. Miss Viata 'Then I sweep the yard, then I sweep, I sweep on Mondays, Wednesdays, and Saturdays.'

Prioritisation: most participants arranged their work to manage the excess work.

Miss Viata: 'House chores - it depends on whether I have laundry to do on that day. With the laundry I do it on Mondays and Saturday.'

Taking a pragmatic approach: some participants decided to take a pragmatic approach in order to adapt well in their work environments; for example one participant was able discern

malice from honest mistakes.

Miss Dolly; 'If she or he can do, she will try to do something and when I come I will see that he tried to make to do something.'

Awareness about worker rights: some participants were aware of their worker's rights.

Miss. Dolly: 'Because others come and they can say "hey, if you don't want to do this I will go and report you to your boss" then I say I will be the one, I am going to be the first one to be there, if you go to my supervisor I will go to the Permanent Secretary.'

'Miss P:'I told them that nna (me) I think my health comes first because they were saying that it's not allowed but the owner of the salon doesn't have any problem, the problem is the supervisors.'

4.4.2 Theme 2: Adherence to medical treatment

All the participants attested to the importance of good adherence to medical treatment.

Some reported to have devised a routine that worked for them. Others ensured that they had some food before they could take their medications.

Routine: Almost all participants had devised a daily routine that ensured adherence to medical treatment; some took their medicine at work so that they could have food first.

Miss Viata; 'So I take my medication when I get to work, but at work I have no concerns because it means when I arrive I do whatever I do, I make something to eat.'

Other participants attested to taking their medicine in the morning before leaving home and in the evening after work.

Miss. P: 'My tablets, I take them at 7 in the morning and in the evening, I leave home around half 7 after taking them because I have to eat before taking them.'

Miss Moss: 'I knock off on time to take my night dose.'

Miss. Dolly: 'My medication stays at home, as I take one, there is the other one which I take 2, one in the morning and one in the evening. In the morning I take at 8 o'clock I just take it

and when is time here, when 8 comes I just drink it and the other one I drink at home. And the other one is of night; I take it at night at home.'

Awareness about food intake and Medication: Participants underscored the importance of nourishment through eating food after or with their medication.

Miss. Dolly 'we have to eat like this, kana (because) you know that we are sick.'

Awareness of dangers with poor adherence: All the participants seemed to understand the dangers of poor adherence to medical treatment, and good medical compliance, while at the same time being aware of the dangers of nonadherence.

Miss Moss: 'I have to be on time to take my medicine.'

Seeking privacy for better compliance: some of the participants ensured that they sought privacy when they took their medication.

Miss Moss, 'the worst thing will be going with them at work'.

Some participants took their medicine at home, while others took time off from their busy work schedules to do so. Some participants choose to do so discretely in the kitchen at work.

Miss P: '... if you are not and you are not feeling fit to come to work and you are not given a sick leave, you just call saying that I'm not feeling well I won't be able to come to work, hmm'

Ms. P: 'No, we have a kitchen there; if I have a customer there I will just tell the customer that I'm coming, then I will take them and go to the kitchen and drink'.

Actively seeking care: Some participants ensured that they actively sought care whenever the need arose.

Miss P; 'I told them that (nna) me I think my health comes first.'

Other participants rescheduled their work in order to create time for ARV refilling appointments.

Miss Viata: 'that's why I have allocated time after lunch for my refill because I don't want it to interrupt with my work'.

Miss Viata 'If you come in the morning it disrupts the work schedule.'

All four participants attested to going to the clinic whenever they felt sick and needed medical solutions.

Miss P; 'if somebody is not feeling well, she has to go to the clinic.'
Some participants testified to have taken anti-depressants.

Miss P; 'I was given Emitriplin and Diazepam, and I had to take them.'

4.4.3 Theme 3: A mind shift - lifestyle and occupational adjustments:

All four participants reported to have made a deliberate mind-shift toward a positive lifestyle and occupational adjustments that were intended for adaptation to their different work environments. Some choose to live; others had diverse lifestyle adjustments that were targeted towards overcoming special negative work environment experiences. Occupational adjustments featured considerably among the participants' desired way of positive adjustment to their varied work environments. Positive living was also a common strategy among the participants.

Choosing to live: Participants choose to live by living to be an example while others choose to look at life positively.

Miss Moss: 'In a general sense I work to be successful, I work to be a better person in the society, a better example which I haven't been but it can be corrected and yah, just a better person, a better friend, a better daughter, a better worker and always stand to be corrected where I stumble'.

Miss Moss; 'so this one could actually be a positive thing that, my spouse or partner is also living positively, it encourages me to live positively'

Lifestyle adjustment: some participants started to adopt positive lifestyles; some even stopped alcohol and clubbing for health reasons.

Miss Moss; 'avoiding fizzes, juice - Anything possible, avoiding alcohol, avoiding drugs, just trying to take care of myself.'

Participants also attempted a balanced life in their endeavour to adapt to their work environments.

Miss Moss, 'I work out a lot, I work out a lot, and live well', Miss Moss: yah, I mean like now I was just telling you my CD4 is from 386 now to 506 so yah, that is all hard work. I work out, I don't drink anymore although there are days when I'm just a victim of these people, but I don't drink, I avoid alcohol because it has, I'm now used to it. I don't want to drink and I don't smoke, I don't go out at night, I rest, I eat well, drink lots of water, yah.'

Some participants even resolved to abandon eating pork for fear of worm contamination or infestation.

Miss Moss: 'apparently now pork has a lot of worms, a doctor speaking on the radio yesterday that he removed like 20 meters-sized worm, long from somebody's large intestine, colon, 20 meters, he says some doctors have even seen worse'.

Others began to use sexual protection.

Miss Moss: 'yeah we play it safe. We use protection.'

Occupational adjustments: This strategy seemed popular among participants as it included rescheduling of work, balancing of housework, social life and official work.

Miss Viata 'I then sweep the yard, then attend to the house because; with house chores it depends on whether I have laundry to do on that day. With the laundry I do it on Mondays and Saturdays.'

One participant reported balancing work with her social activities. *Miss moss; "I balance my office work and my social life.*

Positive living: All the participants mentioned positive living as a strategy that enabled them to have a positive state of mind. This included using constructive efforts like physical exercise, adherence to medication and eating recommended dietary necessities which helped in realising maximum adaptation in their workplaces. A positive state of mind, centred on faith, seemed to lay a foundation for lifestyle and occupational adjustments.

Miss Moss; 'I work out a lot, and live well.'

Miss Moss; 'I eat fruits every day and my meal is vegetables, avoiding fizzes, juice. Avoiding alcohol, avoiding drugs, just trying to take care of myself.'

Miss Moss: 'yah, I mean like now I was just telling you my CD4 is from 386 now to 506 so yah, that is all hard work. I work out, I don't drink anymore although there are days when I'm just a victim of these people, but I don't drink, I avoid alcohol because it has, I'm now used to it. I don't want to drink and I don't smoke, I don't go out at night, I rest, I eat well, drink lots of water, yah.'

Optimistic outlook: All the participants mentioned having resolved to keep a positive attitude, like holding on to hope for a possible cure and for a better life.

Miss. Dolly 'my prayer, I am asking God to heal me, as there is nothing impossible for him, (akere) is it you know that lastly there was this thing of leprosy, it was not being healed by a person, only God did the miracle.

Some participants expressed imaginary future family fortunes. A number of participants had decided to live optimistic lives.

Miss. Dolly: 'Even my, plan is to have my own house, what I want is to have my own house'.

Miss. Dolly: 'As I can see that even them(children) their future is what they think (they want us to have our own house, to live (kegore) like a good life (eseng) knowing, that's why I want them to be educated so they can have better jobs with better salaries.'

Miss. Dolly: 'You will be serving yourself, (akere) it is true when you take the food from the pots, you put in the serving dish., and everyone will come with their own plates to serve himself as the – as much as she wants, or buffet she will put as much as she wants, if he put little or more he is out.'

At least some participants were determined to forget the past and to mend the future. They hoped for a better post within their working environment in the future. They also hoped to get engaged and have children of their own someday.

Miss Moss: 'I don't know, it's getting there, next year, this year I think we are getting engaged, December.'

Other participants had already started to buy some salon equipment because they planned to open their own salon business in future.

Ms. P: 'Hmm, right now I have got 2 blow dryers, but what I'm planning if I can have one steamer and buy 2 machines for cutting, 2 machines for haircut. That will be fine then I will know that I have to maybe find money for rent because I don't want to take a loan or anything'.

4.5 Reframing the disease

A strategy utilised by only some of the participants was to reframe the disease. They compared HIV/AIDS to flu and concluded that HIV/AIDS was just like flu but better than cancer

Miss Viata; 'just take it that I am like everyone else; it's just like someone having flu'

Miss Viata; 'it has never depressed me to think now that I have the virus this and that, I actually find the HIV better than say like' cancer'

They went on to affirm that although they were HIV positive, they had never been severely sick like some people that they saw.

Miss Viata; 'I just told them as long as one takes care of themselves there is no need to be worried, even up to now I have never been ill like some of the people I see'.

The other assertion was, that it did not matter how one had acquired HIV/AIDS infection because it was either through blood transfusion, or through sexual intercourse.

Miss Dolly; 'I don't know because it has been said that you can have it, it has been (gatweng) that is, you can have it through sexual intercourse, you can have it when someone was ill and you – she or he was HIV - and so like, you can get it from blood transfusion. I have been sleeping. And I have got a blood transfusion at some time'.

Code language, tact and playfulness

Some talked playfully about their HIV status to their colleagues and even to their relatives, but were always very tactful and considered in what they said.

Miss Dolly; 'because I'm a talkative person, I am a playful person, like when I tell you about my status I will just say it playfully as if you- it's not true, is playing'.

Miss Dolly was also very selective about what information she shared with others. She practiced discernment around disclosure and only to targeted audiences.

Miss Dolly; 'There is only one who knows truly that is true and I know hers and we talk about it all the time'.

The persistent information cover-up was done to protect family members.

Miss. Dolly: 'the one who is, the boy, ... at first I did not know how to tell them, and I said "Bring my pills there", he came with them, then I said "Do you know these pills" then he said "No". Then I said, "This is for HIV I am HIV+". And he just said "Okay". He did not ask many, any questions, but this one, the girl, is an inquisitor'.

Positive regard for others

Participants adopted the approach of appreciating others and accommodating them especially when they demonstrated vulnerability to abuse by their employers and colleagues at the work place.

Ms. P: 'Yea on my side I think its fine because when someone comes to work and that person is not well, if he collapses at work, it's not good also. Because other people when they collapse, somebody will just die there, so nna (me) I'm somebody who is afraid of other things'.

They undertook to allow for flexible working terms to accommodate their clients.

Miss P; 'sometimes when its err during the week they come- customers will come after lunch, so normally hairdressers are people who go to work around 9-10 because when you make a strict time that's when you are going to create more problems for yourself'.

As they did not wish to see people dying at their workplace, they pledged to allow employees (in their future salon) time to go to the clinic if they fell sick.

Ms. P: 'No if they just told me that they are going to the clinic or the doctor its fine, 'cause

these days many people say they are sick, they are not feeling well, and there are different types of illnesses’.

4.6 Summary of the chapter

This chapter sought to present findings as captured in the three themes; personal agency, adherence to medical treatment, and mind set shift; lifestyle and occupational adjustments. The themes are supported by categories (reflected in the Table 1) that in almost all instances, apply to all participants. Where a category applies to one or some and not all cases, this category was not presented in the table, but presented in text and in relation to the individual to whom it applies. Such case specific categories were regarded important to report given their critical relevance to the research question.

CHAPTER 5: DISCUSSION

5.1 Introduction

This qualitative, multiple-case study sought to explore the work adjustment process of women living with HIV/AIDS. Perspectives of the adjustment process begin to paint a picture about what adequate adaptation may look like and opens opportunities for further research. A key theme was the focus on 'personal work strategies' as a pivotal aspect of adaptation to work environments after being diagnosed with HIV/AIDS. The findings indicated that no personal adaptive strategy was sufficient without considering the influence and support from significant others within the work environment. This interdependency presents a press for a paradigm shift in occupational therapy interventions within the work practice domain, away from the typical approach of focusing only on personal skills to one where support from other role-players must also be considered. This finding is in line with a call within occupational science literature to shift beyond an individualistic approach to the understanding of occupation (Dickie, Cutchin, & Humphry, 2006; Fogelberg & Frauwirth, 2010; Ramugondo & Kronenberg, 2015). Ramugondo and Kronenberg (2015) in particular, have stressed the importance of paying attention to human relations as part of context, in appreciating the transactional nature of human occupation.

5.2 Discussion of the main study findings

5.2.1 Agency

This theme provided a summary of practical, personal strategies relevant to the unique and specific work environment of each participant. Surprisingly, only a few studies have examined the strategies that HIV-positive women use to adapt to their workplace. Pyett and Warr (1999) explored the survival strategies that HIV-positive sex workers used in their work environments, and found that they mainly used communication strategies similar to those used by the participants in the current study, who also used communication strategies alongside other personal strategies. Such strategies included time-management, altering task sequence, resting, reducing work demands, prioritisation, taking a pragmatic approach and awareness about workers' rights. The personal strategies used by participants in the

current study largely depended on the particular work environment in which they found themselves and were unique and specific. Smithers and Smit (1997) noted that the responses to diverse environments are mainly reactive. In the current study however, adaptation was both reactive and proactive. Sequencing of work tasks according to complexity, timing, and importance are some such proactive responses.

Participants referred to the importance of breaks and rest periods between tasks. Although these pauses and breaks could be construed by employers as decreasing the women's productivity, resting enabled the women to complete all the requirements of their jobs within the working day.

Fatigue is common among people living with HIV/AIDS (Hand, et al., 2008). Leserman et al. (2008) connected fatigue to perceived stress among people living with HIV/AIDS. Pugh (2009) goes on to relate fatigue with poor quality of life. It can be argued that regular breaks can improve work output, and in turn, provide a sense of accomplishment (Freudenberger 1974) and improve worker-employer relations (Leserman et al., 2008; Barkey, 2009). Fatigue among people living with HIV/AIDS is common and debilitating but difficult to measure.

The majority of each participant's time was spent on priority tasks. This strategy is important since it reduces the work demands within a given time allocation without affecting the desired work output.

In conclusion, agency in developing personal work strategies points to the importance of an interaction and synergy of the varied strategies towards an enabling work environment.

Taking a pragmatic approach, participants chose not to read too much into disagreements or potential disputes at work. They dealt with matters at face-value rather than link particular situations with pre-conceived ideas or personal beliefs. Robins (2005) underscores the importance of people living with HIV/AIDS to construct a new moral politics through deployment of religious, biomedical and social activism discursive framings. This strategy appears to help avert possible confrontations at the workplace, and allows for constructive and practical approaches to problem-solving. This approach reduced negative experiences within work environments. In addition, participants displayed knowledge about their rights as citizens and workers (Robins, 2004). For instance, as a result of being aware of their rights as workers; some participants were able to decline to reveal their HIV- positive status to their

employers whenever they felt put under pressure to do so. This awareness is indicative of the participants' ability to decipher any attempts to violate their rights as workers.

Agency in developing personal work strategies that are more pro-active than reactive appears to be a new finding in research regarding the process of adjusting to the work environment following a diagnosis with HIV/AIDS. For example, being more assertive and having a positive self-esteem enables workers to effectively manage and maintain cordial working relationships with workmates (Nerima, 2013). Jide-Ojo (2013) is of the same opinion. Given the generic nature of these strategies, they may be relevant in other instances where a worker is newly diagnosed with a chronic disease. The significance of this finding in relation to HIV/AIDS diagnoses is that this condition bears significant stigma, particularly in African contexts. The potential to employ generic personal work strategies in order to stay employed may go a long way in normalising AIDS as any other chronic disease, further mitigating stigma.

5.2.2 Reaction towards Health care

This study highlighted the significance of good adherence to medical treatment. Medical treatment in this discussion is used to represent all health efforts geared towards remaining employed while enjoying positive work experiences. Having knowledge about the frequency and the prescribed number of pills was pertinent to good adherence. In other words, the knowledge about when to take their medicine enabled participants to demonstrate better adherence. From the resolve that participants displayed towards adhering to their medical treatment, it was evident that all the participants were personally committed to following their treatment regimen rather than just following the doctor's orders.

The latter behaviour, namely unquestioningly following the doctor's orders suggests 'compliance' rather than being involved in a therapeutic treatment contract between the clinician and the patient (Miller & Rollnick, 2002). In the current study, participants' commitment to following their treatment regimens indicates that they were fully committed and involved in their own treatment.

Judging by the apparent discipline exhibited by all participants towards taking their medicines correctly, it can be concluded that they displayed adherence rather than compliance to their

treatment possibly because their medication regimes were not very complicated (Fogarty, 2002). Interestingly, taking food before or with medication seemed important to all four participants Weiser et al. (2010) confirmed the importance of nutritional interventions as an adjunct in the management of HIV/AIDS related complications. This endeavour is likely associated with the need to gain enough energy and stamina for the work they needed to do. Participants who could not manage to take breakfast at their homes, made breakfast at work before they took their morning dose. This observation points to a potential link between employment status and personal health maintenance. Available literature suggests a clear link between health maintenance and socio-economic status (Smith, 1999; Ncho & Wright, 2013). It appears the link between employment status and health maintenance is an area of research deserving of further exploration.

5.2.3 Awareness of the dangers of poor adherence

Understanding the dangers of non-adherence to medical treatment is probably associated with the sustained resolve that all the participants displayed towards good adherence to their medical treatments. Privacy when taking medication seemed very important to achieving good adherence. None of the participants had a problem with openly taking their medication; some even took time off from their busy schedules to do so. For those who could take time off from their workplaces to take medication, or for those who did not want to be seen by their clients, they ensured they discretely took their medication in the kitchen at the workplace. This finding supports Rajaraman, Russell and Heymann's (2006) assertion that people living with HIV/AIDS who are working require special skills to manage their medication and symptoms. Understanding the dangers of not taking their medication on time, meant that some participants took their evening medication at work to avoid the possibility of not being home on time to take the evening dose. Small medicine containers were used by some to keep the pills to avoid the chances of not taking the right dosages at work.

5.2.4 Actively seeking medical care

Actively seeking medical care is one way to ensure good adherence to medical treatment. Interestingly, there are volumes of studies on adherence to medical treatment for HIV-infected people relating to the survival of the infected person, for example those of Godin et al. (2005) and Nam et al. (2008), but very few that link it to adaptation within the work

environment. The current study provides some information to bridge this gap. For example Garcia de Olalla et al. (2002) indicate that good adherence to ARVs is related to the patient's survival. Most of the participants in the current study understood the dangers of non-adherence to treatment. However, Chesney (2003) is of the opinion that knowledge about the dangers of non-adherence is only an indicator of good adherence to medical advice, while the ability to apply the knowledge by maintaining at least 95% adherence to HAART is the important aspect of good adherence to medical treatment. This view suggests a need for further research that explores the determinants of, or indicators for, good adherence to medical treatment by people living with HIV/AIDS themselves.

5.2.5 *Lifestyle changes and work adjustments*

A healthy, or unhealthy, lifestyle change can possibly affect a worker's adequate adjustment to the work environment. Personal responsibility and commitment to lifestyle adjustments is important for positive change to occur. In this study, adequate adjustment to the work environment was related to a mind-shift towards a positive lifestyle and making occupational adjustments within participants' various occupational environments. A starting point to this positive lifestyle change was resolving to choose to live. The choice to live can be assumed as a possible stimulant to other and diverse lifestyle adjustments. Positive lifestyle seemed to be linked with a positive workplace experience and an improved work environment. In this study, participants developed different positive lifestyle strategies in relation to key occupational roles to enable them to remain at work.

Factors that influenced positive lifestyles among participants in this study included but were not limited to diet, physical activity, and adjustment of sexual behaviours. It can be observed from the data analysis that dietary adjustments were perceived as very important to positive lifestyle change. Foods like green vegetables were rated as good, while alcoholic and fizzy beverages were considered negative (Kalichman et al., 2009). Pork products were viewed with caution. Similarly, there was agreement that the use of sexual protection amounted to a positive lifestyle change (Golden et al., 2008).

Positive social lifestyle changes included cessation of clubbing life. This study is in agreement with Folkman et al. (1993) who asserted that effective lifestyle adjustment leads to improved psychological and physical wellbeing for HIV-infected people (Barkey, 2009).

Optimism for a good future can be connected to good occupational adjustment (Polatajko & Townsend, 2007). In this study some participants had started to prepare for future business ventures or settling in marriage. The notion of a possible AIDS cure someday lingered in the minds of some participants.

Creating a balance between their working and social lives was seen as important by participants. They also recognised that reconciling the two could impact positively on their general lifestyle adjustment.

HIV/AIDS in the workplace, especially when the employer is not interested or involved in solving illness-related issues, can be of concern. In such circumstances, participants applied the strategy of 'reframing the disease' to create buffers from extreme realities. Due to the stigma that HIV-positive people often face, they might enhance their personal, subjective wellbeing through comparing their alleged negative experiences with a less stigmatised health condition (Buunk & Gibbons, 2000). Wills (1981) pointed out that projection, scapegoating and aversion were indicators of downward comparisons used in an attempt to reduce the intensity of extreme realities. In our study, participants used downward comparisons to create psychological shock absorbers to their HIV/AIDS reality. The notion of HIV/AIDS being a chronic disease like other chronic, but more acceptable conditions, was important. Peer counselling programs at the workplace helped workers to adapt to their varied work environments. Markovits et al. (2010) found that good workplace experiences boosted participants' ability to adapt, and that those with good employer support reported to adapt well.

5.2.6 *Tactical handling of HIV status*

The fear of possible unplanned disclosure of their HIV-positive status led some participants to resort to using covert language at work. Some participants were selective in disclosing their HIV-positive status and only disclosed to a few people.

Having a confidant at the workplace meant a good experience for some participants. Code language and tactfulness between confidants was meant to prevent other workers from unwelcome speculation about the participants' possible positive-HIV-status. No literature was found which speaks directly to use of language in code or through tact to share sensitive

information about HIV/AIDS status in the work environment as a way to manage stigma. This finding makes visible what may very well have been a hidden practice in managing stigma by those who are marginalised for their HIV/AIDS status.

5.2.7 Adaptation

In this study, acquiring skills for good adaptation to the work environment, as perceived by the participants, was mainly influenced by what they believed to be supportive within their respective environments. The ability to care for children, to afford decent accommodation, to acquire skills to establish future business ventures and to be employed in a professional position, were all seen as yardsticks of good adaptation.

Contextual factors that influenced the development of good adaptive work mechanisms were varied: lighting and ventilation of the work station, complexity of the work tasks, and the nature of the materials used. Other factors included the nature of the relationship between the employee (participant) and the employer: an employer who was empathetic towards the welfare of the employee. This was an indication of possible good adaptation to the work environment for Miss Viata. Kawakami et al. (2004) wrote about how various technologies applied at different work environments had both positive and negative safety and health effects. For example In this study, negative effects by chemicals used in hair relaxation process posed a negative health effect to one participant, while poor ventilation at the work station had a negative effect to another participant .

5.2.8 Work cohesiveness

In conclusion, working within a team influenced the way participants reacted to their work environments. Participants who fitted well within teams adapted successfully. The ability to deal with colleagues in a diligent and tactful way played an important role. Miss Dolly took advantage of this factor as an enabler towards good adaptation to the work environment (Ramugondo & Kronenberg, 2015). Ramugondo and Kronenberg (2015) in particular, have stressed the importance of paying attention to human relations as part of context, in appreciating the transactional nature of human occupation.

5.3 Limitations of the study

While every effort was made to achieve a multiplicity of data sources, the study regrettably relied for the most part on interviews as a data source. This could have resulted in an inability to reach full data triangulation.

The researcher was not sufficiently alert to gender dynamics throughout the study. This is an oversight, and a reflection on how most researchers are blinded to issues of intersectionality. This oversight is a definite weakness to the study, and must be borne in mind when considering the findings. Future studies where the researcher's gender is different from that of those being studied, and where sensitive issues that pertain to sexuality – such as HIV/Aids – must use more emancipatory approaches, and depart from a critical feminist paradigm. It is recommended that such studies – when pursued for degree purposes, should be a full dissertation Masters or doctoral studies. The current study is a mini-dissertation, in partial fulfilment towards a Masters qualification, and does not lend itself well for emancipatory approaches, that require considerable flexibility and extended time periods in the field.

5.4 Summary

This chapter has highlighted the role of agency in the development of personal strategies that are crucial to good adaptation to the work environment. Adherence to medical treatment emerged as a very important component of good adaptation to work and indeed to good health and survival. A mind-shift; lifestyle and occupational adjustments proved to influence good adaptation to work environment. Other important new findings, although case-specific, that surfaced included strategic discernment around disclosure, perception of good adaptation and work relationships.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The study explored the adaptive mechanisms used by HIV-positive women in Botswana to fit in their work environments. This study provides further understanding of the adaptive mechanisms used within the workplace and insight as to how they were used. The women used personal innovative work strategies, made lifestyle changes and displayed an unwavering commitment to adhere to medical treatment.

The study is important for health workers, particularly occupational therapists involved in assisting women living with HIV/AIDS to stay employed. The study findings can be used by occupational therapists to offer practical advice on adaptive mechanisms that may be helpful in enabling return-to-work and retaining employment. This study further contributes to understanding the cultural and gender issues that affect women living with HIV/AIDS within their workplaces.

There are many challenges that women living with HIV/AIDS face in an effort to adapt at their workplace. There is no prescription or set of generic adaptive work mechanisms in a reference manual or catalogue. Adaptive work mechanisms can vary depending on the work context, the personality of the participant and their interaction with significant others: employers, work mates, and even their own family.

This chapter has highlighted the importance of agency in the development of personal strategies that are critical to good adaptation to the work environment.

Adherence to medical treatment is also a very important component of good adaptation to work and indeed to good health and survival. A mind shift; lifestyle and occupational adjustments were found to influence good adaptation to the work environment. Other important findings, that were case-specific and thus not included in the themes, included strategic discernment around disclosure, perception of good adaptation, and building trust within work relationships.

6.2 Recommendations for further research

6.2.1 *For further research*

In the current study, the dangers of non-adherence to treatment were fully appreciated by participants. However, other researchers for example Chesney (2003) are of the opinion that knowledge about the dangers of non-adherence is only an indicator of good adherence to medical advice, while the ability to apply the knowledge by maintaining at least 95% adherence to HAART is. This view suggests a need for further research that explores the determinants of indicators for good adherence to medical treatment by people living with HIV/AIDS themselves.

6.2.2 *For practice*

The findings of this study can be used to inform the retention of HIV positive individuals within employment, but also the development of a return-to-work programme for those living with HIV/AIDS, particularly women. Women living with HIV/AIDS who have remained employed over-time could be an important resource as part of job-coaching for newly diagnosed employees.

REFERENCES

- Anandan, N., Braveman, B., Kielhofner, G. & Forsyth, K. 2006. Impairments and perceived competence in persons living with HIV/AIDS. *Work*. 27: 255-266.
- Antoni, M. 2002. HIV and AIDS. In *Chronic Physical Disorders*. A.J. Christensen & M.H. Antoni, Eds. Malden, MA: Blackwell. 191-119.
- Apolonio, E.G., Hoover, D.R., He, Y., Saah, A.J., Lyter, D.W., Detels, R. & Phair, J.P. 1995. Prognostic factors in human immunodeficiency virus-positive patients with a CD4 \geq lymphocyte count $<$ 50/ μ L. *Journal of Infectious Diseases*. 171(4): 829-836.
- Arns, P.G., Martin, D.J. & Chernoff, R.A. 2004. Psychosocial needs of HIV-positive individuals seeking workforce re-entry. *AIDS Care*. 16(3): 377-386.
- Arocha, J.F. & Patel, V.L. 2008. Methods in the study of clinical reasoning. In *Clinical reasoning in the health professions*. 3rd ed. J. Higgs & M. Jones, Eds. Oxford, Elsevier. 93-203.
- Ashenden, R., Silagy, C. & Weller, D. 1997. A systematic review of the effectiveness of promoting lifestyle change in general practice. *Family Practice*. 14(2): 160-176.
- Asmussen, K.J. & Creswell, J.W. 1995. Campus response to a student gunman. *Journal of Higher Education*. 66(5): 575-596.
- Barker, G., & Ricardo, C. 2005. *Young men and the construction of masculinity in sub-Saharan Africa: implications for HIV/AIDS, conflict, and violence*. Washington, DC: World Bank.
- Barkey, V., Watanabe, E., Solomon, P. & Wilkins, S. 2009. Barriers and facilitators to participation in work among Canadian women living with HIV/AIDS. *Canadian Journal of Occupational Therapy*. 76(4): 269-275.

- Barlow, J., Wright, C., Sheasby, J., Turner, A. & Hainsworth, J. 2002. Self-management approaches for people with chronic conditions: a review. *Patient Education and Counselling*. 48(2): 177-187.
- Barnett, T. & Whiteside, A. 2002. Poverty and HIV/AIDS: impact, coping and mitigation policy. In *AIDS, public policy and child well-being*. G.A. Cornia, Ed. UNICEF Innocenti Research Centre. 209-244.
- Beaudry, A. & Pinsonneault, A. 2005. Understanding user responses to information technology: A coping model of user adaptation. *MIS Quarterly*. 29: 3.
- Bedell, G. 2008. Balancing health, work, and daily life: design and evaluation of a pilot intervention for persons with HIV/AIDS. *Work*. 32(2): 131-144.
- Bell, E. 2005. Advocacy training by the international community of women living with HIV/AIDS. *Gender & Development*. 13(3): 70-79.
- Bliss, E.C. 1976. *Getting things done: The ABCs of time management*. Bantam Books: Random House of Canada Limited.
- Bormann, J., Shively, M., Smith, T.L. & Gifford, A.L. 2001. Measurement of fatigue in HIV-positive adults: reliability and validity of the Global Fatigue Index. *Journal of the Association of Nurses in AIDS Care*. 12(3): 75-83.
- Botswana Central Statistics Office. 2009. *Botswana family health survey 2007-2008*. Gaborone, Botswana: Botswana Central Statistics Office.
- Braveman, B., Kielhofner, G., Albrecht, G. & Helfrich, C. 2005. Occupational identity, occupational competence and occupational settings (environment): influences on return to work in men living with HIV/AIDS. *Work*. 27(3): 267-276.
- Breuer, N. 2005. Teaching the HIV-positive client how to manage the workplace. *Journal of Vocational Rehabilitation*. 22: 163-169.
- Britton, B.K. & Tesser, A. 1991. Effects of time-management practices on college grades. *Journal of Educational Psychology*. 83(3): 405-410.

- Brooks, R.A. & Klosinski, L.E. 1999. Assisting persons living with HIV/AIDS to return to work: Programmatic steps for AIDS service organisations. *AIDS Education and Prevention*. 11(3): 212-223.
- Buunk, B.P. & Gibbons, F.X. 2000. Toward an enlightenment in social comparison theory: Moving beyond classic and renaissance approaches. In *Handbook of social comparison: Theory and research*. J. Suls & L. Wheeler, Eds. Dordrecht, Netherlands: Kluwer Academic Publishers. 487-499.
- Cameron, L., Leventhal, E.A. & Leventhal, H. 1995. Seeking medical care in response to symptoms and life stress. *Psychosomatic Medicine*. 57(1): 37-47.
- Carpenter, C.C., Fischl, M.A., Hammer, S.M., Hirsch, M.S., Jacobsen, D.M., Katzenstein, D.A. & Thompson, M.A. 1998. Antiretroviral therapy for HIV infection in 1998: updated recommendations of the International AIDS Society - USA panel. *Journal of the American Medical Association*. 280(1): 78-86.
- Chesney, M.A., Morin, M. & Sherr, L. 2000. Adherence to HIV combination therapy. *Social Science & Medicine*. 50(11): 1599-1605.
- Chesney, M. 2003. Adherence to HAART regimens. *AIDS Patient Care and STDs*. 17(4): 169-177.
- Chilisa, B. 2002. National policies on pregnancy in education systems in Sub-Saharan Africa: The case of Botswana. *Gender and Education*. 14(1): 21-35. DOI: 10.1080/09540250120098852.
- College of Occupational Therapists. 2007. *Work matters: vocational navigation for occupational therapy staff*. London: COT and National Social Inclusion Programme.
- Connecticut Department of Labor. 2011. Project Management Office. Available: <http://www.ctdol.state.ct.us> [2011, April 4].
- Creswell, J.W. 2003. *Research design: Qualitative, quantitative and mixed methods approaches*. 2nd ed. London: Sage Publications.

- Creswell, J.W. 2012. *Qualitative inquiry and research design: Choosing among five approaches*. London: Sage Publications.
- DeMarco, R., Lynch, M.M. & Board, R. 2002. Mothers who silence themselves: A concept with clinical implications for women living with HIV/AIDS and their children. *Journal of Pediatric Nursing*. 17(2): 89-95.
- Dickie, V., Cutchin, M. & Humphrey, R. 2006. Occupation as transactional experience: A critique of individualism in occupational science, *Journal of Occupational Science*. 13(1): 83-93.
- Do, A.N., Rosenberg, E.S., Sullivan, P.S., Beer, L., Strine, T.W., Schulden, J.D., Fagan, J.L., Freedman, M.S. & Skarbinski, J. 2014. Excess burden of depression among HIV-infected persons receiving medical care in the United States: Data from the Medical Monitoring Project and the Behavioral Risk Factor Surveillance System. *PLOS ONE*. 9(3): e92842. DOI:10.1371/journal.pone.0092842.
- Dorine, B. 2016. A dollar short. *Chronicle of Higher Education* (serialonline). 21: 35-39.
- Eller, L.S. 2001. Quality of life in persons living with HIV. *Clinical Nursing Research*. 10(4): 401-423.
- Epstein, B.M. & Mann, J.H. 1982. CT of abdominal tuberculosis. *American Journal of Roentgenology*. 139(5): 861-866.
- Ezzy, D., De Visser, R. & Bartos, M. 1999. Poverty, disease progression and employment among people living with HIV/AIDS in Australia. *AIDS Care*. 11(4): 405-414.
- Fang, X., Vincent, W., Calabrese, S.K., Heckman, T.G., Sikkema, K.J., Humphries, D.L. & Hansen, N.B. 2015. Resilience, stress, and life quality in older adults living with HIV/AIDS. *Aging & Mental Health*. 19(11): 1015-1021. doi: 10.1080/13607863.2014.1003287.
- Ferrier, S.E. & Lavis, J.N. 2003. With health comes work? People living with HIV/AIDS consider returning to work. *AIDS Care*. 15(3): 423-435.

- Fogarty, L., Roter, D., Larson, S., Burke, J., Gillespie, J. & Levy, R. 2002. Patient adherence to HIV medication regimens: a review of published and abstract reports. *Patient Education and Counseling*. 46(2): 93-108.
- Fogelberg, D. & Frauwirth, S. 2010. A complexity science approach to occupation: Moving beyond the individual. *Journal of Occupational Science*. 17: 131-139.
- Folkman, S., Chesney, J., Pollack, L. & Coates, T. 1993. Stress, control, coping, and depressive mood in human immunodeficiency virus positive and negative gay men in San Francisco. *Journal of Nervous and Mental Disease*. 181: 409–416.
- Fourie, P. & Meyer, M. 2016. *The politics of AIDS denialism: South Africa's failure to respond*. London: Routledge.
- Freudenberger, H.J. 1974. Staff Burn-Out. *Journal of Social Issues*. 30:159– 165. DOI: 10.1111 1/j.1540-4560.1974.tb00706.x.
- Gahagan, S., Sharpe, T.T., Brimacombe, M., Fry-Johnson, Y., Levine, R., Mengel, M., O'Connor, M., Paley, B., Adubato, S. & Brenneman, G. 2006. Pediatricians' knowledge, training, and experience in the care of children with fetal alcohol syndrome. *Pediatrics*. 118(3): 657–668.
- Garcia De Olalla, P., Knobel, H., Carmona, A., Guelar, A., López-Colomé, J.L. & Caylà, J. A. 2002. Impact of adherence and highly active antiretroviral therapy on survival in HIV-Infected patients. *Journal of Acquired Immune Deficiency Syndromes*. 30(1): 105-110.
- George, A.L. & Bennett, A. 2005. *Case Studies and Theory Development in the Social Sciences*. Cambridge, MA: MIT Press.
- Giddings, C. & Hovorka, A. 2010. Place, ideological mobility and youth negotiations of gender identities in urban Botswana. *Gender, Place and Culture*. 17(2): 211-229.
- Gillon, R. 1994. Medical ethics: four principles plus attention to scope. *British Medical Journal*. 309(6948): 184-188.

- Glesne, C. & Peshkin, A. 1992. *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.
- Godin, G., Cote, J., Naccache, H., Lambert, L.D. & Trottier, S. 2005. Prediction of adherence to antiretroviral therapy: a one-year longitudinal study. *AIDS Care*. 17(4): 493-504.
- Goldblum, P. & Kohlenberg, B. 2005. Vocational counselling for people with HIV: The client focused considering work model. *Journal of Vocational Rehabilitation*. 22: 115-124.
- Golden, M.R., Stekler, J., Hughes, J.P. & Wood, R.W. 2008. HIV serosorting in men who have sex with men: Is it safe? *Journal of Acquired Immune Deficiency Syndromes*. 49(2): 212-218.
- Golin, C., Isasi, F., Bontempi, J.B. & Eng, E. 2002. Secret pills: HIV-positive patients' experiences taking antiretroviral therapy in North Carolina. *AIDS Education and Prevention*. 14(4): 318-329.
- Greene, R.M. 1969. *The management game: How to win with people*. Homewood, IL: Dow Jones-Irwin.
- Greener, R., Jefferis, K. & Siphambe, H. 2000. The impact of HIV/AIDS on poverty and inequality in Botswana. *South African Journal of Economics*. 68(5): 393-404.
- Guthold, R., Louazani, S.A., Riley, L.M., Cowan, M.J., Bovet, P., Damasceno, A., Sambo, P.H., Tesfaye, F. & Armstrong, T.P. 2011. Physical activity in 22 African countries: results from the World Health Organization STEPwise approach to chronic disease risk factor surveillance. *American Journal of Preventive Medicine*. 41(1): 52-60
- Hand, G.A., Phillips, K.D., Dudgeon, W.D., Lyerly, G.W., Durstine, L.J. & Burgess, S.E. 2008. Moderate intensity exercise training reverses functional aerobic impairment in HIV-infected individuals. *AIDS Care*. 20(9): 1066-1074.

- Harnois, C.E. 2010. Race, gender, and the black women's standpoint. *Sociological Forum* 25(1): 68-85.
- Haynes, R.B., Montague, P., Oliver, T., McKibbin, K.A., Brouwers, M.C. & Kanani, R. 2000. Interventions to assist patients to follow prescriptions for medications. *Cochrane Database of Systematic Reviews*. (2): CD0000 11.
- Hergenrather, K.C., Rhodes, S.D. & Clark, G. 2006. Windows to work: Exploring employment-seeking behaviors of persons with HIV/AIDS through photo voice. *Aids Education and Prevention*. 18: 243-258.
- Jide-Ojo, O.T. 2013. P4.072 sexual risk and preventive behaviours among young people in Nigeria. *Sexually Transmitted Infections*. 89: A311.
- Judge, T.A. & Watanabe, S. 1993. Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology*. 78: 939-948.
- Kalichman, S.C., Amaral, C.M., White, D., Swetsze, C., Pope, H., Kalichman, M.O. & Eaton, L. 2009. Prevalence and clinical implications of interactive toxicity beliefs regarding mixing alcohol and antiretroviral therapies among people living with HIV/AIDS. *AIDS Patient Care and STDs*. 23(6): 449-454.
- Kandala, N.B., Campbell, E.K., Rakgoasi, S.D., Madi-Segwagwe, B.C. & Fako, T.T. 2012. The geography of HIV/AIDS prevalence rates in Botswana. *HIV/AIDS (Auckland, N.Z.)*. 4: 95-102. DOI: 10.2147/HIV.S30537.
- Kang'ethe, S.M. 2014. Social capital from informal networks can be a fertile niche to mitigate HIV/AIDS and poverty: Examples from South Africa and Botswana. *Journal of Human Ecology*. 47(2): 185-192.
- Kawakami, T., Kogi, K., Toyama, N. & Yoshikawa, T. 2004. Participatory approaches to improving safety and health under trade union initiative -experiences of POSITIVE training program in Asia. *Industrial Health*. 42(2): 196-206.
- Kent, A. & Ikgopoleng, H. 2011. Gabarone, *Cities*. 8(5): 478-494.

- Kezar, A.J. 2001. Understanding and facilitating organizational change in the 21st century: Recent research and conceptualizations. *ASHE-ERIC Higher Education Report*, 28(4). San Francisco: Jossey-Bass.
- Kitchener, K.S. 2000. Reconceptualising responsibilities to students: A feminist perspective. In *Practicing Feminist Ethics in Psychology*. M.M. Brabeck, Ed. Washington, DC: American Psychological Association.
- Kitchener, K.S. & Anderson, S.K. 2011. *Foundations of ethical practice, research, and teaching in psychology and counselling*. 2nd ed. New York, NY: Routledge.
- Klitzman, R.L., Kirshenbaum, S.B., Dodge, B., Remien, R.H., Ehrhardt, A.A., Johnson, M.O. & Lightfoot, M. 2004. Intricacies and inter-relationships between HIV disclosure and HAART: a qualitative study. *AIDS Care*. 16(5): 628-640.
- Krefting, L. 1991. Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy*. 45(2): 214-222.
- Lakein, A. 1973 *How to get control of your time and your life*. New York: Signet.
- Lemsalu, L. 2014. Depression in HIV infection: related factors and effects on quality of life. PhD Thesis. Tartu Ülikool.
- Leserman, J., Barroso, J., Pence, B.W., Salahuddin, N. & Harmon, J.L. 2008. Trauma, stressful life events and depression predict HIV-related fatigue. *AIDS Care*, 20(10): 1258-1265. doi: 10.1080/09540120801919410.
- Lima L.P. & Cavalli, A. 1996. Service validation - an embedded testing approach. Proceedings of EUNICE Summer School. 23-27 June 1996. Lausanne, Switzerland.
- Lindsey, E., Hirschfeld, M., & Tlou, S. 2003. Home-based care in Botswana: experiences of older women and young girls. *Health Care for Women International*. 24(6): 486-501.
- Lincoln, Y.S. & Guba, E.G. 1985. *Naturalistic inquiry*. Newbury Park, CA: Sage.

- Lisspers, J., Sundin, Ö., Öhman, A., Hofman-Bang, C., Rydén, L. & Nygren, Å. 2005. Long-term effects of lifestyle behavior change in coronary artery disease: effects on recurrent coronary events after percutaneous coronary intervention. *Health Psychology*. 24(1): 41.
- Loff, B. & Black, J. 2000. The Declaration of Helsinki and research in vulnerable populations. *The Medical Journal of Australia*. 172(6): 292–295.
- Lutgendorf, S., Antoni, M.H., Schneiderman, N. & Fletcher, M.A. 1994. Psychosocial counseling to improve quality of life in HIV infection. *Patient Education and Counseling*. 24(3): 217-235.
- Magura, S., Nwekeze, P.C., Rosenblum, A. & Joseph, H. 2000. Substance misuses and related infectious diseases in a soup kitchen population. *Substance Use and Misuse*. 35: 551-583
- Maisel, N.C., Blodgett, J.C., Wilbourne, P.L., Humphreys, K. & Finney, J.W. 2013. Meta-analysis of naltrexone and acamprosate for treating alcohol use disorders: when are these medications most helpful? *Addiction*, 108(2): 275-293. doi: 10.1111/j.1360-0443.2012.04054.x.
- Makgala, C.J. 2013. Discourses of poor work ethic in Botswana: A historical perspective, 1930–2010. *Journal of Southern African Studies*. 39(1): 45-57.
- Makoe, L.N., Greeff, M., Phetlhu, R.D., Uys, L.R., Naidoo, J.R., Kohi, T.W., Dlamini, P.S., Chirwa, M.L. & Holzeme, W.L. 2008. Coping with HIV-related stigma in five African countries. *Journal of the Association of Nurses in AIDS Care*. 19(2):137–146.
- Maldarelli, F., Wu, X., Simonetti, F. & Kearney, M. 2014. B-109 HIV persistence during combination antiretroviral therapy. *Journal of Acquired Immunodeficiency Syndromes*. 67(47). DOI: 10.1097/01.qai.0000456075.91180.47.
- Markovits, Y., Davis, A.J., Fay, D. & Dick, R.V. 2010. The link between job satisfaction and organizational commitment: Differences between public and private sector employees. *International Public Management Journal*. 13(2): 177-196.

- Maticka-Tyndale, E., Adam, B.D. & Cohen, J.J. 2002. To work or not to work: combination therapies and HIV. *Qualitative Health Research*. 12(10): 1353-1372.
- Martin, D.J., Brooks, R.A., Ortiz, D.J. & Veniegas, R.C. 2003. Perceived employment barriers and their relation to work force entry intent among people with HIV/AIDS. *Journal of Occupational Health Psychology*. 8: 181-194.
- Mayfield A.E., Rice, E., Flannery, D. & Rotheram-Borus, M.J. 2008. HIV disclosure among adults living with HIV. *AIDS Care*. 20(1): 80-92.
- Mays, N. & Pope, C. 1995. Rigor & qualitative research. *British Medical Journal*. 311: 109-112.
- Mays, N. & Pope, C. 2000. Quality in qualitative health research. In *Qualitative Research in Health Care*. 2nd ed. N. Mays & C. Pope, Eds. London: BMJ Books. 89-102.¹
- McDavid, C. 2000. Archaeology as cultural critique: pragmatism and the archaeology of a southern states plantation. In *Philosophy and Archaeological Practice: Perspectives for the 21st century*. C. Holtorf & H. Karlsson, Eds. Göteborg: Goteborg Institutionen för Arkeologi.
- McMillan, J. & Schumacher, S. 2001. *Research in education: A conceptual introduction*. 5th ed. New York: Longman.
- Milani, R.V. & Lavie, C.J. 2003. Prevalence and profile of metabolic syndrome in patients following acute coronary events and effects of therapeutic lifestyle change with cardiac rehabilitation. *American Journal of Cardiology*. 92(1): 50-54.
- Miller, S.D., Duncan, B.L. & Hubble, M.A. 2000. Client-directed, outcome-informed clinical work. In *Comprehensive handbook of psychotherapy. Integrative/eclectic volume 4*. F.W. Kaslow & J. Lebow, Eds. New York: Wiley. 185–212.
- Miller, W.R. & Rollnick, S. 2002. *Motivational interviewing: Preparing people for change*. 2nd ed. New York: Guilford Press.

¹ 1 The British Medical Journal officially changed its name to The BMJ in 2014. All citations retrieved after this date reflect 'The BMJ' as the source

- Moskowitz, T., Hult, R., Russolari, C. & Acree, M. 2009. What works in coping with serious illness? *Psychological Bulletin*. 13):1121-141.
- Mousavi, T., Dharamsi, S., Forwell, S. & Dean, E. 2015. Occupational therapists' perceived relevance of Nussbaum's central capabilities to client-centred practice. *Open Journal of Occupational Therapy*. 3(4). DOI: 10.15453/2168-6408.1130.
- Munir, F., Jones, D., Leka, S. & Griffiths, A. 2005. Work limitations and employer adjustments for employees with chronic illness. *International Journal of Rehabilitation Research*. 28(2): 111-117.
- Nam, S.L., Fielding, K., Avalos, A., Dickinson, D., Gaolathe, T. & Geissler, P.W. 2008. The relationship of acceptance or denial of HIV-status to antiretroviral adherence among adult HIV patients in urban Botswana. *Social Science & Medicine*. 67(2): 301-310.
- Ncho, C.D. & Wright, S.C.D. 2013. Health maintenance and low socioeconomic status: A family perspective. *Curationis*. 36(1). DOI: 10.4102/curationis.v36i1.22.
- Nerima, R. 2013. P4.073 prevention of HIV/AIDS infections among female commercial sex workers in Kampala, Uganda. *Sexually Transmitted Infections*. 89: A311.
- Nurit, W. & Michal, A. 2003. Rest: a qualitative exploration of the phenomenon. *Occupational Therapy International*. 10(4): 227-238.
- Oandasan, I. 2006. Teamwork and healthy workplaces: strengthening the links for deliberation and action through research and policy. *Healthcare Papers*. 7: 98-103.
- Onzalez, J.S., Penedo, F.J., Antoni, M.H., Durán, R.E., McPherson-Baker, S., Ironson, G. & Schneiderman, N. 2004. Social support, positive states of mind, and HIV treatment adherence in men and women living with HIV/AIDS. *Health Psychology*. 23(4): 413.

- Perazzo, J.D., Webel, A.R., Voss, J.G. & Prince-Paul, M. 2017. Fatigue symptom management in people living with human immunodeficiency virus. *Journal of Hospice & Palliative Nursing*. 19(2): 122-127.
- Phaladze, N. & Tlou, S. 2006. Gender and HIV/AIDS in Botswana: a focus on inequalities and discrimination. *Gender & Development*. 14(1): 23-35.
- Polachek, S.W. 1981. Occupational self-selection: A human capital approach to sex differences in occupational structure. *The Review of Economics and Statistics*. 63(1): 60-69.
- Polatajko, H.J., Townsend, E.A. & Craik, J. 2007. Canadian model of occupational performance and engagement (CMOPE). In *Enabling occupation II: Advancing an occupational therapy vision for health, well-being & justice through occupation*. E.A. Townsend & H.J. Polatajko, Eds. Ottawa, ON: Canadian Association of Occupational Therapists Publications ACE.
- Polit, F.D. & Beck, T.C. 2006. *Essentials of nursing research: methods, appraisal, and utilization*. 6th ed. Philadelphia: Lippincott Williams & Wilkins.
- Polit, F.D. & Beck, T.C. 2008. *Nursing research: Generating and assessing evidence for nursing practice*. 8th ed. Philadelphia: Lippincott Williams & Wilkins.
- Pope, C.S., Ziebland, S. & Mays, N. 2000. Qualitative research in health care. Analysing qualitative data. *British Medical Journal*. 320(7227): 114–116.
- Pugh, G.L. 2009. Exploring HIV/AIDS case management and client quality of life. *Journal of HIV/AIDS & Social Services*. 8(2): 202-218.
- Pyett, D. & Warr, D. 1999. Women at risk in sex work: strategies for survival. *Journal of Sociology*. 35(2): 183-197.
- Raditloaneng, W. & Chawawa, M. 2015. *Lifelong learning for poverty eradication*. Cham, Switzerland: Springer International.
- Rajaraman, D., Russell, S. & Heymann, J. 2006. HIV/AIDS, income loss and economic survival in Botswana. *AIDS Care*. 18(7): 656-662.

- Ramiah, I. & Reich, M. 2005. Public-private partnerships and antiretroviral drugs for HIV/AIDS: Lessons from Botswana. *Grant Watch Report*. 24(2): 545-551.
- Ramugondo, E.L. & Kronenberg, F. 2015. Explaining collective occupations from a human relations perspective: Bridging the individual collective dichotomy. *Journal of Occupational Science*. 22(1): 3-16.
- Rasmussen, L.D., Engsig, F.N., Christensen, H., Gerstoff, J., Kronborg, G., Pedersen, C. & Obel, N. 2011. Risk of cerebrovascular events in persons with and without HIV: a Danish nationwide population-based cohort study. *AIDS*. 25(13):1637-1646. DOI: 10.1097/QAD.0b013e3283493fb0.
- Rau, B. 2004. *HIV/AIDS and the public sector workforce: An action guide for managers*. Arlington, VA, United States: Family Health International and Futures Group. Available: [www.fhi.org/en/HIV/pub/guide/workplace HIV program.htm](http://www.fhi.org/en/HIV/pub/guide/workplace%20HIV%20program.htm)
- Republic of South Africa. 1997. No 130 of 1993. Compensation for Occupational Injuries and Diseases Act as amended by the Compensation for Occupational Injuries and Diseases Amended Act, No. 61 of 1997. Available: <http://www.labour.gov.za> [2005, November 2].
- Reverby, S.M. 2002. Feminism & health. *Health and History*. 4(1): 5-19.
- Robins, S. 2004. 'Long live, Zackie, long live': AIDS activism, science and citizenship after apartheid. *Journal of South African Studies*. 30(3): 651-672.
- Rodkjaer, L., Chesney, M.A., Lomborg, K., Ostergaard, L., Laursen, T. & Sodemann, M. 2014. HIV-infected individuals with high coping self- efficacy are less likely to report depressive symptoms: a cross-sectional study from Denmark. *International Journal of Infectious Diseases*. 22: 62-72. DOI: 10.1016/j.ijid.2013.12.008.
- Rosse, J.G. & Miller, H.E. 1984. Relationship between absenteeism and other employee behaviors. *Absenteeism*. 1: 194-228.

- Rudman, D.L., Cook, J.V. & Polatajko, H. 1997. Understanding the potential of occupation: A qualitative exploration of seniors' perspectives on activity. *American Journal of Occupational Therapy*. 51(8): 640-650.
- Sackett, D., Haynes, B.R. & Guyatt, G. 1997. *Evidence based medicine: How to practice and teach EBM*. New York: Churchill-Livingstone.
- Salz, F. 2001. HIV/AIDS and work: The implications for occupational therapy. *Work*. 16(3): 269- 272.
- Schabracq, M.J. 1996. Organisatiecultuur, situationele eigenschappen en stress. In *Handboek arbeid en gezondheid psychologie*. J.A.M. Winnubst & M.J. Schabracq, Eds. Lemma: Utrecht. 31-44.
- Schein, E. 2002. Models and tools for stability and change in human systems, *Reflections*. 4(2): 34-46.
- Schkade, J.K. & Schultz, S. 1992. Occupational adaptation: Toward a holistic approach for contemporary practice, part 1. *American Journal of Occupational Therapy*. 46(9): 829-837.
- Smith, J.P. 1999. Healthy bodies and thick wallets: the dual relation between health and economic status. *Journal of Economic Perspectives*. 13(2): 144.
- Smithers, J. & Smit, B. 1997. Human adaptation to climatic variability and change. *Global Environmental Change*. 7(2): 129–146.
- Sniehotta, F.F., Schwarzer, R., Scholz, U. & Schüz, B. 2005. Action planning and coping planning for long-term lifestyle change: theory and assessment. *European Journal of Social Psychology*. 35(4): 565-576.
- Stake, R.E. 1995. *The art of case study research*. London: Sage Publications.
- Stake, R.E. 2008. Qualitative case studies. In *Strategies of qualitative inquiry*. 3rd ed. N.K. Denzin, & Y.S. Lincoln (Eds.). Thousand Oaks: Sage Publications. 119-149.

- Strauss, A. & Corbin, J. 1998. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. London: Sage Publications.
- Temah, C.T. 2007. Gender inequality and HIV/AIDS epidemic in sub-Saharan Africa. Available: <http://www.csae.ox.ac.uk/conferences/2007-EDiA-LaWBiDC/papers/037-Tsafack.pdf> [2008, September 25].
- Tiamson, M. 2002. Challenges in the management of HIV patient in the third decade of AIDS. *Psychiatric Quarterly*. 73: 51-58.
- Timmons, J.C. & Fesko, S.L. 2004. The impact, meaning, and challenges of work: perspectives of individuals with HIV/AIDS. *Health & Social Work*. 29(2): 137-144.
- Trujillo, M. 2010. Persons living with HIV/AIDS contemplating a return to work: a social cognitive career theory and constructivist theory perspective. *Journal of Rehabilitation*. 76(1): 51-6.
- UNAIDS. 2002. *The private sector responds to epidemic: Debswana - a global benchmark*. Geneva: UNAIDS.
- UNAIDS. 2014. *Botswana HIV epidemic profile*. UNAIDS Country Office: Gaborone. Available: <http://www.unaidsrstes.org/wp-content/uploads/2015/05/UNAids-Profile-Botswana.pdf-18-Feb.pdf>
- United Nations Development Programme. 2000. *Botswana human development report 2000. Towards an AIDS-free generation*. Gaborone: United Nations Development Programme.
- United States Office of Personnel Management. 2009. *Part 1: Outline of position classification plan for white collar occupational groups and services. Hand book of occupational groups and families*. Available: <https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/occupationalhandbook.pdf>

- Webel, A.R., Perazzo, J., Decker, M., Horvat-Davey, C., Sattar, A. & Voss, J. 2016. Physical activity is associated with reduced fatigue in adults living with HIV/AIDS. *Journal of Advanced Nursing*. 72(12): 3104-3112.
- Weiser, S.D., Tuller, D.M., Frongillo, E.A., Senkungu, J., Mukiibi, N. & Bangsberg, D.R. 2010. Food insecurity as a barrier to sustained antiretroviral therapy adherence in Uganda. *PLOS One*. 5(4): e10340.
- Werbner, P. 2010. Many gateways to the Gateway City: elites, class and policy networking in the London African diaspora. *African Diaspora*. 3: 132-159.
- Wills, T.A. 1981. Downward comparison principles in social psychology. *Psychological Bulletin*. 90(2): 245-271. DOI: 10.1037/0033-2909.90.2.245.
- Wollard, J., Beilin, L., Lord, T., Puddey, I., MacAdam, D. & Rouse, I. 1995. A controlled trial of nurse counselling on lifestyle change for hypertensives treated in general practice: preliminary results. *Clinical and Experimental Pharmacology and Physiology*. 22: 466–468.
- Wolverton, B. 2016. Disparities in coaches' academic incentives raise concerns over gender equity. *The Chronicle of Higher Education*. 62: 281.
- Zulu, E.M., Dadoo, F.N. & Chika-Ezee, A. 2002. Sexual risk-taking behaviour in the slums of Nairobi. *Population Studies (Cambridge)*. 56(3): 311-323.

APPENDICES

Appendix 1: Interview guide

The interviews will start by introductions, and then the PI will explain the purpose of the interview and will ask for permission to record and take notes. The participants will be assured of maximum confidentiality as well as being guided through the consent form before they sign it.

Warm up: easy or non-threatening questions so as make the participant comfortable, the interview will be carried out in a logical progression, i.e. from easier questions to more in-depth questions.

The interview will contain open-ended questions so as to allow the participant freedom of expressing her experiences. For example:

‘Tell me, how you have managed to remain at your current work with a HIV/AIDS diagnosis.’

‘Tell me about any positive experiences you have had in your current work’.

‘How did you manage to return to your work after you were diagnosed with HIV?’

‘How will you know that you have completely adapted to your work environment?’

Towards the end of the interview, the PI will ask more straightforward questions to relax the interviewee, as recommended by Rubin & Rubin 1995. The PI will thank the participant at the end of the interview. The recorder will be turned off after the participant exits the interview venue.

Appendix 2: Information letter

English version

Dear Participant,

My name is Patrice Malonza, a Masters student in occupational therapy in the Division of Occupational Therapy, Department of Health and Rehabilitation Sciences, University of Cape Town. I am conducting a minor dissertation towards partial fulfilment of the Master's degree. The title of this study is 'Work environment Adaptive Mechanisms for Women living with HIV/AIDS in Gaborone – Botswana'.

I propose to explore the adjustment process that women between ages of 21 and 50 years living with HIV/AIDS in Gaborone, Botswana, use to fit well in their work place.

Your participation in this study is voluntary but I believe you can make an important contribution to this research. During this study you will be interviewed about your experiences of returning to work after being diagnosed with HIV/AIDS. No tests will be done on you and hence there is no risk of physical harm to you. There will be no direct benefit to you, but the study findings should benefit women diagnosed with HIV/AIDS in returning and remaining in their work in the future. If you experience some distress from talking about your situation, the psychologist at Princess Marina Hospital will be ready to help you. There is no payment for participating in the study but R30 will be provided for each interview to cover your transport costs.

Whilst you may be asked questions relating to your HIV-positive status and your workplace issues, all information you provide will be kept confidential at all times. All responses to my questions and information or material that you provide will be anonymous and no personal details related to you will be recorded anywhere. Only my two research assistants and I will have access to the information that you provide to us.

If you do not wish to participate then you need to ignore this request.

If after reading this information you wish to participate in the research, you will need to sign the consent form and hand it over to me.

On receipt of your signed consent form, you will be contacted to confirm your participation and make arrangements to meet you. You will be required to attend at least two one-hour interview sessions at the Occupational Therapy Department in Princess Marina Hospital or a place convenient to you. The interviews will be held within a time period of four weeks.

If you have any further queries about this research, you may contact:

Research supervisor: Helen Buchanan (Tel: +27 21 406 6383;
[email: Helen.buchanan@uct.ac.za](mailto:Helen.buchanan@uct.ac.za));

Chair of the University of Cape Town Human Research Ethics Committee: Associate Professor Marc Blockman (Tel: +27 21 406 6492; Fax: +27 21 406 6411); or

The coordinator, Research Ethics, Ministry of Health, Private Bag 0038, Gaborone. Telephone: 363200; Fax: 3914467

My own contact details are: Patrice Malonza

P.O Box 80283

Gaborone

Botswana

Cell +267 72821582

Tel +267 3621681

[Email. pmalonza@gmail.com](mailto:pmalonza@gmail.com)



Signed

Setswana version (This is a requirement of Botswana Ministry of health ethics Committee)

Go Motsaya- karolo

Leina lame ke Patrice Malonza, ke dira dithuto tse dikgolwane tsa Occupational Therapy ko mmadikolo wa Kapa (University of CapeTown). Ke dira patlisiso go thusa go fetsa dithuto tse di fa godimo. Setlhogo sa patlisiso e, ke 'Tlwaelo Madirelo ga Bomme baba tshelang ka mogare wa HIV/Aids mo Gaborone – Botswana'.

Nna le bagolwane bame re ikaelela go batlisisa metlhale e bomme ba dingwaga tse di masome mabedi le bongwe go fitlha masome a matlhano (21-50 years) ba ba tshelang ka mogare mo Gaborone ba e dirisang go emelena le seemo sa fa badirelang teng.

Go tsaya karolo mo patlisisong e, ke tiro ya boithaopo, ka jalo re eletsa tetla ya gago go tsaya karolo mo patlisisong ka o ka re thusa fela thata. Mo ditshekatshekong tse, ga gona ditlhathobo tse di tla dirwang, ka jalo ga gona go nna le dikgobalo dipe, le fa go ntse jalo o arabe dipotso ka botlalo. Fa ekare re ntse re tsweletse wa kgoberega maikutlo, ba tshidilo maikutlo mo sepateleng sa Princess Marina ba tla go thusa. Ga gona dituelo tsa go tsaya karolo mo ditshekatshekong tse, mme legale o tla fiwa P30 wa sepalamo nako nngwe le nngwe e o tlang.

Fa o sa kgone go tsaya karolo o ka ikgatholosa kopo e, mme re dumela fa thuso ya gago e ka nna mosola fela thata.

Fa o bala molaetsa o, mme o eletsa go tsaya karolo mo patlisisong e, tlatsa o bo o baya monwana mo fomong, fa o feditse o bo o e busetsa ko go rona. Fa re amogela fomo ya gago ya tetelelelo (consent form) re tla boela ko go wena go rurifatsa botsaya karolo ja gago re bo re dira tumalano ya go kopana le wena.

Go tsaya megopolo go tla tsaya beke tse nne ka jalo o tshwanelwa ke go tsenelela dikarolo tse pedi ko lephateng la Occupational Therapy.

Re ka go botsa dipotso ka seemo sa gago sa mogare le bodiredi jwa gago ko madirelong; dikarabo tsa di tsewa ele sephiri. Kitsiso le tsone dikarabo tse o di fang, ga di tsenngwe maina gore ope a seka a itse gore di tswa kae. Botsamaisi ja patlisiso e, ke jone fela bo ka nnang le tleseletso mo kitsisong eo e fileng.

Le fa go sena dikatso tsa go tsaya karolo mo patlisisong e, kitsiso eo e fileng e ka thusa go tlhabolola metlhale e bomme ba ba tshelang ka mogare mo Gaborone – Botswana go tlwaela madirelo.

Kitsiso yotlhe eo re e fileng e tla bewa sentle mme maduo a tshkatsheko a tla tsenngwa mo dipampiring tsa maranyane kana diphatlaladiwa mo mmadikolo wa Kapa, bokopano jwa dikgaolo (regional conference) le jwa selegae (local seminars). Patlisiso e, e duelwa ke ba lelwapa lame ka fa tlase ga boeteledipele ja ga Mme B. Helen le Ngaka R. Elelwani mo sekolong sa Rehabilitation Sciences Division of Occupational Therapy

Fa o na le sepe fela se o batlang tlholoso ka sone, o ka ikopanya le mogokaganyi wa ditshekatsheko (research) ko lephateng la botstsogo mo atereseng e:

Research supervisor: Helen Buchanan, at Tel: +27 21 406 6383 or [email:](mailto:Helen.buchanan@uct.ac.za)

Helen.buchanan@uct.ac.za;

Chair of the University of Cape Town Human Research Ethics Committee,

Associate Professor Marc Blockman (Tel: +27 21 406 6492; Fax: +27 21 406 6411);

Au Mogolwane, research ethics, Ministry of Health, Private bag 0038 Gaborone. Telephone; 363200, Fax; 3914467

My own contact details are: Patrice Malonza

P.O Box 80283

Gaborone

Botswana

Cell +267 72821582

Tel +267 3621681

[Email. pmalonza@gmail.com](mailto:Email.pmalonza@gmail.com)

Signed

Appendix 3: Consent form

English version

Title of Study: A Collective Case Study on the Adaptive Mechanisms for Women Aged between 21 and 50 years and living with HIV/AIDS in Gaborone- Botswana. The study proposes to examine the adjustment methods that women between ages of 21 and 50 years living with HIV/AIDS in Gaborone, Botswana, use in their attempt to fit well in their work places.

Name of participant

Address

I Miss/Mrs/Ms

Agree to participate in this research

This agreement is out of my free will

I know what the study is all about

I had a chance to ask any questions about the study

I am aware that I can withdraw from the study at any time without giving any reason and without any punitive action on me

I have been given full information regarding the aims of this study and have been given information with the researcher’s names on and a contact number and address if I need further information.

All personal information provided by myself will remain confidential and no information that identifies me will be made public.

Sign Date

(Participant)

Name

Researcher’s Sign or Signed on behalf of the researcher

Sign Date

Name

Research Code

One copy to participant - One copy for researcher - One copy for UCT

Signed

Setswana version (A requirement from Botswana Ministry of health ethics committee)

SETLHOGO SA TSHEKATSHEKO

Patlisiso ka metlhale e bomme ba dingwaga tse di masome mabedi le bongwe go fitlha masome a matlhano (2 1-50 years) ba ba tshelang ka mogare wa HIV/AIDS ba e dirisang go emelena le seemo sa fa badirelang teng mo Gaborone - Botswana.

Leina la motsaya

karolo

Aterese

Ke le Mme/Rre/ Ngaka

Ke dumela go tsaya karolo mo patlisisong e.

Ga ke a patelediwa go tsaya karolo

Ke a itse gore patlisiso e keya eng.

Ke nnile le sebaka sa go botsa dipotso ka patlisiso e.

Ke a itse gore ke ka kgona go boela morago mo patlisising ka nako e nngwe le e nngwe ke sa fa mabaka gape ga nkake ka tseelwa kgato.

Ke filwe kitsiso yotlhe ka maikaelelo a patlisiso e, le maina a mmatla kitso (researcher) ga mmogo le megala fa ke batla go itse go feta fa.

Kitsiso yotlhe ka ga nna e ke e fileng e tla nna sephiri, ka jalo ga gona kitsiso epe e e amanang le nna e e tla phatlaladiwang.



Monwana

Letsatsi

(Motsaya karolo)

Monwana wa mmatlisisi kana boemo jwa mmatlisisi. Monwana Letsatsi

Leina

Nomoro ya Patlisiso(Research Code)

Appendix 4: Letter requesting Ministry of Health's Approval to conduct the study

P.O Box 80283

Gaborone

Botswana

Chair: Research Ethics Committee
Ministry Of Health
Private Bag 0038
Gaborone, Botswana

Dear sir/madam,

My name is Patrice Malonza, a Masters student in occupational therapy in the Division of Occupational Therapy, Department of Health and Rehabilitation Sciences, at the University of Cape Town. I am conducting a minor dissertation towards partial fulfilment of the Masters degree. The title of this study is 'Work environment Adaptive Mechanisms for Women living with HIV/AIDS in Gaborone – Botswana'.

I propose to explore the adjustment process or methods that women between ages of 21 and 50 years and living with HIV/AIDS in Gaborone –Botswana use to fit well in their work place. Enclosed please find a copy of the protocol, consent form for the study, and an approval letter from University of Cape Town's (UCT) Human Research Ethics Committee dated September 2011. I would appreciate your review and approval to contact this study. I will serve as the contact person for this study. If you have any questions or concerns, please feel free to contact me at +267 72821582. I look forward to your comments and approval.

Yours Sincerely

Signed

Patrice Malonza

Cell +267 72821582


Tel +267 3621681

[Email: pmalonza@gmail.com](mailto:pmalonza@gmail.com)

Appendix 5: Approval from the University of Cape Town (UCT) Human Research Ethics Committee

APPENDIX 5

UNIVERSITY OF CAPE TOWN



Health Sciences Faculty
Human Research Ethics Committee
Room E52-24 Groote Schuur Hospital Old Main Building
Observatory 7925
Telephone [021] 406 6338 • Facsimile [021] 406 6411
e-mail: shuretta.thomas@uct.ac.za

16 April 2012

HREC REF: 099/2012

Mr P Malonza
c/o Dr H Buchanan
Occupational Therapy
Health & Rehab, F-Floor
OMB

Dear Mr Malonza

PROJECT TITLE: AN EXPLORATION OF WORK ENVIRONMENT ADAPTIVE MECHANISMS USED BY WOMEN LIVING WITH HIV/AIDS IN GABORONE-BOTSWANA.

Thank you for responding to the issues raised by the Faculty of Health Sciences Human Research Ethics Committee in your e-mail dated 11th April 2012.

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

Approval is granted for one year till the 30th April 2013.

Please submit a progress form, using the standardised Annual Report Form (FHS017), if the study continues beyond the approval period. Please submit a Standard Closure form (FHS019) if the study is completed within the approval period.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please quote the HREC REF in all your correspondence.

Yours sincerely

Signed

PROFESSOR M BLOCKMAN
CHAIRPERSON, HSF HUMAN ETHICS
Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP) and Declaration of Helsinki guidelines.
The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 312.56 and 312.61.

Appendix 6: Approval from the Princess Marina Hospital, Gaborone



Telephone: +267 362 1400

P O Box 258, Gaborone, Botswana

REFERENCE:	PMH 5/79 (1)	DATE: 6 July 2012
Title	An Exploration of Work Environment Adaptive Mechanisms used by Women Living with HIV/AIDS in Gaborone, Botswana	
Principal Researchers	Mr Patrice Malonza, Princess Marina Hospital, P O Box 258, Gaborone.	
PMH Decision	Full approval	
Expiration Date	5 July 2013	

Dear Mr Malonza,

We thank you for making the amendment to the study above and removing Section 4.2. You now have full approval to conduct research at Princess Marina Hospital. The following conditions will apply:

1. You must submit one (1) hard copy and one (1) soft copy of the final report;
2. You must submit the report of the research project within three (3) months of completion of the study.
3. Any amendments to the research proposal that has been approved must be submitted for consideration to the Princess Marina Hospital Research and Ethics Committee (REC) for consideration.
4. You must allow the REC access to the study at any time for purposes of auditing;
5. You must get permission from the relevant head of department to conduct research in their departments.

Appendix 7: Approval from the Ministry of Health, Gaborone, Botswana

Telephone: (267) 363200
FAX (267) 353100
TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD



MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REPUBLIC OF BOTSWANA

REFERENCE NO: PPME 13/18/1 PS V (219)

25 May 2012

Health Research and Development Division

Notification of IRB Review: New application

Dr Patrice Malonza
P.O. Box 80283
Gaborone

Protocol Title:

AN EXPLORATION OF WORK
ENVIRONMENT ADAPTIVE MECHANISMS
USED BY WOMEN LIVING WITH HIV/AIDS IN
GABORONE-BOTSWANA

HRU Protocol Number:	HRU 00762
HRU Approval Date:	24 May 2012
HRU Expiration Date:	24 May 2013
HRU Review Type:	HRU reviewed
HRU Review Determination:	Approved
Risk Determination:	Minimal risk

Dear Dr Malonza

Thank you for submitting new application for the above referenced protocol.
This approval includes the following:-

1. Application form
2. Protocol
3. Data collection tools

This permit does not however give you authority to collect data from the selected sites without prior approval from the management. Waiver of consent is also approved since data will be collected from patients records.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal must be submitted to the Health Research and Development Division in the Ministry of Health for consideration and approval.