OCCUPATIONAL STRESSORS THAT INFLUENCE PROFESSIONAL HEALTH WORKERS

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Submitted in partial fulfillment of the requirements for the degree:

MAGISTER IN BUSINESS ADMINISTRATION

in the Faculty of Business and Economic Sciences

at the Nelson Mandela Metropolitan University

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March 2010
I, Ulungile Klaas Sontyale, hereby declare that:

- The work in this research paper is my own work;

- All sources used or referred to have been documented and recognized;

- This research paper has not been previously submitted in full or partial fulfilment of the requirements for an equivalent or higher qualification at any other recognized education institution.

_____________________                                                              ____________  
U.K. SONTYALE                                                                                          DATE
ACKNOWLEDGEMENTS

During the course of my studies, many people played crucial roles in ensuring my success. I would sincerely like to honour and thank them through this acknowledgement:

- My supervisor, Prof. D.M. Berry, for his patience and gentle, professional encouragement throughout the course of this study;

- My wife, Ntombentsha Jacqueline Sontyale, for her continued support, sacrifices and words of encouragement;

- My sons, Mncedisi, Litha and Lwazi, for allowing me to devote valuable time to my studies, instead of spending it with them;

- My parents and siblings for their encouragement and support during my studies;

- The following institutions: The Nelson Mandela Metropolitan Municipality and Nelson Mandela Metro Health District (Management and participants);

- Academic and non-academic staff of the MBA unit, MBA group 7.10 and other colleagues and friends, for their support and encouragement;

- Last, but not least, the Almighty who gave me strength when I did not have it any longer.
ABSTRACT

**Background:** Despite the prevalence of HIV/AIDS stabilizing and slightly decreasing in certain provinces, there are a number of People Living With HIV/AIDS (PLWHA) in South Africa. Many people seek help at primary health clinics and hospitals and receive chronic care at these facilities. Caring for these chronic patients and new patients entering the health system can be stressful to the health professionals who are involved.

Many studies that have been conducted have focused on the clinical aspects of individual patients, while few studies have focused on the experiences and stressors of health professionals looking after PLWHA. To ensure quality of care for patients with HIV/AIDS, it is important to understand the experiences of health professionals looking after HIV/AIDS patients and how stressful experiences may influence their attitude towards these patients.

**Aim:** The aim of this study is to report the factors health professionals perceive as occupational stressors caring for people living with HIV/AIDS in the public health sector of the Nelson Mandela Metropolitan Municipality.

**Research design and Methodology:** A quantitative, descriptive and non-experimental research design was followed. A pilot study was conducted to determine the clarity of questions, effectiveness of the instructions, completeness of the response sets, the time required to complete the questionnaires and the success of the data collection. The primary method of data collection was self-administered questionnaires. The questionnaires were dispatched to 30 health professionals at the public health facilities in the Nelson Mandela Metropolitan Municipality. A descriptive statistical analysis was done using a Statistical Package. This revealed the following findings.

**Findings:** The following are the findings that were perceived to be occupational stressors: organizational factors, job design factors, career and promotional factors, role-related factors and cultural factors.
Conclusion and recommendations:
There are occupational stressors that affect health care professionals working in an HIV/AIDS setting. The following are the recommendations to rectify or to improve the situation:

- Improve the communication of goals and objectives;
- Redesign the job;
- Human-resources development;
- Improvement of salaries;
- Career planning and mentoring; and
- Sensitisation of employees to cultural differences.

Key words: Occupational stressors, health professionals, HIV/AIDS, public health facilities
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CHAPTER 1: INTRODUCTION, PROBLEM STATEMENT AND OUTLINE OF THE STUDY

1.1. INTRODUCTION

Health care systems are associated with excessive workloads, a lack of autonomy, organisational restructuring and a shortage of staff. Despite these challenges health professionals choose to provide health care to the communities in need of their services (Jackson, Firtko and Edenbourough, 2007:1). The study by Benevides-Pereira and Alves (2007:565) indicates that health-care providers looking after HIV/AIDS infected clients are prone to stress and burn-out syndrome.

This study by Benevides-Pereira and Alves (2007:565) has further revealed that caring for Human Immunodeficiency Virus/Acquired immune deficiency syndrome (HIV/AIDS) infected individuals is physically and emotionally tiring and stressful due to the emotional aspect involved in the relationship.

Greenberg and Baron (2003:122) define stress as the pattern of emotional states and physiological reactions that occur in response to demands from within or outside an organisation. They further define a stressor as any demand, either physical or psychological in nature, encountered during the course of living.

Coetzer and Rothmann (2006:30) view occupational stress as the product of an imbalance between environmental demands and individual capabilities. Studies have shown that occupational stressors may result in psychological, physical and behavioural stress reactions, such as burn-out, depression and psychosomatic diseases.

To put things into perspective, it is interesting to consider an integrated model of stress that has been developed by Champoux (2006). Champoux’s (2006:382)
model describes sources of stress and conditions under which those sources evoke a stress response. According to Champoux's (2006:382) model, stressors occur in work experiences and non-work experiences and during various life transitions. Work stressors include deadlines, work-overload, job insecurity, shift work and the physical environment.

Champoux (2006:384) further argues that stress response is characterised by an increase of the heart rate, the breathing rate, blood pressure, increased apprehension and alertness. The behavioural response can either be distress or eustress. Distress happens when a person does not choose the right behaviour to manage the stress response, for example use of drugs or smoking. Eustress is the excitement that comes with winning or promotion.

Champoux (2006:384) describes moderators of stress as personal characteristics, such as perceptions and behavioural responses to stressors. Moderators include coping responses, personality techniques, various skills and abilities.

1.2. THE MAIN PROBLEM

Coetzer and Rothmann (2006:29) are of the opinion that rapid global economic growth and urbanisation have resulted in acute competitiveness and rivalry between organisations. The impact of this competitiveness is felt amongst employees by engendering general feelings of distrust, tension, strain in interpersonal relations, jealousy from colleagues and interpersonal conflicts.

Rothmann, Steyn and Mostert (2005:55) state that modern business is highly competitive, demanding and expensive, and as a result organisations, management and employees are under constant pressure to achieve higher targets. Rothmann and Joubert (2007:49) point out that globalisation and continued international pressure on organisations to perform better, with fewer
resources, are reflected in the changing psychological contracts between employers and employees.

They further argue that employees are expected to give more in terms of time, effort, skills and flexibility, whilst job security, career opportunities and lifetime employment are diminishing.

The South African Department of Health aims to create a caring and humane society in which all South Africans have access to affordable and good quality health care. Key strategies used by the Department of health to provide affordable and good quality health care are:

- Strengthening partnerships with communities, key stakeholders, the private sector, Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs); and
- Building an accountable public health sector that is committed to improving the standard of health care delivery to ensure a healthier nation in the spirit of Batho Pele.

Health care in South Africa is provided through local clinics and hospitals. Local clinics, referred to as Primary Health Care Clinics, are the first point of service for communities. Treatment and care are provided to patients at primary health care clinics; and cases that require specialist interventions are referred to hospitals. The government has set up norms and standards which guide health workers in their delivery of services. Primary Health care clinics provide a range of services that include:

- **Women's reproductive health:** The focus is on antenatal, delivery, postnatal, termination of pregnancy and family-planning care.
- **Management of genetic disorders and birth defects:** Genetic services are part of the integrated maternal, child and women's health care. It aims
to assist individuals with a genetic disadvantage to live and reproduce as normally and responsibly as possible. The services provided include clinical diagnostic services, counselling, laboratory support, prevention strategies and public awareness campaigns in collaboration with NGOs, CBOs and other government sectors.

- **Integrated management of childhood illnesses (IMCI):** The focus of this area of work is to educate communities and provide preventive treatment and care to reduce the incidence of diseases afflicting children. These include diphtheria, pertussis, tetanus, measles, poliomyelitis, hepatitis and tuberculosis (TB).

- **Adolescent and youth health:** The aim of this area of work is to provide information, treatment and care to young people. The focus is on growth and development, gender-specific needs of adolescents, oral care, nutrition, and the risks to health of alcohol, smoking and drugs, safe sex, condom use, STD, HIV, AIDS, and TB.

- **Cholera and diarrhoeal disease control** is an essential daily element of clinical services, as well as an element in outbreak prevention and control.

- **Prevention and management of Sexually Transmitted Infections (STIs)** is a service available daily at a clinic, and is a component of services for reproductive health and for the control of HIV and AIDS.

- **Home-based care:** Home-based caregivers are in-community volunteers who visit bed-ridden people at home and provide basic care. They work with people of all age groups with terminal illnesses, chronic illnesses, physical challenges, and mental challenges. Clinics manage and support the work of home-based caregivers.

- **Prevention and treatment of malaria:** South Africa has an effective control programme for malaria, although seasonal outbreaks occur in some high-risk areas.

- **Tuberculosis (TB):** This programme focuses on providing treatment and care for people infected with TB. The clinics offer comprehensive
treatment which includes support through the direct observation of treatment support (DOTS) programme.

- **Trauma and Emergency Services:** Clinics provide emergency and resuscitation services, treatment and referral of patients that have experienced trauma and/or injury and have arrangements to deal with disaster situations.

- **Survivors of sexual abuse, domestic and gender violence:** The service involves co-operation between the health sector, the police and the Department of Justice. Survivors are provided with counselling, STI prophylaxis and HIV testing, emergency contraception, care of injuries, medico-legal advice.

- **Treatment and management of chronic diseases:** Treatment and education is provided by the department of health and home-based caregivers to people suffering from diseases like diabetes and hypertension.

- **HIV and AIDS:** This area of work includes education, prevention, care, voluntary testing and counselling, the treatment of opportunistic infections and anti-retroviral treatment. It further includes the medical rights of people living with HIV and AIDS, such as confidentiality, HIV testing and informed consent, and the right to health care and medical treatment (South Africa, 2008).

The Médecins Sans Frontières’ (2007) report revealed that a shortage of staff, clinical equipment, lack of knowledge and skills are major factors affecting the roll-out of comprehensive HIV/AIDS programme in South Africa. The report indicates that for each 100,000 inhabitants there are 74 doctors and 393 nurses. Worse affected areas are rural areas and worse affected provinces are rural or poor provinces, like the Eastern Cape, Limpopo, Mpumalanga and Kwazulu-Natal.

In view of the numerous services provided at primary health care clinics and the shortage of key resources, like human resources, clinical equipment, clinical space and high patient workloads, health care may result in occupational stress
to health care professionals rendering these services. The above viewpoints lead to the following question that needs to be researched:

**Can the implementation of stress management strategies result in decreased levels of stress?**

**1.3. SUB-PROBLEMS**

In order to answer the main problem, the following sub-problems were developed:

**1.3.1. Sub-problem one**
What factors are critical for the successful implementation of a stress management strategy?

**1.3.2. Sub-problem two**
What are the main occupational stressors among employees?

**1.3.3. Sub-problem three**
What strategies for effective stress management are currently in place in the organization?

**1.3.4. Sub-problem four**
How can the results obtained from the resolution of sub-problems one, two and three above be combined into a strategy that can be used by the organization to decrease the levels of occupational stressors.

**1.4. DELIMITATION OF THE RESEARCH**

The purpose of the delimitation of the research is to make the topic manageable from a research perspective. Delimitation is based on the organizational selection, professional group and geographical demarcation.
1.4.1. Selected organization

The Nelson Mandela Metropolitan Municipality is one of the districts rendering HIV/AIDS services in the Eastern Cape. The research was conducted in public health facilities in the Nelson Mandela Metropolitan Municipality. The research was limited to the identification of the perceptions regarding work stressors amongst professional health workers employed in an HIV/AIDS environment in the Nelson Mandela Metropolitan Municipality.

1.4.2. Professional grouping

The research was limited to professional health care workers working in public health institutions within the Eastern Cape department of health. This group of professionals consists of employees who consult HIV/AIDS-positive patients on a daily basis and have to make decisions with the resources at their disposal.

1.4.3. Geographical demarcation

The research was done in the Nelson Mandela Metropolitan Municipality, but it was strictly limited to Port Elizabeth public health facilities, excluding Uitenhage and Despatch which form part of the metropolitan area. The geographical demarcation was done purely for the effective management of the study.

1.5. DEFINITION OF THE CONCEPTS

1.5.1. Stressor

Any demand, either physical or psychological in nature, encountered during the course of living (Swanepoel, 2007:558); Greenberg and Baron (2003:122).

1.5.2. Stress

The arousal of mind and body in response to an environmental demand (Swanepoel, 2007:558).
1.5.3. Health workers
The person that works in a health system with the primary goal of improving the health of others (WHO, 2006: xvi).

1.6. ASSUMPTIONS
The following are the assumptions of the study:

- There are stressors associated with high HIV/AIDS prevalence among the health professionals working in an HIV/AIDS setting.
- A conceptual framework can be developed and used to deal with occupational stressors in an HIV/AIDS setting.
- Management strategies can be developed for dealing with work stressors among professionals working in an HIV/AIDS setting.

1.7. THE SIGNIFICANCE OF THE RESEARCH
Rapid economic growth, competitiveness among organizations and lack of resources are among the factors that cause stress to employees. Highly stressed employees become less productive. Stressful environments cause high rates of absenteeism and a high attrition rate. The aforementioned factors might contribute to an organization becoming less competitive, thus resulting in lower profit margins.

The significance of the study is that it will aid in shedding light on the occupational stressors among health professionals. It is further hoped that the study will help in developing strategies for managing work-related stress.

1.8. THE RESEARCH METHODOLOGY
Welman and Kruger (2001:2) argue that research methodology is the process that involves the application of various methods and techniques in order to
generate scientifically obtained knowledge by using objective methods and procedures.

In this study, the following methods and procedures were followed to make this study both scientific and objective. A literature review was done, choosing and applying the research design, sampling, data collection and data analysis.

1.8.1. A literature review

Mouton (2001:87) defines a literature review as the review of a body of scholarship. Mouton (2001:87) and De Vos (1998:65) are of the view that researchers embark on a literature review for the following reasons:

- To ensure that the researcher does not duplicate a previous study;
- To discover the most recent and authoritative theorizing on the subject;
- To find out what the most widely accepted empirical findings in the field of study are;
- To identify the available instrumentation that has proven validity and reliability; and
- To get a substantially better insight into the dimensions and complexity of the problem.

In this study, the literature review was done precisely for the above reasons.

1.8.2. Research design

Welman and Kruger (2001:46) argue that research design is the plan according to which the researcher will obtain research participants and collect information from them and make their findings known. Collis and Hussey (2003:55) describe research design further as an accurate and systematic description of the research methodology which is necessary to ensure the scientific correctness of the research study.
In this study, a quantitative, descriptive and non-experimental research design will be followed.

1.8.3. Population and sampling
De Vos (1998:191) defines population as the set of entities for which all the measurements of interest to the researcher are represented. The entities may be people, events, organization units or other sampling units (De Vos, 1998:190).

The target population of the study is health professionals working in an HIV/AIDS setting at selected public health facilities in the Nelson Mandela Metropolitan Municipality. The population of this study consists of medical officers, nurses and pharmacists. De Vos (1998:191) defines sampling as the element of the population considered for actual inclusion in the study. De Vos (1998:191) further states the following reasons of sampling: the feasibility of the study, and saving time and effort.

Systematic random sampling was used to include health professionals working at an HIV/AIDS public health facility in the Nelson Mandela Metropolitan Municipality.

1.8.4. Data collection
Collis and Hussey (2003:150) state that data collection are methods used in research processes which are concerned with collecting data. Mouton (2001:105) classifies data-collection methods into four categories: observation, interviewing, testing, selecting and analyzing texts.

Likert scale-structured self-administered questionnaires (falling under the interviewing method) were developed. The following is the outline of the questionnaire used in the study:

- **Section A**: Biographical information
- **Section B**: Organisational factors
• **Section C**: Job-design factors
• **Section D**: Career and promotional factors
• **Section E**: Role-related factors
• **Section F**: Cultural factors

Data-collection tools were taken to experts for review. A pilot study to test the research tools was conducted. Minor changes were made to the final tool. Data collection was conducted over the period of two weeks from the day the questionnaires were hand delivered.

1.8.5. Data analysis

Mouton (2001:108) argues that data analysis involves the breaking up of data into manageable themes, patterns, trends and relationships with the aim of understanding the various constitutive elements of the data. De Vos (1998) elaborates that data analysis means categorising, ordering, manipulating and summarizing the data to obtain answers to the research questions.

The data were analysed using a Statistical Package of Social Sciences (SPSS) version 15.0. Descriptive and inferential data analysis was used. In the descriptive data analysis, data are presented in tables, figures, frequencies, histograms, percentages and means. In the inferential data analysis, data are presented by estimating the mean, using one sample t-test, measures of difference using ANOVA and Chi-squared, and measures of association, using the Pearson correlation and multiple regression.

1.9. THE OUTLINE OF THE STUDY

The following is the outline of the study:

• **Chapter 1**: Contains the introduction, a problem statement, a concept definition and the outline of the research.
• **Chapter 2:** A literature review was undertaken to provide an overview of HIV/AIDS globally, in sub-Saharan Africa, in South Africa and in the Nelson Mandela Metropolitan Municipality. The macro- and micro-economic impact of HIV/AIDS in South Africa is outlined. This is followed by a literature overview on stress as a concept, occupational stress and the causes of stress, as well as models of stress.

• **Chapter 3:** HIV/AIDS care and occupational stress are discussed. Elements critical to the implementation of stress-management strategies are discussed. A conceptual model for stress management is presented.

• **Chapter 4:** This chapter discusses the research methodology of the study in terms of research design, data collection and data analysis.

• **Chapter 5:** Provides a data analysis and the interpretation of the results.

• **Chapter 6:** Contains the conclusion and recommendations of the research project.

### 1.10. CONCLUSION

The aim of this chapter was to provide a better understanding of the study to the reader by, introducing the research, defining the main problem, as well as the sub-problems. Definition of the concepts, delimitation of the research and research methodology were also explained. The outline of the research was additionally explained.

Subsequent chapters are all aimed at addressing the main problem, but also at answering the sub-problems.

Chapter two will be a literature review of the research, an overview of the magnitude of HIV/AIDS, a model of stress and stress management, as well as the elements critical to the implementation of stress-management strategies, together with a conceptual model of stress management.
CHAPTER 2: AN OVERVIEW OF HIV/AIDS AND OCCUPATIONAL STRESS

2.1. INTRODUCTION

A literature review is vital for a better perspective on the study. This chapter represents a literature review that was undertaken to provide an overview of HIV/AIDS globally, in sub-Saharan Africa, in South Africa and in the Nelson Mandela Metropolitan Municipality. The macro- and micro-economic impacts of HIV/AIDS in South Africa are also outlined.

This is followed by a literature overview on stress as a concept, occupational stress and causes of stress and models of stress. Lastly, a review of past studies and their findings on stress amongst South African health professionals will also be discussed.

2.2. THE MAGNITUDE AND IMPACT OF HIV/AIDS

Health and disease are two related concepts. Health, as defined by the World Health Organisation (WHO) is a state of complete physical, mental and social wellbeing, not just the absence of disease or infirmity. This implies that health has physical, psychological and social dimensions and the physical symptoms can be viewed as manifestations of either psychological or social problems (Mtwentula, 2005:2).

Fox, Hall and Elveback (1970:34) are of the opinion that health is the state of equilibrium in which multiple and diverse factors are balanced. Fox et al. (1970:185) state that good health is a properly integrated functioning of body components to give an optimal function of the total individual in terms of his/her mental, emotional and physical dimensions.

Calnan (1987:1) defines health behaviour as any activity undertaken by a person believing himself to be healthy, for the purpose of preventing disease or detecting it at an early and symptomatic stage. Illness behaviour is any activity undertaken
by a person who feels ill, to define the state of his health and to discover a suitable remedy. Fox et al. (1970:186) argue that disease is any deviation from the normal function or state of the total individual, or any component parts. Andy deviation may be imperceptible and may lead to evident dysfunction.

HIV/AIDS and stress are two conditions affecting or impacting on the state of health of citizens and workers of many countries.

Globally, an estimated 33 million people were living with HIV in 2007, of whom 2.1 million were children. About 2.7 million were new infections, with 1.7 million (68 per cent) who were in Sub-Saharan Africa. It is estimated that nearly 3 million people are receiving antiretroviral therapy (ART), 33 per cent of pregnant women with HIV received antiretroviral therapy to prevent mother-to-child transmission (WHO, 2007).

South Africa is one of the countries in Sub-Saharan Africa that is severely affected by the HIV/AIDS epidemic. The following are demographic and socio-economic data on South Africa. South Africa’s estimated population is 48 million; the population aged between 15 and 49 is estimated to be 26 061 000. Sixty per cent of the South African population live in urban areas.

The annual population growth rate is 0.2 per cent versus the life expectancy of less than 51 years. The infant mortality rate is one of the highest in the world, with 56 deaths of infants per 1000 live births. One of the major contributors to these deaths is HIV/AIDS.

It is estimated that there will be 1 million deaths a year from 2010 on, and 50 per cent may be attributed to HIV/AIDS unless drastic steps are taken to curb the epidemic. The crude death rate is 16.7 per 1000 population (UNAIDS, 2008).
The socio-economic data reveal that South Africa's gross national income is $8 900 per capita. $811 per capita is spent on health, meaning that 9.9% of general government expenditure is spent on health.

There has been an increase in spending on HIV/AIDS services from $425.9 million in 2005 to $480.2 million in 2007 (UNAIDS, 2008).

Out of 48 million South Africans, an estimated 5.7 million people are living with HIV/AIDS; approximately 3.2 million of these are women, and 280,000 are children between the ages of 0 and 14 years. HIV prevalence among women attending antenatal clinics was 29% in 2006, compared to 30.2% in 2005. Among adults between the ages of 15 and 49 years, HIV prevalence was 18.3% in 2006.

Evidence points to a significant decline in HIV prevalence among young people below the age 20. In this age group the HIV prevalence was 13.7% in 2006 compared with 15.9% in 2005. There is a significant variation in HIV prevalence according to provinces, ranging from 39.1% in KwaZulu-Natal to 15.1% in the Western Cape. Eastern Cape HIV prevalence is 29%, the third highest prevalence rate after Kwazulu-Natal and Gauteng with 39.1% and 30% respectively.

Inter-district HIV prevalence variations in the country are between 46% and 5.3% (UNAIDS, 2008).

In South Africa the estimated HIV prevalence in 1990 was below 5 per cent and in 2007, it was 19 per cent. It is further estimated that the number of adults and children living with HIV in 2001 was 4.7 million and 5.7 million in 2007. At the end of 2007 it is estimated that 1.7 million were eligible for ART, and 460 000 are receiving antiretroviral therapy. The estimated number of deaths in 2001 was 180 000 compared with 350 000 deaths in 2007 (WHO, 2007).
The Department of Health’s (2008:8) report on the HIV-prevalence concurs with the WHO’s (2007) study. A National Health HIV prevalence (2007) study shows that HIV prevalence rates have been stable for several years. There is now evidence of the epidemic being on the decline. The 2007 national HIV prevalence estimate stands at 28.0% (CI: 26.9% – 29.1%).

This represents a possible 1.1% reduction in HIV prevalence from 2006 to 2007. When the 2005 and 2007 HIV estimates are compared, we observe a statistically significant decline in the prevalence of HIV.

The Department of Health’s report (2008:13) indicates that there is a statistically significant variation in HIV prevalence between some of the provinces and within districts. What is markedly evident is a decrease in HIV prevalence in those districts that had very high prevalence rates i.e. > 40% in 2006: Amajuba in Kwazulu-Natal, Zululand in Kwazulu-Natal and Umgungundlovu in Kwazulu-Natal have all shown a decrease of between 2% to 5% in 2007.

In districts serving metropolitan areas, urban informal settlements and mining communities, the HIV prevalence has either remained constant or has decreased slightly, for example, eThekwini, the Cape Metropole, the Cape Winelands (Western Cape) and Motheo (Free State). However, in districts serving predominantly rural areas, the HIV prevalence has increased slightly. This is particularly pronounced in Xhariep (the Free State), O.R. Tambo (Eastern Cape), Umzinyathi in Kwazulu-Natal and Sekhukhune (Limpopo).

In all districts of Mpumalanga, Pixley district (Northern Cape), Bophirima and Central (North West), Central Karoo, Eden, Overberg and the West Coast (Western Cape) the prevalence rates from 2006 to 2007 have increased significantly.
Intra-provincial variations were wide for the Northern Cape (7.3% to 22.4%); Western Cape (10.2% to 23.6%); Mpumalanga (27.6% to 40.6%) and the Eastern Cape (14.5% to 29.5%).

The Department of Health’s report (2008:13) further indicates that in the Eastern Cape, there was a decrease in HIV prevalence especially among women served in metropolitan or urban areas such as the Nelson Mandela Metropole, Alfred Nzo and Cacadu. A slight increase was, however, noted in the clinics serving rural nodes like Amatole, Chris Hani and Ukhahlamba.

Van Donk’s (2002) study indicates the following socio-economic profile of Nelson Mandela Metropolitan Municipality:

- The area has an estimated population of 1.2 million people;
- Just over half (52%) of the population is female;
- The area has a young population; 38% of the population is younger than 20-years old.
- The annual population growth rate has been estimated at 2.8%, but with the impact of HIV/AIDS, it is anticipated that the annual population growth rate will not exceed 1.9%.

Van Donk’s (2002) study further indicates that it is estimated that there is a 26% HIV prevalence rate in the Nelson Mandela Metropolitan Municipality. In comparison, rural areas in the Western Region of the Eastern Cape Province are estimated to have a 7% HIV prevalence rate. This means that the HIV prevalence rate in the Nelson Mandela metropolitan area is higher than the provincial HIV prevalence rate of 21.7% and even the national HIV prevalence rate of 24.8% (in 2001).

Data indicated that in 1989, the cumulative number of people infected with HIV in that period amounted to 41,180 and the total number of AIDS deaths since 1989 was 4,739. Disregarding any potential movement patterns of people infected with
HIV to and from the metropolitan area, this means that the area hosted at least 36,441 people living with HIV/AIDS. The data also indicate that HIV continues to spread with an annual growth rate of 11%.

The Department of Health’s report (2008) reveal a positive picture on the HIV prevalence rate in the Nelson Mandela Metro; in 2006 the prevalence rate was 31,9 per cent and in 2007 27,9 per cent. There is therefore a significant decrease of prevalence; however much still needs to be done.

Looking at the South African HIV/AIDS prevalence rate, one is left wondering what the impact is on the family, community, businesses and the South African government system.

2.2.1. Micro and macro-economic impact of HIV/AIDS

A study by the Bureau of Economic Research (2004) outlines the following micro-economic impact of HIV/AIDS at selected sectors with the mining and manufacturing sectors being the worst affected compared to retailers and motor traders:

- Reduced labour productivity and high absenteeism rates;
- Decreased labour supply in terms of numbers, productiveness and skill levels due to AIDS impacting on the economically active population;
- Higher labour turnover rates, lost experience and skills and higher recruitment and training costs; and

The macro-economic impact of AIDS is difficult to assess. Most studies have found that estimates of the macro-economic impacts are sensitive to assumptions about how AIDS affects savings and investment rates and whether AIDS affects the best-educated employees more than others. Few studies have been able to incorporate the impacts at the household and firm level in macro-economic projections.
Some studies have found that the impacts may be small, especially if there is a plentiful supply of excess labour and worker benefits are small. There are several mechanisms by which AIDS affects macro-economic performance:

- AIDS deaths lead directly to a reduction in the number of workers available. These deaths occur to workers in their most productive years.
- As younger and less-experienced workers replace these experienced workers, the worker productivity is reduced.
- A shortage of workers leads to higher wages, which leads to higher domestic production costs.
- Higher production costs lead to a loss of international competitiveness which can cause foreign exchange shortages.
- Lower government revenues and reduced private savings (because of greater health care expenditure and a loss of worker income) can cause a significant drop in savings and capital accumulation.
- This leads to slower employment creation in the formal sector, which is particularly capital intensive.
- Reduced worker productivity and investment leads to fewer jobs in the formal sector. As a result some workers will be pushed from high-paying jobs in the formal sector to lower-paying jobs in the informal sector.
- The overall impact of AIDS on the macro-economy is small at first, but increases significantly over time.
- In South Africa, by the year 2010, it is estimated that child mortality will be 99.5 per 1000 children, including the effect of AIDS, while the number would have been 48.5 per 1000 without the effect of HIV/AIDS.
- Life expectancy will decrease to 47.8 years from the previously expected 67.9 years, due to the impact of HIV/AIDS.
- Overall, the population growth rate with AIDS will be 0.4% by the year 2010, while the growth rate without AIDS would have been 1.4% (Bollinger and Stover, 1999:7).
HEARD’s (2000) study agrees with Bollinger and Stover’s (1999) study that the macro-economic impact on South Africa will be due to reduced productivity and increased costs for companies, reduction in household income due to increased AIDS-related expenditure, an increase in the government budget deficit due to increased health spending. The most-affected government departments are Health, Education and Social development.

Health care is negatively affected because there is increased demand for services; on the other hand, health departments experience a decreased ability to offer quality services, as a result of a staff loss and the crowding of health facilities.

The study by Bollinger and Stover (1999) agrees with that of HEARD (2000) that AIDS will affect the health sector in terms of increased numbers of people seeking services, and health care for AIDS patients is more expensive than for most other conditions. Governments will face trade-offs along at least three dimensions: treating AIDS versus preventing HIV infection; treating AIDS versus treating other illnesses; and spending for health versus spending for other objectives. Maintaining a healthy population is an important goal in its own right and is crucial to the development of a productive workforce essential for economic development.

From the above discussion, it is evident that more people, including the workforce are being infected by HIV/AIDS, and HIV/AIDS impacts South Africa’s economy negatively. The discussion also reveals that more than 10 per cent of people are living with HIV/AIDS in South Africa; close to half a million are receiving antiretroviral treatment, and the prevalence of HIV is more than 25 per cent.
The majority of infected people get health care at public sector institutions. The ultimate effect of such a scenario puts more strain on public health resources. The Nelson Mandela Metropolitan district is no exception. HIV/AIDS puts more strain on health resources; and one of those resources is the human resource. It is reasonably assumed that HIV/AIDS causes stress to health professionals who are looking after people infected by HIV/AIDS.

The following are some of the responses of the South African National government in mitigating the epidemic:

- Development of an optimistic National Strategic Plan 2007-2011, aimed at preventing new infections, reducing mother-to-child infection through routine counselling and testing services, condom distribution and the availability of condoms, and the reduction of poverty among affected communities.
- Having collaboration relationships with Non-Governmental Organisations (NGOs) to prevent new infections and provide care treatment and support for infected communities.

An HIV/AIDS epidemic puts strain on human resources in an organization which manifests as stress. Stress manifests in physical, mental, social or spiritual ways. These effects may diminish with a decrease in the levels of stress, but prolonged stress can lead to psychological breakdowns, long-term psychological problems, relationship problems and physical ill health (Mtwentula, 2005:8).

Grant and Brisbin (1992:2) are of the opinion that factors causing stress can be dealt with by an employer or an employee by addressing the following areas:

- Reduction or elimination of work-related traumatic injuries;
- Reduction or elimination of work-related repetitive motion injuries;
• Modified work programmes for rehabilitation following serious illness or injury;
• Alteration of unhealthy lifestyles through education and support;
• Stress management and time management;
• Weight management;
• Smoking cessation;
• Physical fitness, nutrition and health education;
• Workstation assessment and ergonomic design;
• Training in safe work operations and procedures;
• Training in back care for maximum work life;
• Development of a variety of incentives and employee recognition programmes; to promote improved morale of the worker, which in turn promotes improved productivity.

Grant and Brisbin (1992:2) summarise the above-listed activities as an effective employee or workplace wellness programme. Grant and Brisbin (1992:4) are of the opinion that a workplace wellness programme addresses much more than the physical health of individual workers, but it also addresses the overall health status of the business.

Grant and Brisbin (1992:3) further suggest that an informed employer will do everything within his or her power to maintain a healthy workforce and get objective facts about the situation. The extent of the problem can be determined by conducting a survey and analyzing the following activities:

• An increase in absenteeism rate
• An increase in sick leave rate
• An increase in the occurrence of temporary or permanent disabilities
• An increase in any worker’s compensation costs
• An increase in labour relations disputes
• Bad communication between management and staff.
2.3. EMPLOYEE WELLNESS

Employee wellness refers to the employees’ state of optimized social, physical and mental health and wellbeing. It entails a holistic approach to looking after the physical, psychological and social state of wellbeing of employees in an organization. Employers are expected to provide a safe working environment that complies with the legal requirements (Swanepoel, 2007:541).

2.3.1. Legislation governing employees’ wellness

There is a legislative framework in South Africa that governs employees’ wellness and which serves as a guideline for ensuring employee wellness. The main legislative framework is the Constitution of South Africa, Act 108 of 1996. In the Constitution under the Bill of Rights, the right to a healthy and safe working environment is enshrined.

The next piece of legislation is the Occupational Health and Safety Act (1993). The following are the objectives of the Occupational Health and Safety Act:

- Every employer must provide and maintain a working environment that is safe and without risk to the health of the employees.
- The employer must inform the workforce of hazards in the workplace.

As stress is one of the issues affecting the wellbeing of the employees, there is a need for stress to be managed effectively. Without proper management high levels of stress may lead to low productivity, increased absenteeism and turnover, alcoholism, drug abuse and ill health (Grobler, Warnich, Carrell, Elbert and Hatfield, 2006:388).

Before an organization can consider strategies to manage stress, it is necessary to define the concept of stress, the most likely causes of stress, the symptoms of stress and the various theories of stress.
2.4. STRESS AND OCCUPATIONAL STRESS

A definition of stress, as well as occupational stress, will be discussed in detail in the next paragraphs.

2.4.1. Defining stress

Greenberg and Baron (2003:122) define stress as the pattern of emotional states and physiological reactions occurring in response to demands from within or outside an organisation. Swanepoel's (2007:558) definition of stress is similar to Greenberg and Baron’s (2003) definition; he defines stress as the arousal of mind and body in response to an environmental demand (stressors). Both authors are in agreement that a stressor is any demand, either physical or psychological in nature, encountered during the course of living.

Occupational stress is considered to be the product of an imbalance between environmental demands and individual capabilities. Grobler et al. (2006:389) define stress comprehensively by saying it is a discrepancy between an employee’s perceived state and desired state, when such a discrepancy is considered critical by the employee.

The study by Coetzer and Rothmann (2006:30) has shown that occupational stressors may result in psychological, physical and behavioural stress reactions, such as burn-out, depression and psychosomatic diseases.

Individuals can experience stress due to their personal environments, as well as their occupational environments. For the sake of this study, the causes of occupational stress will be further discussed.
2.4.2. The causes of occupational stress

Werner (2007:317) classifies factors causing occupational stress into seven categories or groups, namely: organizational factors, job-design factors, interactional factors, career and promotional factors, role-related factors such as work under-load and work over-load and stressful occupations. Grobler et al., (2006:389) indicate that there are five more factors of stress, including organizational factors, namely individual, interpersonal, cultural, community and national factors.

- **Organisational factors**

Werner (2007:317) and Potgieter (1996:206) define stressors under the heading of organizational factors, such as change and job insecurity, restructuring, downsizing and retrenchment. Grobler et al. (2006) add the following factors to the aforementioned list, definitions of organizational factors, such as poor professional communication systems, extremes of management styles, working with an inexperienced staff, lack of clarity on the values or goals of the organization, inadequate staffing and lack of consideration for the individual.

- **Job design Factors**

Werner (2007:318), Potgieter (1996:208) and Rice (1999:187) argue that poor physical working conditions like noise, temperature, lightning problems and workstation design are additional causes of occupational stress. Werner (2007:318) further argues that the following job design factors cause stress: severe time constraints, lack of clear objectives, complex problem, lack of intellectual demand and repetitive routine work.
• **Interactional factors**

Werner (2007:318) refers to lack of sensitivity and critical work attitudes of colleagues, autocratic leader behaviour, team pressures to conform and diversity issues as being interactional stressors. Like Werner (2007), Grobler et al. (2006) and Furnham (2005:113) refer to the following interpersonal factors that can cause stress: lack of autonomy at work, lack of respect from others, not being involved in decision-making and required to meet up to others’ expectations.

• **Career and promotional factors**

Werner (2007:318) and Furnham (2005:115) state that poor career planning, plateau careers that are characterized by poor promotional prospects, lack of status and autonomy all cause stress.

• **Role-related factors**

Unclear or confusing expectations in regard to job duties, one’s level of authority and social expectations can be further causes of stress. Reference has also been made to role ambiguity. Role ambiguity occurs when there is no role clarification, when there is unclear scope of one’s responsibilities, unclear goals and objectives. Role conflict can also be a cause of stress: where there are two conflicting demands competing against one another (Werner, 2007:319; Furnham, 2005:132; Rice, 1992: 187).

• **Cultural factors**

Grobler et al. (2006) argue that the following cultural factors cause stress: racial, religious and sexual prejudices, as well as discrimination, rigid expectations of certain types of behaviour, according to people’s gender, class or status.
In conclusion, the health care system is one of the public and private sector components that is affected by occupational stress due to the emergence of HIV/AIDS. Knowledge of occupational stress and the factors causing it is vital for the effective management of stress. Management can be primary intervention which is more focused in adapting an environment to prevent the worsening of situation.

The next interventions are secondary and tertiary interventions. Before these interventions are discussed, it is important to know the manifestations of stress.

### 2.4.3. Symptoms of stress

Swanepoel (2007:558) and Grobler et al. (2006:395) classify symptoms into three categories; mental, physical and other. Mental symptoms are the following: anxiety, irritability, aggressive outbursts, poor concentration, forgetfulness, depression, poor motivation, low self-esteem and being easily frustrated. The physical symptoms are headaches, ulcers, high blood pressure, change in appetite, change in sexual drive, stiff and sore muscles, trouble with sleeping and hyperventilation.

Other symptoms are increased smoking, increased alcohol intake and increased medication intake to try to relieve these stress-related symptoms.

Swanepoel (2007) classifies symptoms into physical and mental symptoms. In contrast Grobler et al. (2006) classify the symptoms to watch when an employee is stressed or in trouble which are most significant in the workplace:

- Excessive absenteeism rate
- Unexcused absences
- Altercations with co-workers
- Deterioration of personal appearance
• Poor judgement and bad decisions
• Causing other employees injuries through negligence

2.4.4. Consequences of stress

Martin (2005:406) points out four zones of stress, namely the individual, the organization, other people and other organizations. Stress may result in poor performance of an individual; stress can also affect the performance and profit levels of an organization; stress can also affect the relationships of stressed individuals. Lastly, stress on an individual employee can have an effect on the next organization.

The effects of stress are interactive because it produces a behaviour pattern in those people who have to interact with a stressed individual. The effects of stress are reinforcing as well as cumulative.

The two main consequences of stress will be discussed, namely, occupational burn-out and aggression.

• Occupational burn-out

Werner (2007:323) and Rowe (2000:215) argue that occupational burn-out is the condition where an employee’s coping resources have been consumed by work and life’s demands, to the point of affecting job performance and resulting in exhaustion. Burn-out is a condition that is related to perfectionism. Danger signs of burn-out are substance abuse, increased absenteeism and isolation from interpersonal situations.

• Aggression

Aggression is the dynamic that causes an employee to lash out verbally or physically at other people or objects in the work place. Such aggression can be in
the form of verbal, physical, internalized and corporate aggression. Verbal aggression is a verbal lashing out at another person; physical aggression is the damage done to work equipment and violence towards others. Internalised aggression occurs when an individual has to bottle up the hurt and frustrations and repress any feelings. This may lead to an emotional explosion leading to depression or anxiety. Lastly, corporate aggression is aggression towards the company (Werner, 2007:324).

2.5. PERSONALITY AND STRESS

As indicated in this chapter, the HIV/AIDS pandemic is one of the main causes of stress in South Africa, in the healthcare system and in business. Personality traits also play a role extending stress levels.

Werner (2007:325) distinguishes two main types of personality, distress-resistant types and distress-prone types.

2.5.1. Distress-resistant types

Werner (2007:325) further asserts that distress-resistant types may also be referred to as salutogenic (healthy personalities) individuals. These are those having positive moods and feelings in most situations. This type of personality is characterized by:

- **Optimists**, people having this trait have a positive pattern of thinking that enables them to respond to problems with an internal locus of control and they become less depressed;
- **Hardy personalities** are characterized by three C's, namely commitment to the event as a challenge rather than a threat, control over the situation and challenge that sees the event as having a potential value for personal growth;
• **High sense of coherence** people having this trait are able to make sense of the demands of life and respond to them competently;

• **Emotional intelligence**: these people have an ability to cope with what is happening to them in terms of emotional awareness to self and others. They have emotional control, empathy, balanced thoughts, emotions and behaviour, anger control and the ability to delay gratification; and finally,

• **Survivor personality type**: this refers to people who have survived a major crisis or challenge and emerged from the experience displaying more strength and competency.

### 2.5.2. Distress-prone types

Werner (2007:325) states that distress-prone personalities are people who experience life situations negatively. Such people are characterized by:

• **Hostility**: the person is more irritable and angry with others;

• **Perfectionists**: view events in a hypercritical way; they are self-punitive when in control; they do things almost too well, and as a result, their creativity and happiness suffer;

• **Procrastinators**: having a reason for putting things off, like the task is too big, too difficult or too boring. The underlying reason is the fear of failure;

• **Type E personality**, tries to overachieve in his/her career and personal life, tries to please everybody, thus pushing themselves to the limit;

• **Type A personality**: research by psychiatrists and cardiologists has found out the following traits, frequent heart diseases, competitiveness, a strong sense of time urgency, high levels of irritability, high levels of impatience with co-workers, preferring to do tasks on his or her own, outperforming his/her colleagues and displaying polyphasic behaviour.

• **Type B personality**: they approach life in a less-competitive and less time-oriented way. They suffer less personal insecurity, have high self-esteem,
they are more casual and systematic, have high levels of agreeableness (trust, good nature and co-operative behaviour). This personality type prefers a steady pace of work and less time pressure.

- **Type C personality**: Type C personality is characterized by peak performance under pressure, feels confident and enthusiastic about the ability to achieve tasks with the appropriate level of effort.

For a better understanding of stress, stress theories are vital in putting things into perspective. A discussion of such theories follows.

### 2.6. THEORIES OF STRESS

A theory is a systematic way of looking at the world in order to describe, explain, predict and/or control it. Theory is characterized by creating a different way of looking at a particular phenomenon that is logical in nature, simple, yet with generalized bases for hypotheses that can be tested, that contribute and assist in the general body of knowledge that can be utilised to guide and improve practice (George, 1990:6).

Welman and Kruger (2001:17) define theory slightly differently from George (1990). They define theory as a statement or collection of statements that specify the relationships between variables with a view to explaining the phenomenon.

In this study three theories will be discussed which form the bases of knowledge and guide the research process. The first theory is known as the Integrated Model of Stress. This will be followed by the Occupational Stress model. Lastly, the Conceptual Stress model will be discussed.
2.6.1. The integrated model of stress

Champoux's (2006:383) integrated model of stress attempts to describe common stressors, reactions to stressors, as well as the outcomes of the constant exposure to stressors. An integrated model of stress describes sources of stress and conditions under which those sources evoke a stress response. According to this model, stressors occur in work experiences and non-work experiences and various life transitions. Work stressors include deadlines, work overload, job security, shift work and the physical environment.

Stress response is characterised by an increase heart rate, increased breathing rate, elevated blood pressure, increased apprehension and heightened alertness. Behavioural responses can either be distress or eustress. Distress happens...
when a person does not choose the right behaviour to manage the stress response, for example the use of drugs and smoking. Eustress is the excitement that comes with winning or promotion (Champoux, 2006:384).

Champoux (2006:384) describes moderators as personal characteristics like perceptions and behavioural responses to stressors. Moderators include coping responses, personality, skills and abilities. This model needs to be studied in conjunction with the model of occupational stress, commitment and ill health.

**Figure 2.2: Model of Occupational Stress, commitment and ill health**

![Diagram of occupational stress, commitment, and ill health]

Source: Coetzer and Rothman (2006:30)

**2.6.2. Occupational stress model**

Figure 2.2 exemplifies the model of occupational stress, commitment and ill health. This model was developed by Cartwright and Cooper (2002).
The model identifies seven occupational stressors, commitment to the effects of stress and the outcome of stress, which is ill health.

- **Occupational stressors**

Seven occupational stressors identified are:
- *Work relationships*: poor or unsupported relationships with colleagues and/or superiors, isolation and unfair treatment lead to stress;
- *Work-life imbalances*: when work interferes with one’s personal life and the home life of individuals;
- *Overload*: unmanageable workloads and time pressure;
- *Job security*: fear of job loss or obsolescence;
- *Control*: lack of influence in the way work is organized and performed; and
- *Resources and communication*: sources of stress related to the fundamental nature of the job, lack of training or equipment, inadequate pay and poor benefits all lead to stress.

- **Commitment**

Commitment is an effect of stress; this can be individual or organizational. Individual commitment occurs when an individual is committed to an organization because it is too costly to leave the organization. The individual is also committed to the organization because of shared goals and the wish to maintain his/her membership. Organisational commitment is related to most of the physical and psychological outcomes among workers.

- **Ill health**

Ill health is an outcome of stress which can be used to ascertain whether the workplace pressures have positive and motivating or negative and damaging effects. However, not all poor health is indicative of occupational stress.
In summary, the model indicates that if occupational stressors are poorly managed or not adjusted accordingly, individual commitment can shift and ill health can result.

2.7. CONCLUSION

The aim of this chapter has been to orientate the reader on the literature related to the study. An overview of HIV/AIDS has been done in terms of its magnitude globally, in South Africa and in the Nelson Mandela Metropolitan district. The impact of HIV/AIDS on individuals, the family, the community, the health system and business has also been discussed.

Definitions of stress, occupational stress, symptoms and the consequences of stress have also been discussed. To put things into perspective, two models of stress were discussed, namely: the integrated model of stress and the model of occupational stress, commitment and ill health.

Chapter Three will focus on HIV/AIDS care and occupational stress. This chapter will assist the reader in understanding the emotions involved in caring for HIV/AIDS affected or infected families in the community. Some of the occupational stressors identified in an HIV/AIDS setting will also be highlighted.
CHAPTER 3: HIV/AIDS CARE AND MANAGING OCCUPATIONAL STRESS

3.1. INTRODUCTION

In Chapter 2 stress, the causes of stress and occupational stressors in relation to HIV/AIDS were discussed. Caring for HIV/AIDS-infected patients is a stressor on its own. Several studies have pointed out that caring for HIV/AIDS-infected individuals causes stress due to the emotions involved in caring for such people, work overload and the shortage of resources, namely human and non-human resources.

In this chapter a detailed discussion of HIV/AIDS care and occupational stress will be discussed, together with the findings of stressors in an HIV/AIDS setting, strategies in managing occupational stressors, and lastly, a proposal for a model for managing occupational stress.

3.2. HIV/AIDS CARE AND OCCUPATIONAL STRESS

Benner and Wrubel (1989:1) are of the opinion that nurses, pharmacists, psychologists, doctors and social workers are some of the health care professionals who provide care to patients in need of care. Caring sets up what matters to a person; it also sets up what counts as stressful and what options are available for coping. Caring is primary because it creates the possibility of giving help and receiving help; caring also determines what is stressful and what counts as coping.

There are risks and vulnerability inherent in caring that lead to the need to create safe places of controlled caring, or so-called coping mechanisms for stress control.

Pera and van Tonder (2007:17) state that caring is not merely the present continuous form of the verb to care, but it is also a collective noun denoting a
whole range of ethical, moral and religious concepts and principles. Caring is based on knowledge, skills, experience and values, and it determines the quality of connectedness between subject and object. Caring also brings about true job satisfaction and accompanies the process of curing; and it also oversees healing.

Kilburg, Nathan and Thoreson (1986:16) point out that psychologists, lawyers, nurses and doctors are all professionals that have certain roles to play in society. Some of the roles can be grouped together as interpersonal roles, informational roles and decision-making roles. In the interpersonal role the professionals act as figureheads, leaders and in a liaising capacity. In the information category the professional acts as a monitor, a disseminator and a spokesperson.

In the decision-making category the professional behaves as an entrepreneur, a resource allocator, a negotiator and disturbance handler.

Kilburg et al.(1986:19) take it further by suggesting the following characteristics of professional work:

- the quantity and pace of work;
- the pattern of activities;
- the relationship in the work between actions and reflections;
- the use of different media; and
- the relation to the number of contacts and the interplay between rights and duties.

Mtwentula (2005:35) points out that with the emergence of diseases like HIV/AIDS, health professionals and health departments have identified HIV/AIDS as a new stress factor having a significant negative impact on society and the health care system.
Mtwentula (2005:31) is of the opinion that health care professionals attending people infected and affected by HIV/AIDS experience a variety of problems. People who have rights face rejection, stigmatisation and isolation due to HIV/AIDS. Health care professionals also face patients who have anxiety about their prognosis, minor symptoms and occupational diseases with the side effects of their medication; and then there are also people facing death or loved ones facing death.

On consultation of patients as individuals or on a group basis, health care professionals perform a range of activities, having contact with many people and performing quantity large amount of work, while building relationships with many people. During these activities health care professionals must face the following roles: inter-personal roles, informational roles and decision-making roles.

Van Dyk (2001) points out that the stress experienced by health care providers is inherent in the nature of the work itself.

The following are studies that have been conducted and have identified occupational stressors among health workers in South Africa, especially those working with HIV/AIDS-infected patients.

The study by Smith (2005:26) revealed that some common stressors among nurses looking after HIV/AIDS patients are the following:

- Deterioration of the hospital infrastructure
- Insufficient medical equipment
- Staff shortages
- Work overload
- Performing of work outside their job description
- Less or no support from hospital managers and administrators
- No recognition nor appreciation from superiors
The limitation of this study is that it has focused only on one hospital, and the findings cannot with confidence be generalized to onto any other health facilities (Smith, 2005:26).

Similar findings to those of Smith (2005) were found by Rothmann and Joubert (2007). The latter study found that stress is related to job demands which accompany the physical, emotional and cognitive workload. Organisational support, including the lack of adequate management support, communication, lack of sufficient performance feedback, lack of participative decision–making, work autonomy and role clarification all cause stress. Rothmann and Joubert’s (2007) study further demonstrated that the lack of job resources, lack of organizational support and lack of advancement opportunities are also causes of stress.

The limitations of this study are: the measurement of the model was based on self reports, the study population was homogeneous (88.6 % males and 84.7% whites) and the study did not include different cultural groups (Rothmann and Joubert, 2007).

Peltzer, Mashego and Mabeba’s (2003) study on occupational stress among South African medical practitioners concluded with the following major stressors:

- Fellow colleagues not doing their work
- Inadequate salaries
- Covering the work of another employee
- Working overtime
- Making critical on-the-spot decisions
- Dealing with crisis situations
- Lack of opportunity for advancement
The limitation of this study is that only 33.5 per cent of 1200 participants responded; thus it could not be generalized with confidence (Peltzer et al. 2003).

Coetzer and Rothmann’s (2002:37) study on occupational stress among insurance employees viewed occupational stressors differently from Peltzer et al. (2003). The former study showed that employees experienced occupational stress due to demanding clients, time pressures, meeting deadlines, working hard to achieve targets and work overload. This study has the following limitations: the study was conducted with only one company; therefore the results could not be generalized to other companies.

The study relied solely on self-reporting measures of occupational stress (Coetzer and Rothmann, 2002:37).

Despite the South African government committing resources, there are challenges still facing the South African Health Department. The unpublished thesis paper by Makie (2006) revealed that major stressors for registered nurses working in various units in a tertiary hospital are workload, emotional issues related to death or dying and conflict with fellow colleagues.

The Mtwentula (2005) study revealed that nurses working in an HIV/AIDS environment perceived the following as being major occupational stressors:

- Demands inherent to nursing and caring for HIV/AIDS patients;
- Lack of sufficient resources to deal with those demands;
- Social problems of patients;
- Attitudes to the illness;
- Unsatisfactory compensation for services rendered and the workload.

From the literature, the researcher deduced that the following are the major stressors among health professionals in general:
• Poor institutional infrastructure
• Insufficient medical equipment
• Staff shortage
• Work overload
• Performing work outside the job description
• Lack of support from management
• No recognition nor appreciation from superiors
• Demanding clients, and
• Time pressures

In view of the multiple factors causing occupational stress in general, as well as in the HIV/AIDS setting, there are three main strategies to consider in managing work-related stress.

3.3. STRATEGIES FOR MANAGING OCCUPATIONAL STRESS


Discussion on strategies of promoting and maintaining employee wellness will follow under the headings of primary, secondary and tertiary stress management strategies.
3.3.1. Primary stress management strategies

Manshor, Fontaine and Choy (2003:623) argue that primary stress management strategies are actions taken to change or eliminate sources of stress or to reduce the negative impact on the individual. In essence this includes the adaptation of the environment rendering it conducive to an individual employee's wellbeing.

The following are primary stress management strategies suggested by Swanepoel, (2007); Werner (2007); Grobler et al. (2006): the workplace and job design, health screening and safety auditing, sensitization and education, holistic wellness programme and organizational support.

- **Ergonomics, workplace design and job design**

Ergonomics ensures that a person's abilities are utilized efficiently and the equipment used does not endanger the health and safety of the employee. The design of the building and the infrastructure must be such that it does not endanger the health of employees, for example, creating the possibility of cross-infection due to lack of ventilation (Swanepoel, 2007:548).

Werner (2007:333) takes this further and indicates that job design is vital because it enriches and/or enlarges jobs in such a way that it reduces any stress related to the autonomy, routineness and complexity of the workplace.

- **Health Screening and Safety Auditing**

Health screening is one of the strategies used to make an early disease diagnosis to get an idea of the general health status of an employee. Such assessments are necessary for the timely detection of threats and the establishment of conditions that are conducive for employee wellness.
- Sensitisation and education

Swanepoel (2007) advocates the introduction of aggressive campaigns for promoting employee health, safety and their general wellbeing for the benefits of an organization and its employees.

- Supportive Organisational Strategies

Job-family conflict is found to be one of the main causes of stress and leads to depression, poor morale, absenteeism, poor work performance and decreased productivity (Swanepoel, 2007:551).

Swanepoel (2007:551) suggests the following strategies for reducing job-family conflict: provide child and parent care facilities, flexibility of time and leave, the involvement of spouses and children on certain recreational, social and fitness facilities in an organization. Werner (2007:332) takes this a step further by arguing that organizational support is important. He alludes to the following factors needing attention and improvement in order to reduce stress levels:

- Role classification and goal setting
- Improve job design and safety aspects
- Improve job-person matching
- Improve communication
- Implement flexible work schedules where necessary

Some of the strategies suggested by Grobler et al. (2006) are employee fitness, controlling the physical environment; that includes noise and uncomfortable temperatures. The next strategy is management by objectives, meaning setting clear goals, roles and responsibilities and strengthening communication. The next strategy is maintaining a productive culture.
• **Work load and work pace**

Keita and Sauter (1994:24) argue that workload and work pace are associated with negative health outcomes, proper management of workload and work pace is vital. The physical and mental demands of work should be commensurate with the capabilities and resources of individuals, thereby avoiding any underload and overload of work responsibilities.

• **Work schedule**

Keita and Sauter (1994:25) are of the opinion that the temporary scheduling of work can have a significant impact on the psychological, behavioural, social, and physical well being of the worker. Rotating shifts and permanent night work are linked to a variety of disturbances. Adaptation of work schedules, as in managing stress is important; work schedules should be compatible with the demands and responsibilities outside the job. A flexible and compressed work week, job sharing are all important steps to consider.

• **Career development**

Muller (2007:21) is of the view that people have several hopes when joining an organization; some of the hopes are rapid and steady career advancement, job freedom and increased earning power. When these hopes are not met, employees lose their sense of accomplishment and self-esteem.

Muller (2007:21) mentions four factors that are related to stress in career development: under-promotion, over-promotion, lack of job security and frustrated ambitions. Werner (2007:319) suggests proper career planning for an employee to avoid or prevent arriving at a career plateau or lack of career advancement.
• **Job content**

Rice (1999:187) argues that job tasks should be designed to have meaning and to provide stimulation and an opportunity to use skills. Rice (1999:187) suggests job rotation or increasing the scope of work activities. This improves and prevents any narrow, fragmented work activities.

**3.3.2. Secondary stress management strategies**

Williams and Spur (2007:30) are of the opinion that secondary stress management strategies aid in detecting stress, increase the awareness of stress and improve skills on dealing with stress. Expected outcomes of secondary stress management strategies are to empower individuals on basic relaxation techniques, health promotion, lifestyle enhancement or modification and developing self-awareness.

The main secondary stress management strategy is lifestyle management.

• **Lifestyle management**

Werner (2007:334) suggests the following activities under the heading of lifestyle management: planned rest periods, physical exercise, correct nutritional intake and adequate sleep.

Planned rest periods are one of the strategies suggested after a period of high stress. One of the techniques suggested is that these be taken on an hourly, daily, weekly and monthly basis. Time off and personal leave are some of the techniques suggested for employees to rest, relax and recover for the next challenge (Muller, 2007:24).

Studies have shown that physical health acts as a buffer against the negative consequences of stress, it helps to build and maintain stress fitness. Physical
exercise helps employees to moderate the automatic adrenalin response when faced with stress; it provides high levels of endorphins in the blood system (Muller, 2007:24).

Correct nutritional intake, adequate sleep, relaxation and spiritual prayer together with meditation all enable the body and mind to maintain optimal functioning during stress (Muller, 2007:24).

Secondary stress management strategies are used to limit the damage, address the consequences of stress, together with the adaptability of the individual to the environment. The next type of strategy is concerned with the treatment and rehabilitation of the individual.

3.3.3. Tertiary stress management strategies

Tertiary stress management strategies are aimed at treating, rehabilitating and helping an individual to recover from the ill health that is caused by stress. Some of the interventions provided to employees at tertiary level are holistic wellness programmes.

A holistic wellness programme can be divided into three categories, employee fitness, Employee Assistance Programmes (EAP) and nutritional programmes.

- **Employee fitness**

Swanepoel (2007) and Werner (2007:333) point out that an employee fitness programme is important because it has the following benefits: it improves the emotional, physical and spiritual wellbeing of employees. Literature has shown the benefits of such a strategy as enhancement of a person’s quality of life, prolonged life, happy employees, productive employees and a decreased absenteeism.
• **Employee Assistance Programme (EAP)**

Werner (2007:333) and Swanepoel (2007:550) argue that EAP is a vital intervention because it provides counselling services to assist employees to cope more effectively with personal and organizational stressors, assisting them with addiction problems, HIV/AIDS programmes and family counselling. Muller (2007:25) views EAP as the programme that provides counselling, information and or referral for appropriate counselling treatment and support services.

EAP also helps in the facilitation, the monitoring, the rehabilitation and the return to work of employees who have suffered any stress-related illnesses or trauma. Some of the benefits of EAP programme are:

- Improving the psychological wellbeing of employees;
- It has considerable cost benefits;
- It reduces absenteeism rates;
- It has a significant improvement on the mental and spiritual health of employees; and
- It improves the bottom line of production and profit figures.

• **Wellness programmes**

Wellness refers to a conscious behavioural strategy that will optimize all areas of the employee’s life, including work, family, self and social domains. A wellness programme is the programme that is aimed at the improvement of the emotional, physical and spiritual wellness of employees. Wellness programmes are also aimed at ensuring productivity, creativity and goal directedness (Muller, 2007:25).

However, some of the factors still need to be researched, interpreted and reported on at Nelson Mandela Metropolitan Municipality. From the literature studied, the researcher proposes a conceptual model for stress management.
3.4. A CONCEPTUAL STRESS MANAGEMENT MODEL

Figure 3.1: Conceptual Model for Stress Management

Source: Model developed by researcher

The proposed model consists of the following phases.

3.4.1. Phase 1: The identification of stressors and set objectives

The identification of stressors is the first step in the stress management model. Stressors can be work related or non-work related. For work-related stressors, the manager must identify the factors causing stress among employees. Stress factors can be personal or occupation related. Occupational stress-related factors
are the following: organizational factors, job design factors, interactional factors, career and promotional factors, role and cultural-related factors. Once the manager has identified the causes of stress he/she will be in a better position to put strategies in place to manage the stress.

The most important thing to do is to set objectives that can be measured to assess the impact of any progress made by the strategies.

**3.4.2. Phase 2: Implementing stress management strategies**

Stress management strategies are various but can be grouped into primary, secondary and tertiary strategies. Primary stress management strategies are actions taken to change and eliminate the sources of stress or reduce the negative impact on the individual. In essence this consists of the adoption of an environment that is conducive to an individual employee's wellbeing. The following actions are suggested to prevent stress from occurring or becoming a major stress: workplace and job design, health screening and safety auditing, sensitization and education, holistic wellness programmes and organizational support.

The next strategy is secondary stress management programmes which are more lifestyle management strategies, namely planned rest periods, physical exercise, correct nutritional intake and adequate sleep.

The last level of intervention is tertiary stress management strategies which are more treatment and the long-term rehabilitation of employees.

**3.4.3. Phase 3: Measuring the possible outcomes**

The implementation of these strategies is aimed at ensuring that an organization stays competitive and can earn above-average returns. The following are some of the impacts that can be measured directly or indirectly in the organization:
• Improved the psychological wellbeing of the employees;
• Measurable and considerable cost benefits;
• Reduction in the absenteeism rates;
• Significant improvement of mental and spiritual health of employees; and
• Improved bottom-line production and profit figures.

The above results can be measured using the available organizational tools or records; or alternatively conducting a survey to evaluate the impact of stress management strategies.

3.5. CONCLUSION

This chapter has reviewed literature on the studies done on the occupational stressors in South Africa. Some of the studies revealed that there are common stressors in an HIV/AIDS setting which add to the deterioration of the institutional infrastructure, insufficient medical equipment, staff shortages, work overload, performing work outside the job description, less or no support from facility managers and administrators and no recognition or appreciation from one's superiors.

The literature review on the stress management strategies has suggested strategies that could be employed in various settings. From the literature the researcher developed a conceptual stress management model, which will guide the researcher in conducting the study.

The next chapter will focus on the methodology of the study, the research design, the research approach, the data collection tools and the data analysis.
CHAPTER 4: RESEARCH METHODOLOGY

4.1. INTRODUCTION

In Chapter 3 a detailed discussion on HIV/AIDS care, occupational stress was done. The main occupational stressors in an HIV/AIDS environment were discussed in detail together with strategies of occupational stress management, as well as the conceptual model. In this chapter, an accurate and systematic description of the research methodology used for this study will be discussed. Qualitative and quantitative research methodologies will be discussed.

Research design including the type of the design of the study will be discussed. Data collection, population and sampling procedures will be discussed, including the development of data-gathering instruments, the administration and application thereof. Data analysis, ethical considerations and the limitations of the study will also be discussed.

4.2. RESEARCH METHODOLOGY

Welman and Kruger (2001:2) assert that research involves the application of methods and techniques in order to create scientifically obtained knowledge by using objective methods and procedures. Collis and Hussey (2003:54) point out that methodology is the overall approach to the research process from the theoretical underpinning to the collection and analysis of the data. Collis and Hussey (2003:54) argue that the methodology is concerned with the following issues:

- Why certain data are collected
- What data are collected
- From where the data are collected
- When are the data collected
- And the data are analysed
Leedy (1997:103) argues that all research methodology rests on the nature of the data, in other words data dictate the research methodology. To respond to the dictatorship of data the researcher needs to choose the approach of data collection. There are two main approaches, namely: the quantitative and qualitative approaches. Quantitative research methodology deals with data that are principally numerical, whereas the qualitative research approach deals with data that are principally verbal.

4.2.1. Qualitative research methodology

Mouton and Marais (1993:155) described qualitative research methodology as those approaches in which the procedures are not as strictly formalized, while the scope is more likely to be undefined and a more philosophical mode of operation is adopted.

Mouton and Marais (1993:157) further describe this approach under the following concepts: operational specificity, whereby meanings or words can be interpreted in a number of ways; the hypothesis is undeclared and often emerges from the development of the investigation. The observation is subjective and spontaneous and occurs in a non-structured manner.

Qualitative research is a systematic, subjective approach used to describe life experiences and to give them meaning.

Collis and Hussey (2003:66) and Leedy (1997:156) assert the following types of qualitative research methodology: case studies, ethnography and grounded theory.
Collis and Hussey (2003:66) argue that a case study approach is an extensive examination of a single instance of a phenomenon of interest. A case study is characterized by:

- The research aim to explore, as well as to understand, the phenomenon in a particular context.
- Research does not commence with a set of questions and notions of the study.
- Research uses multiple methods for collecting data which may be both quantitative and qualitative.

Collis and Hussey (2003:70) define ethnography as research methodology in which the researcher uses socially acquired and shared knowledge to understand the observed patterns of human activity.

Saunders, Lewis and Thornhill (1997:78) and Collis and Hussey (2003:73) describe grounded theory as the set of procedures followed in analyzing data to develop theory useful to the particular discipline.

4.2.2. Quantitative research methodology

Mouton and Marais (1993:) describe quantitative research methodology as an approach in research that is more highly formalized, as well as being more explicitly controlled. In this approach the following concepts need to be observed, namely operational specificity, hypothesis and observation. Under the concept of operational specificity, terminology or definitions need to be given unambiguous meanings and to be precise. Lastly, the observation needs to be pre-planned and objective.

Mouton and Marais (1993:155) further describe quantitative research methodology as the research which involves the following three concepts: rigour, control and sampling. Rigour is the striving for excellence in research through discipline, adherence to detail and strict accuracy. A rigorous quantitative
researcher is striving for precise measurement tools, representative sampling and a controlled study group.

According to Leedy (1997:104), quantitative research methodology can be broadly classified into experimental and non-experimental quantitative research. Experimental research is based on the cause–and-effect relationship between the variables; the aim is to manipulate the independent variable in order to observe the effect on the dependent variable, whereas non-experimental research refers to the description of phenomena as they are without manipulating the variables.

Collis and Hussey (2003:60) argue that the following are quantitative methodologies: cross-sectional studies, experimental studies, longitudinal studies and surveys. Cross-sectional studies are a quantitative methodology designed to obtain information on variables in different contexts, but at the same time. Some of the advantages of cross-sectional studies are that it is inexpensive; it is conducted simultaneously so that there is no problem of chronological change.

Experimental studies are conducted in a controlled environment with dependent and independent variables. There is manipulation of the independent variables in order to observe the effect on the dependent variable.

The next quantitative research methodology is longitudinal studies, which is the study over time of a variable or group of subjects with the aim of researching the dynamics of the problem by investigating the same situation or subjects continuously over time. Such surveys are methodological, whereby an unbiased sample of subjects is drawn from a population. There are different types of surveys, namely descriptive and analytical surveys.
4.3. RESEARCH DESIGN

Welman and Kruger (2001:46) argue that a research design is the plan according to which the researcher will obtain research participants and collect information from them and make the findings known. Leedy and Ormrod (2003:85) and Saunders, Lewis and Thornhill (2000:92) refer to research design as the strategy or plan of action to be taken in order to solve the research problem.

Further, they argue that research design provides the overall framework for the procedures the researcher will follow, the data-collection method and the data-analysis method.

In this study, a quantitative, descriptive and non-experimental research design was followed.

Leedy and Ormrod (2003:87) point out that the general research procedure is fundamental in academic disciplines.

The main problem researched in this study was:

- Can the implementation of stress management strategies result in decreased stress levels?

The following sub-problems were identified and addressed to deal with and solve the main problem:

- What factors are critical for the successful implementation of a stress management strategy?
- What are the main occupational stressors found amongst employees?
- What strategies for effective stress management are currently in place in the organization?

A literature review was conducted using the following tools: databases and the library. Some of the databases searched were EBSCOHost and Emerald to
obtain journals and articles. The NMMU library was visited to get books relevant to the topic. The main purpose of the literature review was to address the sub-problems one and two.

The following are the benefits observed by the researcher in doing a literature review:

- It provided new perspectives, ideas and approaches to the topic.
- It informed the researcher of the similar studies conducted before.
- It alerted the researcher on the sources of data that were not previously known to the researcher.
- It revealed ways of dealing with problem situations that the researchers had encountered.

4.4. DATA COLLECTION

Collis and Hussey (2003:150) describe data collection as methods used in the research for collecting data. Some of the methods of data collections are questionnaires, interviews, observation, focus group and diaries. For the sake of this study, questionnaires, interviews and a rating scale checklist will be discussed in detail.

Collis and Hussey (2003:173) define a questionnaire as a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample. The questionnaires provided an effective way of collecting responses from a large number of respondents beyond the physical reach of the researcher. Interviews allow for probing to obtain additional information. The rating scale checklist is a list of items with a scale on which varying degrees of intensity or a range of frequencies is indicated.

Collis and Hussey (2003:174) point out that the validity and reliability of the data collected and the response rate achieved depend largely on the design of the
questions, the structure of the questionnaire and the effectiveness of the pilot study.

4.4.1. Development of data-collection tools

In this study a combination of the questionnaire and a rating scale checklist were used because of the low cost and the ease of administering these methods.

The following was the format of the questionnaire (Appendix A):

- **Section A**: Biographical information
- **Section B**: Organisational factors
- **Section C**: Job design factors
- **Section D**: Career and promotional factors
- **Section E**: Role-related factors
- **Section F**: Cultural factors

The data collection was conducted over a period of two weeks from the dispatch or distribution of the questionnaires.

4.4.2. The covering letter

Collis and Hussey (2003:66) are of the view that the covering letter should be well structured and persuade the respondents to complete the questionnaire, but remain tactful in building and maintaining interpersonal relations. The covering letter was formulated and together with questionnaires was delivered to the respondents.

4.4.3. The pilot study

De Vos (1998:179) defines a pilot study as the process whereby the research design for a prospective survey is tested. Uys and Basson (1991); Burns and Grove (2001) cite a pilot study as the small-scale study using a small sample of
the population, but it is not the same as the one that will be eventually be part of the sample group.

De Vos (1998:182) cites the purpose of the pilot study as the improvement in the success rate and effectiveness of the investigation that can be obtained by looking at the following:

- Suitability of the questionnaire,
- Testing and adapting the measuring instruments,
- Suitability of the procedure of data collection, and
- Suitability of the sampling frame.

Prescott and Socken (1989) presented the following reasons for a pilot study:

- To examine the reliability and the validity of the research instruments
- To develop or refine the data-collection instruments
- To define the data collection and the analysis plan
- To give the researcher the necessary experience with the subjects, setting, methodology and the methods of measurement
- To test the data analysis and the technique

The pilot study was conducted at Empilweni Hospital’s HIV/AIDS clinic; no major errors were found in the questionnaire during the pilot study.

4.4.4. Sampling

Sampling is the process of selecting a group of people, events, behaviour or other elements with which to conduct a study (Burns and Grove, 2001). There are mainly two types of sampling methods, namely probability and non-probability sampling. In probability sampling each member of the population has an equal chance of being selected for the sampling (Burns and Grove, 2001); (Welman and Kruger, 1999).
One of the probability sampling methods is random sampling, which ensures that each subject of the population has an equal chance of being selected for the sample and this increases the validity of the study, thus reducing sample error and systematic bias (Burns and Grove, 2001; Uys and Basson, 1991).

The basic purpose of sampling is to enable the researcher to obtain the desired information in a reliable manner without involving the entire population. The researcher wants to make observations of the sample in a practical and economic manner and generalize the findings to the whole population (Uys and Basson, 1991).

In this study systematic random sampling was used to include health professionals working at HIV/AIDS public health facilities in the Nelson Mandela Metropolitan Municipality.

4.4.5. Questionnaire administration
The covering letter and the questionnaires were hand-delivered to the potential respondents on 5 May, 2009. The respondents were requested to give completed questionnaires to the facility managers. The researcher collected the questionnaires from the facility managers. The cut-off date was seven days from the day of delivery of the questionnaires.

In total 30 questionnaires were sent to potential respondents and 24 completed questionnaires were received within a week of delivery. The 24 completed questionnaires represent a response rate of 80 per cent which was an acceptable response rate for the study.

4.5. DATA ANALYSIS

Mouton (2001:108) argues that data analysis involves the breaking up of data into manageable themes, patterns, trends and relationships with the aim of
understanding the various constitutive elements of the data. De Vos (1998) elaborates that data analysis means categorising, ordering, manipulating and summarizing the data to obtain answers to the research questions.

In order to make sense of the data the following process was followed: all questionnaires were numbered before distribution to make analysis easy on receipt of the completed questionnaires. Microsoft Excel and Statistical Package of Social Sciences (SPSS) version 15.0 was used to analyse the data. Descriptive and inferential data analysis was used. In the descriptive data analysis, the data are presented in tables, figures, frequencies, histograms, percentages and means.

In the inferential data analysis, the data are presented by calculating and comparing the means and the standards deviations.

- A Microsoft excel spreadsheet was developed and rows were used to label the respondent’s numbers, while columns were used to label the question numbers. Data were entered in the spreadsheet with the following information according to the questionnaire:

**Section A: Biographical information**
Codes were used to disaggregate the demographic information.

**Section B: Organisational factors**
The ratings indicating the extent of the stress levels; these were arranged under organizational factors; if no rating was given the space was left vacant.

**Section C: Job-design factors**
The ratings indicating the extent of stress levels were arranged under job design factors; if no rating was given the space was left vacant.
Section D: Career and promotional factors
The ratings indicating the extent of stress levels were arranged under career and promotional factors; if no rating was given the space was left vacant.

Section E: Role-related factors
The ratings indicating the extent of stress levels were arranged under role-related factors; if no rating was given the space was left vacant.

Section F: Cultural factors
The ratings indicating the extent of stress levels were arranged under cultural factors; if no rating was given the space was left vacant.

4.6. ETHICAL CONSIDERATIONS

Pera and van Tonder (2007:147) argue that the primary aim of research in health-related services is to improve the quality of life of individuals and groups. Such researchers must do what is good and right.

In complying with these ethical principles, the researcher considered the following ethics as being relevant to the study:

- The permission to conduct the research was obtained from the Eastern Cape, Department of Health and the Nelson Mandela Metropolitan Municipality(see Annexure D,E and F).
- The respondents in each primary health care centre consented verbally.
- The researcher assured the subjects that anonymity and confidentiality would be maintained and guaranteed.
- Participation in the study was voluntary.
- Participants were not paid for their participation in the study.
4.7. CONCLUSION

In this chapter the research methodology was discussed to address the research problem. Both quantitative and qualitative research methodologies were discussed; this was followed by the research design.

A quantitative and descriptive non-experimental research design was discussed. A questionnaire was formulated with the following sections: biographical data, organisational support, resources, advancement opportunities and workload.

The development of data-collection instruments, the piloting of the study, the limitations of the study, as well as the ethical considerations were all discussed. The next chapter (5) will discuss the research results and the interpretation of these results.
CHAPTER 5: DATA ANALYSIS AND INTERPRETATION OF RESULTS

5.1. INTRODUCTION

The previous chapter outlined the research methodology in terms of the research design, the development of data-collection tools, as well as how questionnaires were administered. Burns and Grove (2001) argue that following the collection of data, the discovery phase of research begins, as the meaning of the data is determined through analysis. Data analysis is that step in the research process in which the data collected are analysed using statistical analysis. These results are then interpreted in terms of meaningful results. In this chapter that will be done.

In this study, the data were prepared and cleaned for use in the Statistical Package for the Social Sciences (SPSS). Descriptive statistics was used to analyse the data and the results were presented in the following format:

- Graphs: Histograms/Bar diagrams/Pie diagrams.
- Statistical summaries: Means and percentages.
- Tables: cross tabulation.

5.2. RESEARCH RESPONSE

As indicated in Chapter 4(4.4.5.), 30 questionnaires were delivered and 24 completed questionnaires were received. The response rate was 80 per cent and non-responses constituted 20 per cent. This is a high response percentage and may be viewed as a good response rate. Collis and Hussey (2003:131) regard a 30 per cent response of personally delivered surveys as being acceptable.

<table>
<thead>
<tr>
<th>Response rate</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns</td>
<td>24</td>
<td>80%</td>
</tr>
<tr>
<td>Non-returns</td>
<td>6</td>
<td>20%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5.1: The response rate

Table 5.1 depicts the response rate.
5.3. DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Section A of the questionnaire contained questions on the respondents’ demographic characteristics. Analysis of the questionnaire helped the researcher to determine the representivity of the sample. The demographic characteristics analysed were gender, age, race, highest educational qualification, job grading and duration in one’s current job.

5.3.1. Age

Chart 5.2: Response according to Age.
Chart 5.2 indicates that 54 per cent of the respondents were more than 40 years of age. The mean is 4.17 and the standard deviation is 1.05. The sample is skewed (-0.85) towards the age of 40 years and above. In this study the age group is therefore considered to be not relevant.

5.3.2. Racial group

Chart 5.3: Response according to race
Chart 5.3 shows that 83 per cent of the respondents were Africans. The mean is 1.38 and the standard deviation is 1.01. The sample is skewed (2.97). In this study race is therefore considered to be not relevant.

There is a strong correlation at the 1 per cent level, between race and gender with r of -0.62, p-value of 0.001 and chi-square of 11.04.

5.3.3. Gender

According to chart 5.4, 83 per cent of the respondents were females. The mean is 1.83 and the standard deviation is 0.83. The sample is skewed (-1.91). In this study gender is therefore not relevant.

There is a strong correlation at the 1 per cent level between race and gender with r of -0.62, p-value of 0.001 and chi-square of 11.04.
5.3.4. Highest qualification

Chart 5.5: Response according to highest educational qualification

An analysis of highest educational qualification in chart 5.5 indicates that 38 per cent of the respondents having a postgraduate qualification, while 33 per cent had only a national diploma. The mean of the sample is 3.96 and the standard deviation was 0.81. The degree of skew was 0.08.

There is a moderately strong correlation at the 5 per cent level between race and gender, with r of -0.45, p-value of 0.026 and chi-square of 12.76.

5.3.5. Job grading

Chart 5.6: Response according to job grading
Job grading analysis in chart 5.6 indicates that 29 percent of the respondents were operational staff, supervisors and middle managers respectively. It further indicates that only 13 percent of the respondents were junior managers. The mean of the sample was 2.42 and the standard deviation was 1.21. The degree of skew was 0.21.

5.3.6. Duration in current job

Chart 5.7: Response according to duration in current job
According to chart 5.7, 46 per cent of the respondents had more than 55 months experience in their current jobs. The mean was 3.04 and the standard deviation was 1.00. The sample is skewed (-0.37).

5.4. OCCUPATIONAL STRESSORS

5.4.1. Organisational factors

Table 5.2: Organisational factors

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1</td>
<td>How often do you find communication within your organisation poor?</td>
<td>n=6</td>
<td>n=11</td>
<td>n=6</td>
<td>n=1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25%</td>
<td>46%</td>
<td>25%</td>
<td>4%</td>
</tr>
<tr>
<td>B.2</td>
<td>Do you find yourself working with inexperienced staff?</td>
<td>n=1</td>
<td>n=12</td>
<td>n=10</td>
<td>n=1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4%</td>
<td>50%</td>
<td>42%</td>
<td>4%</td>
</tr>
<tr>
<td>B.3</td>
<td>How many times do you work with inadequately trained staff?</td>
<td>n=4</td>
<td>n=9</td>
<td>n=11</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17%</td>
<td>38%</td>
<td>46%</td>
<td>0%</td>
</tr>
<tr>
<td>B.4</td>
<td>How often do you participate in decision-making in your organisation?</td>
<td>n=11</td>
<td>n=9</td>
<td>n=1</td>
<td>n=3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46%</td>
<td>38%</td>
<td>4%</td>
<td>13%</td>
</tr>
<tr>
<td>B.5</td>
<td>Do you find organisational goals clear?</td>
<td>n=7</td>
<td>n=12</td>
<td>n=4</td>
<td>n=1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29%</td>
<td>50%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>B.6</td>
<td>Is there adequate equipment necessary to get the work done?</td>
<td>n=3</td>
<td>n=9</td>
<td>n=6</td>
<td>n=6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13%</td>
<td>38%</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table 5.2, question B1 indicates that 46 per cent of the respondents felt that communication is sometimes poor within the organization for which they are
working. 25 per cent felt that communication was always poor and 25 per cent felt that communication is and rarely poor.

Question B2, in table 5.2 shows that 50 per cent of the respondents were at times obliged to work with inexperienced staff. The analysis also indicates that 42 per cent rarely worked with inexperienced staff. There is a statistically significant correlation between poor communication and working with inexperienced staff (r= 0.40 and p value=0.050 and chi-square is 26.88).

According to question B, 3.46 per cent of the respondents rarely worked with inadequately trained staff, while 38 per cent sometimes worked with inadequately trained staff. There is a statistically significant correlation between job grading and inadequately trained staff (r= -0.43 and p value=0.038).

Table 5.2, question B 4, shows that 46 per cent of the respondents always participated in decision-making, while 38 per cent sometimes participated in decision-making.

Question B5 indicates that 50 per cent of the respondents were sometimes clear on the organizational goals, while 29 per cent were always clear on the organizational goals. There is a statistically significant correlation between participation in decision-making and performing duties under clear organizational goals (r= 0.42 and p value=0.041). There is also a statistically significant correlation between clear organizational goals and the adequacy of the equipment provided (r= 0.46 and p value=0.024).

According to question B6, 38 per cent of the respondents were sometimes working with adequate equipment necessary to get the work done. There is a statistically significant correlation between working with inadequately trained staff and the adequacy of the equipment necessary to get the work done (r= -42 and p value=0.040).
5.4.2. Job-design factors

Table 5.3: Job-design factors

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always n=6</th>
<th>Sometimes n=16</th>
<th>Rarely n=2</th>
<th>Never n=0</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.1</td>
<td>Do you find yourself working under severe time constraints?</td>
<td>25%</td>
<td>67%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>C.2</td>
<td>Do you find your job does not challenge you intellectually?</td>
<td>13%</td>
<td>25%</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>C.3</td>
<td>Do you find yourself dealing with complex problems to solve?</td>
<td>17%</td>
<td>63%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>C.4</td>
<td>Do you find yourself working with unclear objectives?</td>
<td>0%</td>
<td>50%</td>
<td>38%</td>
<td>13%</td>
</tr>
<tr>
<td>C.5</td>
<td>How would you rate your work: repetitive and routine?</td>
<td>38%</td>
<td>50%</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>

In Table 5.3, question C.1, 67 per cent of the respondents sometimes found themselves working under severe time constraints, while 25 per cent always found themselves working under severe time constraints.

Question C.2 shows that 25 percent and 13 percent of the respondents sometimes, but rarely found the job not intellectually challenging respectively. There is a statistically significant correlation between participation in decision-making and working in a non-intellectually challenging job ($r=-0.62$, p value=0.001 and chi-square is 20.74).
Analysis of question C.3 indicates that 63 per cent of the respondents sometimes found themselves dealing with complex problems to solve.

According to question C.4, 50 per cent of the respondents were working with unclear objectives. There is a statistically significant correlation between clear organizational goals and working with unclear objectives ($r=-0.48$ and $p$ value=0.017).

Question C.5 shows that 50 per cent of the respondents found their work repetitive and routine.

### 5.4.3. Career and promotional factors

**Table 5.4: Career and promotional factors**

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.1</td>
<td>Are there opportunities for promotion?</td>
<td>n=0</td>
<td>n=3</td>
<td>n=15</td>
<td>n=6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0%</td>
<td>13%</td>
<td>63%</td>
<td>25%</td>
</tr>
<tr>
<td>D.2</td>
<td>Does your current job offer you opportunities for personal growth and development?</td>
<td>n=4</td>
<td>n=12</td>
<td>n=7</td>
<td>n=1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17%</td>
<td>50%</td>
<td>29%</td>
<td>4%</td>
</tr>
<tr>
<td>D.3</td>
<td>Does your organisation give you opportunities to attend training courses?</td>
<td>n=9</td>
<td>n=13</td>
<td>n=2</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38%</td>
<td>54%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>D.4</td>
<td>Does your job offer you the possibility to progress financially?</td>
<td>n=0</td>
<td>n=5</td>
<td>n=8</td>
<td>n=11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0%</td>
<td>21%</td>
<td>33%</td>
<td>46%</td>
</tr>
<tr>
<td>D.5</td>
<td>Does your organisation pay good salaries?</td>
<td>n=0</td>
<td>n=4</td>
<td>n=5</td>
<td>n=15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0%</td>
<td>17%</td>
<td>21%</td>
<td>63%</td>
</tr>
</tbody>
</table>
Table 5.4 In question D.1, 63 per cent of the respondents felt that there were rarely opportunities for promotion.

Question D.2 shows that 50 per cent of the respondents felt that the current job offered opportunities for personal growth and development. There is a statistically significant correlation between complex problem solving and the opportunities for personal growth and development ($r=0.43$ and $p$ value=0.034).

Question D.4 shows that 46 per cent of the respondents felt that their job never offered the possibility to progress financially. There is a significant statistical correlation at the 5 per cent level between age and the possibility to progress financially with $r=0.47$, $p$ value=0.021 and a chi-square value of 13.84.

Question D.5 shows that 63 per cent of the respondents felt that the organizations they are working for do not pay good salaries. There is a statistically significant correlation between working under severe time constraints and the salaries being paid by the organization ($r=-0.51$, $p$ value=0.011 and chi-square is 11.77).

5.4.4. Role-related factors

Table 5.5: Role-related factors

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.1</td>
<td>When performing your duties do you find yourself confronted with unclear roles?</td>
<td>n=2 8%</td>
<td>n=11 46%</td>
<td>n=10 42%</td>
<td>n=1 4%</td>
</tr>
<tr>
<td>E.2</td>
<td>How often do you find yourself performing your duties with unclear scope of</td>
<td>n=0 0%</td>
<td>n=9 38%</td>
<td>n=13 54%</td>
<td>n=2 8%</td>
</tr>
</tbody>
</table>
Table 5.5; question E.1 indicates that 46 per cent of the respondents sometimes perform their duties with unclear roles. There is a statistically significant correlation between the highest educational qualification and the performance of duties with unclear roles ($r = -0.57$, p value=0.004 and chi-square =13.35). There is also a statistically significant correlation between duration in one’s current job and performing duties with unclear roles ($r = 0.52$ and p value=0.009). There is also a statistically significant correlation between intellectually unchallenging jobs and performing duties with unclear roles ($r = 0.41$ and p value=0.048).

Question E.2 shows that 38 per cent of the respondents performed their duties with unclear ideas of their responsibilities. There is a statistically significant correlation between duration in one’s current job and performing duties with unclear ideas of the responsibilities ($r = 0.51$ and p value=0.011). There is also a statistically significant correlation between non-intellectually challenging jobs and performing duties with unclear ideas of the responsibilities ($r = 0.46$ and p value=0.023).

According to question E.3, 29 per cent of the respondents performed their duties with unclear goals and objectives. There is also a statistically significant correlation between duration in one’s current job and performing duties with unclear goals and objectives ($r = 0.46$ and p value=0.024). There is also a statistically significant correlation between a non-intellectually challenging job and performing duties with unclear goals and objectives ($r = 0.42$ and p value=0.043).
Question E.4 shows that 63 per cent of the respondents sometimes found themselves having to perform two or more jobs with conflicting demands.

5.4.5. Cultural factors

Table 5.6: Cultural factors

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.1</td>
<td>How often do you personally experience, racial discrimination?</td>
<td>n=0 0%</td>
<td>n=5 21%</td>
<td>n=7 29%</td>
<td>n=12 50%</td>
</tr>
<tr>
<td>F.2</td>
<td>Have you personally experienced sexual prejudice?</td>
<td>n=0 0%</td>
<td>n=1 4%</td>
<td>n=4 17%</td>
<td>n=19 79%</td>
</tr>
<tr>
<td>F.3</td>
<td>Have you experienced religious discrimination?</td>
<td>n=0 0%</td>
<td>n=2 8%</td>
<td>n=3 13%</td>
<td>n=19 79%</td>
</tr>
</tbody>
</table>

Table 5.6 Question F.1 shows that 21 per cent had sometimes personally experienced racial discrimination; 29 per cent had rarely experienced racial discrimination, while 50 percent had never experienced racial discrimination. There is a statistically significant correlation between non-challenging jobs and racial discrimination (r= 0.54, p value=0.006 and chi-square =14.83).

Question F.2 indicates that 4 per cent of the respondents had sometimes experienced sexual prejudice, while 79 per cent had never experienced sexual prejudice.

Question F.3 shows that 8 per cent of the respondents had experienced religious discrimination. There is a statistically significant correlation between dealing with
complex problem-solving and religious discrimination \((r=-0.43\) and p value=0.036).

5.5. CONCLUSION

In this chapter the results of the study have been presented and analysed using both deferential and inferential analysis. The response rate, the demographic characteristics, and the occupational stressors have also been discussed. The results were presented in tabular and graphical format.

In the next chapter the main findings and problems encountered during the study, the limitations of the study, the recommendations and opportunities for further research will also be discussed.
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1. INTRODUCTION

This study has addressed the identification of occupational stressors impacting on health professionals working in an HIV/AIDS setting at selected public health facilities in the Nelson Mandela Metropolitan district.

The results of the study were presented in Chapter 5. The purpose of this chapter is to summarise the main findings of the study, discuss the problems encountered and look at the limitations of the study. Lastly, recommendations are made to solve the identified problems.

6.2. THE MAIN FINDINGS

The following organizational factors emerged as being the main occupational stressors impacting on health care professionals working in an HIV/AIDS setting:

- Poor communication within the organization;
- Working with inexperienced staff;
- Working with inadequately trained staff;
- Unclear organizational goals; and
- Inadequate equipment necessary to get the work done.

The following job-design factors emerged as the main occupational stressors impacting on health care professionals working in an HIV/AIDS setting:

- Working under severe time constraints;
- Job not intellectually challenging;
- Dealing with complex problems to solve;
- Working with unclear objectives;
- Repetitive and routine work.
The following career and promotional factors emerged as the main occupational stressors impacting on health care professionals working in an HIV/AIDS setting:

- Rare opportunities for promotion;
- No possibility to progress financially;
- Poor salaries.

The following role-related factors emerged as the main occupational stressors impacting on health care professionals working in an HIV/AIDS setting:

- Performance of duties with unclear roles and an unclear scope of responsibilities.
- Performance of duties with unclear goals and objectives.
- Performing jobs with conflicting demands.

The following cultural factors emerged as the main occupational stressors impacting on health care professionals working in an HIV/AIDS setting:

- Personal experience of racial discrimination;
- Personal experiences of sexual prejudice;
- Personal experiences of religious discrimination.

6.3. LIMITATIONS OF THE STUDY

The limitations of the study are weaknesses in the entire study, as the researcher perceives them (Burns and Grove [1993] and Pilot and Hungler [1993]).

The following are the limitations of the study:
• The first limitation is that the study was conducted in the public health system; thus results could not with confidence be generalized to all health workers working in an HIV/AIDS setting.
• The second limitation is that the study was conducted in one district of the Eastern Cape Province; thus the results could not be generalized to all HIV/AIDS facilities in the Eastern Cape or in South Africa.
• This was a cross-sectional study; a further longitudinal study is recommended.
• The study was homogeneous in terms of gender and race.

6.4. RECOMMENDATIONS

The following are recommendations with respect to managing occupational stressors related to organizational factors:

• To improve communication and awareness of goals and objectives: the use of formal letters or memoranda, the use of notice boards, in-house newsletters and workplace committees would be most useful for keeping the staff informed.
• For staff who are inadequately trained and inexperienced the following can help to improve their knowledge: provide training and education, encourage continuous learning, provide challenging initial work, encourage employees to attend conferences and subscribe to professional journals.

The following are recommendations with respect to managing occupational stressors related to job-design factors:

• Work redesign is recommended;
• Job rotation is recommended which involves rotating workers without disturbing the workflow; this will assist in multi-skilling all the employees.
• Job enlargement; this involves an increase in job range to those employees finding their job not intellectually challenging by adding more responsibilities.
• Job enrichment, increasing of job depth by giving employees more discretion, autonomy, responsibility and control over their work.

The following are recommendations with respect to managing occupational stressors related to career and promotional factors:

• Career exploration: collect and analyse information to enable the individual to become aware of himself or herself in terms of interests, values and talents.
• Create awareness of self and the environment for informed decisions
• Formulate a career goal for accomplishment by an individual
• Develop and implement career strategies
• Career development support is crucial during the implementation of the chosen career in terms of mentoring

The following are recommendations with respect to managing occupational stressors related to role-related factors:

• Job analysis can be of help as a strategy in exploring the total job.
• During the job analysis, job description must be developed with the following headings: job title, purpose of the job, responsible to and for the main duties and the subordinates.
• The job specifications will help to specify the education, experience, aptitude and skills of each job.

The following are recommendations with respect to managing occupational stressors related to cultural factors:
• Sensitization of managers and employees on sexual, religious and racial cultural differences is important
• Embracing cultural and racial practices can be of help to help employees to respect each others’ differences

6.5. OPPORTUNITIES FOR FURTHER RESEARCH

A qualitative study using in-depth explanatory interviews with employees at all levels of an organization could shed light on the occupational stressors. A longitudinal study and more objective measurement of the extent of the impact of occupational stressors would be of help.

Further research could investigate the occupational stressors according to gender, race and age groups. Occupational stressors in different regions could also be studied at a district, national and international level in organisations in South Africa and internationally.

6.6. CONCLUSION

An investigation of the organizational factors, job-design factors, career and promotional factors, role-related factors and cultural factors was undertaken in the Nelson Mandela Metropolitan Municipality. The study focused on the perceptions of health care professionals in terms of the prevailing occupational stressors.

This study has demonstrated that the following factors are major occupational stressors impacting on the health care professionals working in an HIV/AIDS setting: organizational factors, job-design factors, career and promotional factors, role-related factors and cultural factors.
REFERENCES


Bollinger, L and Stover, J. 1999. The Economic Impact of AIDS in South Africa. The policy project


ANNEXURE A: Questionnaire Cover letter

Re: Questionnaire on the identification of stressors impacting on professional health workers at selected public health facilities.

Dear Sir/Madam

I am currently studying towards a Master Degree in Business Administration at the Nelson Mandela Metropolitan University in Port Elizabeth.

In order to meet the requirements of this qualification, I am undertaking a research paper with the title: “IDENTIFICATION OF STRESSORS IMPACTING ON PROFESSIONAL HEALTH WORKERS AT SELECTED PUBLIC HEALTH CARE FACILITIES”. The questionnaire is directed at Professional health workers working in an HIV/AIDS setting in the Nelson Mandela Metro District in Port Elizabeth.

I would like to request your assistance in completing the attached questionnaire related to the research paper and return it. The questionnaire should take you less than 10 minutes to complete.

Your cooperation in this matter is highly appreciated.

Yours sincerely

U.K. Sontyale
Researcher
ANNEXURE B: Ethics approval notification

Facility of Business and Economic Sciences

Nelson Mandela Metropolitan University

Dr E.M. Chabula-Nxweni
Executive Director
Public Health
Nelson Mandela Bay Municipality

Dear Dr Chabula-Nxweni

ETHICS APPROVAL – RESEARCH PROJECT U.K. SONTYALE

This serves to confirm that Mr Sontyale’s research proposal and application for approval served at our Faculty’s Research Ethics Committee meeting held on 15 April 2009. The committee approved Mr Sontyale’s application.

It would be appreciated if you could support Mr Sontyale’s research project.

Yours faithfully

PROF D.M. BERRY
DIRECTOR: SCHOOL OF INDUSTRIAL PSYCHOLOGY AND HUMAN RESOURCES
Dear Ms Vuyo Poswana
Research Co-ordinator
Bisho

Dear Ms Poswana

ETHICS APPROVAL – RESEARCH PROJECT U.K. SONTYALE

This serves to confirm that Mr Sontyale’s research proposal and application for approval served at our Faculty’s Research Ethics Committee meeting held on 15 April 2009. The committee approved Mr Sontyale’s application.

Mr Sontyale may therefore proceed with the research project. Your support for this research project would be appreciated.

Yours faithfully

PROF N MAZIBUKO
REPRESENTATIVE: FACULTY OF BUSINESS AND ECONOMIC SCIENCES ETHICS COMMITTEE

PROF H LLOYD
CHAIRPERSON: FACULTY OF BUSINESS AND ECONOMIC SCIENCES ETHICS COMMITTEE
ANNEXURE D: Eastern Cape Department of Health Approval

**FAX COVER SHEET**

**TO:** Mr U K Soti

**FOR ATTENTION:** Lungile

**FAX NO:** 041 363 4729

**FROM:** Epidemiological Research and Surveillance Management

**NO OF PAGES:** 2

**DATE:** 28 April 2009

**MESSAGING:**

Kindly receive the approval letter for conducting research.

Date: 28 April 2009

**Enquiries:** Miss K. Nkazo

**Fax No.:** 043 642 1499

**Tel.:** 040 608 0856

This message is intended only for the individual or entity to which it is addressed and contains information that is privileged and confidential. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this documentation is strictly prohibited. If you have received this document in error, please notify the sender immediately by telephone.
Re: IDENTIFICATION OF STRESSORS IMPACTING ON PROFESSIONAL HEALTH WORKERS AT SELECTED PUBLIC HEALTH CARE FACILITIES.

The Department of Health would like to inform you that your application for conducting a research on the abovementioned topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.

2. You are advised to ensure observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants. You will not impose or force individuals or possible research participants to participate in your study. Research participants have a right to withdraw anytime they want to. However, you shall be responsible in dealing with any adverse effects following the research treatment provided in your study.

3. The Department of Health expects you to provide a progress on your study every 3 months (from date you received this letter) in writing.

4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Epidemiological Research & Surveillance Management. You may be invited to the department to come and present your research findings with your implementable recommendations.

5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.

Your compliance in this regard will be highly appreciated.

EPIDEMIOLOGICAL RESEARCH & SURVEILLANCE MANAGEMENT

DATE 28/04/09
ANNEXURE E: Application to conduct study NMBM

U.K. Sontyale  
Regional Manager  
1st Floor 66 Ring Road  
Fairview Office Park  
Greenacres  
Port Elizabeth  
6033  
Republic of South Africa  
January 2009

The Executive Director: Health  
Nelson Mandela Bay Metropolitan Municipality  
P.O.Box 116  
Port Elizabeth  
6000

Dear Dr M. Chabula-Nxiweni

APPLICATION FOR THE PERMISSION TO CONDUCT A STUDY

I am currently studying towards a Master Degree in Business Administration at the Nelson Mandela Metropolitan University in Port Elizabeth.

In order to meet the requirements of this qualification, I am undertaking a research paper with the title: “IDENTIFICATION OF STRESSORS IMPACTING ON PROFESSIONAL HEALTH WORKERS AT SELECTED PUBLIC HEALTH CARE FACILITIES”.

I would like to get your approval to conduct such a research at selected health facilities rendering Comprehensive HIV/AIDS services. Attached please find my Research Proposal for your perusal

Kind regards,

U.K. Sontyale  
Researcher
ANNEXURE F: Application to conduct study ECDOH

U.K. Sontyale
Regional Manager
1st Floor 66 Ring Road
Fairview Office Park
Greenacres
Port Elizabeth
6033
Republic of South Africa
January 2009

The District Manager: Health
Nelson Mandela Metropolitan District
Private Bag X28000
Greenacres
Port Elizabeth
6057
Republic of South Africa

Dear Mr. T. Oliver

APPLICATION FOR THE PERMISSION TO CONDUCT A STUDY

I am currently studying towards a Master Degree in Business Administration at the Nelson Mandela Metropolitan University in Port Elizabeth.

In order to meet the requirements of this qualification, I am undertaking a research paper with the title: “IDENTIFICATION OF STRESSORS IMPACTING ON PROFESSIONAL HEALTH WORKERS AT SELECTED PUBLIC HEALTH CARE FACILITIES”.

I would like to get your approval to conduct such a research at selected health facilities rendering Comprehensive HIV/AIDS services. Attached please find my Research Proposal for your perusal.

Kind regards,

U.K. Sontyale
Researcher
ANNEXURE G: Questionnaire

OCCUPATIONAL STRESSORS: QUESTIONNAIRE

- This questionnaire is aimed at determining factors you feel are stressors at your workplace.
- The questionnaire is completed anonymously and confidentiality will be maintained.
- You are requested to answer each question and reflect your true reaction when doing so.
- Indicate your choice by marking the appropriate block with an X

### A. BIOGRAPHIC INFORMATION

<table>
<thead>
<tr>
<th>A.1</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
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<tbody>
<tr>
<td>A.2</td>
<td>Age</td>
<td>20 – 25 yrs</td>
<td>26 – 30 yrs</td>
</tr>
<tr>
<td>A.3</td>
<td>Race</td>
<td>African</td>
<td>Coloured</td>
</tr>
<tr>
<td>A.4</td>
<td>Highest Education Qualification</td>
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<td>Certificate</td>
</tr>
<tr>
<td>A.5</td>
<td>Job Grading</td>
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<td>Supervisor</td>
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### A.6 Duration in current job

<table>
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<tr>
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<th>37 - 54 months</th>
<th>More than 55 months</th>
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</table>
| B. ORGANISATIONAL FACTORS

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1</td>
<td>How often do you find communication within your organisation poor?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.2</td>
<td>Do you find yourself working with inexperienced staff?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.3</td>
<td>How many times do you work with inadequately trained staff?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.4</td>
<td>How often do you participate in decision making in your organisation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.5</td>
<td>Do you find organisational goals clear?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.6</td>
<td>Is there adequate equipment necessary to get work done?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C. JOB DESIGN FACTORS

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.1</td>
<td>Do you find yourself working under severe time constraints?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.2</td>
<td>Do you find your job does not challenge you intellectually?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.3</td>
<td>Do you find yourself dealing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
with complex problems to solve?

C.4 Do you find yourself working with unclear objectives?

C.5 How would you rate your work: repetitive and routine?

### D. CAREER AND PROMOTIONAL FACTORS

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.1</td>
<td>Are there opportunities for promotion?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.2</td>
<td>Does your current job offer you opportunities for personal growth and development?</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>D.3</td>
<td>Does your organisation give you opportunities to attend training courses?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>D.4</td>
<td>Does your job offer you the possibility to progress financially?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.5</td>
<td>Does your organisation pay good salaries?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### E. ROLE-RELATED FACTORS

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.1</td>
<td>When performing your duties do you find yourself confronted with unclear roles?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.2</td>
<td>How often do you find yourself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
performing your duties with unclear scope of responsibilities?

<table>
<thead>
<tr>
<th>E.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you find yourself performing your duties with unclear goals and objectives?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you find yourself having to do two or more jobs with conflicting demands?</td>
</tr>
</tbody>
</table>

### F. CULTURAL FACTORS

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.1</td>
<td>How often do you personally experience, racial discrimination?</td>
</tr>
<tr>
<td>F.2</td>
<td>Have you personally experienced sexual prejudice?</td>
</tr>
<tr>
<td>F.3</td>
<td>Have you experienced religious discrimination?</td>
</tr>
</tbody>
</table>

Thank you for your participation and cooperation.
Should you need help, do not hesitate to call Mr Lungi Sontyale at 082 555 3351 or email me at uks2101@columbia.edu