

# MIDLANDS STATE UNIVERSITY



**FACULTY OF SOCIAL SCIENCES  
DEPARTMENT OF PSYCHOLOGY**

**EXAMINING THE PSYCHOLOGICAL AND SOCIAL PREDICTORS OF BURNOUT AMONG  
NURSES EMPLOYED BY GOVERNMENT. A STUDY OF NURSES AT GWERU PROVINCIAL  
HOSPITAL, ZIMBABWE.**

**BY**

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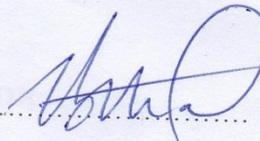


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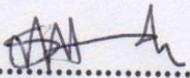
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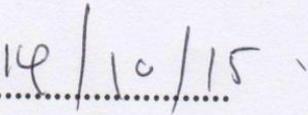
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## **DEDICATION**

I dedicate this piece of work to the Almighty God, the source of all my energy, power and resources.

## ACKNOWLEDGEMENTS

First and foremost, I would like to thank Almighty God, the source of all my energy, health and resources.

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## ABSTRACT

*The purpose of this research was to examine the psychological and social predictors of burnout among nurses employed at the public hospital in Gweru, Zimbabwe. The primary aim was to determine the relationship between occupational and demographic stress factors and burnout levels among nurses. Burnout is defined with the human service as a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that occurs among individuals who work with people in some capacity. The study population consisted of 126 male and female nurses from Gweru General Hospital. A disproportionate stratified random sampling procedure was used to meet the sample size. Data was gathered through structured questionnaires which were distributed among nurses who participated in this study. The research design guiding this study was quantitative which enabled the researcher to identify the predictors of burnout among nurses. Regression analysis was used to analyze data. The results indicated organizational constraints, death and dying related stress, and age as significant predictors of burnout among nurses at Gweru General Hospital. Workload, nurse intention to leave and working experience were not found to significantly predict burnout among nurses. It is recommended therefore that, future research should focus on the development and evaluation of interventions to ameliorate burnout among Zimbabwean nurses.*

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

MBI	Maslach Burnout Inventory
JD-R	Job Demand Resource model
EE	Emotional Exhaustion
DP	Depersonalization
PA	Personal accomplishment
OCS	Organizational Constraints Scale
NSS	Nursing Stress Scale
HSS	Human Service Survey
MBI	Maslach Burnout Inventory – Human Service Survey

# **CHAPTER ONE**

## **INTRODUCTION AND BACKGROUND TO THE STUDY**

### **1.1 Introduction**

This chapter looks at the background of the study, states the problem that led to this research, and gives the research objectives and hypotheses that guided the researcher. It goes further to give the assumptions of the study, its significance, purpose, limitations, delimitations and definition of terms. Finally it gives the summary of the chapter.

### **1.2 Background to the Study**

Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism and inefficacy (Maslach et al, 2001). It is mostly found in helping professions where people work closely with others in an emotionally charged atmosphere. Some of the factors that cause burnout include high workload, organizational constraints factors, duties that do not correspond with pay, and being underappreciated.

The issue of burnout has a long history among human professions such as nursing. Nursing is generally a stressful and emotionally demanding profession which deals with human aspects of health and illness. The career is physically and psychologically challenging, as it involves dealing with people who are suffering from major or minor health problems and life threatening issues (Bakker, et al 2002). Due to this continuous exposure to work stressors, nurses become vulnerable to burnout due to their direct contact with patients with critical health diseases, loneliness, grief, pain, incapacity and death. All these situations are emotionally demanding and can result in stress. Everyday nursing staff are exposed to situations that are unpleasant, some even disgusting, shameful and frightening. All these daily life complications are very stressful, making nurses susceptible to burnout.

Internationally, a number of organizational stress factors have been associated with burnout among nurses in the United State of America. Numerous studies done globally report that

burnout among nurses is associated with many things like the time spent with patients, poor support, high workload, shortage of nursing staff, lack of resources, and death and dying among others. Countless researchers cited that shortage of nurses significantly predicts burnout levels among hospital nurses. According to Jumaat (2009) in his study on burnout, 40% of hospital nurses in the US have burnout level that exceed the norm for health care workers, and job dissatisfaction among these nurses was four (4) times greater than the average for all USA workers. One out of five hospital nurses testify to intentions to vacate the profession within a year. This was further supported by a study conducted in France by Embracio (2007) which indicated that straining duties and higher workload as a result of nurse shortage predicts levels of burnout. About one third of the nurses employed by French government hospitals experience high levels of burnout and 54% showed high level of depression as an indication of burnout (Embracio, 2007). Doctor Curtis, cited in a publication by Chitura and Chitura (2014) further supports this, saying that 40% of the medical personnel in a government hospital in France indicated their intentions to leave the job within a year.

In Africa, in a study about burnout among psychiatric nurses in a Nigerian General Hospital, a high level of burnout was identified in 39.1% of the respondents in the area of emotional exhaustion, 29% in the area of depersonalization and 40% in the area of reduced personal accomplishment. The analysis indicated that inadequate nursing personnel and frequent night duties, poor wages, excess workload, and lack of support were predictors of burnout among nurses especially in the emotional exhaustion subscale of the MBI (Lasebikan & Oyetunde, 2012).

In South Africa existing data indicates that high levels of burnout have been associated with nurses, which places additional pressure on the already struggling public health system characterized by shortage of nurses (Steenkamp, 2014). Researches showed that shortage of nurses in South Africa badly influences the general quality of patient care (Oosthuizen, 2012). Steenkamp (2014) also indicated that there is shortage of about 3,000 professional nurses in the public health sector in South Africa with a nurse to patient ratio of 1:18 to 1:44, which means that one nurse has three minutes to take care of a single patient with other clerical issues alongside that need attention. This provides pressure to the nurse who is already stressed with the work itself, hence predicts burnout levels.

In Zimbabwe burnout among nurses might even be worse. There are a number of observable things currently happening especially in our public hospitals which show that nurses are experiencing burnout. Public hospitals in Zimbabwe are failing to provide health care that is consistent and of high enough quality to compete with other international hospitals. Issues of high death rate of patients in hospitals increase every day, yet we have qualified and experienced nurses. Zimbabwe generally is known for producing top quality graduates globally. Nurses in Zimbabwe get the same training, yet those working in private hospitals perform better than the ones in public hospitals. Most people prefer to get medical attention from private hospitals over public hospitals because they know they will receive quality health care in private hospitals. Even those nurses that migrate to work in other countries from Zimbabwe are well known for producing quality care but yet in Zimbabwe they are failing to do so. Patients are dying everyday of natural causes, and some due to medical errors. Nurses are being accused of being callous, rude and arrogant to patients by the general public (Chitura & Chitura 2014). All these issues show that nurses are experiencing burnout.

According to the Sunday Mail of 19 April (2015), long queues have become the order of the day in public hospitals in Zimbabwe, where patients have to wait for long hours before being attended to. Patients sometimes spend the whole day in a queue before being given medical attention. Some patients even go back home before they get treatment, whereas in private hospitals people get attended to very quickly. To make matters worse some patients that are seriously ill, especially those suffering from AIDS-related illnesses and cancer, are being released from hospitals in conditions so bad that they die upon arrival at their homes showing the failure of nurses. This shows that nurses to some point are experiencing burnout which is affecting their service delivery, yet little is known about the psychological and social predictors of burnout among nurses in public hospitals, which is the current focus of this study.

No researches have been found in Zimbabwe about the predictors of burnout among nurses. The only qualitative study about burnout is the one conducted by Chitura and Chitura (2014) which emphasises more on the signs and symptoms of burnout particularly among the Intensive Care Nurses, but nothing is known about the factors that predict burnout levels among nurses in general. Therefore because of this gap in research in Zimbabwe, the current study intends to add more knowledge to the existing literature about burnout among nurses particularly in the public

hospitals, identifying the predictors of burnout among nurses in the public hospitals so that appropriate intervention strategies to alleviate burnout among nurses can be developed, thus improving the quality of the health care in Zimbabwe.

### **1.3 Statement of the problem**

Zimbabwe's public health system has gone to the dogs (Sunday Mail of 19 April 2015). Nurses are experiencing burnout but yet the psychological and social predictors of burnout among nurses, especially those employed by the government, are not known (Chitura & Chitura, 2014). Thus the researcher seeks to investigate the predictors of burnout levels among nurses in the public hospitals so that appropriate intervention strategies can be put in place to reduce nursing burnout levels.

### **1.4 Purpose of the study**

The main purpose of the research is to examine the psychological and social predictors of burnout among nurses employed by the Government of Zimbabwe, particularly the experiences of those nurses at Gweru General Hospital.

### **1.5 Research objectives.**

This current study is guided by the following objectives:

- To identify the psychological and social predictors of burnout among nurses employed at a government hospital in Gweru, Zimbabwe.
- To determine the relationship between organizational constraints, death and dying related stress, workload, socio demographic factors and burnout levels among nurses employed at the public hospital in Gweru, Zimbabwe.
- To recommend intervention strategies that can be put in place to alleviate burnout among nurses employed at the public hospital in Gweru, Zimbabwe.

### **1.6 Research Hypothesis**

The study seeks to answer the following hypotheses:

#### ***Main Hypothesis***

There is a significant relationship between occupational and demographic variables and burnout among nurses employed by the government hospital in Gweru, Zimbabwe.

**1:** There is a significant relationship between organizational constraints and burnout levels among nurses employed by the government of Zimbabwe.

**2:** There is a significant relationship between workload and burnout among nurses employed by the government of Zimbabwe.

**3:** There is a significant relationship between death and dying related stress and burnout levels among nurses employed by the government of Zimbabwe.

**4:** There is a significant relationship between nurses' sociodemographic characteristics i.e. age, working experience, and intention to leave, and burnout among nurses employed by the government of Zimbabwe.

### **1.7 Significance of the study**

This study was conducted to investigate the psychological and social predictors of burnout among nurses employed by the public hospital in Gweru, Zimbabwe. Its findings therefore are of great significance to future research in the field of psychology. They can also be used in coming up with appropriate measures that can be used to alleviate burnout among nurses, thereby promoting the psychological wellbeing of nurses and in that way the delivery of better and more efficient health care.

The results of this study will also help health care institutions, particularly hospitals, in recognizing factors related to burnout in nursing staff, and hence help them take remedial measures in an attempt to advance the health status of their employees and also hospitals' reputations, hence promoting competitive advantage through offering of high quality health care services.

Findings in this study can be used by health care institutions to develop appropriate intervention strategies and set up systems that can help nurses. This is in light of the fact that there are no organized counselling support systems for nurses who are burned out in hospitals. Thus if the health care institutions offer suitable organized counselling, this can help not only the nurses but the patients as well, as they will be dealing with intellectually, physically and emotionally healthy nurses.

Not only nursing staff and hospital institutions will benefit from this study, but also the researcher will get wider understanding of burnout thus inspiring the researcher to take interest in health care issues such as counselling of nurses. The academic field will also benefit, in the sense that the project will be used as reference by other students and researchers who wish to carry out similar studies.

### **1.8 Assumptions**

The study makes the following assumptions:

- That there is burnout among nurses working under the Public hospital in Gweru, Zimbabwe.
- That there is a significance relationship between burnout and the identified occupational and socio demographic variables.
- That all respondents in this study are willing to share their valuable information with the researcher since the information will be of benefit to both the organizations and participants.
- That the sample chosen is a true representative of the whole targeted population and that the measurement instrument used is valid and reliable.
- Nurses will be trustworthy and give genuine responses

### **1.9 Delimitations of the study.**

This study is confined to Gweru General Hospital, situated in Gweru about 2km from Gweru town along Shurugwi Road. Respondents will be drawn from nurses in every department/ward. The focus of this study is directed towards the investigation of psychological and social predictors of burnout among nurses.

### **1.10 Limitations**

Every study has its weaknesses, complications and hitches and this study has not been an exception. Obtaining authority to carry out the research from the hospital was not easy, considering the issue of the hierarchical structure to be followed. Also nurses are always busy, due to the nature of their work; therefore they had trouble finding adequate time to attend to the questionnaires, which may have affected the results.

Another limitation is that the research was carried out at only one public hospital in Gweru; therefore findings of this study will be difficult to generalize to all public hospitals in Zimbabwe because the sample is limited to a single hospital.

The fear of victimization among the participants is also another constraint of the study. Some participants, due to fear of the unknown, decided not to include themselves despite the researcher's guarantee of confidentiality. They chose to be on the safe side by not involving themselves.

### **1.11 Definition of terms**

In order to create a common understanding of all the concepts in this study, the following words are defined.

**Burnout:** According to the researcher's understanding of burnout, it is not a sign of work stress; rather it is as the end result of unmanaged work-related stress. However for the sake of this research burnout is defined as, "a syndrome of emotional exhaustion (EE), depersonalization (DP) and reduced personal accomplishment (PA) that can occur among individuals who do "people work" of some kind" (Maslach, 1982 p. 2).

**Emotional Exhaustion:** It has been defined by Syed et al (2014) as the feeling of being unable to give oneself at a psychological level due to a depletion of emotional resources. However this research views it as simply the feeling of being emotionally worn-out by one's work. It can be described as the feeling of, "I can't take it any longer."

**Depersonalization:** It has been defined by Syed et al (2014) as the development of impersonal feeling towards recipients of one's services. However for the sake of this research it is defined as the feeling or lack of concern towards one's service. Its end results are reduced empathy with respect to patients, which can lead to alienation and the feeling of "I don't care anymore."

**Reduced personal accomplishment:** It is defined as the feeling of incompetence and ineffectiveness in one's work (Maslach & Leiter, 2001). The researcher also defines it as the individual feeling that they cannot handle the clients or patients' situations.

**Stress:** According to Chitura and Chitura (2014), it is a term in psychology used to signify one's total response to environmental demands or pressures. However for this study, stress is defined as the end result of an individual's failure to cope with the work stresses, emotionally, internally and physically.

**Public Hospital:** Generally it is those hospitals that are funded and owned by the government.

**Nurse:** For the sake of this research a nurse is a formally educated and experienced individual responsible for the caring of people who are sick.

**Counselling:** It is the provision of qualified support and guidance in solving personal or psychological difficulties.

**Maslach Burnout Inventory (MBI):** Is the most broadly used tool by researchers to measure burnout.

### **1.12 Chapter summary**

This chapter set the foundation for arguments in the next chapter. In this chapter, the background, history and definition of burnout were looked at. It is the backbone of the study as the following chapters will be based on the statement of the problem, research hypotheses, assumptions, purpose of the study, delimitations and limitations alluded to.

## CHAPTER TWO

### LITERATURE REVIEW AND THEORETICAL FRAMEWORK.

#### 2.1 Introduction

In this current chapter, literature about burnout that explains the foundation of the research is reviewed. The literature about burnout in other parts of the world and in Zimbabwe is explored. The researcher attempts to provide a clear structure about the different views from different authors concerning the existing knowledge and research in the field of burnout in the nursing profession. Thus the chapter seeks to examine and explore the views of different authors regarding the psychological and social predictors of burnout among nursing staff. Information was obtained from several academic databases, Google Scholar, and the internet. In this review of literature, occupational factors as well as demographic characteristics associated with burnout among nurses were identified as predictors of burnout.

#### 2.2 Conceptualizing Burnout

Literally, burnout means, "...the smothering of a fire or the extinguishing of a candle", and this acts as a metaphor for the draining of employees' energy (Schaufeli et al, 2009, p. 205). Burnout concept firstly emerged in the USA during the 1970's to express the state of occupational depression experienced by people employed in customer services. According to Serin and Balkan (2014), the concept emerged in 1961 in the novel titled, "Burn Out Case", by Greene which depicts the story of a spiritually tormented and cynical architect who quit his job and withdrew to the African jungle as he was plagued by extreme fatigue and loss of idealism and passion in his job. (Maslach, Schaufeli & Leiter, 2001).

Freudenberger (1974) borrowed the term to describe ongoing emotional depletion, loss of motivation and reduced commitment (Schaefeli et al, 2009, p. 205). The concept was then furthered by the American social psychologist Maslach, who defined burnout as a psychological response to chronic emotions and interpersonal contact (Hurkin & Melby, 2014). In the 1980's the concept was then expanded by Maslach and Jackson (1981) through the development of the Maslach Burnout Inventory (MBI), an instrument used to measure burnout. Currently, as a result,

many researchers now favor the multidimensional and standardized definition of burnout by Maslach (1982). His definition of burnout has been accepted and used worldwide by many researchers. He defined burnout as a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do “people work” of some kind. (Maslach, 1982, p. 2). According to his definition, the concept of burnout includes three aspects that are, emotional exhaustion, depersonalization and reduced personal accomplishment perceived by those interacting extensively with other people (Maslach, 1982).

To understand burnout as a concept, the three aspects of burnout according to Maslach’s definition will be discussed in this literature review.

***Emotional exhaustion:*** It entails the feeling of being emotionally overstretched, overused, and depleted of emotional resources, which individuals experience either during or after work (Maslach, 1992). It is also viewed as one’s effort to distance oneself emotionally or cognitively from one’s work and it is a central element of burnout and the most obvious manifestation of the syndrome (Harkin & Melby, 2014). Workers feel that they are no longer able to give of themselves at a psychological level (Maslach & Jackson, 1981, p.99). On this dimension, higher levels of burnout are characterized by high scores on the EE (emotional exhaustion) subscale.

***Depersonalization:*** It is the second dimension of burnout. According to Serin and Balkan (2014), it refers to an individual’s apathetic feeling towards work in general and the feelings leading to one’s loss of interest in work and the development of the feeling that work has lost its attraction. It is the individual’s feeling that they cannot enjoy work any longer and they often answer in an excessively detached manner towards clients and at times it includes a loss of idealism (Maslach & Goldberg, 1998). High scores in the DP (depersonalization) subscale indicate high levels of burnout.

***Personal Accomplishment:*** Signifies the self-evaluation element of burnout. Personal accomplishment by definition refers to the feeling of competence and successful achievement. Contrarily, reduced personal accomplishment refers to an individual’s feeling of decrease in competence and successful achievement at the workplace (Maslach & Golberg, 1998). Individuals with this feeling assess themselves negatively with regards to their work with clients

when they fail to succeed in their personal goals at work. This feeling hinders progress in an individual's work and hence it's frustrating leading to burnout (Serin & Balkan, 2014).

### **2.3 Burnout in relation to nursing profession.**

According to Kaytal (2013), burnout pervades every occupation but however it is more predominant among those professions that offer human service in response to the needs of the society. Nurses comprise the largest segment of employees in the global health care industry and they are more exposed to stressful events which eventually lead to burnout. According to Yavello (2014), nursing is a very stressful profession because it deals with human aspects of health and illness which can ultimately lead to job dissatisfaction and burnout. In their daily work, nurses are exposed to many stressors ranging from organizational stressors, the nature of work itself, workload, exposure to death and dying issues, inadequate pay, environmental stressors, and long working hours (McVicar, 2003). It is therefore essential to identify the predictors of burnout in nursing so that proper intervention strategies can be developed to reduce burnout among nurses.

Generally, nurses' principal mission is nurturing and caring for sick people and restoration of health. They treat and comfort patients with illness, pain and agony, incapacity diseases and death. They deal with problematic and life threatening issues, helping people who are experiencing major health problems. All these situations are emotionally draining and they indeed form the excellent breeding ground for burnout (Spooner-Lane, 2004). The nature of the work itself is very demanding, it requires emotional involvement. Although the nurses get paid for the job, the care and concern they exhibit at times goes beyond any monetary remuneration (Gulavan & Shinde, 2014) which eventually leads to the development of burnout among the nurses.

### **2.4 Presence of high levels of burnout among Zimbabwean nurses.**

Zimbabwe like many other countries has the dilemma of finding the best way to address the health needs of its citizens and economically develop the country to provide its population with satisfactory quality health care. From 1990, partly due to the lack of economic growth and economic stagnation, government resources have increasingly become inadequate to match and

satisfy the population's health needs (Mudyarabikwa, 2000). Available evidence in Zimbabwe indicates that there is presence of burnout among the nurses especially those in the public hospitals as measured by the Maslach Burnout Inventory (MBI).

According to the study conducted by Chitura and Chitura (2014) the burnout syndrome was evident among the intensive care nurses in Zimbabwean's hospitals. Using a sample of 23 participants, the study found out that, emotional exhaustion has been a contributory factor to burnout with 78% of the ICU nurses caring for the dying and 43% involved in the life end decisions. The findings of the study revealed that spending prolonged time in the ICU contributed to burnout with 40% score in the emotional exhaustion subscale indicating severe feelings of emotional exhaustion and also 46% in depersonalization score which indicates a moderate level of burnout among ICU nurses as measured by the MBI (Chitura & Chitura, 2014). This indeed calls for concern in the field of burnout among nurses but however as a limitation, it was discovered that it was not defined in this study what exactly constituted high levels of emotional exhaustion and depersonalization among these nurses. Therefore because of this gap, this present study intends to expand the existing literature about burnout among nurses in Zimbabwe by investigating the psychological and social predictors of burnout so that appropriate intervention strategies to alleviate burnout among nurses can be put in place.

## **2.5 Relationship between burnout and Nurse's intention to leave the career.**

Internationally, regionally and locally, it has been found that there is a strong correlation between burnout and nurses' intentions to leave the nursing profession. A study among 380 nurses in the United States found out that 22% of those nurses in the sample had already exited the nursing profession and they cited burnout and stress as the reason behind the leaving of the profession (Steenkamp, 2014). Among the France studies, 60% of the ICU nurses who exhibited high levels of burnout wished to leave the job (Embracio, 2007) and they presented poor quality of life as a sign of burnout. Also according to Heinen et al (2013), among a sample of 23,159 European nurses, 95% of the respondents indicated their intention to leave the profession and this was significantly represented with higher scores in the EE aspect of burnout.

Similarly, in another study of 10,184 nursing staff in Pennsylvania, Aiken et al (2002) found out that 43% of the nurses reported high levels of burnout and job dissatisfaction and they intended

to leave their current professions within a year. Another sample of 336 Japanese nurses also indicated their intentions to leave the nursing profession due to burnout (Olue, Manyama & Nakaya, 2011). Additionally another sample from the United States of nurses who looked after chronic hemodialysis patients also showed that 95% of the participants experienced burnout and were three times more likely to report the intent to leave the profession (Steenkamp, 2014). In this study burnout was defined by a score of 27 or higher on EE subscale of MBI. In another study also in the United States, among a sample of 2,494 ICU nurses, 60% of the respondents reported severe levels of burnout and were thinking of changing the job to another profession. They cited increasing workload as a predictor of burnout and job dissatisfaction with 23% and 15% respectively (Steenkamp, 2014).

In Africa, a study among a large sample of 542 nurses in South Africa indicated high levels of burnout and 34.4% of the participants intended to change their profession (Piennar & Bester, 2011). Also in another sample of 536 South African nurses who were asked about their career plans for the next five years, 12.7% planned to change the profession while 15.7% planned to work abroad (Pillay, 2009). In the same country among a sample of 1,187 nurses, 54.4% according to Coetzee et al (2013) intended to leave their current profession within a year. Participants who intended to leave the profession were higher among participants from the public hospitals with 59% as compared to 31% from the private hospitals.

## **2.6 Organizational stress factors in the nursing profession**

Organizational constraints in the nursing profession have been reported in many developed and developing countries as a predictor of burnout. Burnout at an organizational level is characterized by reduced effectiveness, poor performance and less productivity. Nevertheless not only the quantity of work is affected but also the quality of service offered is also affected. Several mistakes are made and the work done is less accurate, for example patients get incorrect medication and files might not be kept properly hence affecting patient outcomes. According to Glazer and Gyurak (2008), several studies reported shortage of material resources such as hospital beds, medical equipment, poor infrastructure and medical supplies to have an influence on nursing burnout. Absence of workplace support from supervisors has also been reported by nurses to have an influence on burnout. Thus the review of literature from international studies

with regards to different types of organizational constraints in the nursing profession will be presented.

### **2.6.1 Shortage of resources in the nursing profession.**

According to Glazer and Gyruk (2008), among a study of 2.144 nurses from five countries (United States, United Kingdom, Italy, Israel and Hungary), they identified lack of resources to be among the top 10 workplace stressors in each country. Inadequate resources, such as lack of funds, lack of supplies, lack of equipment or broken equipment as well as unavailability of resources, were reported. Internationally among a sample of 333 Turkish nurses, 52% of the respondents reported that lack of hospital equipment affected them negatively (Steekamp, 2008). With another study also among 24 Ugandan nurses, participants indicated that they were morally distressed by not being able to provide care among HIV patients due to lack of resources and poor infrastructure (Steekamp, 2008).

Regionally, among 1.702 South African healthcare workers (including nurses), 50% were dissatisfied with both workplace infrastructure and unavailability of medical supplies (Pendleton et al, 2007). Participants identified shortage of equipment such as medication and beds, safety clothing (gloves), poor infrastructure and not having enough space, to have a great influence on the level of burnout and job dissatisfaction. In another study conducted in the Gauteng Province in South Africa, Smit (2005) with a sample of 35 nurses caring for HIV/AIDS patients reported concern about deterioration of hospital infrastructure and lack of medical equipment which all contributed to burnout.

Locally in Zimbabwe at Gweru Provincial Hospital, speaking at the commissioning of a new Casualty Department at this hospital, Dr. Parirenyatwa acknowledged lack of resources and poor infrastructure as organizational constraints affecting the quality of health care. Dr Parirenyatwa indicated that the infrastructure at Gweru Hospital was surely in a sorry state and it needs upgrading to ensure that it offers quality service to locals (Sunday Mail of 19 April, 2015). The Midlands Governor, Cephass Msipa, also speaking on behalf of the Midlands Province Affairs Minister on the same occasion, indicated that there was need for necessary facilities such as ICU and adequate remuneration for nurses to perform at their best and reduce pressure among nurses. The hospital suffers from lack of resources and there is need for more in order to increase the

number of patients admitted. Lack of resources such as medication running out is also another problem often associated with stress and burnout. However the documented evidence on the extent to which all these factors predict burnout among nurses is not known in Zimbabwe which is the focus of this current study.

### **2.6.2 Shortage of workplace support among the nursing profession.**

According to Glazer and Gyarak (2008), in a study conducted in five countries, inadequate support from management has been constantly reported among the top 10 organizational stress factors in a study of 2.144 nurses. When the nursing stress scale which measures seven sources of Nursing Stress was administered to a sample of 23 participants, Singaporean nurses testified a lack of supervisory support as well as lack of recognition as the daily hassles they experienced (Lim et al, 2011). Nurses revealed that supervisors expect nurses to assist them in their work daily but they themselves do not offer support in return when needed. Other participants from the 18 Turkish nurses according to Steenkamp (2014) indicated that they come to work every day and overwork but there is no appreciation. “Nobody says ‘thank you’, rather supervisors continuously ask why we did not do this and that” (Ustun, 2009, p. 239).

Among a sample of 35 nurses providing care in PLWH (people living with HIV/AIDS), in Gauteng Hospital, Smit (2005) indicated that participants reported being demotivated by lack of recognition from nursing managers and hospital administrators.

A study in Zimbabwe also reported lack of support from supervisors as a problem being faced by nurses. Among a sample of 23 ICU nurses according to a study by Chitura and Chitura (2014), participants indicated that lack of enough support from supervisors or administration can lead to intense stress that results in burnout (Chitura & Chitura, 2014). Thus it appears there is a correlation between organizational constraints and burnout in Zimbabwean nurses but no research has been documented to show that indeed there is a significant relationship between organizational constraints and burnout, which is the current focus of this study.

### **2.7 Relationship between workload and burnout among nurses**

Both internationally and locally, workload has been identified as a leading occupational stressor within the nursing profession. According to Glazer and Gyuruk (2008), a study among 5 countries identified workload in relation to certain types of task such as working shifts to have an

influence on burnout among nurses. Steenkamp (2014) found out that, in a Spanish study of 473 nurses, workload was the most significant predictor of Emotional Exhaustion among all predictors of burnout in the study. Aiken et al (2008) found out that among 10,184 nurses in Pennsylvania, the possibility of higher levels of burnout due to workload increases by approximately 20%, and heavy workload has been associated with shortages of nurses in hospitals.

In a Spanish study among 473 nurses, participants who completed the 78 item Nursing Burnout Scale indicated that workload experiences with pain and death predicted 26% of the variance of emotional exhaustion and 22% of depersonalization (Garossa et al, 2008) which signifies higher levels of burnout. Workload was found to be the most significant predictor of emotional exhaustion among all the predictors in that study such as personality, socio demographic variables and job stressors. In another study among 959 German nurses, using the Maslach Burnout Inventory-General Survey, Steenkamp (2014), indicated that 50% of the sample respondents significantly showed burnout symptoms as represented by a score of 3.5 out of 6. 50% of the respondents also reported moderate burnout symptoms in this study, and workload was identified to be the most significant predictor of burnout. Thus internationally, studies indicate that there is a strong association between burnout and workload among nurses.

In Africa, according to Kruse et al (2009), a study was conducted in June 2007 in Lusaka hospitals in Zambia about occupational burnout among health care providers. Participants from 13 public hospitals and clinics were given questionnaires about burnout. Results indicated that of the 483 active clinical and hospital staff who completed the questionnaire, 84% testified to occupational burnout (Kruse et al, 2009) and they described it as a feeling of being overworked, stressed and tired. The risk factors were employee's intention to leave the job due to better pay, and looking for additional jobs due to little pay which further exacerbates the feeling of burnout (Kruse et al, 2009).

In Nigeria, according to Okwaraji and Aguwa (2014), a study among physiotherapists reported 66.2% of the participants exhibited emotional exhaustion, 65.2% showed high levels of depression, and 75.6% showed reduced personal accomplishment as measured by the MBI. In

another study of burnout among maternal health staff in Malawi hospital, 72% of the respondents reported emotional exhaustion, 43% reported depersonalization and 24% showed high levels of reduced personal accomplishment (Steenkamp, 2014). These studies revealed an association between high workload and burnout as a result of shortage of nursing staff.

In Zimbabwe, however according to Chitura and Chitura (2014), nurses are experiencing burnout. Nurses forego their lunch and breakfast attending to patients which is very stressful. The study conducted by Chitura and Chitura (2014) on burnout among 23 ICU nurses revealed that 93% of the participants had high levels of burnout. However as a limitation the study did not give reasons behind the high levels of burnout. Little is known about the factors that lead to burnout among nurses in Zimbabwe. The current study therefore focusses on covering the gap in literature about burnout in Zimbabwe by identifying the psychological and social predictors of burnout among nurses in public hospitals so that proper intervention strategies towards these predictors can be developed to reduce burnout among nurses, hence improving the quality of health care in Zimbabwe.

### **2.7.1 Nature of workload in the nursing profession**

High workload in the nursing profession has also been attributed to staff shortages. Internationally among a sample of 22 Iranian nurses, participants indicated that working short staffed requires them to work extra hours additional to the 44 hours per week required of them (Steenkamp, 2014). Nurses perform a lot of duties such as consultation, dispensing and report writing which in a normal health facility should be done by three nurses but because of inadequate staff, the duties are now done by a single nurse thus causing stress and leading to burnout among nurses.

In Africa, among a sample of Tanzanian nurses, participants reported that they felt guilty whenever they provided inadequate patient care as a result of workload. “I felt so bad when I remembered that I had forgotten to give the patient important diabetic medication and he had to suffer because of me” (Haagston et al, 2008, pp.482-483). In South Africa as well, a study of 543 nurses reported that long work hours and high level of administrative functions and pressure to implement several new programs required of them often causes burnout and job dissatisfaction among nurses (Steenkamp, 2014). Therefore studies in Africa also show that there is a link

between work overload as a result of nurse shortages and burnout among nurses which negatively affects the nurses, their family life and also their ability to perform well in providing the best patient care needed.

In Zimbabwe, however little is known about burnout among nurses in relation to work overload, hence the focus of this current study to try and identify whether workload significantly predicts levels of burnout among nurses so that appropriate intervention strategies can be developed to reduce burnout among nurses in Zimbabwe.

## **2.8 Death and dying related stress and burnout among nurses**

In most cases nurses experience death and dying cases and other ethical dilemmas at a regular basis. Therefore due to the continuous exposure to these situations, their attitudes towards death and dying may become more complex and in turn can affect their fears, anxieties and personal attitude towards death which often leads to burnout (Chitura & Chiitura, 2014). The emotional issues related to death and dying of patients can be extremely stressful and mentally draining as nurses are expected to take care of the next patient even if they are still mourning the previous patient's death. This is distressing not only because of the loss of patients, but also having to witness the prolonged suffering and death of patients (Steenkamp, 2014).

According to Steenkamp (2014), in a British study of 51 community nurses, participants in the sample described palliative care as emotionally draining with no formal support services assisting them in dealing with difficult emotions. In a British study of Critical Care nurses, participants indicated that at times patients stayed long in the critical care unit, so much so that they end up having an emotional attachment (Steenkamp, 2014) with the nurse who often takes care of them, thus creating an emotional bond between the nurse and the patient as well as the family in the critical care environment. Stayt (2009) cites that nurses end up having an intimate relationship with the family and the patient, sharing with them their painful experiences plus taking care of the relatives when the patient dies which is very emotionally draining and stressful and leads to burnout. Participants according to this study indicated that they find it stressful and uncomfortable to deliver bad news to the patient's relatives because some parents do not understand the effort that nurses give out when their beloved ones are dead. Thus international studies clearly indicated that there is a strong association between death and dying related stress and burnout among nurses.

In Africa, among a sample of 174 nurses caring for people living with HIV (PWLH) in the Limpopo Province, 90% of the respondents found it difficult to see their patients suffer and die (Steenkamp, 2014). Participants indicated that they find it difficult to cope with large numbers of deaths in the hospital. This was supported by a study of 35 nurses caring for PLWH in Gauteng Province who reported physical exhaustion and particularly emotional exhaustion as a result of dealing with dying patients (Smit, 2005). Participants from this study by Smit (2005) also reported that they try to leave their work at the hospital when they go home, but emotions are not that easy to control and easily forget. They continue being worried about their patients whom they know are dying and cannot help them. It leaves them with heavy feelings inside which often results in burnout and job dissatisfaction among nurses (Smit, 2005).

## **2.9 Demographic characteristics and nursing burnout**

According to Serin and Balkan (2014), numerous studies have often reported on effects of demographic variables on job burnout. Previous researches have indicated that there is a strong relationship between burnout and personal factors. They identified demographic variables of age and working experience to have an association with burnout syndrome. According to Serin and Balkan (2014) higher levels of burnout were strongly associated with age. Age was reported to be the strongest predictor of emotional exhaustion and depersonalization.

Harkin and Melby (2014), reported high levels of burnout as associated with young nurses as compared to those over 30 or 40 years old, because they have high expectations yet they lack adequate skills needed in the nursing profession. Among a sample of 2.392 French critical care nurses, age was also associated with severe burnout syndrome which was defined as a total of MBI score of a greater than nine (Poncet et al, 2007). Younger nurses were predicted to be more likely to suffer from severe burnout syndrome.

Research also indicated that there is a relationship between burnout and working experience. As cited in Serin and Balkan (2014), Bruwer and Sheperd (2004) made a meta-analysis and findings indicated that, there is a negative correlation between age, experience and burnout. According to the same source, Chen and Kao (2012) further indicated that there is interaction between burnout and job tenure. All these demographic variables either have a negative or positive influence on the nursing staff which either increases or decreases the level of burnout among nurses.

## **2.10 Theoretical Framework**

The current research is supported by the following three models

### **2.10.1 Maslach burnout model**

This model was developed by Leiter and Maslach (1988). The model states that burnout progresses from emotional exhaustion through depersonalization to lack of personal accomplishment. The model emphasizes that burnout develops through emotional exhaustion which occurs as a result of emotional depletion of individuals' emotional resources at times due to lack of resources. During that time where individuals are striving to cope with their emotional exhaustion they tend to withdraw themselves from other people which gradually results in feeling of depersonalization. While individuals perceive such a distance, they tend to restrict their contributions to the organization in which they work, hence they develop feelings of incompetence about their occupational achievement and human relations, hence the feeling of reduced personal accomplishment (Serin & Balkan, 2014).

### **2.10.2 Mismatching model of burnout**

The study is further supported by the mismatching model of burnout. According to Leiter and Maslach (1999), burnout results from chronic mismatch between the person and the six domains of his or her job environment which include workload, control, reward, community, fairness, and values. In terms of this model, the greater the gap between the individual and the job in terms of these six work life issues, the greater the likelihood of burnout syndrome (Maslach & Leiter, 2001). Therefore in this study the greater the mismatch between nurses and perceived social and psychological predictors of burnout, the greater the levels of burnout among nurses.

However individual factors at work also play a role on top of situational factors. Thus demographic characteristics have also been found to contribute to burnout (Maslach & Leiter, 2001). However the model of mismatch between the six work life areas appears not to account for the influence of such individual factors on job burnout (Maslach & Leiter, 2001). Thus another theoretical framework used to predict burnout among nurses known as the Job Demand Resource model (JD-R) (Demerouti & Bakker, 2011) comes into play.

### 2.10.3 Job Demand Resource model (JD-R)

The model postulates that burnout is triggered mostly by the interaction between job demands and job resources. The model implies that job resources act as a buffer against job demands on burnout (Steenkamp, 2014). According to this model, when a nurse perceives a threat on the two aspects (job demands and job resources) they are bound to experience burnout. Job demands are those psychological and organizational aspects of the job that require sustained physical and psychological effort (Leiter & Maslach, 1999), for instance in this study these are, death and dying related issues, and high workload. On the other hand, job resources are those physical, organizational aspects of the job that are useful in attaining work related goals (Leiter & Maslach, 1999) such as availability of resources at work, sufficient supervisory support, and rewards which in their absence can predict burnout levels among the nurses.

Although the JR-D model embraces the situational factors in the form of job demands and job resources, it did not account for the effect of demographic characteristics on burnout (Steenkamp, 2014). Therefore another model by Bronfenbrenner and Morris (2006) known as the **Bronfenbrenner's ecological model** comes into play. This model emphasises on the human environment interacting at the microsystem level to determine whether certain features of nurses' professional environment predict their levels of burnout (Bronfenbrenner & Morris, 2006). Therefore in the context of this study the model is used to find out whether certain personal characteristics such as age and working experience significantly predict burnout levels among nurses.

### 2.11 Knowledge Gap

The current study was conducted in Zimbabwe at Gweru Provincial hospital. Literature review has shown that many studies about burnout in the nursing profession have been conducted internationally and regionally in countries like United State, Europe, China, Asia, South Africa and other sub-Saharan African countries. However, the conditions applied there are different from what we have in Zimbabwe. Their conclusions cannot be generalized in the Zimbabwean context considering the differences in culture, ethnicity, economy and even difference in conditions of health care systems. Most previous studies focused more on the effects of burnout on nurses' attitudes towards patients and few studies focused on the predictors of burnout among nurses.

In Zimbabwe only one study about burnout has been conducted so far among ICU nurses, and findings indicated that 95% of the respondents indicated high levels of emotional exhaustion and depersonalization on the MBI subscale (Chitura & Chitura, 2014). This indicates that there is presence of burnout among ICU nurses. However as a limitation the study did not go on to ascertain what exactly contributed to burnout among nurses in Zimbabwean hospitals considering the economic situation Zimbabwe is facing currently and the challenges bedeviling the health sector. Thus because of this gap, the researcher finds it necessary to increase the literature about nursing burnout in Zimbabwe, particularly investigating the predictors of burnout among nurses such that the findings of this study would be recognized when designing intervention strategies for burnout among nurses working in the public hospitals in Zimbabwe.

## **2.12 Chapter summary**

This chapter gave detailed information on which the research will be built on. It covered what the theories and other previous studies have found in relation to burnout among nurses. Literature about burnout and its concepts, burnout in relation to nursing shortage, workload, death and dying issues in hospitals, organizational constraints and nurses' demographic characteristics were explored. The following chapter therefore will be looking at how data will be collected and the development of the instrument that will be used to gather primary data about burnout among nurses employed by a public hospital in Zimbabwe.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology shows the image of how the study was conducted. Methods are tools used for gathering data, analyzing and presenting it. Polit and Hungler (1995) define research methodology as the steps, procedures and strategies for gathering and analyzing the data in a research investigation. Therefore, this chapter discusses the research paradigm, research design used, how data was collected, procedures employed in collecting data, sample and sampling techniques used, the instruments used to collect data, how data was analyzed and presented and also indicates the ethical considerations observed during the data collection.

#### **3.2 Research Paradigm**

Research paradigm is a belief system that simply leads us to the right way of doing things and also establishes a set of practices that range from thought patterns to actions. According to Weaver and Olson (2006), there are a number of paradigms commonly used in nursing research such as positivism, post positivism, interpretivism and critical social theory. Therefore this current study is confined to the positivist paradigm which focuses on reality. It is mainly concerned about the social problems that exist within the world around us, thus it is suitable in this study as the study mainly focuses on finding the real predictors of burnout among nurses. Positivism is based on the principle that there is reality outside there waiting to be discovered and explored with logical analyses so as to establish the truth (Weaver & Olson, 2006). It is also based on the assumption that events are caused by other circumstances, therefore understanding these crucial links are necessary in order to make predictions and control, hence it is deterministic in nature (Weaver & Olson, 2006). The paradigm is also principled on the concept of generalizability of findings to the world at large, thus it also important in this research so that results obtained will be generalized to all nurses working in public hospitals in Zimbabwe.

This research is a quantitative study which shares its theoretical foundations with the positivist paradigm. According to Creswell (2003), a quantitative approach is one which uses positive claims for developing knowledge, and employs strategies of inquiry such as surveys and experiments to collect data using predetermined instruments that yield statistical data. Gray

(2008) also defined quantitative research as an explaining phenomenon that collects numerical data and uses mathematical methods to analyze and understand the social reality experienced by people. The researcher used this research design in order to acquire first-hand information from the participants in order to make conclusions and recommendations. The research design helps the researcher to determine the relationship between burnout and social and psychological factors in the organization. Another advantage of the design is that it focusses on gathering numerical data which allows the researcher to generalize results across groups of people explaining a particular phenomenon.

### **3.3 Research Design**

Nachmias and Nachmias (1996) state that, a research design is a program that guides the investigator as he or she collects, analyzes and interprets observations. It is also a rational model of proof which permits the researcher to draw conclusions with regard to relationships among variables under investigation. The research design determines whether the results obtained can be generalized to a larger population or not. This present study is a cross-sectional correlational study, making use of an investigative survey design for gathering quantitative data. It is cross sectional in the sense that it sorts out the existence of predictive effects of more than one independent variable (predictors) upon a dependent variable (dimensions of burnout). The design was considered as the most appropriate in this study because it seeks to find the nurses' views and opinions towards the perceived social and psychological predictors of burnout among nurses.

### **3.4 Target Population**

Methodologically speaking Baran and Greeburg (2002) state that, population is the actual number of participants that the researcher is going to work with. Sunders et al (2009) also defined a population as a complete set of cases being studied from which a sample can be drawn. In summary it is the entire group of individuals from which the subjects of the research are drawn in order to generalize the findings. In this study the target population was all nurses at Gweru General Hospital. The Gweru General hospital has eight wards which include Casualty, Outpatients, Maternity, Psychiatric, Pediatric, Medical, Surgical and Private wards. In this study the population therefore referred to the two hundred and ten (210) nurses currently employed at the Gweru General hospital working under the above mentioned wards. The population includes

both males and females and their ages range from 20 to 65 years and they work either at night shift, day shift or both.

### **3.5 Population Sample**

Bless and Smith (1995 p. 85) defined a sample as “a subset of the whole population which is actually investigated by the researcher and whose characteristics will be generalized to the entire population”. It can also be defined as a portion from a group of elements or units in a defined population. In this study a target sample of 130 nurses from the total population of 210 nurses was required. Nurses were randomly selected from different wards in the hospital to participate in the study. In each ward at least 3/4 of the nurses in that ward who volunteered to participate were chosen, both males and females, to give a sample of 130. Among the 130 nurses who were given questionnaires only 126 responded which gives a total of 98% response rate. The study consisted of 39 males and 87 females who work either on day shift, night shift or both shifts.

### **3.6 Sampling Technique**

There are two sampling methods used in research when selecting participants, probability (random) sampling and non-probability (non-random) sampling techniques (Saunders et al, 2009). Probability sampling methods offer a high level of objectivity as they remove bias and sample errors that can be scientifically calculated. They have advantage in that they ensure that every individual in the entire population has an equal chance of being selected to participate in the study. Therefore this study used the probability sampling technique known as **disproportionate stratified sampling** which is a stratified sampling technique. According to Kosslyn (2004), stratification is the process of grouping members of the population into sub groups known as strata in order to capture key population characteristics of the overall population. Disproportionate stratified sampling is a stratified sampling procedure in which the number of elements sampled from each stratum is not proportional to their representation in the total population. The strata have different sampling fractions. This type of sampling is appropriate in this study because the nurses in the hospital wards are not proportionally distributed. Some hospital wards work with a bigger number of nurses as compared to others. For example the maternity and casualty departments have the largest number of nurses as compared to other wards at Gweru General Hospital. Therefore using proportionate sampling will misrepresent the

views of other nurses not selected to participate in the study. It will also limit the sample size of the strata hence making it difficult for the study to meet its objectives.

In order to meet the sample size required in this study, the researcher identified eight different wards present at Gweru General Hospital i.e. maternity, casualty, outpatient, medical, surgical, psychiatric, pediatric and theatre. These eight wards were the strata used in this study to come up with the required sample size of 130 nurses. For each stratum three quarters of the total nurses both males and females who volunteered to participate were given questionnaires to represent the whole stratum until a sample of 126 nurses was finally reached.

### **3.7 Research Instruments**

Research instruments are tools used to gather information needed to solve a problem under investigation. The study used three questionnaires to collect data i.e. Maslach Burnout Inventory, Organizational Constraints Scale and the Nursing Stress Scale which were adopted from Maslach (1982), Spector & Jex (1998) and Gray-Toft and Anderson (1981) respectively. Doyle (2003) defined a questionnaire as a written or printed set of questions used to collect information and draw conclusions on the subject matter under investigation. The researcher used closed ended questions. This type of questionnaire was most suitable for this research because generally nurses are busy due to the nature of their work; therefore closed ended questionnaires were convenient to them as they allow them to choose from the given options without being given any room for further explanation. The questionnaire calls for item checking and it requires about 20-30 minutes to complete so that they quickly go back to their patients. Another advantage of using closed ended questionnaires was that they are easy to summarize, interpret and tabulate data on the side of the researcher. Questionnaires are also inexpensive to the student and can be delivered in person. However as a limitation, questionnaires have low response rates, response bias and it is difficult to interpret participants' responses (Khosa et al, 2014). Nurses due to the nature of their job might not find free time to attend to the questionnaires.

Firstly, as part of the questionnaire the demographic data sheet was included which was developed by the researcher to capture nurse's personal information on age, gender, experience, level of education, work area, marital status, working experience, duty shift, level of education and their intention to leave the career within the next twelve months. The questions on

demographic profiles were included because literature review in this study indicates that there are certain demographic characteristics that were found to predict burnout among nurses.

The researcher used three set of questionnaires which were adopted. The first questionnaire was the **Maslach Burnout Inventory- Human Services Scale (MBI-HSS)** which was adopted from Maslach (1982) and used to measure burnout levels among the nurses. The MBI-HSS is an instrument comprising of 22 items across three subscales of Emotional Exhaustion (7 items), Depersonalization (7 items) and Personal Accomplishment (8 items). Responses to scale items range from never =0 to everyday= 6. The scores for each subscale were classified individually and the total subscale were regarded as high, moderate or low as defined by the cut off points of the MBI (Maslach, 1982). **Section A (EE Subscale):** A total of 17 or less indicates low level of burnout, between 15 and 29 shows moderate burnout and over 30 indicates high levels of burnout (Maslach, 1982). **Section B (DP subscale):** A total of 12 and greater , between 6 and 11 inclusive and between 5 and less indicates high, moderate and low levels of burnout respectively. **Section C (PA subscale):** 33 and less shows high levels of burnout, 34 to 39 shows moderate levels of burnout and greater than 40 reflects low level of burnout. Therefore high scores in the EE and DP and a low score in PA indicates highs levels of burnout among the sample (Maslach, 1982).

The reliability and validity of the MBI have been well established by previous researchers. According to Steenkamp (2014), Cronbach's alpha ( $\alpha$ ) is used as a measure of the internal consistency of an instrument and an acceptable level of consistency exceeds 0.70. Aiken et al (2009) among his sample of 54,738 nurses from eight countries calculated Cronbach's alpha values of the three subscales and all values ranged between ( $\alpha =0.71$  to 0.93), showing that the instrument is valid and reliable in measuring burnout levels among nurses.

The second questionnaire was the **Organizational Constraints Scale (OCS)** adopted from Spector and Jex (1998) which was administered to participants to measure their perceived stress levels in relation to organizational constraints as well as workload which predict burnout among nurses. The OCS questionnaire presents situations at work which are related to burnout (Steenkamp, 2014). It contains 10 items on Section A which includes items such as inadequate training, poor equipment, lack of resources, inadequate support and others (Spector & Jex, 1998). The participants were required to asses each construct and how often it makes the job difficult.

Responses ranged from 1 (less than once per month) to 5 (several times per day). High scores represent high levels of organizational constraints hence burnout. Section B of the questionnaire included 5 items that measure the level of stress related to workload among nurses and it included items like, “how often does your job require you to work fast, how often does your job require you to work hard” and other questions. Response range was from 1 (less than once per month) to 5 (several times per week). High scores also indicate burnout among nurses. Based on a sample of 1,746, over eight studies, 0.85 alpha coefficient of the instrument was reported (Spector & Jex, 1998) which indicated that the instrument is very valid and reliable in measuring the levels of organizational constraints and workload among nurses.

The third questionnaire used was the **Nursing Stress Scale (NSS)** adopted from Gray-Toft and Anderson (1981) which was used to assess the level of stress related to death and dying of patients among nurses. It measures the frequency at which certain situations at work are regarded as stressful by nurses (Gray-Toft & Anderson, 1981). It consists of 7 items on the death and dying subscale. Items included statements such as, “watching a patient die, death of a patient with whom they have developed a relationship with”, asking how often these situations become stressful. Response choices ranges from 0 (never) to 3 (very frequently). According to Grey-Toft & Anderson (1981), the NSS reported high internal consistency of ( $\alpha = 0.89$ ) from the whole NSS scale and an alpha of ( $\alpha = 0.77$ ) only for the death and dying subscale (Steenkamp, 2014).

### **3.8 Data collection procedure**

Before data was collected, permission was sought from the Midlands State University through the Psychology department to carry out data. The researcher went on to seek permission from the Gweru General Hospital authorities (Human Resources Department). When permission was granted, after two weeks the researcher made an appointment to administer questionnaires through the HR department. Data was collected in September 2015. After the appointment was made, the researcher prepared the required number of questionnaire packs according to the sample size required. The questionnaires were administered in paper form through the Matrons together with the sisters in charge, who were asked to distribute the questionnaires to the nurses on the day shift as well as the night shifts during a particular week. Participants were instructed on the questionnaire to respond to all items included in the questionnaire but were asked not to include their names on the questionnaire to ensure anonymity and promote confidentiality.

Participants were required to complete the questionnaires either at home or at work during periods when they were not busy with patients or during visiting hours. The questionnaires were administered on a Thursday and were collected after three days (Monday) during patient visiting hours. During the collection process the researcher inspected the questionnaire for missing data and asked the nurses to complete them. Finally the completed questionnaires were anonymous.

### **3.9 Data Presentation and Analysis**

The relationship between variables was studied using regression analysis. Three separate regression analysis models were computed for the Criterion variables of EE, DP, and PA (dependent variable) and predictor variables of age, working experience, organizational constraints, death and dying related stress, intention to leave work and workload as independent variables in order to find the predictors of burnout among nurses employed by the government hospitals in Zimbabwe. The Pearson correlation coefficient was also calculated to find the correlation between occupational stress factors (organizational constraints, death and dying related issues, workload) and burnout among nurses. All these data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 20, so that there were no missing data points.

After analyzing the data, the researcher presented the data using frequency tables and descriptive statistical tables in percentages to present demographic information of the participants. Pie charts were used to present the level of emotional exhaustion, depersonalization and personal accomplishment aspects of burnout among the sample. Graphs were also used to illustrate the average level of perceived stress related to organizational constraints, workload and death and dying issues.

### **3.10 Ethical Considerations**

According to Glynis et al (2006) ethics in research are standard rules that govern human behavior either right or wrong. In this study, approval was sought from Midlands State University Department of Psychology, and also from Gweru General Hospital authorities. Participating in this study was voluntary to those nurses who were available and willing. Respondents were guaranteed confidentiality, anonymity, and the right to withdraw at whatsoever time they felt that they could no longer complete the questionnaire. Respondents

were not requested to sign a consent form simply because the consent was implied in the completion of the anonymous questionnaires. Names and other identifying data of participants were removed throughout the study process to maintain confidentiality. Apart from their valuable time cost, the study did not suffer any costs or expenses on the participants. There were no potential risks that would have caused any harm in any form among the participants. The researcher kept information found from every participant secure and confidential. All questionnaires were destroyed after the end of the research.

### **3.11 Chapter summary**

This chapter was presenting an overview of the research methodology. The main aim of this chapter was to discuss the research design used and show the advantages and disadvantages of using questionnaires as research instruments. A total of 126 nurses out of the target population of 130 nurses were recruited in the sample. Disproportionate stratified sampling procedure was used to come up with the required study sample and data collection procedures were well detailed. The next chapter therefore aims to analyze and present the results of the study obtained.

**CHAPTER FOUR**  
**DATA PRESENTATION, ANALYSIS & INTERPRETATION**

**4.1 Introduction**

The main focus of this chapter is to present the results from the data collected as well as give an analysis and interpretation of the findings. Information concerning the demographic profile of the sample is presented as well as statistical analyses used to answer the research hypothesis. Tables and graphs will be used in this chapter to present the data.

**4.2 Demographic Characteristics of the Sample**

The first section of the research questionnaire collected the demographic information of the participants. The table below indicates results of the demographic profile of nurses. A total of 126 nurses were recruited (N=126). Their ages ranged between 22 and 65 .

**Table 4.1: Demographic profile of the sample (N=126)**

<b>Variable</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	39	31.0
Female	87	69.0
<b>Marital Status</b>		
Single	31	24.6
Married	87	69.0
Divorced	8	6.30
<b>Level of Education</b>		
Diploma in Nursing	122	96.8
Diploma in Midwifrey	2	1.60
Degree in Nursing	2	1.60
<b>Age Group</b>		
22 to 30 years	37	29.40
31 to 40 years	80	63.55
41 to 65 years	9	7.10

The table above indicates that 31.0% (n=39) of the participants were males while 69.0% (n=87) were females. 24.6% (n=31) of the participants were single, 69.0% (n= 87) were married and

6.3% (n=8) were divorced. The majority of nurses in the sample (96.8% , n=122) held a Diploma in Nursing, 1.6% (n=2) had a Diploma in Midwifrey and 1,6% (n=2) held a Degree in Nursing. Among the participants, 29.4% (n=37) were between the ages of 22 and 30 years, 63.5% (n=80) were between 31 and 40 years and 7.1% ( n= 9) were in the range of 41 to 65 years.

### 4.3 Participants’s Job Characteristics

The demographics part of the questionnaire also collected information about the participants’s job characteristics. Questions about participants’s job title, working shift, area of hospital, level of working experience and their intention to leave the job within the next twelve months were asked and the results are presented in the table blow.

**Table 4.2: Participants' job characteristics**

<b>Variable</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
<b>Job Title</b>		
Assistant nurse	1	8.0
Enrolled nurse	5	4.0
Registered nurse	120	95.2
<b>Working Shift</b>		
Day	67	53.2
Night	34	27.0
Day and night	25	19.8
<b>Area of Hospital</b>		
Maternity	26	20.6
psychaitric	10	7.9
Casualty and Outpatient	32	25.4
Surgical	20	15.9
medical	20	15.9
Pediatric	11	8.7
Thearte and Renal Unit	7	5.6
<b>Level of Experience</b>		
1 to 5 years	43	34.1
6 to 10 years	58	46.0
11 to 35 years	25	19.8
<b>Intention to leave</b>		
Yes	21	16.7
I don’t know	23	18.3
No	82	65.1

The results presented in table 4.2 above show that 8% (n=1) of the participants were Assistant nurses, 4.0% (n=5) were Enrolled Nurses and the majority (95.2%, n=120) were Registered Nurses. Most nurses in the sample (53.2% , n=67) worked on day shift, 27.0% (n=34) worked the night shift and 19.8% (n=25) worked both day and night shifts. On working experience, 34.1% (n=43) of the participants had working experience of 1 to 5 years, 46.0% (n=58) had 6 to 10 years experience, and 19.8% (n= 25) had 11 to 42 years working experience as a nurse. Among the sample, 16.7% (n=21) of the participants indicated their intention to leave the job within the next twelve months, 18.3% (n=23) indicated that they don't know whether they are going to leave the job within the next twelve months and 65.1% (n=82) showed no intention of leaving the job within the next twelve months.

Results also show that 20.6% (n=26) of the participants worked in maternity ward, 7.9% (n=10) worked in the Psychiatric ward, 25.4% (n=32) worked under the Casualty and Outpatient departments, 15.9% (n=20) worked under the Adult Surgical wards, 15.6% (n=20) worked under the Adult Medical wards, 8.7% (n=11) worked under the Pediatric Ward and 5.6% (n=7) worked in the Theatre and Renal Unit.

#### **4.4 Reliability analysis of the Measurement Instrument .**

##### **4.4.1 Maslach Burnout Inventory- Human Service Survey ( MBI-HSS)**

High internal consistency ( $\alpha = 0.78$  ) was obtained from the seven -item Emotional Exhaustion subscale of the MBI. The eight-item Depersonalisation and Personal Accomplishment demonstrated alpha of ( $\alpha = 0.74$ ) and ( $\alpha = 0.82$ ) respectively which shows that the instrument had high internal consistency.

##### **4.4.2 Spector and Jex's Organisational Constraints scale**

The ten-item Organisational Constraints Subscale together with the five-item Workload subscale demonstrated high internal consistency alpha of 0.71 and 0.72 respectively.

#### 4.4.3 Demographic questionnaire

The demographic questionnaire reported a low Cronbach alpha coefficient of 0.50.

#### 4.4.4 Nursing Stress Scale

The seven item of Death and dying subscale reported a high internal consistency of ( $\alpha = 0.74$ ). These Cronbach's Alphas coefficients of the measurement Instrument are presented in table 3 below.

**Table 4:3 Cronbach's Alpha Coefficients of the Measurement Instruments**

Scale & subscale	Cronbach's Alpha ( $\alpha$ )
Maslach Burnout Inventory- Human Service Survey	
Emotional Exhaustion subscale	0.78
Depersonalization subscale	0.74
Personal Accomplishment subscale	0.82
Spector and Jex's Organisational Constraints Scale	0.71
Workload subscale	0.72
Nursing Stress Scale: Death and Dying subscale	0.74
Demographic Data sheet questionnaire	0.50
<b>Total Alpha Coefficient of the Measurement Instrument</b>	<b>0.74</b>

#### 4.5 Interpretation of the Level of Burnout according to Maslach Burnout Inventory (MBI)

According to Maslach et al (1996), high scores reported on the MBI for the Emotional Exhaustion and Depersonalisation subscales reflect high levels of burnout, while high scores on Personal Accomplishment subscale indicate low levels of burnout. The table below presents the cut off points for Low, Average, and High Levels of burnout as recommended by Maslach (see table 4.4 below).

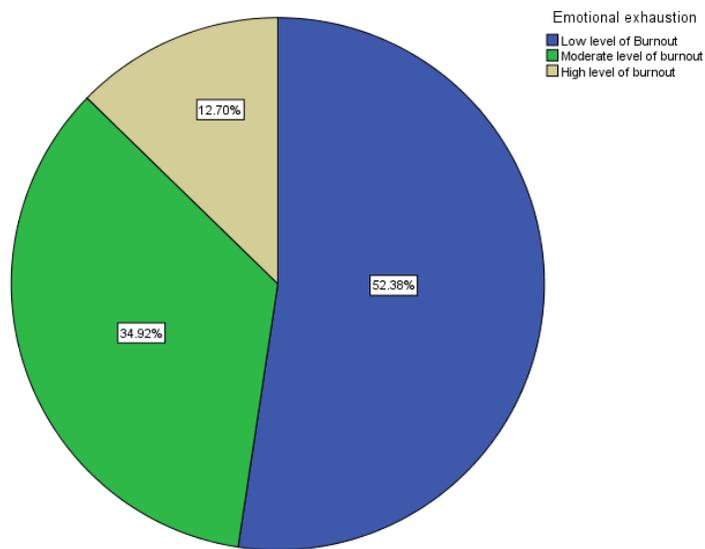
**Table 4:4 Maslach 1996's Cut off points for the levels of Burnout**

Level of burnout	Emotional Exhaustion	Depersonalisation	Personal Accomplishment
<b>Low</b>	17 and less	5 and less	40 and above
<b>Average</b>	18-29	6-11	34-39
<b>High</b>	30 and above	13 and above	33 and less

#### 4.6 Descriptive statistics of the different levels of Burnout among the Sample

##### 4.6.1 Level of Emotional Exhaustion

The first section (2A) of the questionnaire requested information about the level of emotional exhaustion experienced by nurses. Emotional exhaustion subscale of the MBI reported a mean score of 18.5 which falls within the moderate level of burnout, with scores ranging from 1 to 42. Results on the level of emotional exhaustion (aspect of burnout) is presented in the figure below.

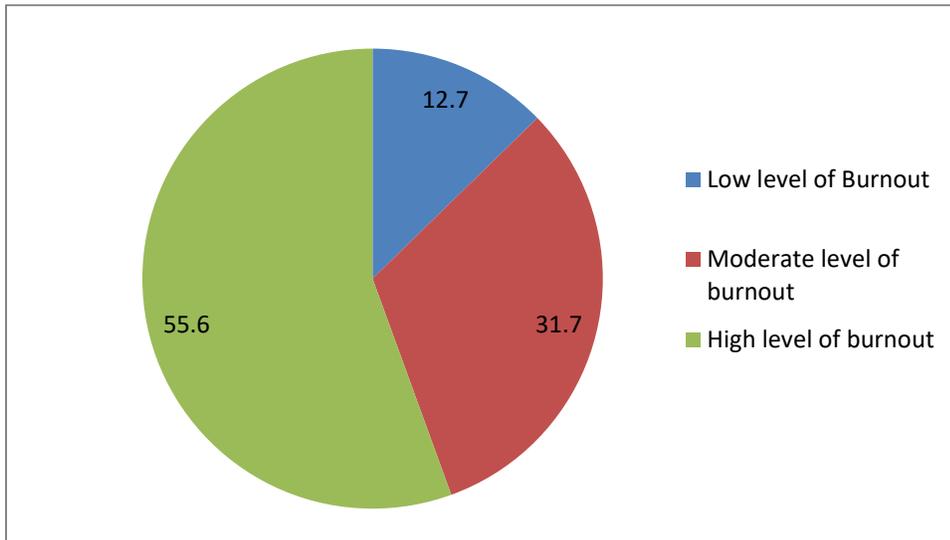


**Figure 4.1: Level of emotional exhaustion**

As shown in the Figure 4.1 above 52.4% (n=66) of the participants reported low levels of emotional exhasustion, 34.9% (n=44) indicated average levels of emotional exhaustion and 12.7% (n=16) indicated high levels of burnout.

#### 4.6.2 Level of Depersonalisation

The second section (2B) of the research instrument asked information about the levels of depersonalisation among nurses. Depersonalisation is the second component of burnout according to the MBI. High levels of depersonalisation were reported, with a mean score of 13.61 and a range of 0 to 42. Results about the levels of depersonalisation among the sample are presented in the Fig 4.2 below.

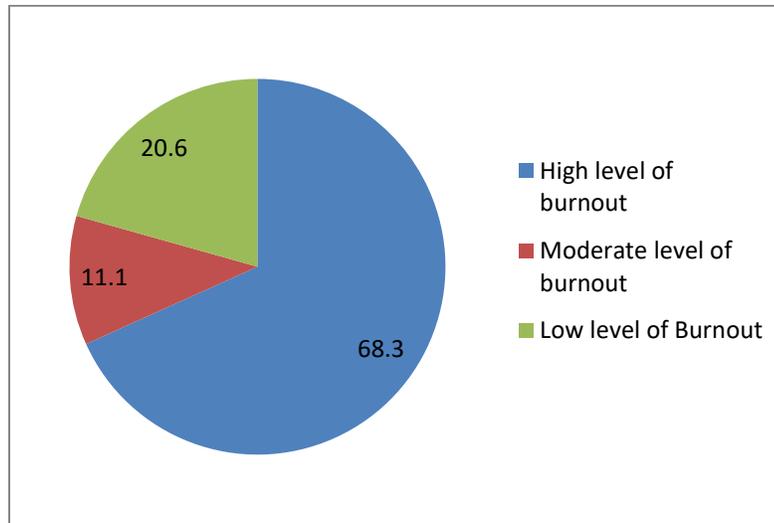


**Figure 4.2: Level of depersonalisation**

As shown in Fig 4.2 above, among the 126 participants who responded to the depersonalization subscale of the MBI, 12.7% (n=16) of the participants had low levels of depersonalisation, 31.7% (n= 40) had moderate levels and the majority (55.6%, n=70) had high levels of depersonalisation.

### 4.6.3 Level of Personal Accomplishment

The third section (2C) of the MBI research questionnaire requested information about the level of personal accomplishment among the nurses. A mean score of 30.6 out of a possible score of 48 was reported. The results are summarized in the Fig 4.3 below.



**Figure 4.3: Level of personal accomplishment**

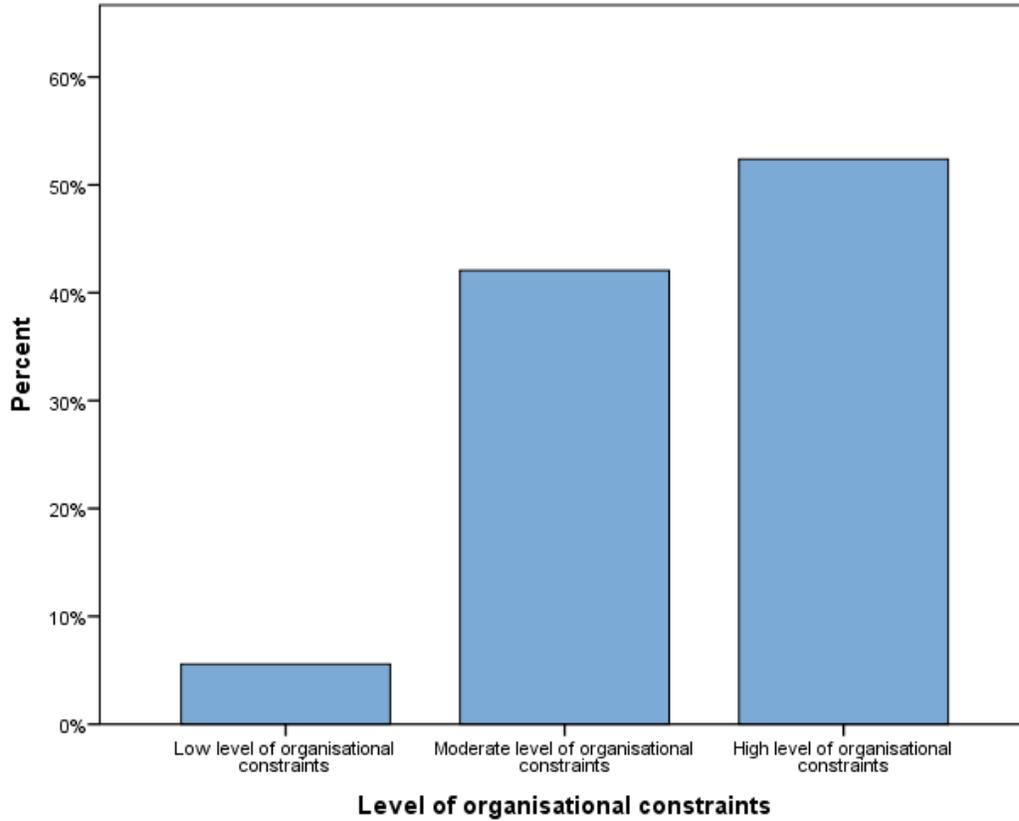
As indicated in the figure above, the vast majority of nurses (68.3%, n=86) reported high levels of depersonalization aspect of burnout, 11.1% (n=14) had moderate levels and 20.6 (n=26) had low levels of depersonalization.

## 4.7 Level of Organisational Constraints, Wokload & Death and Dying related Stress

### 4.7.1 Level of Organisational Constraints

The third section of the research instrument asked information about the level of organisational constraints experienced by nurses. Questions about organisational constraints such as poor equipment supply, lack of resources, and lack of support from the supervisors were asked. An

average score of 30.50 out of a possible score of 55 was reported with scores ranging from 10 to 50 . Results obtained are presented in the fig 4 below.

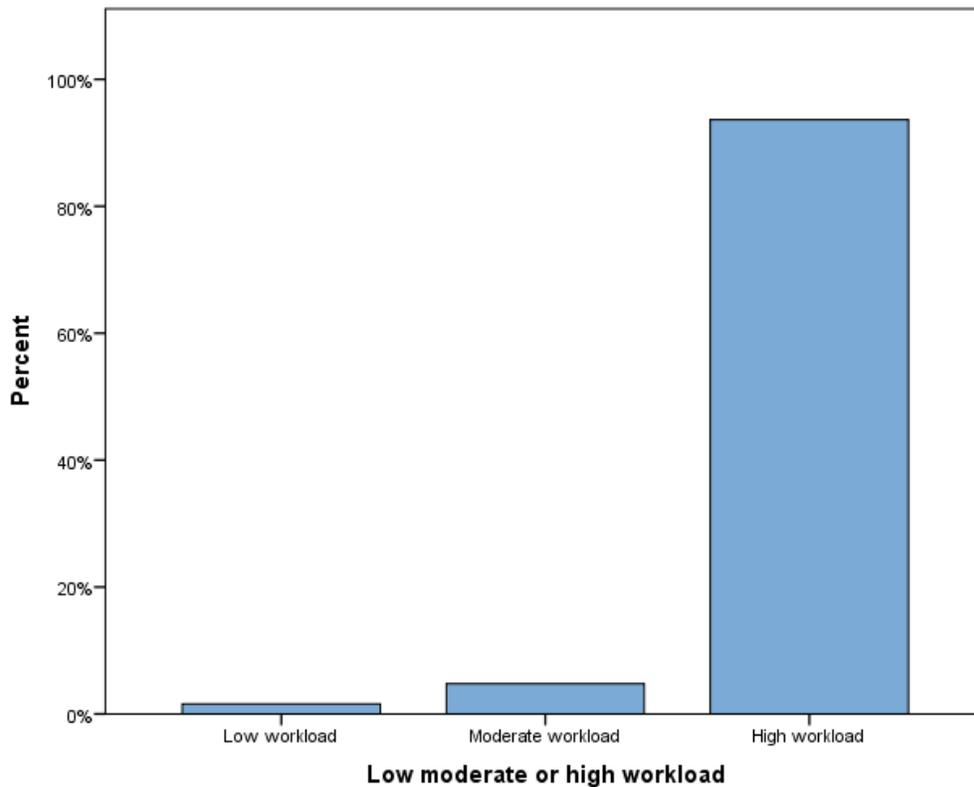


**Figure 4.4: Level of organisational constraints**

As mentioned above, the Organizational Constraints Scale (OCS) was administered to participants to measure their perceived level of organizational constraints at work, indicating how often these constraints make their job performance difficult. The above Fig 4.4 shows that, 85.5% (n= 108) of the participants indicated high levels of organizational constraints, 11.1% (n=14) indicated moderate level and 3.2% (n=4) indicated low levels of organizational constraints.

#### 4.7.2 Level of Workload.

Part two of the third section (3B) of the research questionnaire requested information about the amount of workload among nurses as a predictor of burnout. The organisational constraints scale (OCS) was also used to measure the perceived level of occupational workload among the participants. On average, a high level of occupational workload among the sample was reported by the mean score of 21.13 out of the possible score of 25, with scores ranging from 5 to 25. Figure 5 below presents the results obtained.

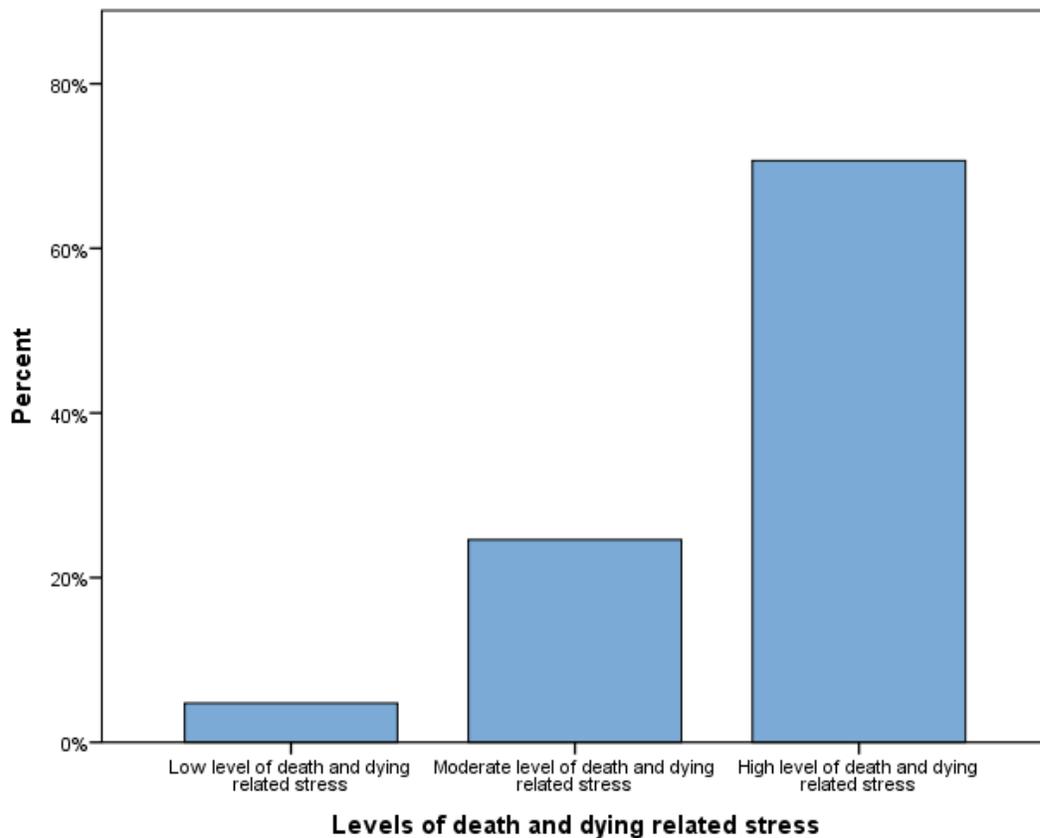


**Figure 4.5: Level of workload**

As shown in Figure 4.5 above, the vast majority of the nurses in this sample (96.8%, n= 121) indicated high workload, while 2.6% (n=3) and 1.8% (n= 2) indicated moderate and low workload respectively.

### 4.7.3 Level of death and dying related stress

The final section (4A) of the research questionnaire asked information about level of death and dying related stress among nurses. The Death and Dying related stress subscale of the Nursing Stress Scale (NSS) was used to measure the level of death and dying-related stress present among participants (Gray-Toft & Anderson, 1981). Participants indicated the frequency with which certain situations at work are regarded as stressful, such as death of patients, seeing a patient suffer and failing to recover. Mean score of 15.15 out of a possible score of 21 was reported with scores ranging from 1 to 21. The summary of the results are presented in the figure 6 below.



**Figure 4.6: Level of death and dying related stress**

As presented by figure 4.6 above, most of the nurses 70.6% (n=89) indicated that they often find it very stressful to deal with death and dying issues of patients. 24.6% (n=31) indicated moderate feelings and 4.8% (n=6) indicated low levels of death and dying related stress.

#### 4.8 Correlation coefficient of the Criterion Variable and the Predictor variables

Pearson's correlation coefficient was calculated for the predictor variables and criterion variable and results are presented in the Table 4.5 below.

**Table 4.5: Pearson correlation coefficients of the predictor and criterion variables**

Correlation Coefficient			
	Emotional	Exhaustion	Depersonalization
<b>Personal Accomplishment</b>			
Organizational Constraints	0.30	0.36	0.03*
Workload	0.15	0.10	0.03*
Death & Dying related stress	0.21	0.29	0.13
Working Experience	0.00**	0.81	0.15
Age	0.04*	0.19	0.14
Nurse's intention to leave	0.12	0.20	0.13

*Note N=126*

*\* P < .05, two-tailed. \*\* P < .01, two-tailed.*

The results in the table above show that there is a significant correlation between working experience and emotional exhaustion ( $p < 0.01$ ). The correlation between age and emotional exhaustion was also found to be significant at 5% level of significance. None of the predictor variables showed a significant correlation with the level of depersonalization. The two variables of organizational constraints and workload were both significant correlates with personal accomplishment ( $p < 0.05$ ).

#### 4.9 Linear Regression Analysis in predicting Burnout

The main aim of the study is to investigate the psychological and social predictors of burnout among nurses employed by the government in Gweru, Zimbabwe. Therefore to find these predictors, three separate regression analyses were carried out on the dependent variables for Emotional Exhaustion, Depersonalization and Personal Accomplishment aspects of burnout. The five predictor variables (organizational constraints, workload, death and dying related stress,

nurse's intention to leave profession, working experience and age) were entered in a single step in each regression model to predict burnout among nurses.

#### 4.9.1 Results of the linear regression analysis for predicting Emotional Exhaustion

A multiple linear regression analysis was done with Emotional Exhaustion as the dependent variable, and organizational constraints, workload, death and dying work related stress, age, intention to leave and working experience as independent variables to identify factors that predict emotional exhaustion aspect of burnout among nurses. The model explained 10.9% (Adjusted  $R^2 = 0.109$ ) of the variance in Emotional Exhaustion, and was significant at 5% level of significance ( $p = 0.002$ ) in predicting emotional exhaustion. The table below shows the results from the regression analysis for predicting emotional exhaustion.

**Table 4.6: Results of linear regression analysis for predicting Emotional Exhaustion aspect of burnout**

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig. (p)
	B	Std. Error	Beta		
Constant	.331	7.875		.042	.967
Death and dying related stress	.525	.245	.204	2.142	.034*
Organizational constraints	.294	.112	.239	2.636	.009**
Workload	.050	.221	.021	.229	.820
Experience as a nurse	4.787	2.231	.192	2.146	.033*
Age group	-1.432	1.851	-.066	-.774	.041*
Intention to leave nursing	.045	.251	.196	335	.644

*Note N= 126*

*\* P < .05. \*\* p < .01*

Results in the table above show that, of the five variables entered in the prediction model for emotional exhaustion, only three variables were statistically significant. Death and dying related stress was significant at 5% level of significance ( $p=0.034$ ). Organizational constraints was a strong statistical predictor of emotional exhaustion, at 1% level of significance ( $p=0.009$ ).

Reports of high levels of organizational constraints were linked to higher levels of emotional exhaustion. Working experience as a nurse was also found to significantly predict Emotional Exhaustion, at 5% level of significance ( $p=0.034$ ). Statistical evidence also shows that age is a significant predictor of emotional exhaustion. According to the results, as age increases, the level of emotional exhaustion among nurses decreases, leading to lower burnout. However, no statistical evidence was found either at 1% or 5% level of significance that workload ( $p=0.820$ ), intention to leave ( $p=0.644$ ) and working experience ( $p=0,334$ ) were significant predictors of emotional exhaustion.

#### 4.9.2 Results for linear regression analysis for predicting Depersonalization

To predict depersonalization, five variables of workload, death and dying related stress, organizational constraints, age and working experience together with depersonalization being the dependent variable were entered into the regression analysis. The regression model explained 14.1% (Adjusted  $R^2 = 0.146$ ) of the variance in depersonalization and was statistically significant at 1% level of significance ( $P = 0.000$ ).

**Table 4.7: Results of linear regression analysis for predicting Depersonalisation aspect of burnout**

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig (p)
	B	Std. Error	Beta		
(Constant)	1.184	7.112		.166	.868
Death and dying related stress	.561	.221	.236	2.532	.013*
Organizational constraints	.353	.101	.311	3.505	.001**
Workload	-.140	.199	-.063	-.702	.484
Experience as a nurse	.322	2.015	.014	.160	.873
Age group	1.414	2.193	.055	.645	.447
Nurse's intention to leave	.424	3.522	.056	.180	.834

$N=126$

\*  $p < 0.05$  \*\* $p < 0.01$

As indicated in the table 4.7 above, of the five aforementioned predictor variables of depersonalization, only two were found to be statistically significant. Death and dying related

stress was a statistically significant predictor of depersonalization at 5% significance level ( $p=0.013$ ) indicating that the predictor has an effect on the level of depersonalization. Organizational constraints also demonstrated strong statistical evidence in predicting depersonalization at 1% level of significance ( $p=0.001$ ). Results indicate that organizational constraints affected the level of depersonalization aspect of burnout. However statistical evidence shows that working experience ( $p =0.873$ ), age ( $p=0.447$ ), intention to leave ( $p=0.834$ ) and workload ( $p =0.484$ ) were not significant predictors of depersonalization dimension of burnout.

#### 4.9.3 Linear regression analysis results for predicting Personal Accomplishment

The multiple linear regression analysis for predicting Personal Accomplishment was carried out to find whether any of the five aforementioned variables (organizational constraints, death and dying related stress, workload, age and working experience) significantly predicted personal accomplishment aspect of burnout. The five independent variables were entered into the regression analysis with personal accomplishment as the dependent variable as shown in the model below. The model explained 2.6% (Adjusted  $R^2= 0.026$ ) of the variance in personal accomplishment, and was significant at 5% significance level. The regression analysis results are presented below.

**Table 4.8: Results of regression analysis for predicting Personal Accomplishment aspect of burnout**

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig (p)
	B	Std. Error	Beta		
Constant	29.637	9.330		3.177	.002
Death and dying related stress	-.182	.290	-.062	-.627	.532
Organizational constraints	-.254	.132	-.182	-1.923	.047*
Workload	.143	.262	.052	.547	.586
Experience as a nurse	3.272	2.643	.116	1.238	.218
Age group	-1.041	1.671	-.052	-.632	.044*
Intention to leave nursing	1.432	.210	-.053	-.728	.412

*Note N= 126*

*\* P < .05. \*\* P < .01*

As mentioned in table 4.8 above, two of the five predictor variables were statistically significant in predicting personal accomplishment. Organizational constraints was a significant predictor at 5% level of significance ( $p=0.047$ ). Higher organizational constraints predicted the likelihood of reduced personal accomplishment. Results also shows that, as the level of organizational constraints increases, the level of personal accomplishment decreases (reduced personal accomplishment), thus leading to higher levels of burnout. Statistical evidence also shows that age is a predictor of personal accomplishment at 5% ( $p=0.044$ ) level of significance. The results show that, as age increases, the level of personal accomplishment decreases which leads to burnout.

Other predictor variables like, death and dying related issues ( $p = 0.532$ ), workload ( $p =0.586$ ), intention to leave ( $p=0.412$ ) and working experience as a nurse ( $p = 0.218$ ) were not significant predictors of personal accomplishment.

#### **4.10 Chapter summary**

The chapter presented and analyzed data obtained from the questionnaires. The data was analyzed and summarized using descriptive statistics and it was presented in frequency tables, pie charts and graphs. This included information about the demographic characteristics of the sample, level of emotional exhaustion, level of depersonalization, level of perceived organizational constraints, workload and also death and dying related stress. Linear regression analyses were done to examine the predictors of each of the three dimensions of burnout using IBM SPSS version 20. The levels of significance for the predictors for each dimension of burnout were identified. Therefore, in the next chapter, the findings of the study will be discussed and conclusions will be drawn. The study will also conclude by giving recommendations concerning possible intervention strategies that can be put in place to alleviate burnout among nurses working in Public hospitals in Zimbabwe.

## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSIONS & RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter focuses on the discussion of the research findings. The discussions in this chapter will be answering the research hypothesis given in chapter one. Overall conclusions of the study and recommendations will be given.

#### **5.2 Discussion of results**

##### **5.2.1 Relationship between Organizational Constraints and Burnout among nurses**

The first objective of the study was to determine the relationship between organizational constraints stress factors and burnout among nurses employed by the public hospital in Gweru, Zimbabwe. To find the relationship between these two variables, firstly the percentage of nurses who indicated high levels of organizational constraints were calculated. Regression analysis was then carried out to determine the relationship between the stress factor of organizational constraints and the three dimensions of burnout.

Results obtained show that the stress factor of organizational constraints significantly predicts emotional exhaustion, depersonalization and reduced personal accomplishment aspects of burnout. 85.5% of the nurses in the sample indicated that they often feel it impossible to do their job due to the stress as a result of organizational constraints. The results found are in line with those found internationally by Van Bogaert et al (2009), who indicated that lack of organizational support as well as supervisory support from the hospital management influenced levels of emotional exhaustion as well as personal accomplishment. Similar results were also found from Van de Doef et al (2012) in his study of nurses in East Africa, where he found a strong relationship between organizational constraints and emotional exhaustion aspect of burnout.

Coetzee et al (2013) in the study of South African nurses found similar results, saying that nurses from hospitals with favorable practice environments, enough equipment, and good

leadership from nursing supervisors as well as sufficient resources were less likely to report levels of emotional exhaustion, depersonalization and reduced personal accomplishment. The results concur with the Job Demand Resource model cited in chapter 2, which emphasises the interaction between job demands and job resources (Dematouti & Bakker, 2011). His argument indeed supports Coetzee et al (2013)'s findings which indicated that when job demands are high with little resources to work with, it often leads to burnout. Van der Colff and Rothman (2009) show that lack of organizational support combined with job demands predicted emotional exhaustion and depersonalization aspects of burnout. These constraints of lack of supervisory support, information provision, lack of equipment, lack of resources as well as support from the other core workers were included in this present study in the 10 organizational constraint factors measured by the Organizational Constraint Scale (Spector & Jex, 1997). All these findings from previous studies therefore concur with the present findings that there is a significant relationship between organizational constraints and burnout levels among nurses.

Thus according to the findings of this present study and also support from the literature of previous studies and the Job Resource Model, the hypothesis that there is a significant relationship between organizational constraints and burnout among nurses employed at the public hospital in Zimbabwe is therefore accepted.

### **5.2.2 Relationship between Workload and Burnout among nurses among nurses**

Many studies have indicated higher workload as a significant predictor of burnout among nurses. However this study is an exception. Despite the large percentage (96.8%) of nurses in the sample indicating high levels of workload, workload was however not found to be a statistically significant predictor of burnout among nurses. The results of this study are therefore inconsistent with previous findings. Steenkamp (2014) among his study of South African nurses found out that workload was directly associated with burnout at 1% significance level. Aiken et al (2008) also found a relationship between workload and emotional exhaustion aspect of burnout. Garrossa et al (2008) among his study of Spanish nurses revealed that, workload together with experience with pain, death and conflicting interaction predicted depersonalization and emotional exhaustion with the variance of 26% and 23% respectively.

Kruse et al, (2009), Okwaraji and Aguwa (2014) and Kawalski et al (2010) also found association between nurse workload and higher levels of emotional exhaustion and depersonalization aspects of burnout among nurses. Findings of this study also disagree with Garrosa et al (2009) who found workload to be the most significant predictor variable of emotional exhaustion among other predictors such as personality characteristics, demographic characteristics and job stressors. The same applies to Glazer and Gyuruk (2008) in the study of burnout among five countries, who identified workload to be a significant predictor of emotional exhaustion in relation to certain types of tasks such as work pressure and working shifts. These results concur with the Mismatching model of Burnout (Maslach & Leiter, 1997) which emphasizes on burnout as a result of the mismatch between the person and the six domains of his work environment. Thus in this case the mismatch between a person and the workload they have consequently leads to burnout. Aiken et al (2008), in his study of nurses in Pennsylvania, indicated that burnout increases approximately with 20% due to workload as a result of nursing staff shortage.

However this is not the case with nurses employed by the government in Gweru, Zimbabwe. Workload was not a predictor of burnout, maybe because the current economic conditions and levels of unemployment in Zimbabwe leave nurses with jobs grateful to have employment and a source of income. Barbosa et al (2012) in his study about burnout syndrome among the physicians in Maceio also supports this present study results. A high prevalence (70.14%) of burnout in at least one of the dimensions of MBI was found. However despite this high prevalence of burnout among the physicians, the results did not indicate any significant correlation between weekly workload and any of the three dimensions of burnout in that sample. The present study results are very similar to Barbosa et al (2012), 96.8% of the nurses at Gweru General Hospital indicated high levels of workload, but despite that, workload was not found to significantly predict any of the three dimensions of burnout.

Thus according to this present study results and other support from previous studies, the hypothesis that workload is a significant predictor of burnout is therefore rejected.

### **5.2.3 Relationship between Death and Dying related stress and Burnout among nurses**

The study found that death and dying related stress significantly predicted emotional exhaustion and depersonalization aspects of burnout but however did not predict personal accomplishment. These results were found among the sample; 70.6% of the nurses had high levels of stress related to death and dying of patients. Results concur with previous studies done internationally by Garrossa et al (2008), where a significant relationship between burnout and death and dying related stress was found. Steenkamp (2014) in his study among South African nurses in the public hospital in Western Cape indicated that, nurses' experience with pain and death of their patients predicted emotional exhaustion, depersonalization and reduced personal accomplishment aspects of burnout at 1% significance level.

Similar results from Smit (2005), in his study of nurses caring for PWLH in Gauteng Province, also show that 90% of the nurses find it difficult to deal with the death and dying of patients. Nurses reported that they find it very emotionally exhausting to see patients suffering and dying especially knowing that they could have helped but because there are no resources, they can do nothing but look at the patient suffering and dying. A positive correlation was found between death and dying issues, other ethical dilemmas and burnout in a study done locally on burnout among ICU nurses (Chitura & Chitura, 2014). His study results were similar to this present study, with 78% of ICU nurses reporting high levels of stress as a result of death and dying issues (Chitura & Chitura, 2014)

The findings of the present study therefore advance the existing literature by providing additional support for a significant association between death and dying related stress and two of the three dimensions of burnout, specifically in Zimbabwean context. Thus because of this evidence from the present study, the hypothesis that there is a significant relationship between death and dying related stress and burnout is accepted.

## **5.2.4 Relationship between the socio-demographic characteristics of Age, Working experience, Intention to leave the profession and Burnout among nurses**

Bronfenbrenner's ecological model is of the view that demographic characteristics account for burnout among nurses. It emphasizes on the human's interaction with the environment to predict burnout levels (Bronfenbrenner & Morris, 2006). In view of this model, this present study therefore analyzed only three demographic characteristics of age, intention to leave and working experience to find their association with the three components of burnout.

### **5.2.4.1 Age and burnout among nurses.**

According to literature cited in Chapter 2 of this study, among all the socio demographic variables, age was found to be the most significant predictor of burnout. This study has not been an exception. Age was found to significantly predict emotional exhaustion and reduced personal accomplishment aspects of burnout, but however did not predict depersonalization. The age range of the participants was from 22 to 65 years. Results from this study show that as age increases the level of emotional exhaustion among the nurses decreases, thus leading to lower levels of burnout. Conversely, on depersonalization aspect of burnout, as age increases the level of personal accomplishment decreases which contributes to burnout.

The results are consistent with Hurkin and Melby (2014) in his French study among Critical Care nurses, where he found a strong association between age and the three aspects of burnout syndrome. According to his results, high levels of burnout were associated with those nurses over 30 to 40 years old and the reason was that they have high expectations yet they lack adequate skills required in the nursing profession (Hurkin & Melby, 2014). This is similar to Okwaraji and Aguwa (2014)'s findings among the nurses in Nigerian public hospitals, which revealed that nurses aged less than 35 years significantly experienced higher levels of emotional exhaustion and reduced personal accomplishment more than elderly nurses aged 35 years and more. The reason was that, younger nurses might not have acquired enough psychological resilience to cope and deal with the challenges associated with the nursing profession unlike the older nurses (Okwaraji & Aguwa, 2014). Therefore the researcher accepts the hypothesis that, there is a significant relationship between the socio demographic characteristic of age and burnout.

#### **5.2.4.2 Working experience and burnout**

The socio demographic variable of working experience was also analyzed to see its association with the three aspects of burnout among nurses. Working experience was only found to be a significant predictor of emotional exhaustion aspect of burnout, but however did not significantly predict depersonalization and reduced personal accomplishment. Forty three percent of the participants had working experience of more than six years. As discussed in Chapter 2 of the study, the less the working experience the higher the level of burnout. Although working experience significantly predicted emotional exhaustion aspect of burnout; it however did not predict depersonalization and reduced personal accomplishment aspects of burnout. Results are therefore inconsistent with the previous literature findings where working experience was found to significantly predict burnout among nurses. Serin and Balkan (2014) in his meta-analysis study of burnout among nurses found a negative correlation between demographic characteristics of age and working experience and emotional exhaustion and reduced personal accomplishment dimensions of burnout. The results were further supported by Chen and Kao (2012) who also found an association between emotional exhaustion and work experience.

The hypothesis that there is a significant relationship between nurse's socio demographic characteristics of working experience and burnout is therefore rejected.

#### **5.2.4.3 Intention to leave nursing profession and burnout**

Literature review in Chapter 2 indicates a significant relationship between nurse's intention to leave the profession and burnout according to previous studies. However the results of this study are different. Although 16.7% of the sample indicated the intention to leave the profession, regression analysis however found that there was no relationship between nurses' intention to leave the profession and burnout. These results are inconsistent with Embracio (2007) in his French study of burnout among nurses, where 60% of the ICU nurses exhibited high levels of burnout and intended to leave the nursing profession. Haiken et al (2013) in his study of European nurses reported that 95% wanted to leave the profession with high scores in Emotional and Depersonalization dimensions of burnout. Another study in United States, showed that 95% of nurses who took care of chronic hemodialysis patients were three times likely to report their

intention to change the profession (Steenkamp , 2014). 59% of South African nurses according to Coetzee et al (2013) indicate their intention to leave the profession as a result of burnout.

However in Zimbabwe, this is not the case with nurses employed by the government at Gweru General Hospital. Nurse intention to leave the profession was not a predictor of burnout, maybe because of the current economic hardship and high levels of unemployment in Zimbabwe. Nurses at Gweru General Hospital have burnout but they do not intend to leave the profession not because they are enjoying their work but simply because they have nowhere to go. With their basic salary of USD\$230 which is below the poverty datum line as compared to USD\$3,594 basic salary for a sister in charge at a private hospital, nurses at Gweru General hospital still do not intend to leave their profession probably because they are grateful to at least have employment as a source of income in order to earn a living in Zimbabwe. They cannot leave their jobs because they know that lots of people with degrees are jobless in Zimbabwe.

### **5.3 Conclusions**

This section of the study seeks to state the conclusions arrived at in respect to the statement of the problem and research hypotheses. The main objective of the study was to examine the psychological and social predictors of burnout among nurses employed by a government hospital in Gweru, Zimbabwe. Specifically, the primary purpose was to determine the relationship between burnout and the selected predictor variables. The study concluded that, there is burnout among nurses at Gweru Provincial hospital in Zimbabwe. Although the levels of burnout differed from moderate to severe in all aspects of burnout (emotional exhaustion, depersonalization and personal accomplishment), the fact that it was demonstrated would indicate that remedial measures need to be taken by the responsible authorities at this institution to try and alleviate the situation.

The research also identified the psychological and social predictors of burnout among nurses that can be used to come up with proper intervention strategies to reduce burnout syndrome among nurses in Zimbabwe. Out of the six identified predictor variables of burnout, only three were found to significantly predict levels of burnout among nurses at Gweru Provincial Hospital in Zimbabwe. These were death and dying related stress, organizational constraints and age. These results are supported by other literature studies cited in the discussion of the results above.

Therefore, since the three major occupational variables were found to have strong relationship with the three aspects of burnout, the main hypothesis of the study which says there is a significant relationship between occupational stress factors (that is, organizational constraints, workload, death and dying related stress, working experience, age and intention to leave) and burnout is therefore accepted in this study.

#### **5.4 Recommendations**

Based on the findings of the study, the researcher makes the following recommendations.

- It appears that nurses who work with inadequate resources and get less support from management and core workers are more prone to burnout, which suggests that there is need for social support programs which can be a buffer against burnout. The manpower department together with matrons and sisters in charge, need to encourage a positive working relationship among nurses and their management team to reduce the effects of stress from work and prevent burnout.
- To encourage support for each other and reduce stress related to organizational constraints, sisters in charge together with matrons need to make arrangements for nurses and their supervisors to go on group retreats. This could help nurses regain their focus and their lost vigor during such outings. Campaign awareness programs which can be in forms of open day for administrators to come and see the nurses at work and highlight the role of nurses and also challenges they face may also be useful to reduce stress and prevent burnout before the full blown feelings develop.
- To reduce the level of stress related to death and dying of patients, the researcher recommends that authorities at Gweru Provincial hospital, that is, the principal nursing officers, need to offer professional counselling services to the nurses on a regular basis so as to identify any issues troubling them, and offer appropriate remedial action before burnout feeling develops.
- To reduce stress related to issues of death of patients, it is also recommended that matrons at this particular hospital need to work hand-in-hand with the administrators to ensure that there are enough rest rooms that are away from the working area to give nurses a feeling of rest during breaks and visiting hours especially in the areas of the hospital such as medical and surgical wards where nurses constantly face death issues.

Moreover principal nurses together with the Human resources department need to grant nurses compassionate annual leave on reasonable grounds whenever the nurse feels he or she cannot cope with the depleted emotional resources as a result of a patient who fails to recover.

- In light of age being a significant predictor of burnout, interventions to prevent burnout should mainly target younger nurses who are more prone to emotional exhaustion. Perhaps such activities as sports days may help younger nurses cope better with the emotional demands of their job, thereby reducing burnout.

### **Recommendations for future research.**

- Taking into account the results of this present study regarding the psychological and social predictors of burnout among Zimbabwean nurses, the development and evaluation of possible intervention strategies to reduce burnout among nurses employed by the government is required.
- This study's results cannot be fully generalized to other Public Hospitals in Zimbabwe; therefore further research on burnout among nurses from a large scale with randomly selected participants from different public hospitals in Zimbabwe is required.
- According to Maslach et al (2001), several factors which contribute to high levels of burnout have been documented. However this study only identified six factors which were regarded as significant predictors of burnout among Zimbabwean nurses. Therefore the researcher recommends similar research on other occupational stressors and other demographic characteristics which were not included in this study to be investigated to see their contribution to levels of burnout so that full intervention strategies can be developed to ameliorate burnout among Zimbabwean nurses.

### **5.5 Chapter Summary**

To sum up the whole study, this final chapter discussed the results obtained. Burnout was found to be prevalent among nurses at Gweru General Hospital in Zimbabwe. Organizational constraints, death and dying related stress together with age and working experience were found

to be significant predictors of burnout. Results on these predictors of burnout were linked and compared with the results from other previous studies done locally as well as internationally. Recommendations for the possible intervention strategies to reduce burnout, based on each of the research findings, were suggested by the researcher.

## REFERENCES

- Aiken, L. H., Clarke, S. P., Sloane, D. M., Lake, E. T., & Cheney, T. (2008). Effects of hospital care environment on patient mortality and nurse outcomes. *The Journal of Nursing Administration* 38(5), 223-229. Retrieved from [www.ncbi.nlm.nih.gov/pmc/articles/](http://www.ncbi.nlm.nih.gov/pmc/articles/).
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J., & Silber, J. H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association*, 288(16), 1987-1993.
- Aiken, L. H., Poghosyari, L., & Sloane, D. M. (2009). Factor structure of the Maslach Burnout Inventory: An analysis of data from large scale cross-sectional surveys from nurses from eight countries. *International Journal of Nursing Studies*, 46(7), 894-902.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2002). Validation of the Maslach Burnout Inventory: General survey. *Anxiety, Stress and Coping*, 15, 245-260.
- Bakker, A. B., Killmer, C. H., Siergnst, J., & Schaufeli, W. B. (2000). Effort-reward imbalance and burnout among nurses. *Journal of Advanced Nursing*, 31(4), 884-891.
- Barbosa, F. T., Leao, B. A., Tavares, G. M., & Santos, J. G. (2012). Burnout syndrome and weekly workload of on-call physicians: A cross-sectional study. *Sao Paulo Medical Journal*, 130(5), 282-288. doi:10.1590/S1516-31802012000500003
- Bless, C., & Smith, C. H. (1995). *Fundamentals of social research methods: An African perspective*. Boston: Jutu and Co Limited.
- Bronfenbrenner, U. (1979). Basic concepts in the ecology of human development: Experiments by nature and design. Retrieved from <http://icdl.com/graduate/Portal/IMH210/document>
- Chitura, D., & Chitura, M. (2014). Burnout syndrome in Intensive Care Unit nurses in Zimbabwe. *European Scientific Journal*, 436-457.
- Coetzee, S. K., Klopper, H. C., Ellis, S. M., & Aiken, L. H. (2013). A tale of two systems: Nurses practice environment, wellbeing, perceived quality of care and patient safety in

- private and public hospitals in South Africa. A questionnaire study. *International Journal of Nursing*, 50, 163-173. doi:10.1016/j.ijnursstn.2012.11.002
- Creswell, W. (2003). *Research design: Qualitative and mixed approaches*. New York: SAGE Publications.
- Demoirouti, E., & Bakker, A. B. (2011). The job demands resources model: Challenges for future research. *South African Journal of Industrial Psychology*, 37(2), 1-9. doi:10.4102scijipv3712.974
- Embracio, N., Papazian, L., Kentish-Barnes, N., Pochard, F., & Azoulay, E. (2007). Burnout syndrome among critical care healthcare workers. *Current Opinions in Critical Care*, 12(5), 482-488. Retrieved from <http://www.pulmoneryreviews.com>
- Glazer, S. J., & Gyurak, A. (2008). Sources of occupational stress among nurses in five countries. *International Journal of Intercultural Relations*, 32, 49-66. doi:10.1016/ijintrel2007.10.003
- Glynis, M., Smith, J. A., & Wright, D. B. (2006). *Research methods in psychology* (3rd ed.). London: SAGE Publications.
- Gorrosa, E., Moreno-Jimenez, Y., & Gonzalez, J. L. (2008). The relationship between sociodemographic variables, job stressors and hardy personality in nurses: An exploratory study. *International Journal of Nursing*, 45, 418-427. doi:10.1016/j.ijnursh.
- Gray-Toft, P., & Anderson, J. G. (1981). The nursing stress scale: Development of an instrument. *Journal of Behavioural Assessment*, 3(1), 11-23. Retrieved from <http://download.springer.com/static/pdf/736/art%253A10.1007%252FBBF01321348.pdf>
- Gulavani, A., & Schnide, M. (2014). Occupational stress and job satisfaction among nurses. *International Journal of Science and Research*, 3(4). Retrieved from [www.ijsr.net](http://www.ijsr.net)
- Harkin, M., & Melby, V. (2014). Comparing burnout in emergency nurses and medical nurses. *Journal of Clinical Nursing Studies*, 2(3), 132-163. doi:10.5430/cns/v2n3p152
- Heinen, M. M., Van, M., Achterbeger, T., Schwendiman, R., Zander, B., Matherus, A., . . . Schwunhoven, C. (2003). Nurses's intention to leave their profession: A cross sectional

- observational study in 10 European countries. *International Journal of Nursing Studies*, 50, 174-184. doi:10.1016/j.ijubhu.2012.ag.oig
- Jumaat, A. (2009). The empirical study of burnout among nurses of public hospitals in the Northern part of Malaysia. *The Journal of International Management Studies*, 4(3).
- Katyal, S. (2013). Burnout among nurses working in government and private hospitals. *Study Home Care Science*, 7(2), 83-85.
- Khosa, M. G., Tinyo, I., Ritacco, G., & Lowies, A. (2014). Impact of occupational stress and burnout on employee job performance: A study of nurses in rural clinics of Boishbuckridge in Mpumalanga Province . *International Journal of Innovative Research in Management*, 1(5).
- Kruse, G., Chapula, B. T., Ikeda, S., Nkharia, M., Ouitero, N., Pankratz, D., . . . Reid, S. E. (2009). Burnout and use of HIV services among health care workers in Zusaka District, Zambia: A cross-sectional study. *Journal of Human Resources for Health*, 7(55). doi:10.1186/1478-4491-7-55
- Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: A model of the organisational context of burnout. *Journal of Health and Human Services Administration*, 472-489. Retrieved from <http://cord.acodian.ca/files/sites/cord/resources>
- Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology*, 7, 63-74. Retrieved from [www.sciencedirect.com/ez.sun.ac.zw](http://www.sciencedirect.com/ez.sun.ac.zw).
- Maslach, C., & Jackson, S. (1982). Burnout in health professions: A social psychological analysis. In G. Saunders, & J. Suls (Eds.), *Social psychology of health and illness* (pp. 19-103). New Jersey: Lawrence Erlbaum.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2(2), 99-113. doi:10.1002/job.40300205
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 448-512. doi:10.1037/0021.901093.3498

- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 394-422. Retrieved from [www.annualreviews.org](http://www.annualreviews.org)
- McVicar, A. (2003). Workplace stress in nursing: A literature review. *Journal of Advanced Nursing*, 44(2), 633-642.
- Mudyarabikwa, O. (2000). An examination of the public sector subsidies to the private health sector: A Zimbabwe case study. *Equinet Policy Series(8)*. (M. Bedingfield, Ed.) Regional Network for Equity in Health in Southern Africa (EQUINET).
- Nachmias, C. F., & Nachmias, D. (1996). *Research methods in the social sciences* (5th ed.). New York: Library of Congress.
- Oasthuizen, D. (2012). The portrayal of nursing in South Africa newspapers: A qualitative content analysis. *Africa Journal of Nursing and Midwifery*, 14(1), 49-62. Retrieved from <http://ez.sun.ac.za/science/articles>
- Ohue, T., Moriyama, M., & Nakaya, T. (n.d.). Examination of a cognitive model of stress, burnout and intentions to resign for Japanese nurses. *Japan Journal of Nursing Sciences*, 8(3), 76-86. doi:10.11.11111.i743290.00161x
- Okwaraji, F. E., & Aguwa, E. N. (2014). Burnout and psychological distress among nurses in Nigeria tertiary health institutions. *Journal of African Health Sciences*, 14(1), 237-245. Retrieved from <http://dx.doi.org/10.4314/ahs.v14i1/137>
- Pendleton, W., Crush, J., & Lefko-Everett, K. (2007). The hemorrhage of health professionals from South Africa. *Medical Opinions*, 204(20). Retrieved from <http://dspace.cigilibrary.org/jspui/bitstream>
- Pienaar, J. W., & Bester, C. C. (2011). The impact of burnout on the intention to quit among professional nurses in Free State Region: A national crisis. *South African Journal of Psychology*, 4(1), 113-122. Retrieved from <http://reference.sabinet.co.za.ez.sun.ac.za>
- Pillary, R. (2009). Work satisfaction of professional nurses in South Africa: A comparative analysis of the public sectors. *Human Resource of Health*, 7(15), 1478-1491. doi:10.1186/1478-4491-7-15

- Polit, B., & Hunger, T. (2002). *Nursing research principles and methods*. New York: Lippincott Company.
- Poncet, M. C., Toullic, P., Papaz, L., Kentish-Barnes, N., Timsit, J. F., Pochard, F., & Azoulay, E. (2007). Burnout syndrome in critical care nursing staff. *American Journal of Respiratory and Critical Care Medicine*, *175*, 698-704. doi:10.1164/rccm.200606-80600
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Harlow: Prentice Hall.
- Schaufeli, W. B., Lelster, M. P., & Maslach, C. (2008). Burnout: 35 years of research and practice. *Career Development Interaction*, *14*(3), 204-220. Retrieved from <http://www.dx.org/10.108/136204309>
- Senn, A. E., & Balkan, M. O. (2014). Burnout: The effects of demographic factors on staff burnout. *Journal of International Business Research*, *7*(4). doi:10.5539/Ibr.V7n4p151
- Smit, R. (2005). HIV and AIDS and workplace: Perceptions of nurses in public hospital in South Africa. *Journal of Advanced Nursing*, *51*(1), 22-29. Retrieved from <http://www.web.ebscohost.com.ez.sun.ac>
- Spector, P. E., & Jex, S. M. (1988). Development of four self report measures of job stressors and strain: Interpersonal conflict at work scale, organisational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, *3*, 356-367. Retrieved from <http://web.ebscohost.com.e2.sun.ac.za>
- Spooner-Lone, R. (2004). Determinants of burnout among public hospital nurses. *Australian Journal of Advanced Nursing*, *25*(1).
- Stayt, L. C. (2009). Death, empathy and self preservation: The emotional labour of caring for families of the critically ill in adult intensive care. *Journal of Clinical Nursing*, *18*, 1267-1275. doi:10.1111/j.1365.2702.2008.02712.x.
- Steenkamp, J. G. (2014). Investigating the psychological and social predictors of burnout among nurses. (*Masters' dissertation*). Stellenbosch: Stellenbosch University Press. Retrieved from <http://scholar.sun.ac.za>

- Syed, M. A., Nazir, A., & Akhtar, N. (2014). Role of stress and burnout among nurses in the private hospitals. *International Journal of Academic Research in Business and Social Sciences*, 4(3). doi:10.6007/IJARBSS/v4-i3/720
- Van Bogaert, P., Meulemans, H., Clarke, S., Vermeyen, K., & Van de'Heyning, P. (2009). Hospital nurse practice environment, burnout, job outcomes and quality of care: Test of a structural equation model. *Journal of Advanced Nursing*, 65(10), 2175-2185. doi:10.1111/j1365-2648.2009.05082x
- Van der Colff, J. J., & Rothman, S. (2009). Occupational stress sense of coherence, coping burnout and work engagement of registered nurses in South Africa. *Journal of Nursing Management*. doi:10.1111/j1365-2834.2012.0146x
- Van der Doef, M., Mbazzi, F. B., & Verhoefen, C. (2012). Job condition, job satisfaction, somatic complaints and burnout among the East African nurses. *Journal of Clinical Nursing*, 21, 1763-1775. doi:10.1111/j.1365-2702.2011.03995x
- Weaver, K., & Olson, J. K. (2006). Understanding paradigms used for nursing research. *Journal of Advanced Nursing*, 53(4), 459-469. doi:10.1111/j.1365-2648.2006.03740x
- Yatasa, Y. N. (2014). Levels of burnout among EU and ICU nurses. (*masters' thesis*). Addis Ababa, Ethiopia.

**APPENDIX B: QUESTIONNAIRE**

**Psychological and Social Predictors of burnout Questionnaire**

My name is Salfina Sibanda, a fourth year student at MSU in the department of Psychology. I am conducting a research on the study title: **Examining the psychological and social predictors of burnout among nurses employed by the Government. A study of nurses at Gweru General Hospital, Zimbabwe.** Please do not write your name on the questionnaire. Your participation is strictly voluntary and may be discontinued at any time. There are no penalties for not completing it. Be trustworthy in your answers.

**1. Demographic Information Data Sheet.** Please tick the answer that best describes you.

**Gender**

<input type="checkbox"/> Male	<input type="checkbox"/> Female
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**Marital status**

<input type="checkbox"/> Married	<input type="checkbox"/> Single
<input type="checkbox"/> Divorced	<input type="checkbox"/> Live together

**What is your highest level of education completed?**

<input type="checkbox"/> Diploma in Nursing	<input type="checkbox"/> Degree in Nursing
<input type="checkbox"/> Master's Degree in Nursing	<input type="checkbox"/> Other ( please specify)

**What is your working job title?**

<input type="checkbox"/> Assistant Nurse	<input type="checkbox"/> Enrolled Nurse
<input type="checkbox"/> Registered Nurse	<input type="checkbox"/> Nursing Axillary

**What shift do you work at present?**

<input type="checkbox"/> Day shift	<input type="checkbox"/> Night shift
<input type="checkbox"/> Other ( specify)	<input type="checkbox"/> Day and Night.

**Intention to leave work within the next 12 months?**

<input type="checkbox"/> Yes	<input type="checkbox"/> I don't know	<input type="checkbox"/> No
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**How many years have you worked as a nurse? -----**

**What is your age? -----**

**Which area of the hospital do you work mostly? -----**

**2. Maslach Burnout Inventory (MBI) Maslach, 1982)**

For each question, indicate the score that corresponds to your respond. Your responses are strictly confidential.

	Never	A few times per year	Once a month	A few times per month	Once a week	A few times per week	Every day

<b>SECTION 2 A EMOTIONAL EXHAUSTION</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
I feel emotionally drained by my work							
Working with people all day long requires a great deal of effort.							
I feel like my work is breaking me down							
I feel frustrated by my work							
I feel I work too hard at my job							
It stresses me too much to work in direct contact with people.							
I feel like I'm at the end of my rope							
<b>Total score – SECTION 2 A</b>							

<b>Questions</b>	<b>Never</b>	<b>A few times per year</b>	<b>Once a month</b>	<b>A few times per month</b>	<b>Once a week</b>	<b>A few times per week</b>	<b>Every day</b>
<b>SECTION 2 B DEPERSONALISATION</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
I feel I look after certain patients/clients in personal, as if they are objects.							
I feel tired when I get up in the morning and have to face another day at work.							
I have the impression that my patients/clients make me responsible for some of the problems							
I am at the end of my patience at the end of my work day							
I really don't care about what happen to some of my patients/ clients							
I have become more insensitive to people since I've been working							
I am afraid that this job is making me uncaring							
<b>Total score – SECTION 2 B</b>							

<b>Questions</b>	<b>Never</b>	<b>A few times per year</b>	<b>Once a month</b>	<b>A few times per month</b>	<b>Once a week</b>	<b>A few times per week</b>	<b>Every day</b>
<b>SECTION 2C PERSONAL ACCOMPLISHMENT</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
I accomplish many worthwhile things in this job.							
I feel full of energy							
I am easily able to understand what my patients/ clients feel							
I look after my patients/clients problems very effectively							
In my work, I handle emotional problems very calmly							
Through my work, I feels that I have positive influence on people.							
I am easily able to create a relaxed atmosphere with my							

patients / clients							
I feel refreshed when I have been close to my patients/clients at work							
<b>Total score – SECTION 2 C</b>							

### 3. Organizational Constraints Scale (OCS) (Spector and Jex, 1998)

Indicate how often you feel difficult or impossible to do your job because of the events described below. Your responses are strictly confidential.

<b>HOW OFTEN</b>	<b>Less than once per month or never</b>	<b>Once or twice per month</b>	<b>Once or twice per week</b>	<b>Once or twice per day</b>	<b>Several times per day</b>
<b>SECTION 3 A ORGANISATIONAL CONSTRAINTS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Poor equipment's					
Organizational rules and procedures					
Other employees					
Supervisors					
Lack of equipment's supplies					
In adequate training					
Lack of necessary information about what to do and how to do it.					
Conflicting job demands					
Inadequate help from others					
Incorrect instructions from others					
<b>SECTION 3 B WORKLOAD</b>					
How often does your job require you to work very fast					
How often does your job require you to work very hard					
How often is there a great deal to be done					
How often does your job left you with little time to get things done					
How often do you have to do more work than you can do well					

### 4. Nursing Stress Scale – Death and Dying Sub Scale (Gray- Toft & Anderson, 1981)

Indicate how often you feel the situation to be so stressful.

	<b>Never</b>	<b>Occasionally</b>	<b>Frequently</b>	<b>Very frequently</b>
<b>Statement DEATH AND DYING RELATED STRESS</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Performing procedures that patients experience as painful				
Feeling helpless in the case of patients who fails to improve				
Listening and talking to a patient about his/ her approaching death				
Death of a patient				
The death of patient with whom you developed a closer relationship				

Physicians not being present when the patient dies				
Watching a patient suffer				

Thank you for completing and returning this questionnaire. Please if you have any questions fill free to contact me at 0773349163 or email, [salliesibanda@gmail.com](mailto:salliesibanda@gmail.com)

## APPENDIX E: MARKING GUIDE

### MIDLANDS STATE UNIVERSITY

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY

A GUIDE FOR WEIGHTING A DISSERTATION

Name of Student **SALFINA SIBANDA**

REG NO **R122534Z**

	ITEM	Possible Score	Actual Score	Comment
A	RESEARCH TOPIC AND ABSTRACT clear and concise	5		
B	PRELIMINARY PAGES: Tittle page, approval form, release form, dedication, acknowledgements, appendices, table of contents.	5		
C	AUDIT SHEET PROGRESSION Clearly shown on the audit sheet	5		
D	CHAPTER 1 :Background, statement of problem, significance of the study, research questions, objectives, hypothesis, assumptions, purpose of the study, delimitations, limitations, definition of terms	10		
E	CHAPTER 2: Addresses major issues and concepts of the study. Findings from previous work, relevancy of the literature to the study, identifies knowledge gap, subtopics	15		
F	CHAPTER 3:Appropriateness of design, target population, population sample, research tools, data collection, procedure, presentation and analysis	15		
G	CHAPTER 4:Findings presented in a logical manner, tabular data properly summarized and not repeated in the text	15		
H	CHAPTER 5 :Discussion (10) Must be a presentation of generalizations shown by results: how results and interpretations agree with existing and published literature, relates theory to practical, implications, conclusions (5) Ability to use findings to draw conclusions .Recommendations (5)	20		
I	Overall presentation of dissertation	5		
J	References	5		
	TOTAL	100		

MARKER.....SIGNATURE.....DATE.....

MODERATOR.....SIGNATURE.....DATE.....

**APPENDIX A: STUDENT-SUPERVISOR AUDIT SHEET**

DATE	ACTIVITY	SUPERVISOR'S COMMENT	SUPERVISOR'S SIGNATURE	STUDENT'S SIGNATURE
18/05/15	PROPOSAL	Rework		
20/05/15	PROPOSAL	Proceed		
19/06/15	CHAPTER 1	Rework		
21/06/15	CHAPTER 1	Proceed		
07/07/15	CHAPTER 2	Rework		
24/07/15	CHAPTER 2	Proceed		
01/08/15	CHAPTER 3	Rework		
10/08/15	CHAPTER 3	Proceed		
18/08/15	RESEARCH INSTRUMENTS	Rework		
25/08/15	RESEARCH INSTRUMENTS	Proceed		
18/09/15	CHAPTER 4	Rework		
28/09/15	CHAPTER 4	Proceed		
04/10/15	CHAPTER 5	Rework		
07/10/15	CHAPTER 5	Proceed		
09/10/15	FIRST DRAFT	Proceed		
11/10 /15	SECOND DRAFT	Proceed		
14/10/15	FINAL DRAFT	Submit		



NOW VIEWING: HOME > PSYCHOLOGY 4.2 DISSERTATION OCTOBER 2015

Welcome to your new class homepage! From the class homepage you can see all your assignments for your class, view additional assignment information, submit your work, and access feedback for your papers. Hover on any item in the class homepage for more information.

Class Homepage

This is your class homepage. To submit to an assignment click on the "Submit" button to the right of the assignment name. If the Submit button is grayed out, no submissions can be made to the assignment. If resubmissions are allowed the submit button will read "Resubmit" after you make your first submission to the assignment. To view the paper you have submitted, click the "View" button. Once the assignment's post date has passed, you will also be able to view the feedback left on your paper by clicking the "View" button.

Assignment Inbox: Psychology 4.2 Dissertation October 2015			
	Info	Dates	Similarity
Psychology 4.2 Dissertation October 2015		Start 06-Oct-2015 5:37PM Due 31-Dec-2015 11:59PM Post 31-Dec-2015 12:00AM	8% <input type="button" value="Resubmit"/> <input type="button" value="View"/>

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Med Supt; Can be assisted provided the student will also give feedback on the results of the research

17/8/15  
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GWERU

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Fax: (263) 54 260233/260311

**FACULTY OF SOCIAL SCIENCES  
DEPARTMENT OF PSYCHOLOGY**

Date 17 August 2015

18/08/15 Authority granted

To whom it may concern

Dear Sir/Madam



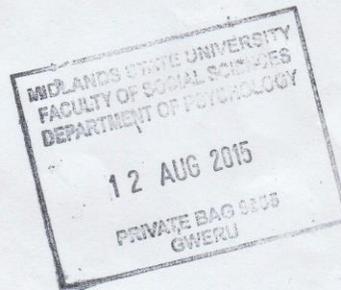
RE: REQUEST FOR ASSISTANCE WITH DISSERTATION INFORMATION  
FOR SALFHA SIBATIDA  
BACHELOR OF PSYCHOLOGY HONOURS DEGREE

This letter serves to introduce to you the above named student who is studying for a Psychology Honours Degree and is in his/her 4<sup>th</sup> year. All Midlands State University students are required to do research in their 4<sup>th</sup> year of study. We therefore kindly request your organisation to assist the above-named student with any information that they require to do their dissertation.

Topic: Examining the psychological and social predictors of burnout among nurses employed by the Government.

For more information regarding the above, feel free to contact the Department.

Yours faithfully  
  
F. Ngwenya  
Chairperson



Contact 0773349 163

