

**AN INVESTIGATION INTO THE FACTORS THAT NURSES WORKING IN
CRITICAL CARE UNITS PERCEIVE AS LEADING TO BURNOUT**

by

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DECLARATION

I declare that **AN INVESTIGATION INTO THE FACTORS THAT NURSES WORKING IN CRITICAL CARE UNITS PERCEIVE AS LEADING TO BURNOUT** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

SIGNATURE

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DATE

AN INVESTIGATION INTO THE FACTORS THAT NURSES WORKING IN CRITICAL CARE UNITS PERCEIVE AS LEADING TO BURNOUT

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ABSTRACT

Burnout is reflected in pathological emotional depletion and maladaptive detachment that is a secondary result of exposure prolonged occupational stress. It is comprised of three dimensions, namely, emotional exhaustion, depersonalization and reduced personal accomplishment. It is becoming increasingly recognized as one of the most serious occupational hazards for nurses who work in critical care units. The objectives of this study are to assess the prevalence of burnout among a sample of nurses who worked in the critical care units in a particular hospital in Kenya, to analyze factors that contributed to the development of burnout and to identify measures for the mitigation of burnout.

For this study, the researcher utilized a mixed methods research design in two phases. Phase one assessed the prevalence of burnout in nurses working in the critical care units by making use of the Maslach Burnout Inventory – Human Services Survey. Focus groups discussions were then held in Phase two to investigate the factors that the nurses perceived as the main causes of burnout and to solicit their ideas about it could be mitigated. Convenience sampling and purposive sampling were used in the two phases of the study respectively.

KEY CONCEPTS

Burnout; critical care units; mitigation; stressors

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Dedication

*I dedicate this study
to my sister Doreen Muthoni and my
brother Abdul-Malik Kinyua:
May you forever Rest in Peace.*

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List of abbreviations

AACN	American Association of Critical Care Nurses
AIDS	Acquired Immunodeficiency syndrome
AKDN	Aga Khan Development Network
AKU	Aga Khan University
ANOVA	Analysis of Variance
APA	American Psychiatric Association
CCU	Critical care unit
DP	Depersonalization
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition)
DSM-IV TR	Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition)
EE	Emotional Exhaustion
HDU	High dependency unit
HIV	Human Immunodeficiency Virus
ICD-10	International Classification of Mental and Behavioral Disorders
ICN	International Council of Nurses
ICU	Intensive Care Unit
ILO	International Labour Organization
JD-R	Job demands- resources model
MBI	Maslach Burnout Inventory
MBI-ES	Maslach Burnout Inventory – Educators Survey
MBI-GS	Maslach Burnout Inventory – General Survey
MBI-HSS	Maslach Burnout Inventory-Health Services Scale
PA	Personal Accomplishment
RAM	Roy Adaptation Model
SPSS	Statistical Package for the Social Sciences

UK	United Kingdom
USA	United States of America
WHO	World Health Organization

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CHAPTER 1

Orientation to the study

1.1 INTRODUCTION

Burnout is a prolonged response to chronic emotional and interpersonal stressors that an employee encounters in the context of a job (Maslach, Schaufeli & Leiter 2001:398). Academic interest in the phenomenon of burnout began in as far back as the 1970s. It was at this time that researchers first attempted to explain reasons for the appearance of symptoms of physical and mental deterioration in professionals – especially professionals working in the human services (Freudenberger 1974:159). The term “burnout” was first coined by Freudenberger (1974:159) who defined it as “the signs and symptoms characterized by loss of energy and feelings of life being broken into pieces”. The most influential description of burnout in the literature is the operational definition supplied by Maslach and Jackson (1981:99), who developed their definition from studies that they undertook by making use of the Maslach Burnout Inventory. Maslach and Jackson (1981:99) defined burnout as “a sustained response to the chronic work stress comprising of three components: the experience of being emotionally exhausted (emotional exhaustion), negative feelings and attitudes towards the recipients of the service (depersonalisation) and feelings of low accomplishment and professional failure (lack of personal accomplishment)”.

Since it was the prototype of the ubiquitous stress endured by so many professionals today, burnout has increasingly been recognised as one of the most serious occupational hazards that can afflict professionals (Greenglass & Burke 2002:89). Donchin and Seagull (2002:316) have even pointed out that burnout is more likely to affect health care professionals who work in the critical care units of hospitals that are characterized

by a high level of work-related stress because stress of this kind has been identified as one of the main precipitating causes of burnout (Bakker, Le Blanc & Schaufeli 2005:276). It is not passed unnoticed among researchers that health care professionals who work in critical care units are confronted on a daily basis by the kind of stressful situations that precipitate work-related problems such as absenteeism, high staff turnover, a reduction in the quality of patient care, a deterioration in morale, and a significantly high incidence of staff conflicts – all of which are symptoms and signs that precede the development of burnout (Embriaco, Azoulay, Barrau, Kentish, Pochard, Loundou & Papazian 2007:686).

1.2 BACKGROUND TO THE STUDY

In the background to this study, the global perspective of burnout as well as a brief overview of the country, the setting in which the study took place and the Aga Khan University Hospital is given to orientate the reader to the research problem and the objectives of the research.

1.2.1 Global perspective on burnout

Burnout is a complex of symptoms and behaviours that include a pathological degree of emotional depletion and maladaptive detachment in the presence of prolonged occupational stress (Maslach & Jackson 1981:99). In 1986, Maslach and Jackson developed the Maslach Burnout Inventory (MBI) for the purpose of detecting and measuring the severity of burnout in individuals. This scale evaluates three of the major dimensions of the burnout syndrome, which are:

- Emotional exhaustion
- Depersonalisation
- Lack of personal accomplishment

The dimension of emotional exhaustion reflects the degree of individual stress from which an individual is suffering, and refers to perceptions of being so occupationally overloaded and overextended that the sufferer experiences a sense of being depleted of emotional and physical resources (Maslach & Jackson 1986:4). It is the opinion of Maslach, Jackson and Leiter (1997:4) that these perceptions indicate the central dilemma of the victim of burnout: as the normal reserve of emotional resources of a worker becomes increasingly depleted, the person concerned feels they are unable to project themselves psychologically in a way that the requirements of their occupation require them to do. Demerouti, Bakker, Nachreiner and Schaufeli (2001:499) consider that the effects of emotional exhaustion and depletion are similar to occupational stress reactions such as anxiety, depression, and fatigue.

The subjective awareness of a sense of depersonalisation (cynicism) in a professional, as well as the projection of such an attitude in interpersonal relationships, is also indicative of burnout. Depersonalisation (in this sense) refers to a negative, callous or excessively detached response to the characteristic features of particular professional situations (Maslach et al 2001:397). It is possible to deduce the presence of cynicism in an individual from an indifferent or emotionally detached attitude towards work and a (often uncharacteristic) lack of professional efficacy that stands in stark contrast to the usual social and non-social accomplishments of a person when he or she is not suffering from burnout (Schaufeli & Buunk 2003:84). According to Maslach et al (1997:4), the development of depersonalisation functions in an individual as a defence against dangerously high levels of emotional exhaustion. These two aspects of burnout are therefore intimately connected, and the presence of one is invariably indicative of the presence of the other in a person who presents with the major symptoms of burnout.

Another dimension of burnout is the subject's perception of reduced personal accomplishment in any test or expression of self-evaluation. This perception is characterised by feelings of incompetence and lack of achievement and productivity in the work situation – perceptions that may be completely at variance with the objective

facts (Maslach et al 2001:399). These dimensions will be discussed in more detail in the following chapter.

Burnout has been well described by, among others, researchers and commentators such as Schaufeli and Enzmann (1998), Baum, Revenson and Singer (2001) and Winefield (2003:187). In spite of this, the officially recognised and accepted canons of diagnostic classification such as the prestigious Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition) (DSM-IV), a completely revised text of the DSM-IV TR by the American Psychiatric Association (APA 2000), and the International Classification of Mental and Behavioral Disorders (ICD-10) produced by the World Health Organization (WHO 1993), have not included burnout as a separate and specific condition in their diagnostic classification. In the DSM-IV TR it is classified as an Adjustment Disorder. More specifically, it is included in the particular subcategory that lists all those non-specific maladaptive responses to stressors that are not classified in the specific subtypes listed under the heading of Adjustment Disorders (APA 2000:680). The ICD-10 categorises burnout as an inability to manage the problems and difficulties of life and notes that it is invariably accompanied by a state of nervous and vital exhaustion (WHO 1993:73).

The past 30 years have witnessed a growing scholarly interest in the problem of burnout and other work-related stress issues. Freudenburger (1974:159) made some pioneering observations about burnout and provided a basis for a broader understanding of this condition in his 1974 article entitled "Staff Burnout". In 1976 Maslach began a series of empirical investigations into how people such as doctors, nurses and police officers, who work in particularly emotionally demanding occupations, managed to cope with the demands and stressors of their everyday tasks. The years since then have seen an increase in amount of research being devoted to the phenomenon of burnout. Prominent among these researchers have been Schaufeli and Enzmann (1998:33), Maslach et al (2001:397), Burisch (2002:1) and Kristensen, Borritz, Villadsen and Christensen (2005:192).

Most burnout research has tended to focus on the experiences of those who work in the human services and healthcare sectors. Occupations in these sectors always include a relationship between the service provider and the recipient. While it has long been known that healthcare professionals are at high risk for job burnout and role conflict, wide variations have been reported in the prevalence of burnout in health care professionals across specialties, both in doctors (Shanafelt, Bradley, Wipf & Back 2002:358) and in nurses (Lu, White & Barriball 2005: 211).

It is an uncontested and universally accepted statement that nursing is a stressful occupation. Recognition on the part of the International Labour Organization (ILO) that nursing is a stressful occupation led it to commission a specific manual on stress prevention and management for the use of nurses (Cox, Griffiths & Cox 1996:47). Nurses who work in highly stressful environments such as critical care units are particularly vulnerable to the harmful effects of burnout. Recent advances in technology and changes in healthcare procedures and delivery in these units have only added new responsibilities to the nurse's traditional role as a caregiver and the patient's advocate. It is quite usual for nurses who work in such units to experience a great deal of stress because they are responsible on a day-to-day basis for the welfare of patients who are dependent on critical life support procedures and technology and for patients often in a state of terminal or futile care (Mobley, Rady, Verheijde, Patel & Larson 2007:256) hence exposing the nurse to ethical and moral distress (Elpern, Covert & Kleinpell 2005:523; Meltzer & Huckabay 2004:202).

Burnout in nurses who work in critical care units has been the topic of a great deal of research in developed countries. This research has attributed burnout to varying combinations of both personal and work-related factors. Studies by Aiken, Clarke, Sloane, Sochalski and Silber (2002:1987) and Poncet, Toullic, Papazian, Kentish-Barnes, Timsit, Pochard, Chevret, Schlemmer and Azoulay (2007:698) have demonstrated how both personal and work-related factors can be the cause of burnout in nurses who work

in critical care units. According to these researchers, the personal factors that are implicated in burnout include a lack of stamina, an inability to practise required levels of assertiveness in dealings with others, the gradual diminishment of coping skills, the demands of family life, particular health problems and a lack of crucial social support in areas where it is required. The work-related factors include an unrealistic and therefore unmanageable workload, a tendency to engage in conflict with colleagues and management, work conditions characterised by inadequate staffing and resources, the emotional demands of patients and their families, the intricacies of reaching an accommodation with the ethical implications of life-sustaining technology and constant exposure over long periods to death and dying. Studies by Burisch (2002:1) and Kalliath and Morris (2002:648) have also demonstrated the existence of a negative relationship between burnout and organizational structures and the processes that determine work satisfaction.

The consequences of burnout manifest themselves both on an organisational and personal level. Burnout results in job dissatisfaction (Kalliath & Morris 2002:648), reductions in the quality of care and patient satisfaction (Vahey, Aiken, Sloane, Clarke & Vargas 2004:57), in personal problems, in deterioration in the state of individual nurses' health and in the fact that nurses thus affected tend to abandon critical care nursing as a nursing speciality (Stechmiller 2002:577). A study by Gillespie and Melby (2003:842) recognised that stress and burnout exert far-reaching effects on the clinical practice and the personal lives of nurses who work in critical care environments. Gillespie and Melby are of the opinion that unless the issues and problems that nurses are forced to face in high-stress environments are not dealt with in good time, they will undoubtedly begin, at some time or another, to suffer from the whole spectrum of burnout symptoms and conditions. Tzeng (2002:867) has also observed that burnout is costly for organisations because it compromises the quality of work, it increases rates of absenteeism, it magnifies rates of staff turnover and causes nurses to abandon critical care nursing for more manageable alternatives. It is imperative therefore for

administrators to focus on the causes of burnout and its concomitant reductions in levels of job satisfaction.

Only a few studies that deal with the experiences of nurses who work in critical care units have been published in Kenya because most research papers in Kenya have tended to focus on health professionals in general. Researchers such as Uebel, Nash and Avalos (2007:500) have noted the prevalence of burnout in doctors and nurses who work for prolonged periods with patients with Human Immunodeficiency Virus/Acquired Immunodeficiency syndrome (HIV/AIDS). A study undertaken by Raviola, Machoki, Mwaikambo and Good (2002:55) found that the degree of emotional exhaustion experienced by healthcare professions and other health care workers who work with patients affected by HIV/AIDS was so great, that most of them eventually reached a point at which they dissociated themselves from this kind of work.

This study adds to the body of knowledge about the factors leading to burnout in nurses who work in critical care nursing in Kenya.

1.2.2 A brief description of Kenya

In order to orientate the reader to the context in which this study was conducted, a brief description of Kenya will now be presented.

Kenya is situated on the east coast of Africa and is dissected by the equator. It is bordered in the north by Sudan and Ethiopia and in the west by Uganda and Lake Victoria. Tanzania and Mount Kilimanjaro lie to the south while Somali and the Indian Ocean form the eastern border. Kenya is the world's forty-seventh largest country and covers a surface area of 582,646 km² (Saffer 2001:6).

From the Kenyan coast on the Indian Ocean, low-lying plains rise to the central highlands, which are bisected by the Great Rift Valley, a fertile plateau in the west. The

Great Rift Valley extends for 8,700 km on the surface of the earth from the Dead Sea in Jordan to Beira in Mozambique. The Kenyan Highlands comprise one of the most successful agricultural production regions in Africa. The highlands are also the site of the highest point in Kenya (and the second highest in Africa) – Mount Kenya, which reaches 5,199 metres (17,057 ft) (Saffer 2001:6). Kenya itself enjoys a tropical climate. It is hot and humid at the coast, temperate inland and very dry in the north and northeast parts of the country. Even though a great deal of rain falls between March and May every year, the average temperatures remain high throughout these months. The country enjoys a great deal of sunshine throughout the year. The long rain season occurs from between April and June, while the short rain season occurs from between October and December. The hottest period in Kenya is from February to March, and coldest time of the year is between July and August (Pateman 2004:55).



Figure 1.1 Map of Kenya

(<http://www.mapsofworld.com/kenya/kenya-political-map.html>)

The Kenya government has set aside considerable tracts of land for wildlife conservation. These include the Maasai Mara, where Blue Wildebeest and other bovids participate in large-scale annual migrations. The famed "Big Five" animals of Africa also abound in conservation areas in Kenya: the lion, leopard, buffalo, rhinoceros and elephant. A varied population of wild animals, reptiles and birds can be found in the national parks and game reserves of the country (Giles 2006:32).

Kenya is characterised by diverse physical features that are divided into low-lying arid and semi-arid lands, the coastal belt, the plateau, highlands and the lake basin around Lake Victoria. The population of Kenya was estimated in July 2007 to be 36,913,721 (Kenya National Bureau of Statistics 2007). Of this number, approximately six million people lived in urban areas. According to Kenya National Bureau of Statistics (2007), the age distribution of the Kenyan population is as follows: 0-14 years: 42.2% (male 8,065,789/female 7,953,077); 15-64 years: 55.2% (male 10,498,468/female 10,434,764); 65 years and over: 2.6% (male 457,886/female 543,854) (Saffer 2001:6).

Many different cultures are represented among the people of Kenya. The best-known among these are the Swahili on the coast, the pastoralist communities in the north, and several different communities residing in the central and western regions. While the Maasai constitute the best-known of all Kenyans ethnic groups because of their intensive exposure to tourism, the Maasai only make up a relatively minor percentage of the Kenyan population (Pateman 2004:63).

It is the task of the Ministry of Health in the government of Kenya to provide quality healthcare for all of its citizens so that they will be in a position to lead economically and socially productive lives. Both public (government-sponsored and financed) and private hospitals are found throughout Kenya (Government of Kenya 2008).

1.2.3 Nairobi

Nairobi is both the capital city of Kenya and the administrative capital of the region in which Nairobi is situated. The name "Nairobi" comes from the Maasai phrase *Enkare Nyorobi*, which in English means "the place of cool waters" (Sayer 1998:51). But it is also popularly known as the "Green City in the Sun".

Nairobi is also the capital of Nairobi Province and the Nairobi District. The city lies on the Nairobi River towards the south of Kenya. It started life as a railway depot for Uganda Railways in 1899, a company that was constructing a railway line between Mombasa and Uganda. In the early 1900s, it was totally rebuilt after an outbreak of plague and fire devastated the original town. In 1905, Nairobi replaced Mombasa as the capital of what was then a British Protectorate, and the town gradually developed into a city that depended mainly upon administration and the kind of tourism that specialised in big game hunting. As more and more British colonialists began to explore the region, they tended to use Nairobi as their base and first port of call. This prompted the colonial government to build several grand hotels in the city (Sayer 1998:51).

The geographical coordinates of Nairobi are 1° 16' 60" South (latitude) and 36° 49' East (longitude). Nairobi is situated at an altitude of 5672ft above sea level and covers an area of approximately 150 km². It lies between the cities of Kampala and Mombasa and is close to the Rift Valley. The Ngong hills lie towards the west of Nairobi, Mount Kenya lies towards the north, and Mount Kilimanjaro lies to the southeast of the city (see figure 1.2) (Sayer 1998:51).

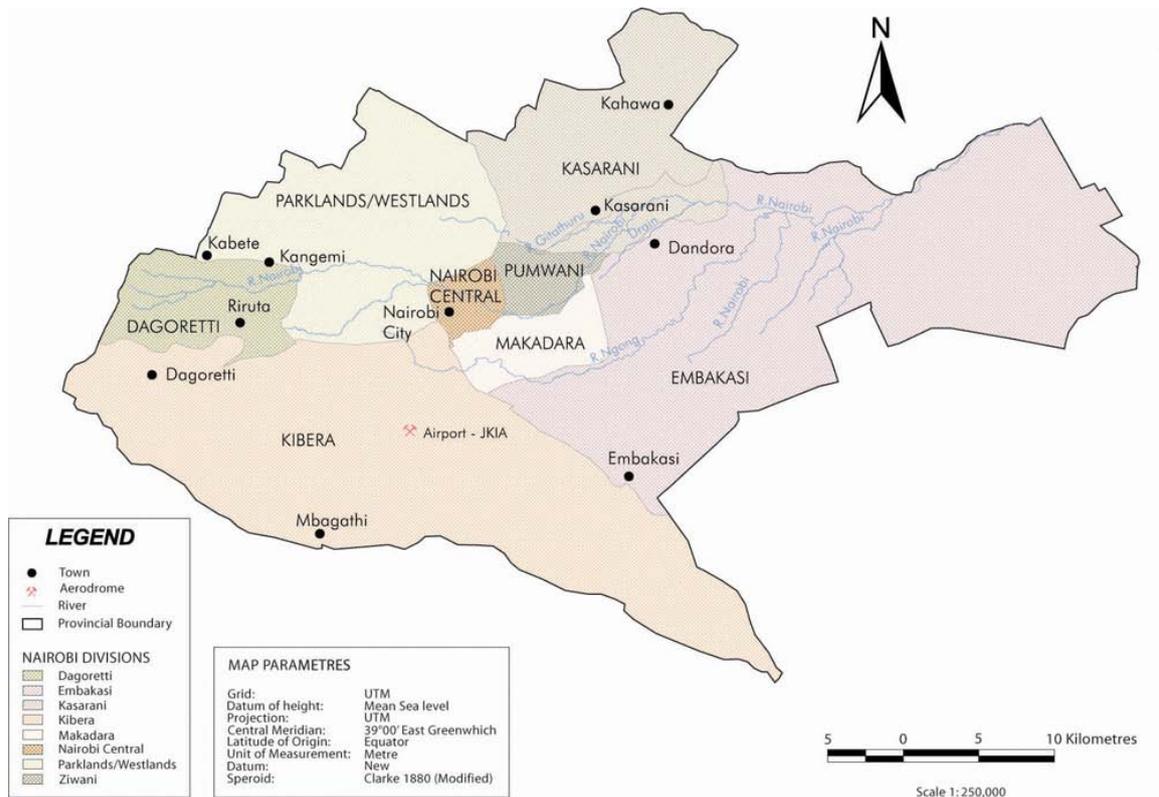


Figure 1.2 Map of Nairobi

(http://www.unep.org/roa/Nairobi_River_Basin/Images/maps/NairobiAdministrative-map.jpg)

Nairobi's western suburbs stretch all the way from the Kenyatta National Hospital in the south to the United Nations headquarters and Gigiri in the north, a distance of about 20 kilometres. The City Square lies at the heart of the city and is located in the Central Business District. The square is surrounded by the buildings of the Kenyan Parliament, the Holy Family Cathedral, the Nairobi City Hall, the Nairobi Law Courts and the Kenyatta Conference Centre.

Nairobi is divided into the following eight constituencies: Makadara, Kamukunji, Starehe, Langata, Dagoretti, Westlands, Kasarani and Embakasi. The main administrative divisions of Nairobi are Central, Dagoretti, Embakasi, Kasarani, Kibera, Makadara, Pumwani, and Westlands. Most of the upmarket suburbs are situated to the west of Nairobi, and these include Karen, Langata, Lavington and Highridge. The

suburbs of Kangemi and Dagoretti on the western outskirts of the city are inhabited by Nairobi's less affluent residents. A mixture of low and lower-middle income people live in the eastern parts of Nairobi. These include Kariokor, Dandora, Kariobangi, Embakasi, and Huruma.

Since Nairobi is the regional headquarters of several international companies and organisations, it is host to organisations that make it one of the most influential and important cities in Africa. It is also home to a busy tourist industry because it is both a tourist destination and a transportation hub. Nairobi is essentially a cosmopolitan and multicultural city.

Nairobi has been the site of some of the highest growth rates of any city in Africa. The population of Nairobi grows at an annual rate of 6.9%, a much higher rate than the national population growth rate of about 3.8%. The metropolitan area of Nairobi also includes more than 18 "informal settlements" (urban slum areas), home to about 60% of Nairobi's population. Since this population of 60% of the total number of residents resides in only 4% of the total area of the city, the population density in these informal settlements is extremely high. It has been projected that Nairobi's population will reach five million in 2015 (Oronje 2005:24, Kilbride, Suda & Njeru 2000:44).

1.2.4 Aga Khan University Hospital

The Aga Khan University Hospital in Nairobi is the teaching hospital for the Aga Khan University. The Aga Khan University (AKU) was established and chartered in 1983 as an international university by the Aga Khan Development Network (AKDN), a group of private, non-denominational development agencies and institutions that work together to improve living conditions and opportunities in over 30 of the poorest countries in the developing world. The university comprises 11 teaching sites in eight countries, including the Aga Khan University Hospital in Nairobi, which has been in operation in Nairobi for over 50 years under the aegis of the Aga Khan Health Services.

The transition of what was formerly known as the Aga Khan Hospital into the Aga Khan University Hospital commenced in 2005, when its sponsors adopted a plan to make it the premier tertiary, teaching and referral hospital serving sub-Saharan Africa (AKDN 2007).

The Aga Khan University Hospital is a 254-bed, long-term care facility that offers high-quality health care. The hospital provides variety of general medical services, specialist clinics and high-tech diagnostic services. In 2003, all the clinical, diagnostic, support and administration services of the Aga Khan University Hospital were awarded ISO 9001 accreditation.



Figure 1.3 Location of Aga Khan University Hospital

(<http://www.agakhanhospitals.org/nairobi/emergencies.asp>)

The hospital receives referrals for specialised medical care and diagnostic services from various hospitals and clinics in the region. This forms part of the AKHS international referral system, with links to the Aga Khan University Hospital in Karachi. The hospital also sponsors the full programme of health outreach activities that include various

projects that address Nairobi's public health concerns. It has contributed, for example, to the national immunisation campaign by organising free clinics in under-served peri-urban settlements (AKHS 2003).

The hospital is comprised of general wards, semi-private and private rooms. It also has fully equipped delivery rooms for normal deliveries and all obstetrics emergencies. Its facilities include a fully equipped nursery for normal babies, and a premature care unit that is staffed by skilled neo-natal nurses and doctors for premature babies. Seventy-three beds are dedicated to separate male and female surgical wards. There are three semi-private female rooms, three semi-private rooms for males, and four private male rooms with built-in wardrobes and washing facilities. The wards admit both emergency and elective surgical cases. The renal unit contains four beds that are fitted with piped oxygen and haemodialysis machines for the needs of patients with severe kidney diseases. The general ward contains 33 spaciouly accommodated beds and four semi-private rooms with built in wardrobes and washing facilities (AKHS 2003).

The hospital contains one general critical care unit with a bed capacity for eight critically ill patients, a general High Dependency Unit with a bed capacity for eight patients, and a neonatal critical care unit with a bed capacity for four patients. Cardiac and oncology unit are currently under construction. Their construction plans include facilities for three separate critical care units and centres for cancer management (AKHS 2003).

1.3 RESEARCH PROBLEM

Critical care nursing is a developing discipline in Kenya because more and more nurses are venturing into the field. This interest on the part of student nurses has been fuelled by a growing demand for nurses who are qualified to care for severely ill patients. There are currently a limited number of nurses who are qualified to work in critical care units in Kenya. Since most of the nurses who are qualified in critical care nursing work

in the urban and metropolitan areas of Kenya, there is an urgent need for nurses who are qualified and competent to care for critically ill and injured patients in the district and regional hospitals of the country.

The greatest problem currently facing the Kenyan nursing workforce is the migration of the professional and well-qualified nurses to countries such as United States of America (USA), United Kingdom (UK), and various Arab countries, among others. According to the Nursing Council of Kenya, approximately 3000 nurses emigrated between 1999 and 2004. Of these, 87% were fully registered nurses and nurses with the degree of Bachelor of Science in Nursing (Riley, Vindigni, Arudo, Waudu, Kamenju, Ngoya, Oywer, Rakuom, Salmon, Kelley, Rogers, St. Louis, & Marum 2007:1389). Even those nurses, who have not yet emigrated, intend to do so. In a survey conducted by the Population Services International, it was found that 53% of all resident Kenyan nurses surveyed were planning to emigrate, while 26% of them were considering the possibility of emigration (Eyck 2004:38).

International migration is symptomatic of larger problems that motivate nurses to leave their jobs and even, at times, to leave the health sector completely. According to Kingma (2006:206), no matter how attractive the pull factors in the country of destination are, few nurses migrate without substantial push factors that drive people away from the source country. In most such cases, the push factors are a result of the variety of constraints, such as stressful work environments and burnout, that people experience in the workplace. This constant departure of nurses to more affluent and developed countries seriously weakens the health care sector by reducing the number of qualified and experienced nurses in the profession and leading inevitably to diminishment in the quality of patient care. Another of the consequences of this rate of emigration is that those nurses who are left behind in their country of origin become overburdened with higher workloads and greater responsibilities that frequently result in stress, burnout, reduced work satisfaction and low morale. According to Dovlo (2005), such factors have contributed to high levels of absenteeism and have adversely

affected the quality of care. Dunser, Baeleni and Ganbold (2006:1234) have also noted that enormous workloads, low wages and the risk of exposure to occupational infections (such as HIV and hepatitis, to name but two) explain why one so frequently encounters the burnout syndrome and such low levels of motivation among nursing practitioners in developing countries. Most critical care units in Kenya are units that accommodate patients with admission criteria for both general surgical and medical cases. But with the advent of the HIV/AIDS pandemic, nurses who work in critical care units and who have to care for these patients on a daily basis are exposed to all the additional stress factors that are associated with the care of patients with AIDS. It is such factors that contribute to increasing emotional and moral exhaustion (Raviola et al 2002:55).

While there is a dearth of studies about burnout in Kenya, those studies that have been undertaken have not focused specifically on the appearance and progress of this syndrome in the lives of critical care nurses. This might well be because critical care nursing is still a relatively new field in Kenya. Maslach et al (2001:412) suggest that there are national differences in the way that burnout presents among specific groups of individuals, a phenomenon which, in their opinion, could be related to the cultural values and economic condition of the different countries in which such groups originate. According to this theory, the circumstances and work environment in the less developed countries such as Kenya are different from those of developed Western countries, and so the way in which people experience and perceive burnout in the less developed countries might well be very different from the way in which it is perceived and experienced in developed Western countries. It is necessary therefore to study the phenomenon of burnout in a specifically Kenyan setting in order to obtain an accurate picture of how it arises and affects members of the nursing profession in that country.

If critical care nursing care is ever to become a more desirable nursing speciality among qualified nurses in Kenya, much more needs to be understood about why nurses who work in critical care units tend to manifest so many symptoms of the burnout

syndrome. These are, after all, nurses who are doing everything in their power to create the kind of healthy and ordered work environments that are described in the Regulations for Reducing the Impact of HIV/AIDS in Nursing and Midwifery Personnel that were issued by the International Council of Nurses (ICN) in 2006. The ICN (2006:16) states: “The employer must assume measures that reduce or prevent stress, isolation and burnout...” In addition, the ICN adds that “Health facilities that ignore staff exhaustion can expect negative outcomes in staff morale, the working environment and in the quality of care” (ICN 2006:16).

1.3.1 Research questions

The following research questions were compiled after a careful consideration of the issues and problems set out in the preceding paragraphs:

- What is the prevalence of burnout among nurses working in critical care units at Aga Khan University Hospital, Nairobi?
- What are the factors that contribute to the possible development of burnout in nurses working in critical care units at Aga Khan University Hospital, Nairobi?
- What are the measures that the organisation can implement to mitigate the occurrence of burnout in nurses working in critical care units at Aga Khan University Hospital, Nairobi?

1.3.2 Objectives of the study

The objectives of this study were to:

- investigate the prevalence of burnout in nurses who work in critical care units (CCUs) at Aga Khan University Hospital, Nairobi
- determine the factors that contribute to the development of burnout in nurses who work in CCUs at Aga Khan University Hospital, Nairobi

- provide organisational guidelines for the mitigation of burnout in nurses who work in CCUs at Aga Khan University Hospital, Nairobi

1.4 ASSUMPTIONS UNDERLYING THE STUDY

The research that follows was based on the following assumptions:

- Roy's Adaptation Model (Roy & Andrews 1999:43) reveals that nurses who work in critical care units have adaptive or ineffectual responses to the stimuli that originate in their environments. Such ineffectual responses can contribute to the development of burnout in these nurses.
- There is a wide range of factors, both personal and occupational, that contribute to the development of burnout in nurses who work in CCUs.
- There are various measures that an organisation can implement to mitigate the effects of burnout in nurses who work in CCUs.

1.5 SIGNIFICANCE OF THE STUDY

Very little research into the phenomenon of burnout has been undertaken in East Africa, and none of it relates to nurses who work in critical care units. This may be attributable to the fact that critical care nursing is a relatively new field in Kenya and the East African region. In spite of this, interest in critical care nursing in Kenya is growing apace, with the result that more and more nurses are applying to be trained in critical care nursing. This study provides useful information for both nursing administrators and nurses who work in the critical care unit about the burnout syndrome and its various predictors. It furthermore educates managers and nurses on how to become more aware of those environmental factors that lead to burnout and, in so doing, to prevent or alleviate the more pernicious effects of the burnout syndrome. This study also provides recommendations about how nurses who work in critical care environments can implement strategies to develop the necessary coping skills to deal with this phenomenon. This study has attempted to increase the degree of awareness of

burnout among nurses so that they can improve their coping skills, take personal measures to reduce their levels of stress and deal with the factors that make the critical care environment so extremely stressful for caregivers. Mee and Robinson (2003:51) are of the opinion that nurses need to become more proactive in improving the working environments of the organizations in which they work. The study will also help nursing administrators to deal with all the organisational problems that are associated with burnout and to apply appropriate countermeasures.

1.6 DEMARCATION OF STUDY FIELD

This research was carried out at a hospital in Nairobi, Kenya. It is a privately owned, non-profit-making hospital located in the Parklands area of Nairobi, Kenya. It contains one general critical care unit with a bed capacity for eight critically ill patients, a general high dependency unit with a bed capacity for eight patients, and a neonatal critical care unit with a bed capacity for four patients.

1.7 THEORETICAL FRAMEWORK OF THE STUDY

Roy's Adaptation Model (Roy & Andrews 1999), which is hereafter referred to as RAM, guided the theoretical framework for this research. Sister Callista Roy developed RAM in 1976. Roy's Adaptation Model (RAM) regards human beings as biopsychosocial adaptive systems who cope with environmental stimuli through a process of coping. According to Roy, the human being is an open system that responds to environmental stimuli by means of cognator and regulator coping mechanisms. The responses that human beings make usually appear in different modes that are visible to others. These modes of annotation can then be identified as either adaptive or ineffective. Adaptive behaviours that need support and are ineffective can be analyzed to identify the associated stimuli (Galbreath 2002:295; Phillips 2006:307).

According to Phillips (2006:307), the RAM regards a human being as an adaptive system that is in constant interaction with both the internal and external environment. These environments are a source of a variety of stimuli that either threaten or promote a person's uniqueness and integrity. According to Roy and Andrews (1999:52), the major task of each human being is to maintain his or her integrity in the face of all environmental stimuli which one may categorise as *focal*, *contextual* or *residual*. **Focal stimuli** are external or internal stimuli that present an immediate challenge to a person's adaptational ability and which therefore attract the most attention. **Contextual stimuli** are all the other stimuli that exist in a situation and that therefore strengthen the effect of the focal stimuli. **Residual stimuli** are any other phenomena that arise in a person's internal or external environment.

According to Alligood and Tomey (2006:363), Roy divides coping mechanisms into cognator or regulator subsystems. She defines regulator responses as neural, chemical, and endocrinal processes, and cognator responses as cognitive and emotive processes. Alligood and Tomey also point out that Roy designates control processes as being either stabilisers or innovators. The stabilisers reinforce the established structures, values, and daily activities by means of which individuals accomplish the purpose of the group to which they belong and contribute to the common good of society. Innovators, on the other hand, are those who use various cognitive and emotional strategies that enable them to move to higher levels of potential.

Although direct observation of the regulator and cognitive processes is not possible, it is possible to observe the behavioural responses that are the result of any of the adaptive modes. The adaptive modes are classified as those that relate to the physiological-physical self, to the self-concept, to role function, and to interdependence. Adaptive responses result from the coping mechanisms and adaptation that a human being brings into play in order to establish meaning and purpose in life and to become an integrated person (George 2002:295). Ineffective responses tend to produce the opposite results: an

inability to find meaning and purpose and the multiplication of those centripetal forces that contribute to human disintegration and entropy.

1.8 RESEARCH METHODOLOGY

Research methodology refers to the techniques and methods that a researcher uses to structure a study and to gather and analyse information in a systematic fashion (Polit & Beck 2004:15). According to Burns and Grove (2003:223), the research methodology encompasses the entire strategy of the study from the identification of the problem to the chosen methods of data collection. Research methodology is a blueprint for the intended research process. It describes the kind of tools and procedures that will be used, the specific tasks that need to be accomplished, the individual steps in the research process, and the methods that the researcher intends to use to guarantee reliability, objectivity, validity and freedom from personal bias (Mouton 2001:75).

1.8.1 Research design and method

In the following sections a summary of the design and methods used in this study will be provided.

1.8.1.1 *Research design*

Because a research design is the blueprint for conducting the study, it includes methods for maximising control over factors that might interfere with the validity of the study and is the end result of a series of decisions made by the researcher on how to implement the study (Burns & Grove 2001:223). An appropriate research design should provide trustworthy answers to the research questions while at the same time avoiding or minimising bias (Polit & Beck 2004:209). According to Bryman (2004:27), the choice of the research design reflects the decisions that the researcher makes about the priority

that the researcher accords to a range of dimensions of the research process. It also describes the ways in which the causal connections of the variables will be established and whether the results of the study will be able to be generalized to the population at large. For this study, the researcher selected a cross-sectional mixed methods research design as the basis for answering the research questions.

1.8.1.2 Research methods

As has been noted above, this study made use of a mixed methods research design. The term “mixed methods” refers to the use of two or more quantitative and/or qualitative strategies being used either concurrently or sequentially within a single research project to answer research questions and/or to test a hypothesis (Driessnack, Sousa & Mendes 2007:1046) and to the current or sequential collection and analysis of quantitative and qualitative data. According to Creswell and Plano-Clark (2006:6), quantitative data includes closed-ended information while qualitative data consists of open-ended information that a researcher collects from interviews conducted with the participants. The main advantage of using mixed methods is that they assist in the process of triangulation, which is the substantiation of results so as to increase their validity and to acquire a greater depth of insight into a particular phenomenon (Rocco, Bliss, Gallagher & Perez-Prado 2003:19). The study was carried out in two phases (phase one and phase two). These two phases are described below.

1.8.1.2.1 Phase 1

In phase 1, the researcher used a quantitative research design to answer the first question of the study. Burns and Grove (2003:37) describe a quantitative study as a formal, objective, rigorous and systematic process for generating information about the world. It is used to describe new situations, events and concepts. It measures the causal relationships between concepts or ideas, and determines the effectiveness of treatments.

1.8.1.2.2 *Phase 2*

In phase 2, the researcher used a qualitative research design to answer the second and third questions of the study. Qualitative research refers to the investigation of phenomena by means of coherent descriptions that are generated from the in-depth and holistic exploration of a collection of rich narrative materials and the use of a flexible research design (Polit & Beck 2004:15).

Focus group discussions were conducted to gather information about factors that might contribute to the development of burnout in nurses who work in the critical care units at the Aga Khan University Hospital, and to discuss possible measures for preventing the occurrence of burnout in nurses who work in the critical care units at the Aga Khan University Hospital.

1.8.1.3 *Cross-sectional study*

A cross-sectional design entails the collection of data from more than one case occurring in the same situation in order to collect a body of quantitative data with two or more variables. This data is then examined to detect patterns of association (Bryman 2004:41). The participants in the study were all the full time nurses working in the critical care units at a selected private hospital. The respondents all completed the questionnaires at approximately the same time. Focus group discussions with a selected number of nurses were then carried out in order to collect the opinions of the nurses themselves about the factors that were postulated as possible causes of the development of the burnout syndrome, and possible measures that could be instituted to counter and prevent burnout in the population that forms the subject of this research.

1.8.2 Population

Bryman (2004:87) describes population as the “universe” of units from which the sample is selected. He explains that units do not necessarily refer only to people. They might also refer, for example, to towns, regions, diseases, animals, birds, illnesses, physiological events or any number of other items that might be suitable subjects for research and investigation. Polit and Beck (2004:289) describe a population as “the entire set of population or individuals and elements that meet the sampling criteria”. The members of a population need to be accessible because they are the target of investigation. These authors describe the *accessible population* as “the aggregate of cases that conform to the designated criteria and that are accessible as a pool of subjects for the study” (Polit & Beck 2004:290). They also describe *target population* as “the aggregate of cases about which the researcher would like to make generalizations” (Polit & Beck 2004:290).

The population for this study comprised the 56 nurses who were working in the intensive care units, the high dependency units and the neonatal intensive care units in the selected hospital in Kenya at the time of the research.

1.8.3 Sample and sampling procedure

Polit and Beck (2004: 291) describe the sample as “a subset of the population elements”. In this study, the sample was made up of all the nurses who were working in the critical care units at the selected hospital in Nairobi, Kenya at the time the research.

Sampling is described by Polit and Beck (2004: 291) as the process of selecting a portion of the population to represent the entire population. According to Bryman (2004:87), the sample has to be representative of the population if one wants to be able to make generalizations about the findings from the sample to the population and similar populations.

In the phase one, a researcher used a convenience sampling method for the quantitative component of the study in order to investigate the prevalence of burnout in the nurses who were working in the critical care units at Aga Khan University Hospital in Nairobi at the time of the research. According to Polit and Beck (2004: 292), convenience sampling entails using people who are conveniently available as study participants. The research chose a convenience sample by distributing the research instrument to the nurses working in the critical care units until all the necessary participants had been recruited. Convenience sampling is used when a researcher has reason to believe that the population that is being sampled is either homogeneous or else has characteristics being measured that are so randomly distributed that the outcome would not be materially affected by more sophisticated methods of sampling (Dorofeev & Grant 2006:42). Because the respondents in this study were all nurses who were working in critical care units, the researcher had reason to believe that they were more or less homogenous. Hence the appropriateness of the convenience sampling method for this research.

In phase two of this study, the researcher utilised purposive sampling method to investigate (1) the factors that nurses perceive as leading to the development of burnout, and (2) the measures that might be implemented to moderate and alleviate the effects of burnout. In purposive sampling, each sample is selected for a particular purpose or reason. The purpose is usually the unique knowledge that the individuals have about the subject under investigation or the unique way in which the elements represent the factors that have been chosen for investigation (Schutt 2006:155).

The researcher selected a total of 16 nurses from the critical care units to participate in the focus group discussions. Three focus group discussions were organised. Five nurses were assigned to the first focus group discussion, six to the second focus group discussion, and five in the third focus group discussion.

Those nurses who were included in this sample had to meet the following criteria:

- They had to be enrolled and registered nurses who were working either in the general intensive care unit, the neonatal intensive care unit or the high dependency units at the Aga Khan University Hospital. All of the nurses who were included worked on a rotational basis in one or other of the above-mentioned units.
- They had to have been employed for at least six months in the critical care units prior to being selected for the sample.

The criterion for exclusion from the sample was the following:

- All nurses in managerial positions. (This was an important exclusion criterion because nurses in managerial positions are not involved in direct patient care on a day-to-day basis, and, although they are exposed to various kinds of stress, the stresses to which they are exposed relate to their job responsibilities rather than to the routines of nursing in critical care units.)

1.8.4 Research Instruments

1.8.4.1 Phase 1

For the quantitative phase of the research, the researcher utilised a data collection instrument in the form of structured self-reporting questionnaire. A *data collection instrument* is a formal written document that is used to collect and record information (Polit & Beck 2004:318). A *questionnaire* represents a highly structured method of data collection that is low in cost and it quickly produces data. One of the drawbacks of a research questionnaire is that the response rate might be low unless the respondents perceive them to be of some value to themselves (Sapsford & Jupp 2006:102). The researcher utilised the Maslach Burnout Inventory- Health Services Scale (MBI-HSS). The Maslach Burnout Inventory-Health Services Scale was developed by Christina

Maslach (Maslach & Jackson 1986:2) and is used to determine burnout levels. This is the only measure that assesses all three of the core dimensions of burnout. These three core dimensions for people who work in human services and health care professions, are *emotional exhaustion*, *depersonalisation*, and *reduced personal accomplishment* (Maslach et al 2001:402).

The Maslach Burnout Inventory-Health Services Scale consists of 22 questions that are couched in the form of statements about the respondent's feelings or attitudes to job-related issues such as, for example, "I feel burned out from my work." These feelings are then rated in Likert style on a seven-point scale that ranges from between 0 and 6. The structure of the MBI-HSS will be discussed in more detail in chapter 4.

The researcher included demographic questions to ascertain the demographic, professional and personal characteristics of all individuals in the sample. The inclusion of these questions is based on reports in the literature that indicate that age, years of experience (Ilhan, Durukan, Taner, Maral & Bumin 2007:100), and marital status (Sahraian, Fazelzadeh, Mehdizadeh & Toobae 2008:62) are some of the demographic factors that can also lead to the development of burnout in nurses.

1.8.4.1.1 *Reliability of Maslach Burnout Inventory-Health Services Scale*

Polit and Beck (2004:417) describe reliability as the consistency with which an instrument measures a tribute of the target. It also measures the stability, internal consistency and dependability of the instrument.

Reliability coefficients have already been established by the researchers who devised the scale, and these have been confirmed by means of extensive and thorough research. Internal consistency is estimated by Cronbach's coefficient alpha (n=1,316). The reliability coefficients for the subscales are the following: .90 for Emotional Exhaustion, .79 for Depersonalisation, and .71 for Personal Accomplishment. The standard errors of

measurement for each subscale have been established as: 3.80 for Emotional Exhaustion, 3.16 for Depersonalisation, and 3.73 for Personal Accomplishment (Maslach et al. 2001:402).

The stability of the MBI-HSS has been established by means of the substantial amount of research that has used the scale as an instrument of research.

1.8.4.1.2 Validity of Maslach Burnout Inventory-Health Services Scale

Polit and Beck (2004:422) refer to *validity* as the degree to which an instrument measures what it intends to measure. The construct validity of the MBI has been assessed in different sociocultural contexts and the results have been acceptable (Schutte, Topinnen, Kalimo & Schaufeli 2000:53).

1.8.4.2 Phase 2

The researcher carried out focus group discussions with the nurses whom she had selected in order to gain an understanding of what the nurses regarded as the factors that lead to the development of burnout and the measures that the organisation could implement to alleviate burnout.

1.8.4.2.1 Reliability of focus group discussion

Since this represented the qualitative component of the study, the researcher had to establish the trustworthiness of the narrative interview data that she had obtained during the interviews in order to be in a position to ensure that this data reflected the truth (Polit & Beck 2004:430). Person triangulation was carried out during sample selection. Nurses from different types of critical care units were grouped into three groups in order to validate the data by means of three different perspectives on

burnout. The credibility of the researcher was increased by using a recorder/observer during the FGDs. Trustworthiness will be further discussed in chapter 4.

1.8.5 Data analysis

The researcher used quantitative and qualitative data methods to analyse the data.

1.8.5.1 *Quantitative data analysis*

The process of data analysis relied on the manipulation of descriptive statistics. Descriptive statistics are used to describe and synthesise data. According to Polit and Beck (2004:451), they provide simple summaries about the sample and the measures that form the basis for a study. Univariate analysis, which is the examination across cases of one variable at a time, was carried out. This kind of analysis involved the calculation of distribution, the central tendency and dispersion. The research data was analysed with the assistance of a statistician who used the Statistical Package for the Social Sciences (SPSS) (version 16.0) – a statistical software program that was capable of answering the first research question.

1.8.5.2 *Qualitative data analysis*

Before the qualitative data could be analysed, it first had to be transcribed from the tape recorded focus group discussions. The researcher then had to read through the transcripts while listening to the tape recorded discussions. This was a form of proofreading or transcription checking that ensured the accuracy of the transcription. The researcher then read through the transcripts in order to identify the major themes and subthemes that became apparent in the text. She then summarised these and used them to draw conclusions that would provide answers to the research questions.

1.8.6 Pretesting of the research instrument

The pretest is the trial administration of a research instrument to identify possible flaws and to ascertain time requirements (Polit & Beck 2004:728). The instrument was pretested on a sample of five nurses who were then excluded from being participants in the main part of the study. The pretest was undertaken in the Aga Khan University Hospital Medical ward. The main research instrument was then reviewed and revised (where necessary) on the basis of the results obtained from the pre-test.

1.9 DEFINITIONS OF TERMS

The following section provides definitions of a number of high-frequency terms and phrases that are central to this research.

➤ **Burnout**

Burnout is chronic physical or emotional exhaustion that is usually caused by long-term stress or dissipation (Maslach & Jackson 1981:99). The symptoms of the burnout syndrome are emotional exhaustion, a sense of depersonalisation and reduced levels of personal accomplishment. It most frequently occurs in individuals who work with or care for people in some or other capacity. Schaufeli and Enzmann define burnout as “a persistent work-related state of mind in ‘normal’ individuals that is primarily characterized by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and development of dysfunctional attitudes and behaviors at work”. The most recent definition from the literature is that of Kristensen et al (2005:192), who postulate that “the core of burnout is fatigue and exhaustion, which is attributed to specific domains or spheres of a person’s life”.

In this study, **burnout** refers to the maladaptive response that develops as a result of prolonged exposure to high levels of occupational stress and that manifests as

emotional exhaustion, depersonalisation, and reduced levels of personal accomplishment.

➤ **Occupational stress**

Occupational stress is a physiological and psychological response to occupational stressors in the work environment. Occupational stressors are events or conditions in the work environment that lead to the development of stress (Dollard 2003:4). Some of the known occupational stressors include increased workloads, role conflicts, and inadequate salaries, among others. In this study, these conditions are referred to as the factors that lead to the development of burnout.

➤ **Critical care units (CCUs)**

These are specialised units located within environment of a hospital, that provide comprehensive and continuous care for people who are critically ill and who need a kind of care provided by such units. This type of comprehensive care involves the use and application of specialised techniques by highly skilled and qualified personnel. Among the many specialised techniques they use are artificial ventilation, cardiac monitoring, hemodynamic support, intracranial pressure monitoring, and dialysis (Encyclopedia of Surgery 2008). Other terms for CCUs are “intensive care units” and “intensive therapy units”. In this study, CCUs refer to the general ICU, the General HDU and the Neonatal ICU.

➤ **Job satisfaction**

Nurse job satisfaction is a multidimensional phenomenon that is influenced by many variables. Sengin (2003:317) identified the following factors that influence nurse satisfaction:

- Demographic variables: education, experience, position in the hierarchy
- Job characteristics: autonomy, tasks repetitiveness, salary
- Organizational environment factors: degree of professionalization, type of unit, nursing care delivery model

➤ **Critical care nursing**

Critical care nursing is a speciality within nursing that deals specifically with human responses to life-threatening conditions. A critical care nurse is a licensed professional nurse who is responsible for ensuring that acutely and critically ill patients and their families receive the kind of optimal care that is provided by critical care units (AACN 2004).

1.10 ETHICAL CONSIDERATIONS

The researcher met the ethical requirements for this research by attaching an individual covering letter for each participant. This letter informed the participant about what the researcher was hoping to achieve by means of the research, the probable benefits of the research and the advantages of their voluntary participation. If a participant completed and returned the questionnaire, it was assumed that she had given her consent. The nurses who participated in the focus group discussions were also required to sign a consent form which indicated that they agreed to participate. The respondents who completed the questionnaires and those who were involved in the focus group discussions were also informed that they were not required to give their name or any other kind of identifying information (such as, for example, their employee number) anywhere on the research instruments or during any kind of discussion or participation. In this way the participants' anonymity was preserved. Confidentiality was also maintained during the data collection by making sure that the participants returned the completed instruments only to the team leaders who had have been briefed on the

absolute need for confidentiality and the methods that would be used to maintain confidentiality.

Permission to carry out the study was sought from the Research Review Committee and the Ethics Review Committee of Aga Khan University Hospital. The researcher presented her proposal to the above committees and attached the following documents to the proposal: the covering letter for the respondents and participants, a sample of the research instrument, the demographic questionnaire, and the consent form for participation in the interviews. More detailed information about the measures that were instituted to maintain confidentiality is provided in chapter 4.

1.11 LIMITATIONS OF THE STUDY

The researcher identified the following possible limitations of the study:

- The study is cross-sectional. Because this means that the data was collected at a particular and quite specific time, it does not take into consideration the effects of changes in staff, managerial changes, and the patient census of the units at the time when the study was conducted. All of these factors may have affected the nurses' responses had the research been conducted at a different time.
- While the Maslach Burnout Inventory-Health Services Scale that was used in this study has been widely accepted and tested in developed countries, the reliability and validity of this tool has not been tested on nurses in developing and underdeveloped countries such as Kenya.
- Because this study was confined to a selected private hospital in Kenya, it cannot therefore be generalised to other hospitals in the country.
- The sample that was used in the study was relatively small.

1.12 LAYOUT OF THE STUDY

This dissertation consists of six chapters.

Chapter 1 introduces the study area, the problem, the purpose and objectives of the study, and the research design and methodology of the study. It also provides definitions of key terms and phrases.

Chapter 2 describes the literature review that was conducted for the study.

Chapter 3 discusses the theoretical framework and assumptions on which this study is based.

Chapter 4 discusses the research design and methodology.

Chapter 5 presents and sets out the data analysis, the interpretation and the results.

Chapter 6 discusses the conclusions and limitations of the study, and makes recommendations for practice and further research.

1.13 CONCLUSION

This chapter provided a short introduction to Kenya, Nairobi and the Aga Khan University Hospital. This was designed to familiarise the reader with the context and conditions in which the study took place. This chapter also described the background to the problem which the study was designed to solve, the purpose, significance and objectives of the study, and the research design and methodology (including various components of the design and methodology such as population, sampling, data collection and data analysis). Key terms were then defined and the ethical considerations that were implemented in the study were briefly highlighted.

Chapter 2 discusses the review literature that the researcher undertook for the study.

CHAPTER 2

Literature review

2.1 INTRODUCTION

In order to be able to provide an authoritative understanding of how burnout develops in critical care units, the researcher undertook a comprehensive review of the literature on the subject. This chapter contains a detailed discussion of the existing literature on the main concepts that occur in this study.

A literature review critically examines and discusses whatever has been researched and discovered about a particular topic. It requires the researcher to locate, analyze, synthesise, and interpret all previous research and documents (such as periodicals and books abstracts) that relate to the particular area of study in which the research topic is located. According to Roberts (2004:73), a literature review serves the following purposes:

- It helps to bring a study into sharper focus by relating it to everything that is already known about the topic.
- It helps a researcher to develop a theoretical or conceptual framework that he or she will use to guide and frame the study.
- It identifies key variables for the research and suggests the relationships that might be obtained between them in a quantitative study. But if the research being conducted is qualitative, it identifies the relative importance of the concepts, problems and topics that need to be taken into account.
- It suggests how some of the previous research that has already been undertaken on the topic can be usefully extended by means of further research and study.

- It identifies how the study topic relates to present and past studies and findings.
- It provides a basis for determining the significance of the study.
- It brings the researcher into contact with the questionnaires and tests that were used in earlier research and the results that such questionnaires and tests were able to produce.
- It helps the researcher to make a strong logical and contextual link between the findings and procedures of the present study and all previous studies in the field.

2.2 THE BURNOUT CONSTRUCT

According to Maslach et al (2001:397), the term “burnout” refers to a syndrome that encompasses a well-defined set of prolonged responses to chronic emotional and interpersonal stressors that afflict a person who is engaged in a job or occupation in which the levels of stress are unusually high. Burnout has been universally identified as a profound social problem in all the well-developed countries of the world. Phenomenon of burnout describes how those who are suffering from it experience the realities of their workplace. Although the term “burnout” originated as an *a posteriori* hypothesis that was extrapolated from a variety of accumulated observations and findings, it is now the name that is accorded to particular occupational syndrome that has been widely described in scientific and clinical research and practice. The frustrations and difficulties that people encounter in their work and the way in which these accumulated negative experiences can result in varying degrees of breakdown and dysfunction has prompted researchers and clinicians to recognise burnout as an important occupational hazard in the workplace (Maslach et al 2001:398).

The demands that are placed on specialist nurses who work in critical care units have, for example, been increasing over the decades. These professionals now face a variety of challenges such as greater workloads, increasing job insecurity and an absence of adequately defined roles and responsibilities – to name but a few (Johnson, Cooper, Cartwright, Donald, Taylor & Millet 2005:178). The increasing demands of the

workplace in the modern world are mirrored by the ever-increasing demands that employees experience in their personal lives. This combination of extreme stress at work and stress and frustration in the home produce a number of negative effects on the mental and physical health of modern individuals. But the ravages of full-blown burnout affect not only individual employees; it also affects the organisation for which they work by contributing to an increase in the staff turnover and absenteeism rates, as well as substandard and defective work performance. It is cumulative and excessive stress that ultimately leads to the development of full-scale burnout in employees.

2.2.1 History of burnout research

The concept of burnout was first described in the USA in the 1970s in people who worked in human services (Maslach et al 2001:397), although it must have existed in many unrecognised forms and places before this date. But ever since it was first described in the 1970s, there has been an increasing interest in the phenomenon of burnout and the enormous body of research that has been devoted to it.

Burnout research initially came into focus by means of a bottom-up or a *posteriori* approach to the phenomenon. In other words, an accumulation of data by means of research and observation enabled researchers to develop theoretical frameworks and constructs that accounted for the facts that were widely observed in the workplace (Maslach et al 2001:399). The initial challenge in burnout research was therefore to identify concepts and theories that would help researchers to explain recurrent phenomena in the workplace for which there was no satisfactory scientific explanation (Schaufeli & Enzmann 1998:30). In addition, Engelbrecht (2006:26) notes that there is an enormous amount of empirical research and effort that has gone into the development of theoretical models that account for the phenomena of burnout. Examples of the fruits of this research are, for example, the multidimensionality theory of Maslach (1998:69), the process model of burnout of Cherniss (1980), and the phase model of burnout of Golembiewski and Munzenrider (1988:176).

The earliest reported study of burnout can be attributed to Isabel Menzies in 1959, who undertook a case study based on the activities of nurses in a British teaching hospital (Menzies 1975:78). In addition Menzies states that she was inspired to undertake a study by the prevailing concern in the nursing profession at that time that nurse training was being driven more by the excessive demands of day-to-day practical nursing rather than by the actual training needs of the nurses. Menzies identified high levels of distress and anxiety among the student nurses in her sample, and observed that approximately one third of all the student nurses left the training hospital every year out of their own volition – a situation that was apparently regarded as normal (Menzies 1975:78). Menzies also made the observation that because of the very nature of the nursing profession, a nurse is frequently at considerable risk of being overwhelmed by intense and unmanageable anxiety. The symptoms have been well described in over thirty years of scientific research into the burnout syndrome.

But it was Herbert Freudenberg (1974:159), a psychiatrist who worked in an alternative health agency, who actually popularised the term “burnout”. As a result of his observations of people who worked in various branches of social service (the public service, volunteer organisations, medical services, human social services, educational organisations), he coined the term “burnout” which he defined as a verb in the following way: “to fail, to wear out or to become exhausted by making excessive demands of energy, strength and resources” (Freudenberg 1974:159). He provided detailed accounts of the stages of the process by means of which both he (as the researcher) and the people whom he observed experienced chronic emotional depletion and a loss of motivation and commitment. Freudenberg (1974:161) described the consequences of burnout in terms of physical outcomes and behavioural outcomes. He also observed that those who work too much, too long and too intensively without any allowance for rest and recuperation, as well as those who suffer from chronic compulsion to give of themselves, were decidedly more prone to burnout. He also identified the absence of challenges in the workplace and overwhelming amounts of monotony and tedium as possible risk factors that were likely to lead to burnout.

In 1976, Christina Maslach (1976:16), a social psychologist, launched an intensive investigation into how people who work in emotionally demanding occupations (such as doctors, nurses, and police officers) cope with the demands of their everyday lives. She interviewed people in these professions and discovered that the coping strategies that they utilised (or failed to utilise) had important implications for their physical and mental health in general, their sense of professional identity and their successes or failures on the job (Maslach 1976:16).

After these pioneering studies, research into burnout began to focus more specifically on care-giving occupations in which an indispensable feature of the job is the quality of the relationship between the provider of care and the recipient of care, and between the provider and his or her co-workers and family members. In other words, these early studies concentrated more on trying to identify the interpersonal contexts of various jobs rather than the individual stress responses of those who occupied these jobs. Three important indicators of burnout emerged from these studies. They were *emotional exhaustion*, *a detachment from concern about clients* and *a feeling of reduced personal accomplishment* (Maslach et al 2001:397). This represents the first phase of burnout research which was, as has been noted above, dominated by qualitative descriptions of the symptoms of burnout. Maslach et al (2001:397) reported that their research was based on interviews, field observations, and case studies.

The second phase in burnout research took off in the 1980s when burnout research moved towards a more systematic and empirical approach that focused on methods and techniques for assessing the degree and intensity of burnout (Cordes & Dougherty 1993:621; Maslach et al 2001:397). The research done during this phase was quantitative in nature and made much use of questionnaires and surveys. These studies ultimately led to the development of the Maslach Burnout Inventory (MBI) of Maslach and Jackson in 1981. Various other measurement scales that were developed during this period were the Burnout Measure (Pines, Aronsson & Kafry 1981), and the Oldenburg Burnout Inventory (Ebbinghaus 1986). Although the original version of the MBI was designed to

measure burnout only in human service work (Maslach & Jackson 1981:99), the need for a more general and a specialised measurement tool led to the appearance of the MBI-General Survey that was first published in 1996 (Schaufeli, Leiter, Maslach & Jackson 1996:19). The MBI has continued to be used widely by burnout researchers because of its strong emphasis on psychometric procedures (Maslach et al 2001:401).

The 1980s phase in burnout research produced a much greater diversity of perspectives and theories about burnout. It also saw an increasing emphasis on the scholarly and theoretical basis of burnout studies and the use of standardized tools and research designs. But since most of the studies that were conducted during this period were cross-sectional in design, they contributed little to an understanding of the causative factors of burnout (Maslach et al 2001:402).

The third phase was also dominated by empirical research – but with developments in several different directions. Firstly, the concept of burnout was extended to include workers in occupations other than human and caregiving services. Secondly, burnout research was enhanced by use of more sophisticated methodologies and statistical tools. Thirdly, a number of longitudinal studies were initiated that assessed the links between what employers thought about their work environment at one particular time and the way in which they perceived the same work environment at another later time. This final phase was also characterised by an interest in assessing the impact of various kinds of interventions made on those who were suffering from burnout (Borritz 2005:9; Engelbrecht 2006: 27; Maslach et al 2001:397).

2.2.2 Description of burnout

The definitions of burnout are many and varied. According to Burke and Richardsen (1996:327), there are two categories of burnout definitions: in the first category, the definitions are broader, and, in the second category, they are narrower. The broader definitions, which include those of Freudenberg and Richelson in 1980 (as cited in

Cooper, Dewe, O'Driscoll 2001: 81), basically equate burnout with stress. They emphasise the connection between burnout and a long list of adverse health and well-being variables, and suggest that burnout is, in the last resort, caused by the relentless pursuit of success. The narrower definitions, such as those of Maslach and Jackson (1981:99), emphasise the connection between burnout and the working lives of health service professionals, occupations in which their job requirements constantly expose employees to emotionally charged and draining interpersonal situations.

Because of the increased interest in burnout over the past few decades, new researchers have appeared on the scene and have proposed an array of definitions of burnout that emphasised different aspects of the phenomenon. What follows below is a summary of the more common definitions of burnout in the words of those who proposed them.

1974

Freudenberger (1974:159):

“To fail, wear out, or become exhausted by making excessive demands on energy, strengths or resources.”

1980

Cherniss (as cited in Schaufeli & Enzmann 1998:34):

“The first stage involves an imbalance between resources and demands (stress). The second stage is immediate, short-term emotional tension, fatigue, and exhaustion (strain). The third stage consists of a number of changes in attitude and behaviour, such as a tendency to treat clients in a detached and mechanical fashion, or a cynical preoccupation with gratification of one’s own needs (defensive coping).”

1986

Maslach and Jackson (1986:99):

“Burnout is a syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur among individuals who do ‘people work’ of

some kind. This is the most influential and widely accepted definition of burnout. This led to the establishment of the Maslach Burnout Inventory.”

1988

Pines and Aronsson (as cited in Pines 1993:33):

“A state of physical, emotional, and mental exhaustion caused by long term involvement in situations that are emotionally demanding.”

1997

Maslach et al (1997:18):

“Burnout ... represents erosion in values, dignity, spirit, and will – an erosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it is hard to recover.”

1998

Schaufeli and Enzmann (1998:36):

“Burnout is a persistent work related state of mind in ‘normal’ individuals that is primary characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work. This psychological condition develops gradually but may remain unnoticed for a long time by the individual involved. It results from a misfit between intentions and reality in the job. Often burnout is self-perpetuated because of inadequate coping strategies that are associated with the syndrome.”

2001

Schaufeli and Greenglass (2001:501):

“A state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding.”

2005

Kristensen et al (2005:192):

“The core of burnout is fatigue and exhaustion, which is attributed to specific domains or spheres of a person’s life. Personal burnout is the degree of physiological and psychological fatigue and exhaustion experienced by the person. Work-related burnout is the degree of physiological and psychological fatigue and exhaustion that is perceived by the person as related to his/her work. Client-related burnout is the degree of physiological and psychological fatigue and exhaustion, which is perceived by the person as, related to his/her work.”

“Burnout is not included as a specific diagnostic classification in officially recognised and accepted diagnostic classification systems, such as the DSM-IV TR and the ICD-10. It is classified in the Adjustment Disorder in the unspecified subtype, which is used for maladaptive response to stressors (DSM IV-TR 2000: 680). In the ICD-10, it is categorised in the problems related to life difficulty management and it refers to “a state of vital exhaustion (ICD-10, Z73.0).”

2.2.3 Multidimensionality of burnout

As was already noted in the previous section, no standard definition of burnout exists. In spite of this, Maslach developed the multidimensionality model of burnout from summarising the consensus of most researchers on burnout about the three core dimensions of burnout (Maslach 1998:69). In her model, Maslach conceptualises burnout in terms of the following three interrelated dimensions:

- Emotional exhaustion
- Depersonalisation
- Reduced personal accomplishment

2.2.3.1 Emotional exhaustion

Emotional exhaustion refers to a spectrum of feelings that result from being emotionally overextended and therefore depleted of one's normal reserve of emotional resources (Maslach 1993:20). According to Maslach et al (2001:397), the major contributors to this kind of exhaustion are having more work than one can cope with (work overload) and having to endure excessive personal conflict at work. She describes a situation in which an otherwise normal person begins to feel drained and "used up" because they have no more sources of replenishment (Maslach 1993:22). This state represents the individual dimension of burnout.

Emotional exhaustion is the most widely reported and most thoroughly analysed component of burnout (Maslach 1998:77). She refers to it as the "central quality of burnout and the most obvious manifestation of this complex syndrome".

Nevertheless, because this is essentially an individual response, it fails to capture the critical aspect of the relationships that people have to endure and cope with in their work. Maslach (1998:78), however, notes that chronic exhaustion can lead people to distance themselves emotionally and cognitively from their work and so become less involved and responsive to the needs of other people and to the task in hand in the work situation. This induces a sense of depersonalisation in the individual.

2.2.3.2 Depersonalisation

Depersonalisation represents the interpersonal dimension of burnout. It refers to a negative, cynical or emotionally detached response to other people that might include an excessive or unrealistic idealism about the tasks in hand (Maslach 1998:77). Since depersonalisation develops in response to an individual's failure cope with and processes an excess of cumulative emotions, and the emotional exhaustion or depletion that is consequent upon this failure, the function of depersonalisation is essentially, in

the first analysis, self-protective because it functions as an emotional barrier that protects an individual from further dysfunction. Depersonalisation can, however, turn into dehumanisation, and dehumanisation has the potential to harm the person who experiences it as well as all those with whom he or she comes into contact. According to Maslach (1998:78), distancing can take the form of depersonalisation in people who work in service-providing or caring professions. But, as Maslach points out, one does not have to be a member of the service-providing or caring professions to suffer from burnout. In those who are not in these professions, burnout manifests itself as a profound cynicism about the job itself and all its circumstances. Maslach et al (1996:121) explain that depersonalisation is such an immediate and automatic (unconscious) reaction to extreme exhaustion that a strong correlation has been found between extreme emotional exhaustion and depersonalisation in a wide range of organisational and occupational burnout research.

2.2.3.3 *Reduced personal accomplishment*

Reduced personal accomplishment refers to a decline in feelings of personal competence and productivity at work and may actually reflect the consequences all the feelings that it indicates. This is the component of the burnout syndrome that is connected with self-evaluation and self-assessment – whether such evaluations are realistic or unrealistic, accurate or inaccurate (Maslach 1993:20). In addition, Maslach (1998:69) links deficits in personal accomplishment to the paralysing effects of depression and a consequent inability to cope with what might be the normal demands of the job. This kind of negative self-evaluation and paralysis may be aggravated by an absence of social support and career opportunities which allow a person to develop professionally.

Relationships obtained among reduced personal accomplishment, emotional exhaustion and depersonalisation are complex. According to Lee and Ashford (1996:123), reduced personal accomplishment appears to be a function of some critical threshold of either

emotional exhaustion or depersonalisation or a combination of both together. Jobs that are inherently emotionally exhausting are likely to make those who are prone to burnout, cynical about their profession and their performance in it. This, in turn, will inevitably reduce (or at least distort) the sense of accomplishment that they might have felt about their job had they not been suffering from the effects of burnout. Exhaustion and depersonalisation may, on the other hand, interfere with people's ability to accomplish or achieve their goals and thus reduce their sense of personal achievement.

Leiter (1993:240) is of the opinion that the conviction of reduced personal accomplishment may exist in parallel to depersonalisation and emotional exhaustion rather than sequentially. But while a subjective conviction of reduced personal accomplishment may realistically be attributed to a lack of relevant resources, depersonalisation and emotional exhaustion are associated in the literature with the pernicious effects of an excessive and unmanageable workload and the persistence of social conflict in the work situation.

The three dimensions mentioned above are conceptualised diagrammatically in figure 2.1 below.

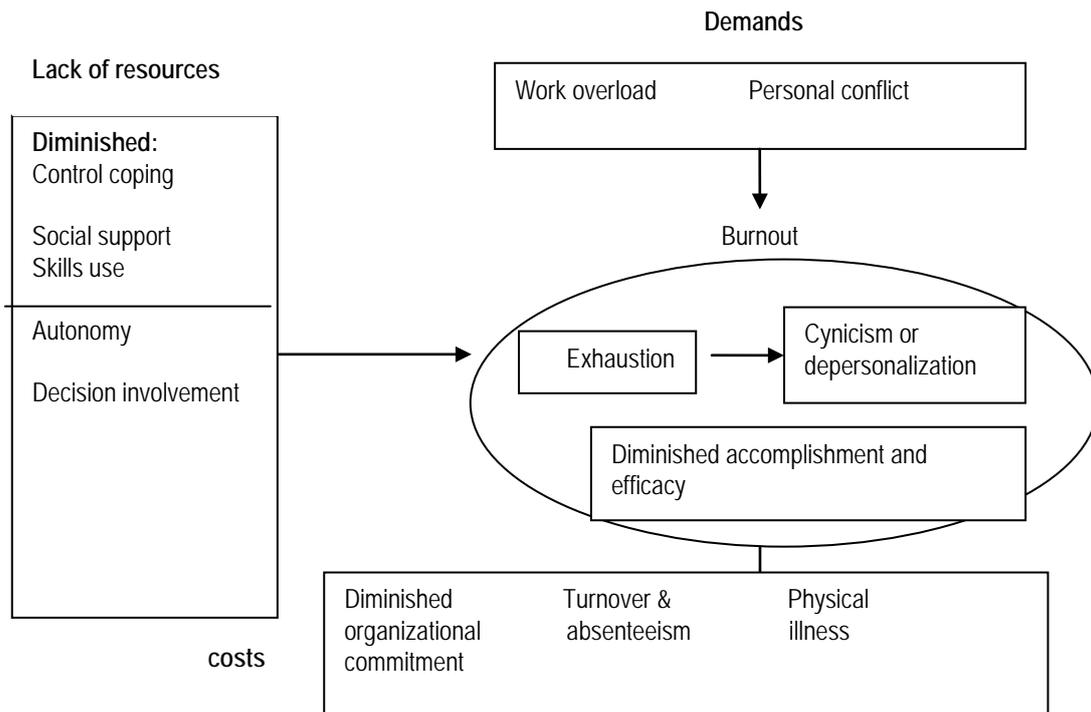


Figure 2.1 Model of how the elements of burnout are related

Source: Maslach (1998:77)

2.2.4 Symptoms and consequences of burnout

Schaufeli and Enzmann (1998:21) described 132 possible symptoms obtained from various uncontrolled clinical observations and interviews. These symptoms are classified in the same way as psychological symptoms. According to these observers, burnout is experienced not only on a personal level but also on an interpersonal and organizational level, and they become evident on these levels. Table 2.1 sets out some of the symptoms of burnout in terms of their classifications.

Table 2.1: Symptoms of burnout

PERSONAL				
AFFECTIVE	COGNITIVE	PHYSICAL	BEHAVIOURAL	MOTIVATIONAL
Depressed mood, tearfulness, emotional exhaustion, changing moods, decreased emotional control, undefined fears, increased tension, anxiety	Helplessness, loss of meaning and hope, fear of "going crazy", feelings of powerlessness, sense of failure, feelings of insufficiency, poor self-esteem, guilt, suicidal ideas, inability to concentrate, forgetfulness, difficulty with complex tasks, rigidity and schematic thinking, difficulties in decision making, intellectualisation, loneliness	Headaches, dizziness, restlessness, nervous tics, muscle pains, sexual problems, sleep disturbances, sudden loss or gains of weight, shortness of breath, increased pre-menstrual tension, missed menstrual cycles, chronic fatigue, hyperventilation, gastrointestinal disorders, coronary disease	Hyperactivity, impulsivity, procrastination, increased overconsumption of stimulants, overrating and underrating, high risk-taking behaviours, increased accidents, abandonment of recreational activities, compulsive complaining	Loss of zeal, loss of idealism, disillusionment, resignation, disappointment, boredom, demoralisation
INTERPERSONAL				
Irritability, oversensitivity, coolness and lack of emotion, lessened emotional empathy with recipients, increased anger	Cynical and dehumanising perception of recipients, negativism with respect to recipients, lessened cognitive empathy with recipients, stereotyping of recipients, labelling recipients in derogatory ways, "blaming the victim", air of grandiosity, air of righteousness, "martyrdom", hostility, suspicion, projection, paranoia		Aggressiveness towards recipients, marital and family conflicts, social isolation and withdrawal, detachment with respect to recipients, expression of hopelessness, helplessness and meaninglessness towards recipients, jealousy, compartmentalisation	Loss of interest, discouragement, indifference with respect to recipients, using recipients to meet personal and social needs, overinvolvement

ORGANISATIONAL				
AFFECTIVE	COGNITIVE	PHYSICAL	BEHAVIOURAL	MOTIVATIONAL
Job dissatisfaction	Cynicism about work role, feelings of not being appreciated, distrust in management, peers and supervisors		Reduced effectiveness, poor work performance, decline in productivity and turnover, increased sick leave, absenteeism, resistance to change, being over-dependent on supervisors, "going by the book", increased number of accidents, inability to organise	Loss of work motivation, resistance to go to work, dampening of work initiative, low morale

Source: Schaufeli and Enzmann (1998:21)

2.2.4.1 *Affective symptoms*

The affective symptoms together indicate a person who is gloomy, tearful and depressed (Schaufeli & Enzmann 1998:25). Such people suffer from emotional exhaustion because they have used up all their energy in trying to deal with stressful situations or trying to contain negative emotional situations. Emotional exhaustion is one of the most common symptoms of burnout and has been accepted by researchers as one of the dimensions of burnout.

The normal strategy that people use for dealing with emotional exhaustion on an interpersonal level is to try to distance themselves from their work and colleagues. Such a person is easily incited to irritability and anger by his or her colleagues while

remaining distance and aloof to the recipient of their services. This kind of behaviour creates discomfort in all concerned and consequently tends to make people dissatisfied with their job in the organisation as they unconsciously project their personal dissatisfaction and unhappiness onto those with whom they work.

2.2.4.2 *Cognitive symptoms*

The burned-out person presents with feelings of hopelessness, helplessness, and powerlessness. According to Schaufeli and Enzmann (1998:25), such a person feels out of control and experiences an enveloping sense of doom. This prevents the sufferer from being able to concentrate, make decisions and complete even normal run-of-the-mill tasks. On an interpersonal level, the person suffering from burnout becomes cynical and consequently tends to dehumanise the recipient of his or her services. In effect, they feel less empathy for the recipients of their services. The burned-out nurse, for example, begins to assign derogatory labels to her patients, and may come to regard all elderly patients as troublesome and wasters of her time.

On the organisational level, those who suffer from burnout become increasingly cynical about their work role and begin to feel that they are unappreciated by their management and peers – whether or not there is any evidence to support such a conviction.

2.2.4.3 *Physical symptoms*

Schaufeli and Enzmann (1998:26) assign the physical symptoms of burnout into the following three categories: indefinite physical distress complaints, psychosomatic disorders, and physiological reactions.

“Indefinite physical distress complaints” do not correspond to any known pattern of physical illness and include headaches, nausea, dizziness, restlessness, nervous tics, and muscle pains (which often manifest as shoulder and neck and lower-back pain).

Some individuals suffering from burnout develop “psychosomatic responses to the ongoing stress in the form of physical problems such as ulcers, gastro-intestinal disorders, and coronary heart disease” (Schaufeli & Enzmann 1998:27). Many burned-out individuals start to indulge in high-risk behaviours in order to take their mind off the frustrations and stress that they experience at work. This, in turn, increases their susceptibility to physical injuries (Schaufeli & Enzmann 1998: 27). Hypertension, an increased heart and respiration rate, as well as high levels of serum cholesterol, have also been linked to burnout.

2.2.4.4 Behavioural symptoms

The presence of burnout also becomes evident in the behaviour of the person concerned in that they become more aggressive and tend to engage more frequently than an average person in high-risk behaviours. There might also increase their consumption of alcohol and/or tobacco and end up being dependent on either of these substances. A study of the Finnish working population over a twelve-month period showed that alcohol dependence was associated with the symptoms of burnout among both men and women. In this study, each one-point increase in burnout score was associated with an 80% increase in the incidence of alcohol dependence among women and a 51% increase of alcohol dependence among men (Ahola, Honkonen, Pirkola, Isometsä, Kalimo, Nykyri, Aromaa & Lönnqvist 2006:1438).

On an organisational level, a person who is suffering from burnout also experiences a reduction in work productivity, personal effectiveness and general performance. This is evident from the increasing number of performance errors that the person makes and his or her poor commitment to the work in hand. Such a person is unable to make

independent decisions; they tend to be sceptical and unreceptive to new ideas. They are also more frequently absent from work on grounds of illness than other employees. Toppinen-Tanner, Ojajarri, Väänänen, Kalimo, Jäppinen (2005:18) demonstrated a correlation between burnout and the probability of a higher than average number of days taken for sick leave because of mental and behavioural disorders and diseases of the musculoskeletal system. This is supported by Ahola, Kivimaki, Honkonen, Virtanen, Kokinen, Vahtera and Lönnqvist's (2008:185) study on Finnish employees , who found that, after adjusting for mental and physical illnesses, severe burnout was always associated with higher than average increases in absence from work on grounds of illness.

2.2.4.5 *Motivational symptoms*

When a person who has a tendency to burnout is a new employee, he or she is full of zeal, enthusiasm and interest and seem to suffer from the illusion that they are being employed in a very special kind of job (no matter how ordinary it may be). But as they become more and more burned out, such a person loses his or her sense of specialness, and disappointments and frustrations begin to set in. This might happen because the person's initial expectations were unrealistic and impossible to satisfy in the first place, and so the person becomes increasingly demoralized and unhappy. It is as though they unconsciously set themselves up for disappointment and frustration because of their initial highly unrealistic and unjustified expectations. Increasing demoralisation causes people who suffer from burnout to become indifferent to the recipients of their services, and they also entertain the conviction that their recipients make far too many demands on them. It sometimes also happens that the social and personal demands and expectations of the burnout victim begin to take precedence over their duty and the needs of the workplace, and this may lead to various forms of unethical behaviour. Sufferers from burnout experience poor work motivation and it often becomes increasingly difficult for them to wake themselves up to go to work. Once the initial enthusiasm they felt for the job has disappeared, their interest in their work and their

initiative become unequal to their tasks. One of the interesting facts about burnout is that it can become psychically “contagious”. This means that the feeling of burnout can spread from an employee who is burned out to others who were not burned out before they made contact with that employee. A study undertaken by Bakker, LeBlanc and Schaufeli (2005:376) on nurses working in critical care settings showed that burnout was “contagious” in the sample that they studied. They found, for example, that the nurses who reported the highest prevalence of burnout among their colleagues were most likely to experience the greatest degree of burnout themselves. This contagion effect was valid for all three components of the burnout phenomenon.

2.2.5 Instruments for measurement of burnout

As was noted in the previous section, burnout has been defined in various ways by different researchers at different times. Because burnout researchers have approached the burnout phenomenon in different ways, they have developed a variety of instruments for the measurement of burnout. In this section, the researcher will discuss some of the most frequently used instruments for the measurement of burnout.

2.2.5.1 *Maslach Burnout Inventory*

The Maslach Burnout Inventory, which was developed by Maslach and Jackson in 1981, is the instrument that has been most frequently used to measure burnout in the past few decades. Although the Maslach Burnout Inventory was initially developed to assess levels of burnout among human services professionals, it was later adapted to measure rates of burnout in other occupations. The Maslach Burnout Inventory is a self-reporting paper-and-pencil test that covers all of the three dimensions of burnout that were defined by Maslach and Jackson (1986:99). These dimensions are emotional exhaustion (psychic depletion and the exhaustion of emotional resources caused by interpersonal demands), depersonalisation (the development of negative, callous and cynical attitudes toward the recipients of one’s services), and reduced personal

accomplishment (the tendency to underestimate the value of one's professional services to the recipients of those services, even when there is no rational evidence for supporting the belief that this might be true).

Although burnout was originally believed to affect mostly professionals who offer direct services to other people in the caring or health-related professions, the concept of burnout was broadened in 1996 to include professionals in other occupations as well. It was then that the original three dimensions of the Maslach Burnout Inventory were expanded to include professionals who do not offer direct services to other people. In terms of this expanded definition of burnout, emotional exhaustion and depletion is now recognised as a symptom of burnout, irrespective of its cause and the vocational context of the person who is experiencing it. In the same way, the kind of cynicism that is reflected in indifference towards work, a normal lack of interest in other people, and a lack of professional efficacy, were also then included in an expanded definition of burnout that takes account of both the social and non-social aspects of a variety of occupations (Schaufeli & Buunk 2003:293).

The following three versions of the Maslach Burnout Inventory (Maslach & Jackson 1996:2) are currently being used by researchers:

- The original instrument that was designed for professionals in the human services – MBI-Human Services Survey (MBI-HSS)
- An adaptation of the original instrument for use with educators – MBI-Educators Survey (MBI-ES)
- A new version of MBI designed for use with workers in other occupations – MBI-General Survey (MBI-GS).

Although the MBI is most commonly used in its original English version, individual researchers have translated the MBI into other languages in order to use it in their research and studies. But Maslach et al (1997:212) have pointed out that such

translations are ad hoc and are only used by specific researchers. They have indicated that because they have not officially certified any translation of the Maslach Burnout Inventory, no such version is commercially available.

The MBI-HSS will be discussed in detail in chapter 4 because it is the instrument that is used in this study.

2.2.5.2 *Burnout Measure*

The Burnout Measure was developed by Pines and Aronson in 1988. Pines and Aronson (1988:9) defined burnout as a state of physical, emotional and mental exhaustion that is caused by long-term involvement in situations that make enormous emotional demands on the person who eventually develops burnout. When they developed the Burnout Measure, Pines and Aronson devised a more empirical definition of burnout in which they described burnout as a sequence of symptoms that consisted of an overall feeling of helplessness and powerlessness combined with a lack of enthusiasm, high levels of irritability and chronically low self-esteem (Schaufeli & Enzmann 1998:32). Unlike the MBI, which was originally designed to measure burnout in health services professionals, the Burnout Measure was designed for use with all occupational and even non-occupational groups (Kyriakidou & Özbilgin 2006:978).

The Burnout Measure, which is a self-reporting measure with items that are rated on a seven-point frequency scale, is able to measure the degree of physical, mental and emotional exhaustion from which a person may be suffering. Although Pines and Aronson defined burnout as a multidimensional construct, the Burnout Measure is a one dimensional questionnaire which produces a single burnout score.

Schaufeli and Van Dierendonck (1993:631) are of the opinion that because the Burnout Measure assesses the non-specific affective component of burnout (i.e. exhaustion), it should be supplemented by a scale that also measures the attitudinal component of

burnout (i.e. the intensity of people's negative attitudes towards the recipients of their services and towards their own job performance).

2.2.5.3 *The Copenhagen Burnout Inventory*

The Copenhagen Burnout Inventory, which is the most recent burnout measure to be developed, was developed by Kristensen et al (2005:192) and has three different scales:

- a scale that measures general exhaustion (which they call *personal burnout*)
- a scale that measures work-related burnout
- a scale that measures client-related burnout

According to Kristensen et al, the questions in their personal burnout scale were inspired by the Burnout Measure questionnaire and the questions about work-related burnout were inspired by the subscale on emotional exhaustion of the MBI/MBI-General Survey questionnaires. While the burnout scales of the *Copenhagen Burnout Inventory* correlate with one another, the correlation is only partial and it supports the idea of three independent burnout scales (Borritz, Bültmann, Rugulies, Christensen, Villadsen, & Kristensen 2005:1015).

2.3 BURNOUT AMONG HEALTH CARE PERSONNEL

Health care professionals are at very high risk of developing burnout. This can be attributed to the fact that health care professionals are directly and continuously involved with human beings in their professions, and the intensity of these relationships can create or amplify the possibility of developing stress-related symptoms. Maslach et al (2001:398) noted that the relationship between the provider and the recipient of services is invariably emotionally demanding to some or other degree, and that the asymmetry of these relationships contributes to the incidence of burnout. Health care professionals also work in environments that are characterised by financial constraints,

high workloads, complex cases, and the need to adhere to the conventions and regulations of the profession in order to satisfy the diverse expectations of the recipients as well as the harsh realities of the job (Dollard, Dorman, Boyd, Winefield & Winefield 2003:84; Ohlson, Soderfeldt, Soderfeldt, Jones & Theorell 2001:268).

The prevalence of burnout in health care professionals has been reported across all specialities and is encountered in doctors (Shanafelt et al 2002:358) and in nurses (Lu et al 2005:211). In a study of health care providers in a trauma unit in South Africa, at least half of all the health care workers in the unit reported a high degree of professional burnout (Crabbe, Browley, Boffard, Alexander & Klein 2004:568). In another study of health care workers in Zambia, 62% of the health care workers reported moderate to high levels of emotional exhaustion (Dieleman, Biemba, Mphuka, Sichinga-Sichali, Sissolak, Van der Kwaak & Wilt 2007:139).

Kenya is not untouched by the worldwide prevalence of burnout in the health care professions. Research undertaken by Raviola et al (2002:55) reported a high level of emotional exhaustion in healthcare professions in Kenya, together with accounts of how health care professionals and other health care workers were refusing to work with patients who were affected by HIV/AIDS. Research undertaken by Shanafelt et al (2002:358) reported that 76% of the 115 residents in their sample in the USA conformed to their criteria for burnout. Research by Wu, Zhu, Li, Wang and Wang (2007: 233) into the mental health of medical practitioners in China revealed that 47.5% of the doctors they interviewed reported emotional exhaustion.

Nurses are particularly vulnerable to the development of burnout. This is reported in a study that investigated the health of health professionals in Nigeria. The participants in this study consisted of doctors, nurses, pharmacists, medical social workers and nursing assistants. It was found that nurses consistently reported the highest scores on all the measures of burnout when compared to other health professionals (Olley 2003:297). Such high levels of stress and burnout among nurses could well be attributed to the

excessively long working hours, the complexity of their relationships with their patients, and the additional demands that are made on them by their families, by physicians and even by co-workers (Albar-Marin & Gracia-Ramirez 2005:2; Shimizu, Mizoue, Kubota, Mishima & Nagata 2003:185). In addition, Vahey et al (2004:57) reported that 40% of nurses in developed countries suffered from burnout, and that one in every five nurses was contemplating resigning from his/her job in the following year. Because it is universally accepted and recognised that nursing is a stressful occupation, the ILO commissioned a manual that was designed to show nurses how they could minimise the levels of stress in their lives, both at work and at home.

For the same reasons, the International Council of Nurses (ICN) has made an urgent appeal to the leaders of the nursing profession to undertake a complete restructuring of environments in which nurses are called upon to work so as to prevent a global crisis in nursing profession throughout the world. With this specific project in mind, Andrea Baumann developed a toolkit in 2007 to facilitate the creative restructuring of the work environments of nurses. Baumann (2007:5) noted that the two most important considerations that emerge when attempting to create an optimal practice environment for nurses are, firstly, issues that reinforce or diminish a nurse's sense of professional identity and, secondly, the particular characteristics and design of the environments themselves. Baumann made use of two models that are applicable to nurse working environments in her study. These are Kristensen's model and the Magnet Hospitals model.

Kristensen's model identifies six stressors and then relates them to the needs and obligations of the individual nurse and of the organisation which provides the nursing services (Baumann 2007:6). According to Kristensen, the following factors are required for optimal social and psychological wellbeing of the nurses:

- The expectation that the demands of the job can be accommodated by the resources of the person (which would naturally result in the minimisation of work pressures)
- A high level of predictability in the nursing environment (which result in job security and workplace safety)
- The necessary levels of social support from colleagues and from managers in addition to access to opportunities for education and professional development opportunities (team work and study leave)
- Meaningful work (professional identity)
- According nurses the autonomy, resources and control they need to perform their job efficiently (these factors affect personal autonomy, control over scheduling and the ability to lead efficiently)
- A reasonable balance between effort and reward (remuneration, recognition and professional rewards for good service)

While the Magnet Hospitals Model was devised in the USA by McClure in 1983, it has been recognised and used all over the world. A “magnet hospital” refers to a facility that is able to attract and retain a workforce of well-qualified nurses and to provide a consistent level of quality care. Some of the criteria used for magnet hospitals are applicable to all work environments ranging from the general (e.g. those places that are able to assure quality care and have a reputation for being a good place to work) to the specific (those places that have high retention and low turnover rates for staff, adequate staff for performing the necessary tasks, flexible schedules, strong leadership, and adequate salaries). According to Aiken et al (2002: 1987), nurses in magnet hospital environments enjoy the advantages and benefits of lower burnout rates, higher job satisfaction and better patient outcomes.

In Sub-Saharan Africa, the ICN and the Stephen Lewis Foundation are collaborating with national nursing associations and Becton, Dickinson and Company to provide wellness centres that will concentrate on establishing and maintaining the psychological

and physical health of health care workers and their families. One of the main focuses of these centres is both the treatment and management of stress in health care workers (Baumann 2007:27).

It has been widely reported that nurses who work in critical care units suffer from significantly higher levels of burnout in comparison to nurses who work in other units or specialities. De Martino and Misko's (2004:161) study of 296 nurses from different specialties found, for example, that nurses in the critical care unit reported much higher levels of burnout than those who work in other wards.

2.4 CAUSES OF BURNOUT

Research undertaken by Aiken et al (2002:1987) and Poncet et al (2007:698) have demonstrated a positive correlation between individual and situational factors and the occurrence of burnout in nurses, a finding that they noticed was particularly applicable to nurses who work in critical care units. These findings are supported by an earlier study by Stechmiller and Yarandi (1993: 534) on predictors of burnout in critical care nurses. In this study, Stechmiller and Yarandi attributed burnout either to well-defined personal and situational factors, or to a combination of the two.

2.4.1 Situational factors

Situational factors refer to those factors that are intrinsic to the work environment of the any nurse. Maslach et al (2001:407) refer to them as "the characteristics" of the job, the occupation and the organisations in which nurses perform their functions. According to these authors, "job characteristics" refer to the actual quantitative and qualitative demands of a particular job and the absence or otherwise of the needed resources to perform the job. "Occupational characteristics" are those that reflect the demands and expectations of a particular vocational occupation, while "organisational characteristics" focus on the values implicit in the organisational processes and structures of a particular

occupation. In the discussion that follows, the researcher will look at the most common situational factors that facilitate the development of burnout.

2.4.1.1 Job demands and resources (JD-R model)

Job demands and resources are derived from the Job Demands and Resources model (Bakker, Demerouti, De Boer & Schaufeli, 2003:341; Bakker, Demerouti & Verbeke 2004:83; Demerouti et al 2001:499; Schaufeli & Bakker 2004:293). This model is based on two premises. The first premise is the assertion that despite the fact that different occupations have particular characteristics, some of which are associated with the development of burnout, it is nevertheless possible to group all these characteristics into two basic groups, namely *Job demands* and *Job resources*. These are depicted in figure 2.2 (below).

“Job demands” refer to the physical, psychological, social and organisational aspects of a job that require sustained physical and/or psychological (cognitive or emotional) effort and that therefore make certain physiological and/or psychological demands on those who work in them. While job demands may not necessarily be objectively arduous, they become significant stressors when the effort required by a particular employee to meet the demands of the job, requires a degree of effort from the employee that induces burnout (Bakker & Demerouti 2007:309). Examples of job demands that result in burnout are an increased or unmanageable workload, role conflict and ambiguity, the demands made by shift work, and the pressure of unreasonable deadlines (time pressure).

“Job resources” refer to those physical, psychological, social and organisational resources that:

- reduce the severity of certain job demands and the associated physiological and psychological costs associated with them

- assist a worker to achieve his or her work goals
- stimulate personal growth, learning and development

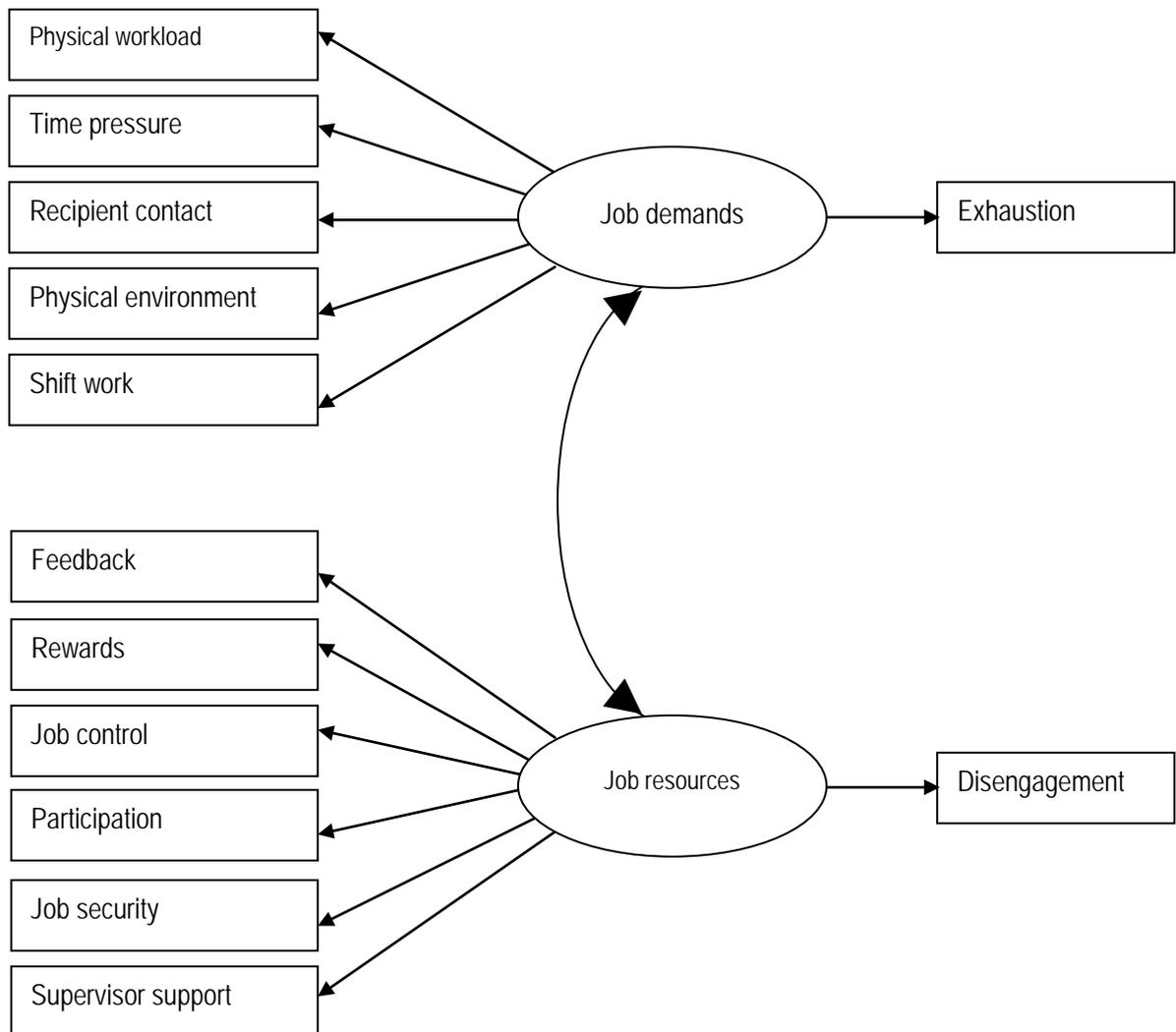


Figure 2.2: The Job Demands-Resource model of burnout

Source: Demerouti, Bakker, Nachreiner and Schaufeli (2001:499)

Resources might be organisational in nature (salary, career opportunities, and job security) and interpersonal and social (supervisor and co-worker support, team atmosphere). They may also be identified as features of how the work is organised (role clarity, participation in decision-making) or may be found at the level of individual

tasks (performance feedback, skill variety, task significance, task identity, autonomy) (Bakker et al 2004:83; Schaufeli & Bakker 2004:293).

The second premise of the JD-R model is that two different underlying psychological processes play a role in the development of job strain and motivation and lead to the development of burnout (see figure 2.2 below). In the first process, the more demanding requirements of a job constantly overtax the worker's resources. This may result in the exhaustion of an individual's emotional, mental and physical resources and therefore contribute to the development of burnout.

The second process is motivational in nature. The assumption behind this process is that job resources have motivational potential that can engender close engagement with the work in hand, low levels of cynicism, and excellent performance on the part of workers. Job resources may thus either play an *intrinsic motivational role* because they foster the growth, learning and development of employees, or they may play an *extrinsic motivational role* because they can be used as instruments for achieving work goals (Bakker & Demerouti 2007:309). A lack of resources can complicate attempts to meet the demands of a job. This might lead to withdrawal behaviour on the part of employees as well as reduced motivation and commitment in the workforce – all of which result in varying degrees of disengagement (Demerouti et al 2001:499).

Apart from the main effects of job demands and resources, the JD-R model also suggests that it is the interaction between job demands and job resources that creates either unacceptable levels of job strain or desirable levels of employee motivation. The model makes it clear that adequate job resources can protect employees from the full impact of the strains induced by job demands, and also from the pernicious effects of full-blown burnout (Bakker et al. 2003:341). When a nurse, for example, feels that he or she has the full support of the supervisor and when the supervisor actively involves him or her in the decision-making processes of the ward, this kind of recognition, appreciation, respect and involvement may function to protect the nurse concerned

from some of the more deleterious effects of an impossible and unmanageable workload.

Bakker and Demerouti (2007:309) expand this view by adding that there are other characteristics of the work situation that tend to act as moderators of the destructive effects of burnout. These include:

- the extent to which the onset of a stressor is predictable (this is made possible by clarity in role definition and by providing regular performance feedback)
- the extent to which the reasons for the presence of a stressor are explained to the worker (by means of information provided by supervisors)
- the extent to which the effects of a particular stressor can be controlled by the person who must experience it (this is effected by means of job autonomy)

The premises of the JD-R model are supported in a study on employees of a home care organization that was conducted by Xanthopoulou, Bakker, Demerouti and Schaufeli (2007:766). Four specific job demands (emotional demands, patient harassment, workload and physical demands) and four specific job resources (autonomy, social support, performance feedback and opportunities for professional development) were included in the study. The findings of the study revealed that when job demands such as patient harassment were balanced against job resources such as autonomy and support, it became possible to predict levels of physical and emotional exhaustion in workers, and that when job demands were balanced against factors such as the autonomy, support and professional development of the workers, it became possible to predict the levels of cynicism that workers would manifest about the work in hand. Autonomy proved to be the most important factor for mitigating the destructive effects of job demands in both of the burnout dimensions, followed by support and opportunities for professional development. All the most significant interactions were therefore predicted by the JD-R model. In those conditions where the four job demands

were high and the five job resources were low, the highest levels of exhaustion and cynicism among workers were encountered.

The final proposition of the JD-R model is that job *resources* influence motivation or work engagement when job *demands* are high (Bakker & Demerouti 2007:309) for example giving recognition, providing incentives and working under supervised backup. Hobfoll (2002:307) supports this by arguing that resource gain (for example recognition and giving feedback for a job well done) has an important influence in the morale and motivation of staff when there is loss of resources or high demands in the workplace. This implies that job resources are particularly valuable for their motivational potential in employment situations where employees are confronted with excessive job demands. A study conducted by Hakanen, Bakker and Demerouti (2005:479) tested this interaction in a sample of Finnish dentists. The researchers hypothesised that job resources (such as variability in the required professional skills and peer contacts) are most effective in maintaining work engagement in conditions where excessive job demands prevail (as in situations where workload is excessive and the physical environment is unfavourable to optimal performance). The dentists selected for the study were split into two random groups in order to validate the findings. The findings provided evidence for seventeen of the forty possible significant interactions (a rate of 40%). Thus, for example, variability in professional skills boosted work engagement when the qualitative workload was high, and thus alleviated the negative effect of qualitative workload on work engagement.

In the discussion that follows below, the researcher reflects on some of the job demands and resources which nurses' encounter and the way in which these affect the development of burnout by increasing its likelihood or mitigating its onset or severity.

2.4.1.1.1 *Nursing workload*

Increases in the workload of nurses is one of the mostly frequently cited causes of burnout (Adali & Priami 2002:1; Aiken et al 2002:1987; Bakker et al 2005:276; Demir, Ulusoy & Ulusoy 2003:807; Embriaco et al 2007: 686; Ridley 2007:429; Leiter & Maslach 2004:17; Poncet et al 2007:698). These enormous amount of research that has been conducted into the effects of increased nurse workloads have clearly demonstrated how adversely increased workloads affect a nurse's physical and mental health.

Workload refers to the relationship between the demands of the work and the time in which it has to be performed and the resources that are available to the nurse who must perform it (Maslach and Leiter 1997). Unreasonable expectations about the quantity of work that has to be performed, the time in which it has to be performed, and the resources with which it must be accomplished, manifest initially as an excessive workload and ultimately as burnout. It is intuitively obvious that excessive and unreasonable demands will rapidly exhaust even the most proficient individual's available sources of energy and will ultimately lead to a situation in which recovery becomes impossible (Maslach et al 2001:414).

Scales of workload are often used to operationalise the concept of nursing workload at the organisational level. Nursing workload is measured by determining the total amount of nursing time available (such time would include direct and indirect nursing services) for providing clients with adequate nursing services, and the number of nurses who would be necessary to provide such a service. The nursing workload measurement systems that have been devised take the following variables into account: total workload, nursing care, related nursing activities, support care and patient transportation (Fitzpatrick & Wallace 2005:412). Even though these measures appear to be objective variables for measuring workload, nurses will often described nurse workloads as being too heavy – a feature that is not captured in the methods of measuring nursing workloads mentioned above. In order to obtain the subjective

opinions of nurses themselves, Gaudine (2000:22) conducted interviews with thirty-one nurses in order to ascertain how they would personally define nursing workload and work overload in general. The nurses in the study described the following nine characteristics of excessive workloads:

- Volume (this represents the actual amount of work)
- Simultaneous demands that cannot be fulfilled at the same time
- Demands on the self
- The degree of difficulty of the work being performed
- The effects of anticipation
- A sense of responsibility for the lives of patients
- The sharing out of work among a team
- Work that overflows into non-work activities
- Emotional exhaustion

They defined nursing work overload more specifically in terms of the following factors:

- An insistence on the simultaneous fulfilment of two separate but incompatible demands
- The unfamiliarity of certain kinds of work, and having no option of being able to do work and work-related activities that the nurse particularly enjoys
- A large volume of work
- The responsibility that nurses feel for the care of the nurse's own patients and for the patients of other nurses

There are several important consequences that flow from compelling nurses to cope with excessive workloads. Research has shown that excessive nursing workloads adversely affect the safety of patients. Montgomery (2007:11) has demonstrated that fatigue, inadequate sleep and excessive and inappropriate workloads will (regardless of

discipline) have a significant effect on the incidence of medical errors that compromise the safety and even the lives of patients.

Because excessive nurse workloads negatively affect the quality of nursing job satisfaction, they also contribute to a high turnover in nursing personnel and thus contribute to the nursing shortage. Kovner, Brewer, Wu, Cheng and Suzuki (2006:71) conducted a study on 553 hospital nurses in 2006, and they found that nurses who reported that they had lighter workloads were more satisfied with their jobs than those who reported having higher workloads. High nursing workloads also affect a nurse's social roles. A study by Yildirim and Aycan (2008:1366) has shown that work overload and irregular work schedules were significant predictors of work and family conflict, and that work and family conflict was in turn associated in the study with lower job and life satisfaction.

Heavy nursing workload increases the incidence of burnout and its related disorders in nurses and their private and professional lives. A study undertaken by Li and Lamber (2008:34) found that nurses who work in intensive care units cite nursing workload as the most serious job stressor to which they were exposed. This is confirmed by reports from other studies. In a study that Hamaideh, Mrayyan, Mudallal, Faouri and Khasawneh (2008:40) undertook in hospitals in Jordan, nurses identified workload as the second most serious work-related stressor. These researchers found that increased workloads were not only related to higher patient acuity, but also to systemic work factors and expectations: nurses were expected to perform non-professional tasks such as delivering and retrieving food trays, housekeeping duties, the transportation of patients, and ordering, coordinating and performing ancillary services that should not have been their responsibility. Excessive workloads therefore consistently correlate with higher levels of emotional exhaustion in nurses.

A nationwide study conducted in the USA by Aiken et al (2002:1987) produced the following findings:

- For every patient added to the average staff nurse's workload, the risk of death following common surgical procedures increased by 7%, and the risk of failure to rescue patients with complications increased by 7%. They also found a 30% difference in mortality following surgery between hospitals where the average nurse workload is four patients and hospitals where the average workload is eight patients.
- Heavy workloads also contributed to staffing shortages. Thus, for each patient added to a nurse's workload, the rates of burnout and job dissatisfaction (two key indicators of job turnover) rose by 23% and 15% respectively.
- Hospitals in which high levels of nurse burnout occurred recorded high levels of patient dissatisfaction.
- There was a definite correlation between higher error rates and hospital staff nurses who worked on overtime and other shifts that lasted longer than 12 hours at a time.

2.4.1.1.2 *Role stress*

The work that nurses are expected to do and the roles that they are expected to perform have increased in complexity because of the increased number of health professionals and the more complex health needs of patients in the modern world. There is often little symmetry between the expectations that nurses have and the demands that are placed on them. Patients, the relatives of patients and the organisation in which nurses work all make excessive psychological and physical demands on nurses. This initially makes nurses uncertain, confused and uncomfortable, but eventually leads, in the long term, to demoralisation and cynicism about the profession, and, ultimately, full-blown burnout (Allen & Mellor 2002:905; Burke 2002:1059).

Nurses commonly encounter two major types of role stress: role conflict and role ambiguity. Role conflict is caused by communicating inconsistent and incomparable expectations to a person (Nelson & Quick 2005:219). The most frequent kind of role conflicts that occur are:

- those that arise because of a conflict between an the individual's values and those of his or her superior or the organization itself
- the conflicting demands of the work place and the worker's personal life
- the dissonance between a worker's abilities and the organisational expectations

“Role ambiguity” refers to the confusion that engendered in a worker by the expectations and demands of others. This may occur as a result of not understanding what is expected, not knowing how to do what is expected, and not knowing the result of a failure to do what is expected (Nelson & Quick 2005:219).

Although role conflict and ambiguity may occur independently, they both arise out of uncertainty about what one is expected to be able to do at work. Role conflict has been associated in the literature with low levels of job satisfaction, frustration, a decrease in trust and respect, diminished confidence in the organization, problems with morale and high levels of personal stress. It has also been noted that role ambiguity produces a higher correlation with job dissatisfaction than does role conflict.

Piko (2006: 311) also found that role conflict was a factor that contributed positively to emotional exhaustion and depersonalisation scores. A cross-sectional study on Australian nurses conducted by Spooner-Lane and Patton (2007:8) produced evidence that role conflict was the most reliable determinant of emotional exhaustion, which they described as the increased pressure, anxiety and stress that nurses experience as a result of trying to fulfil their duties responsibly. Their other finding was that role ambiguity was the main determinant of reduced levels of personal accomplishment. They also noted that such reduced levels of personal accomplishment made nurses feel

inadequate because they perceived themselves as being unable to meet the demands of their profession.

A literature review performed by Chang, Hancock, Johnson, Daly and Jackson (2005: 57) found that the work-induced stress is consistently cited as one of the main reasons why nurses leave the workforce. They therefore concluded that it was essential for institutions to implement strategies that would help nurses to deal with their occupational stress.

2.4.1.1.3 *Moral distress*

Nurses are frequently exposed to all the events that accompany death and dying. This is especially true of nurses who work in critical care environments. The aim of nurses who work in critical care unit is to provide appropriate and palliative expert care for all patients – even in situations where there is little hope that a patient will recover or even survive (Beckstrand & Kirchhoff 2005:395). In doing so, the nurse must sacrifice his /her values, beliefs, these leads to a conflict with the ethical decisions which is often taken and may lead to the development of *moral distress* as described by Beckstrand and Kirchhoff (2005:395). Moral distress has been defined by the American Association of Critical Care Nurses (AACN) as the feelings engendered in a nurse or caregiver when he or she is unable to act in an ethical way when what would be ethically appropriate in the situation is clearly known to the person concerned. By extension, moral distress has also been caused by the need for a nurse to act in a manner that is contrary to his or her own personal and professional values. The behaviour that arises out of such dilemmas obviously undermines the integrity and sense of personal authenticity of any nurse who feels compelled to act in such a way (AACN 2006).

The most frequently-cited situations that evoke moral distress in nurses who work in critical care units are those in which nurses are compelled to prolong the life of a person who is dying through the application and maintenance of aggressive treatments when

all hope of recovery or improvement has passed, and when simply allowing the patient to die a natural death with as much palliative care as possible would be more ethical and compassionate (Elpern et al 2005: 523; McClendon & Buckner 2007:199; Mobley et al 2007:256; Meltzer & Huckabay 2004:202). Ironically, the degree of moral distress experienced by critical care nurses has increased in tandem with exponential advances and improvements in medical technology that permit patients with zero hope of recovery or any kind of improvement to survive by means of artificial life-sustaining treatments such as mechanical ventilation, organ transplants and many others (Meltzer & Huckabay 2004:202).

The moral distress of nurses who work in critical care units inevitably affects the quality of their personal and professional lives in the long term, and ultimately results in burnout unless precautionary measures are taken to prevent full-blown burnout from occurring (McClendon & Buckner 2007:199). In addition, Meltzer and Huckabay's (2004:202) research showed that the frequency, with which nurses who work in critical care units encounter morally distressing situations and the prolongation of futile care provisions, is directly and significantly related to the experience of emotional exhaustion, which is one of the three components of burnout. These findings were supported in the study undertaken by Mobley et al (2007:256). They reported that 66% of their sample (n=42) experienced varying degrees of moral distress as a result of having to implement pointless and futile treatments to prolong human life in conditions where a realistic possibility of any kind of improvement in the patient's condition was zero. Constant exposure to such conditions in critical care environments resulted in emotional exhaustion in nurses and ultimately in full-blown burnout.

2.4.1.1.4 *Interpersonal conflicts*

The work environment in critical care units requires close collaboration between nurses who have specialised in different disciplines. The nurse who works in critical care units has to work in collaboration with her colleagues, with doctors, with her supervisors and

with the nurse manager. Because relationships in such conditions are frequently stressful, they elicit a degree of stress in those involved are frequently leads to the development of the burnout syndrome.

➤ **Nurse-nurse conflict**

A paper published by the AACN that describes the environment of critical care nurses reports that 25-32% of all the nurses in the sample that the quality of their interactions with their peers was either “fair” or “poor” (Ulrich, Lavandero, Hart, Woods, Leggett & Taylor 2006:46). Lateral hostility (which is also known as *horizontal violence*) refers to hostile and aggressive behaviour by individuals or group members towards other members or groups of members in the larger group to which they all belong. This kind of hatred, malice and aggression has been described as one of the main features of intergroup conflicts (Hastie 2002, Duffy 1995:5). Such negative attitudes appear in the form of back-stabbing, malicious gossiping, belittling gestures, constant carping criticism, and attempts to make excessive demands of others (AACN 2004; Dunn 2003:977; Hastie 2002). The morale of nurses who are the targets of this kind of gratuitous horizontal violence gradually deteriorates, and the victims of this kind of malevolent oppression develop all the symptoms of depression, low self-esteem and career fatigue that are the precursors and indicators of burnout (Alspach 2007:10; Mckenna, Smith, Pool & Coverdale 2003:90; Randle 2002:395).

These findings are supported in a study by Sa and Fleming (2008:411), in which they found that, out of the 107 nurses in the sample, 13% had experienced bullying in the previous six months. The three most common types of bullying experienced by nurses are being compelled to perform tasks that are below their level of competence, having significant areas of responsibility taken away from them and replaced with trivial and/or unpleasant tasks that demean their status, and being compelled to cope with unmanageable workloads. The research showed that the nurses who were bullied

experienced significantly higher levels of emotional exhaustion and compromised mental health when compared with colleagues who had not been bullied.

➤ **Nurse-physician conflict**

One of the most important relationships in clinical settings is the nurse-physician relationship. When the nurse and physician work together to set goals for their patients and to plan appropriate courses of care and treatment, the result is a healthy and efficient working relationships in which the nurse feels respected, affirmed and appreciated. Many nurses, however, feel that physicians do not respect them for their unique knowledge and skills. This inevitably results in relationships in which nurses are forced to endure varying degrees of unprofessional rudeness and humiliation which ultimately affects not only their personal happiness and professional fulfilment, but also the quality of care that patients receive (Jansky 2004:28). Rosenstein (2002:26) conducted a survey of a select number of nurses, physicians and healthcare executives who worked in a large network of hospitals. The majority of respondents (92.5%) reported witnessing some degree of disruptive physician behaviour in the context of the hospitals in the group. Both the physicians and the nurses in the study agreed that such behaviour exerts a deeply negative effect on the attitude of other staff members towards patient care, that it reduces the effectiveness of teamwork, and that it negatively affects the outcomes of patient care.

Poor nurse-physician relationships have been identified as an important cause of patient dissatisfaction and emotional and psychological exhaustion on the part of nurses – all of which are symptoms of burnout (Obrien-Pallas, Hiroz, Cook & Mildon 2005; Vahey et al 2004).

➤ **Nurse-supervisor conflict**

Optimal nursing environments are, without doubt, enhanced by respectful relationships between nurses and nurse supervisors. Leaders have been identified as indispensable for the success of nursing teams (Kosinska & Niebroj 2003:69), and effective and respectful clinical supervision can promote efficiency and autonomous behaviour in nursing professionals (Berggren & Severinsson 2006:637). Unfortunately, the relationship between nurses and their supervisors has often been described in research as lacking in trust and hindered by poor and ineffectual communication (Cline, Reilly & Moore 2003:50). Ulrich et al (2006:46) found that nurses in critical care environments rated the level of respect that they received from their superiors as the poorest they had experienced in any nursing capacity. This in itself is a cause for profound concern because patients in critical care units are presumably those who are most in need of attentive, balanced and compassionate therapeutic interventions.

The poor relationships that nurses experience in their profession have resulted in a vast number of negative professional and personal consequences that directly affect the quality of care that individual nurses are able to give to patients and the degree of happiness and fulfilment that all nurses should be able to experience in their profession. Poor relationships in the nursing profession ultimately cause large number of nurses to abandon their specialities, leave their units and even leave their profession altogether. Poor relationships between nurses and their supervisors therefore inflict far more harm on patients, on nurses themselves, and on the nursing profession in general, than might seem to be the case to an uninformed observer (Stone, Larson, Mooney-Kane, Smolowitz, Lin & Dick 2006:1907).

Wager, Fieldman and Hussey (2003:468) conducted a study in which they attempted to elucidate the physical effects of the nurse-supervisor relationship. In this study, they attempted to determine how the perceptions of nurses who felt that they were being unfairly and unreasonably treated by their supervisors, affected the blood pressure of the participants. They set up their experimental study so that they were able to record,

evaluate and categorise the blood pressure changes that occurred in nurses in the presence of their supervisors. They found that when the participants worked under a supervisor they considered to be fair, reasonable and respectful, their blood pressure dropped slightly. But the blood pressure of participants increased (the systolic by 15mmHG and the diastolic by 7mmHG) in participants when they were working under a supervisor whom they considered to be overbearing and disrespectful. Wager, Fieldman and Hussey therefore concluded that a supervisor who is perceived by her charges to be unfair and unjust constitutes a potent workplace stressor that might exert a clinically significant effect on the short- or long-term health of the nurses concerned.

Stordeur, D'Hoore, and Vandenberghe (2001:48) studied the effect of the leadership style of head nurses on the emotional exhaustion subscale of burnout of a select sample of nursing staff. Their findings were that when head nurses were regarded as transformational leaders, the staff nurses in the sample reported a lower degree of emotional exhaustion on the burnout scale. They also found out that the kind of leadership style that makes use of a continuous and gratuitous monitoring of performance and excessive criticism after mistakes have been made, correlated with noticeable increases in the emotional exhaustion rates of the nursing staff. This is supported by a study by Greco, Laschinger and Wong (2006:41), who found that there was an inverse relationship between empowering behaviour on the part of a leader and levels of emotional exhaustion (burnout) in nurses, and that the deliberate empowerment of nurses by their superiors resulted in lower levels of job tension and in increased effectiveness on the job.

2.4.1.1.5 Participation in decision making and autonomy

A clinical setting can only be an effective forum for decision if nurses are incorporated into the decision making process and are treated by all other members of the clinical team as essential participants in policy making, the direction and evaluation of clinical care and as valued contributors to the formulation of organisational policies (McCauley

& Irwin 2006:541). It is essential for a hospital's management team to solicit the nurses' opinions prior to making any decisions that affect them or that the provision of healthcare in the hospital. This kind of consultation is essential for maintaining the rather than goodwill of the nursing staff. Conversely, hospital managers who fail to demonstrate a caring and open communication style undoubtedly contribute to the development of the burnout syndrome in nurses. Maslach and Jackson (2001:402) borrow the opinion that burnout is far higher in people who are not involved in decision-making processes. This point of view is supported by other studies that have shown that the lack of participation in decision making contributes to a sense of depersonalisation and disengagement from a work in hand – and therefore ultimately to burnout (Bakker et al 2004:83; Demerouti et al 2001:499).

An increase in participation in organisational governance on the part of nurses should be facilitated by officially granting them the necessary time and compensation to engage in meaningful discussions and decisions about their work (Raiger 2005:71). In addition, Gifford, Zammonta, Goodman and Hill (2002:13) have observed that nurses who work in organisations where they are included in the participatory decision making process, demonstrate higher levels of organisational commitment, empowerment and job satisfaction and are far less likely to leave the nursing profession than nurses who are excluded from participatory and decision making processes.

When nurses are empowered by being involved in decision making processes, their expectations of what they expect to find in the work place and the actual conditions of the work place tend to be far more symmetrical. Such nurses enjoy a sense of being in control of their workloads, they feel satisfied with what they achieve, they feel rewarded and appreciated for their accomplishments, they experience a deeper sense of community with their peers, they have a sense of being fairly treated, and they believe that their personal values are in alignment with the values of the organization (Greco, Laschinger, Wong 2006:41). Under the conditions described above, nurses experience

much higher levels of engagement and suffer far less frequently from burnout and its predisposing symptoms.

Nursing autonomy is a concept that is closely related to decision making. "Nursing autonomy" is defined as the right of the nurse to determine her own course of action in accordance with the best judgment of the situation (Layman 2003:2). In a study conducted by Stewart, Stansfield and Tapp (2004:443), nurses described autonomy as their ability to accomplish their patient care goals in good time by using all accumulated knowledge, skills, experience and expertise to understand the condition and needs of a patient and to make a vital contribution to the overall plan for patient care. This contribution would include the assessment of patient needs and conditions, the effective communication of concerns and priorities during the course of patient care, and the assessment and coordination of the resources of the multidisciplinary team. A study by Varjus, Suominen and Leino-Kilpi (2003:31) came to the conclusion that the autonomy that is extended to Finnish intensive care unit nurses fundamentally supports their sense of empowerment in the workplace. The majority of nurses in that study reported that they enjoyed more autonomy in decision making about patient care than about unit operations.

A sense of autonomy contributes both to the sense of fulfilment and satisfaction that nurses derive from their jobs. Several studies have provided evidence that autonomy is a strong predictor of job satisfaction (Laschinger & Shamian 2001:209; Ray & Marion 2002:1; Senguin 2003:78; Papathanassoglou, Tseroni, Karydaki, Kassikou & Lavdaniti 2005:154). The lack of autonomy in the workplace, by contrast, correlates very strongly with the symptoms and development of burnout (Maslach et al 2001:407). An investigation by Flynn and Aiken (2002:67) whether nurses in the USA and other countries valued those attributes of the organisation that supported their professional nursing practice, and whether high levels of burnout could be correlated with the absence of such attributes in professional nursing practice in organizations. Some of the advantages that nurses valued and which contributed to their sense of job satisfaction

included nurse autonomy and control over the practice environment, and constructive and respectful relationships with physicians.

2.4.1.1.6 Career progression

When individuals start out in their professions, they initially experience a great deal of enthusiasm for their chosen profession. A new employee is generally full of energy, is willing to work hard, and finds his or her job challenging and exciting. But if this initial enthusiasm is replaced by conditions that are characterised by poor management, lack of involvement, frustration and poor procedures and supervision, the new employee begins to feel cynical, unappreciated, disregarded and undervalued. It is these conditions that produce a conviction of increasing powerlessness in employees. When the idealistic expectations that the person brought to the job are undermined by the inefficiency and incompetence of management, the employee begins to withdraw physically and mentally from the situation and eventually begins to present with the initial symptoms of burnout such as cynicism and depersonalisation. It is for this reason that a master plan for career progression should be drawn up for all employees because concrete measures for career development support a sense of personal accomplishment.

The materialisation of career advancement and promotional opportunities are effective in reducing occupational stress among professionals (Shell 2003:249).

2.4.1.1.7 Social support

Social support means the physical and emotional comfort that people receive from their family, friends, co-workers and others. These factors promote the conviction that we belong to a community of people who love and care for us. Social support can take many forms. It could be emotional, informational or physically tangible (practical). Emotional support increases when the supportive activities and the positive regard of others increase an individual's self-esteem and enhance his or her confidence and ability

to deal with challenges. *Informational support* helps a person to identify new strategies for resolving particular problems while *tangible support* means giving someone the resources to help that person to resolve the problems with which they are faced (Hawton, Rodham & Evans 2006:96).

Research has shown that social support may be effective in reducing the effects of burnout by removing some of the predisposing conditions that lead to the development of burnout or by protecting a person from whatever conditions make it more likely that the person will succumb eventually to full-blown burnout. According to Dollard, Dorman, Boyd, Winefield and Winefield (2003:84), direct social support service to create and maintain both physical and psychological health – regardless of the presence or absence of work stressors. When social support functions to insulate people against the destructive effects of the conditions that lead to burnout, it moderates the impact of the most destructive stressors and helps people to cope with high levels of stress. People who were enjoying high degrees of social support are therefore relatively resistant to the deleterious effects of stressful events and poor working conditions.

The role of social support has been extensively studied by researchers. Maslach and Schaufeli (2001: 397) have shown that a lack of proper support from supervisors is even more pernicious than a lack of support from co-workers. Research has also revealed lower levels of burnout in health care workers who enjoy high levels of social support. In a study that carried out research into medical residents, Prins, Hoekstra-Weebers, Gazendam-Donofrio, Wiel, Sprangers, Jaspers and Heijden (2007:1) showed that all the symptoms of burnout were extremely high among medical residents. They also demonstrated that a lack of social support exerted a direct effect on emotional exhaustion, and that a sense of depersonalisation (the most reliable predictor of burnout) could be predicated on the extent of the dissatisfaction that medical residents felt about the emotional support that they were receiving (or not receiving) from their supervisors. A grounded theory study by Rafii, Oskouie and Nikraves (2004:3) indicated that supportive behaviour and attitudes on the part of head nurses, nursing

administrators and co-workers alleviated the intensity of burnout symptoms among nurses, and that the support of head nurses was the most effective in this regard. But it was also observed that social support alone was insufficient to modify the behavioural and organisational inadequacies of an organisation, and that social support could only change some of the emotional and attitudinal responses of nurses.

Nurses who are engaged in offering voluntary counselling and testing services for people with HIV/AIDS in the Limpopo Province of South Africa reported that they were continuously exposed to extremely emotionally draining conditions, and that the very little support that they received from their supervisors in these conditions caused them to experience a whole spectrum of burnout symptoms (Mavhandu-Mudzusi, Netshandama & Davhana-Maselesele 2007:254).

2.4.2 Individual factors

Far less empirical research has been conducted into the risk factors associated with the causes of burnout in individuals rather than the causes of burnout in situations. This reflects the theoretical orientation of many of the leading researchers in this field (Cooper 2005:165). Since burnout has been described as more of a social phenomenon rather than an individual one by these researchers, the possible correlations between burnout and the individual characteristics of employees has been largely ignored. In spite of this, it has been accepted that since individuals vary in their ability to cope with stress and unfavourable job conditions, some employees may be far more prone to burnout than others. For this reason alone, it is vitally important not to ignore the significance of individual factors in burnout research (Hochwalder 2006:1051).

Research has also demonstrated a consistent correlation between the age of the subject and the onset of full-blown burnout. Since a far higher incidence of burnout has been reported in younger employees than in older employees, younger people are at far greater risk of burnout in the earlier stages of their careers (Maslach et al 2001:409). In a

study of sample of people selected from the whole population of Finland, Ahola et al (2006:11) found that, as a syndrome with three dimensions, burnout tended to be the more frequently associated with age and seemed to increase to some extent with the age of the subject. This contrasts with what has been reported in human service careers, where high levels of burnout are encountered among younger employees and lower levels among older employees. Ericksson and Grove (2007:3) found that younger nurses experienced significantly higher levels of burnout than did their older counterparts. They explain this by hypothesising that younger nurses are less efficient at blocking out their own personal feelings in stressful situations – an ability which at which older and more experienced nurses is presumably more efficient.

Gender has also been investigated as a possible variable in the development of burnout. The main difference identified by research is that men score more highly on the cynicism index while women score more highly on indices of emotional exhaustion. Research performed by Bekker, Croon and Bressers (2005:221) identified a gender difference with regard to emotional exhaustion. Their study found that while men reported higher levels of emotional exhaustion than women, women accumulated more days of absence from work because of illness. In a study on Dutch dentists, Brake, Bloemendal and Hoogstraten (2003: 321) revealed that male dentists scored more highly on the depersonalization dimension of the MBI than did female dentists. This same study detected no differences between the genders in any of the other important dimensions of burnout (such as the dimensions of emotional exhaustion and personal accomplishment).

Educational level has also been correlated with the onset of burnout. Relevant research has found that the higher the education level of the employee, the greater is the probability of developing burnout. A possible explanation for this is that people with higher levels of education tend to have higher expectations of their jobs. When they find that these expectations are not being realized, they are more likely to succumb to the various symptoms that eventually result in full-blown burnout. This finding coincides

with the predictions of the Pearlman and Hartman theory that relates to the perception and impact of job stress on employees. The theory predicts that when an employee's expectations and values do not coincide with the expectations and values of the organization, such an employee is far more likely to develop the symptoms of burnout (Pearlman & Hartman 1982:283). Erlen and Sereika (1996:953) examined these same issues in a study that investigated the relationship between ethical decision making and stress in ICU nurses. Their finding was that nurses with a bachelor's degree or other higher degrees revealed significant higher levels of stress-related conditions than nurses who possessed only an associate degree.

Several personality traits have also been positively correlated with the risk of developing burnout. Most of these studies have been developed by making use of the "Big Five Personalities" typology (Bakker, Van der Zee, Ledwig & Dollard 2006:31; Langelaan, Bakker, Schaufeli & Van Doornen, 2006:521; McManus, Keeling & Paice 2004:29). In terms of the big five personalities, neurosis and conscientiousness demonstrate the highest correlations to the development of burnout (Maslach et al 2001:411). Neurosis is defined in these theories in terms of trait anxiety, hostility, depression, self-consciousness and vulnerability, and neurotic individuals are regarded as those who are emotionally unstable and prone to psychological distress. "Conscientiousness" in this context refers to setting a high value on self-discipline, dutifulness, visible achievements and carefully planned rather than spontaneous behaviour (Howard & Howard 2006). A low degree of conscientiousness and high levels of neurosis have been correlated with poor work performance and being at higher risk of developing the symptoms of a burnout (Cohen & Rhydderch 2006:438; Judge, Heller & Mount 2002:530).

Schaufelli and Enzmann (1998:70) point out that it is important to note that a high correlation between the development of burnout and various personality traits does not always imply causality. They indicate that because certain individuals place themselves in situations that match their personality, such situations may nevertheless promote the

development of burnout. In contrast to this, there are certain identifiable personality traits that can moderate the effect of stressful situations and so insulate employees to some extent from the negative effects of indicators of burnout.

Barrick and Ryan (2003: 24) support this finding by pointing out that neurosis is inversely related to job satisfaction and directly to perfectionism. Extraversion (which is associated with sociability, dominance, ambitiousness, and assertiveness) has been found to be positively correlated with levels of job satisfaction while neurosis is negatively correlated with extrinsic career success. Barrick and Ryan (2003) also found that neurosis correlated positively with poor work performance, lower pay and fewer promotions and the conscientiousness also correlated positively with the desire for accomplishment in the workplace and extrinsic career success, with job performance serving as a mediator variable.

2.5 BURNOUT AND RELATED CONCEPTS

The concept of burnout has been related to many other concepts with which they share certain similarities. It is therefore important to distinguish the concept of burnout from other concepts that bear a superficial resemblance to burnout.

2.5.1 Burnout and job stress

While the terms *stress* and *burnout* are sometimes used interchangeably because they both originate from work studies, they are not in fact identical at all. "Job stress" is a generic term that refers to a temporary adaptational process that occurs at work and is accompanied by certain mental and physical symptoms, while the burnout syndrome is the end result of prolonged exposure to various stressors that originate in the workplace (Carayon 2006:219). It is easier to understand the differences between stress and burnout if one accepts that stress, distress and burnout all occur at different places on the same continuum (Bunge 1989:92; Siamian, Shahrabi, Vahedi, Abbsai Rad, &

Cherati 2006:262). The one polarity of this spectrum is characterised by feelings of optimal well being in the workplace and situations in which challenges are being effectively met and the individual worker enjoys feelings of happiness and fulfillment. In the middle of this spectrum is characterised by an imbalance between the demands of the job and the resources that are made available to the worker to cope with such imbalances. At the opposite end of the spectrum one encounters inappropriate coping strategies that make excessive demands on the physical and mental resources of the worker. Here is a place where the worker has made unsuccessful attempts to cope with the various components of burnout until he or she feels completely defeated by unmanageable stresses and strains that are characteristic of full-blown burnout. The distinction between stress and burnout can therefore be described in terms of time frame and the qualities and results of stressors that undermine the worker.

Another important distinction between burnout and job stress is that burnout has been clearly defined in research in terms of a number of quite specific symptoms, conditions and events. While burnout includes energy depletion and exhaustion, cynicism, depersonalisation and a perception of reduced personal accomplishment, job stress occurs in the form of a multiplicity of physical, psychological (affective and cognitive) symptoms and behavioural symptoms. Schaufeli and Enzmann (1998:38) describe burnout as a cluster of quite specific job-related attitudes and behaviours that do not necessarily appear in traditional definitions of job stress – even though some of the stressors that are described may be common to both categories. While emotional exhaustion is a traditional variable, depersonalisation and reduced personal accomplishment are specific to the definition of burnout and a person cannot be said to be suffering from burnout if he or she experiences neither depersonalisation nor a sense of reduced personal accomplishment.

Stress is common to all human beings at various times in their lives. But burnout, according to Schaufeli & Enzemann (1998:38), can only be experienced by those who enter their careers with a great deal of enthusiasm, ambitious goals and expectations

and who restlessly pursue success in their jobs until they are brought low by the various symptoms, conditions and clinical features that characterise burnout.

2.5.2 Burnout and depression

Depression is sometimes equated with burnout, as it is, for example, by Hallsten (1993:99), who regards burnout as a particular form of depression that results from succumbing to the ravages of the burnout syndrome. While he regards depression as a necessary precondition of burnout, Brenninkmeijer, VanYperen and Buunk (2001:837) and Iacovides, Fountoulakis, Kaprinis & Kaprinis (2003:209) argue that burnout and depression only share various identifying characteristics. Depression is characterized by depressed moods, an inability to derive pleasure from anything at all, excessive weight losses or gains, insomnia or hypersomnia, psychomotoric agitation or retardation, fatigue and loss of energy, tormenting feelings of insufficiency and guilt, indecisiveness or an inability to concentrate, paralysis of the will, an obsessive interest in death and dying, and persistent suicidal ideations. The symptoms of burnout, on the other hand, are mental and emotional exhaustion (which refer to feelings of being “empty” or “worn out”), depersonalization (which manifests as a negative and cynical attitude toward one’s work and the recipients of one’s care) and reduced personal accomplishment (which refers to subjective negative evaluations of one’s achievements at work). Dysphoric symptoms such as fatigue, emotional exhaustion and feelings of depression are regarded as the most frequently recurring symptoms of burnout.

Burnout and oppression therefore referred to two different things. Brenninkmeijer et al (2001: 837) point out the differences between depression and burnout is that someone who is burned out:

- seems to possess more vitality and seems to be able still to enjoy things (although they often lack the energy to do so)
- rarely loses weight or reports suicidal ideations

- is able to be more realistic and objective about subjective feelings of guilt (if they feel guilty at all)
- tends to attribute their indecisiveness and inactivity to their fatigue rather than to their illness (as depressed individuals tend to do)
- often has difficulty in falling asleep whereas those who suffer from depression tend to wake up too early than they would like

Cooper (1998:76) distinguishes burnout from depression by emphasising that:

- the burnout syndrome is defined in terms of a small cluster of predominantly dysphoric symptoms such as mental exhaustion, fatigue and depletion
- the emphasis in burnout is on mental and behavioural symptoms rather than on physical symptoms
- burnout is always related to work conditions while depression may occur in any domain in an individual's life
- the symptoms of burnout appear in otherwise “normal” people who had never suffered from them before
- the decreased effectiveness and deterioration in work performance that are characteristic of burnout occur because of negative self-attitudes and behaviours

2.5.3 Burnout and compassion fatigue

Burnout and compassion fatigue are concepts that describe the responses of those who have to deal with difficult patients in trying circumstances over long periods of time and with inadequate resources (Figley 2002:1433). Maslach (1986:3) states that compassionate fatigue is experienced when individuals who are suffering from burnout reach a point of total emotional exhaustion in which it is no longer possible to give enough of themselves to be of help each others. In response to this, they reduce their contact with other people so that they can keep up at least an appearance of being functional. In spite of this, their detachment only increases their indifference and

depersonalization. They then develop hostile and angry feelings towards those for whom they should be caring, and this in turn turns into guilt because they feel that they are insufficiently caring (which, indeed, they have become). This eventually leads to convictions of personal and professional failure and its corollary, a sense of reduced personal accomplishment.

In spite of similarities in such sequences of development, burnout and compassion fatigue are two distinct concepts. The difference between burnout and compassion fatigue is that whereas burnout produces emotional withdrawal and diminished empathy, those with compassion fatigue try to continue to give of themselves and feel as though they have failed at their profession if they don't. But in either case, physical, emotional and spiritual exhaustion ensues (Pfifferling & Gilley 2000:39).

In contrast to burnout, compassion fatigue may be of sudden onset and is a natural consequence of having to work under extremely difficult circumstances with people who have experienced stressful or life-threatening events (Benson & Magraith 2005:497). Burnout, by contrast, is a process that emerges gradually and becomes progressively worse as a result of gradual emotional exhaustion rather than exposure to a series of emotional traumas that succeed one another with great rapidity. Compassion fatigue can be distinguished from burnout by the fact that the symptoms of those who suffer from compassion fatigue are often similar to those of the patient population whom they are attempting to serve because they occur when a caregiver is exposed in rapid succession to a series of highly charged and emotional empathetic engagements and contacts with other people who are the victims of stressful situations (Boscarino, Figley & Adams 2004:1)

2.6 INTERVENTIONS IN BURNOUT

Because the cost of burnout both to the individual and to the organization can be extremely expensive and disruptive, individuals and institutions should institute timely

measures to prevent it from happening. In order to prevent burnout, it is necessary for the individual and the organization to work closely together. Nelson and Quick (2006:228) divide the prevention process into three categories: the primary, the secondary and the tertiary. They describe primary prevention as a process that is designed to reduce, modify or eliminate the demand or stressors that, if they remain unchecked or unaltered, will eventually result in full-blown burnout. The onus is on organisations to become involved in primary prevention because they alone have the power to change the demands or revised the expectations that they place on their employees. The purpose of secondary prevention is to alter or modify the responses of individuals to demands or stressors. If individual employees can learn techniques to manage the work stressors that are integral to the jobs in which they find themselves, they will have the power to moderate the stresses and strains they experience in the work situation and to promote their own health and well being by definite plans of action. Tertiary prevention is concerned with bringing individuals and organisational who have developed full-blown burnout back to a condition of full health and competence.

2.6.1 Primary prevention

The underlying assumption behind primary prevention strategies is that the most effective way of managing stress is by removing the stressors themselves. Stress management strategies therefore focus on teaching employees to use coping strategies that will enable them to endure the stresses of the job without harm to themselves or to deal with the source of the stress itself (Landy & Conte 2006:442).

Redesigning jobs is one of the primary preventive strategies that organizations can institute in order to increase the control that workers have over the way in which stressors affect their personal well-being and their state of mind. This can be achieved by giving workers more control over the decision-making processes that affect their work. In the nursing profession, this means giving nurses the authority to order the

sequence of their work activities, the timing of their work schedules, and the selection of their work tools and work teams (Nelson & Quick 2006:232). It was noted earlier that improved communication and detailed consultation with nurses prior to making decisions that affect them and their working lives can empower nurses and improve their morale. Conversely, the kind of leadership style that fails to demonstrate caring and open communication is creating those very conditions that lead to the development of burnout in the nurses.

2.6.2 Secondary prevention

Secondary prevention involves modifying the stress response and therefore mitigating its negative impact. Landy and Conte (2006:443) describe secondary strategies as emotion-focused coping strategies that seek to reduce the intensity of the emotional response to stressors. This can be achieved by avoiding, minimizing or distancing oneself from the presence or impact of the stressor. Lazarus and Folkman (1986:164) define coping as “those changing cognitive and behavioural efforts developed for managing the specific external and/or internal demands judged as exceeding or surpassing the individual’s own resources”. These kinds of individual coping strategies can either be effective or ineffective. Effective coping strategies are able to deal with the problem of stress by regarding it as a challenge and by becoming increasingly capable of identifying the imminence of a stressor and so neutralising it before it can exert a destructive impact on the recipient. The most ineffective strategies are escape and avoidance strategies because these reduce the impact of stress by, for example, denying that the stress is there or by resorting to chemicals such as drugs or alcohol to ameliorate the pain inflicted by the stressor. Theodoratou, Tafiadis, Mpekos and Skiloyanni (2006:242) undertook research to examine and describe the coping strategies used by a sample of 160 nurses working in Greece. They report that the coping strategies used by these nurses could be divided into the following categories: focus (89.4%), social support (78.8%), withdrawal (30.6%), diversion (83.8%), and denial (72.5%).

It is vitally important for individuals to educate themselves in the skills they need to be able to cope with the stressors that endanger their mental and physical health. Such skills revolve around skill in self-diagnosis and self-help or self-help. As soon as a nurse feels that a situation has become unduly stressful, she should immediately adopt measures to cope with the stress and undermine or eliminate the negative impact that it could make on her. Hays, All, Mannahan, Cuaderes and Wallace (2006:185) undertook research in which they studied the coping strategies that were being utilized by nurses who work in critical care units. Their findings were that the most frequently utilized strategy to cope with stress was the practice of varying forms of self-control. These same nurses also reported that they took the initiative in taking responsibility for preventing their own stress.

Well established methods and techniques for diminishing and preventing the destructive impact of secondary stress are regular exercise, meditation, yoga, prayer, the planning and taking of vacations, taking regular breaks, balanced nutrition and sufficient sleep.

2.6.3 Tertiary prevention

The techniques and strategies of tertiary prevention are designed to treat and rehabilitate individuals who are already terminally stressed and burned out.

2.7 CONCLUSION

This chapter provided a critical discussion of the literature about burnout in nurses and health care workers in general. The sheer extent of this literature indicates that it is a widely studied field that is a matter of great concern to professionals in stressful occupations all over the world. Since the incidence of burnout in nurses who provide critical care is not only an individual problem but also an organizational problem, it is

being widely studied by researchers in many different countries in as many different occupational backgrounds. Although burnout is caused by a myriad of factors that are both individual and organisational, this literature review indicates that the main focus of research attention for the past two decades has been on organisational factors. Since the consequences of burnout become manifest as symptoms in the individual and disruptions in the corporate health organisations, it is necessary to devise solutions both for individuals and organisations. It is for this reason that suggested remedies for burnout involve preventive strategies that are focus both on individual emotions, reactions and responses, and the problems that beset organisations and professions that give rise to the symptoms of burnout in their employees.

Chapter 3 offers a discussion about the theoretical framework upon which this study is based.

CHAPTER 3

Theoretical framework

3.1 INTRODUCTION

This chapter explains what a theoretical framework is and the function that it serves in research. A theoretical framework is a conceptual model of how one theorizes or makes logical sense of the relationships among several factors that have been identified as important to the problem (Cargan 2007:29). A useful theoretical framework “should contribute to the definition of the phenomenon of study that is broad enough to capture the variations in interpretations by researchers but narrow enough to provide boundaries and direction to literature retrieval” (Patterson, Thorne, Canan & Julings 2001:26). The theoretical framework that guides this study will be discussed later in this chapter.

A theoretical framework serves the following purposes in a research study:

- It enables the most important concepts to be integrated in a logical manner
- It provides a schematic description of relationships between and among independent, dependent, moderator, control and extraneous variables
- It identifies and sets out the assumptions that underlie the study
- It demonstrates the link between the research results and the research objectives (Demarrais & Lapan 2003:55; Finlay & Gough 2003:47; Munhall & Chenail 2007:8)

This research is based on the Roy Adaptation Model (RAM). The RAM explains the connections between environmental stimuli and the bio-psycho-social responses to the stimuli (Shin, Park & Kim 2006:425). It also emphasizes the interactions between a

person and the environment as that person attempts to adapt to environmental stimuli (Tourville & Ingals 2003:21). The RAM is one of the most fully developed and widely used of all nursing conceptual models (Veliog lu 1999:372).

3.2 BACKGROUND TO THE RAM

The RAM was devised by Sister Callista Roy, who first began to work on constructing the model while she was a graduate student at the University of California between 1964 and 1966. Roy was inspired and challenged by her advisor and faculty mentor, Dorothy Johnson, who also made distinguished contributions to theory, to develop a conceptual model that could be applied to various forms of nursing practice (Phillips 2006:355).

When Roy developed the original version of the RAM in 1970 in response to Johnson's encouragement, she was strongly influenced by Von Bertalanffy's 1968 Systems Theory and Harry Helson's 1964 Adaptation Level theory (Galbreath 2002:296). Although Roy read elements from both Von Bertalanffy and Helson, she deliberately adapted them to create a model that would be particularly useful to researchers who proposed to conduct research in the health sciences and medicine. Roy also acknowledged her debt in creating RAM to the researchers Dohrenwend, Lazarus, Mechanic and Seyle, from whom she adopted concepts that she refined for use in the RAM (Phillips 2006:356).

The RAM has gradually evolved over the years to meet the changing trends of the research establishment, the world in which we live, and the needs of nursing practice. The original version of the RAM was published in 1970 in an article in *Nursing Outlook*, entitled "Adaptation: A conceptual framework for nursing" (Roy 1970:42). The original version of the RAM incorporated the concepts of stimuli, adaptation, adaptation levels and coping mechanisms. Roy, as cited in Tsai (2003:137), reformulated the RAM in 1976 to include adaptive modes, and then further revised it in 1981 to conform to the view that an individual represents an adaptive system with models of cognator and regulator

subsystems, and various other associated propositions. By 1984, Roy had incorporated the four adaptive models. In 1991, she changed the model once again to make allowance for a more interactive worldview. Her most recent adaptations occurred in 1999 when Roy adjusted her definition of the environment to emphasise the importance of people and the way in which they interact with the resources of the earth and the environment (Roy & Andrews 1999).

Roy continues to contribute to the understanding and application of the RAM by means of publications in various scholarly journals. Among such recent articles are those by Roy (2003: 7), Roy (2007a:113), Roy (2007b:29), Roy and Lindendoll (2006:345), and many others.

3.3 ASSUMPTIONS OF RAM

Over the years, Roy has identified and refined the scientific and philosophical assumptions on which she based the original and the most recent versions of the RAM. The philosophical assumptions that form the basis of the RAM are derived from humanistic premises and veritivity (Roy 1988:26) while the scientific assumptions are derived from the Systems Theory of Von Bertalanffy (1968) and the Adaptation Level theory of Helson (1964) (Galbreath 2002:296).

3.3.1 Scientific assumptions

According to Phillips (2006:360), the scientific assumptions of the RAM were derived from Helson's Adaptation Level theory (1964) and Von Bertalanffy's Systems Theory (1968). Both of these theories regard the human being as a complex and multifaceted system that responds to other human beings and the environment in an attempt to adapt and survive. But human beings also create changes in the environment because of their ability to adapt to environmental stimuli and shape the environment according to

their needs and wishes. The scientific assumptions that inform this point of view are summarised in the following propositions:

- Systems of matter and energy are constantly engaged in rising to higher levels of more complex self-organization.
- Human beings constitute themselves and manage their integration into the environment by means of their own conscious understanding and construction of meaning.
- Human awareness of the self and the environment in which we find ourselves are rooted in thinking and feelings.
- Human beings are accountable for the integration of their creative processes because they make conscious decisions about them.
- Human action is mediated by thinking and feeling.
- System relationships foster the acceptance, protection and development of interdependence.
- Human beings and the earth are connected by common patterns and integral relationships.
- Human and environmental transformations are originally created in human consciousness.
- A proper integration of human and environment meanings results in adaptation.

3.3.2 Philosophical assumptions

The philosophical assumptions that underlie this study have been drawn from the way in which Swimme and Berry (1992:17) describe creation and spirituality, and from the principles of humanism and verity (Roy 1988:26). Humanism proposes that the subjective experiences of human beings constitute the basis for human knowing and the assignation of value categories by human beings. The term “verity” was first coined by Roy, and it implies that the most important principles of human existence affirm the common purposefulness of human existence as well as the

- purposefulness of human existence
- unity of purpose for humankind
- necessity of activity and creativity for the common good
- intrinsic value and meaning of life (Hanna & Roy 2001:59)

These philosophical assumptions of the RAM are based on subjective judgments about the human condition and include the principles of value and meaning in human experience and existence, the ultimate purposefulness of life, the importance of relationships between human beings, and an assertion of the value of human and environmental holism (Dobratz 2004:335). Dobratz attributes the connection between various spiritual themes and RAM as being evident in the self-concept mode (one of the adaptive modes of the model). Roy conceptually defines the psychic and spiritual integrity as “the need to know who one is so that one can be or exist with a sense of unity, meaning, and purposefulness with the universe” (Roy & Andrews 1999:101).

The philosophical assumptions upon which the RAM is based are contained in the following assertions:

- Human beings engage in mutual relationships with the world and with God.
- Human meaning is rooted in the omega point convergence of the universe.
- God is intimately revealed in the diversity of creation and is the common destiny of all creation.
- Human beings are characterised by their specifically human qualities of creativity, awareness, enlightenment, and faith.
- Human beings are accountable for the processes of deriving, sustaining, and transforming the universe (Roy & Andrews 1999:35).

According to Perrett (2007: 349), the focus of research when guided by the philosophical assumptions on which the RAM is based, should be adaptation. Any research that utilises the RAM should focus on extending human knowledge by understanding how

human beings adapt to the various situations with which they have to cope. This kind of RAM-based research should elucidate the patterns of human life that emerge from these adaptive processes and, by so doing, add to our understanding of human beings as adaptive systems.

The qualitative nature of part of this research is congruent with the philosophical assumptions of the RAM. This is because qualitative research seeks to understand the subjective experiences of individuals while the RAM attempts to provide a definition of the meaning of existence and the place of human beings within the universe (creation). The researcher selected a qualitative framework to assist her, firstly, to shed light on the factors (environmental stimuli) that nurses in critical care units perceive as being the cause of the burnout (ineffective responses to stressful stimuli), and, secondly, to describe techniques that are able to modify the destructive effects of burnout (the control processes).

3.4 MAJOR CONCEPTS OF THE RAM

While there are many assumptions that underpin the RAM, the four major concepts in terms of which the theory is constructed, are all related to one another. These four major concepts are the human adaptive system, the environment, health, and the nursing process (Roy & Andrews 1999:35).

3.4.1 Human adaptive system (person)

Roy, as cited by Phillips (2006:362), defines a human being as a human adaptive system. This means that all the parts that constitute the human organism work together in a unitary system to maintain itself for the common purpose of survival in the context of the environment in which human beings find themselves. As far as survival is concerned, human beings may work either as individuals or in groups. Phillips (2006:362) points out that Roy regards people and the environment as being engaged in

constant communication and interactions with one another. It is this process of communication and interaction that enables people to adjust effectively to whatever changes in the environment they encounter. Human beings are able to adjust to changes in their environment because of their unique ability to think and feel and to construct and assign meanings that derive from their awareness, observations and beliefs.

Each person receives inputs from his or her environment and from within the systems in which he or she operates. Roy identifies these inputs as stimuli, and conceptualises these stimuli in terms of the following three categories: focal stimuli, contextual stimuli, and residual stimuli (Roy & Andrews 1999:31). *Focal* stimuli, which may be either internal or external, are those that immediately confront human beings in the context of their daily life. *Contextual* stimuli are all other stimuli that originate in a human being's internal or external world – stimuli that exert either a positive or negative influence on the situation. *Residual* stimuli are those factors whose current effects remain unclear (Galbreath 2002:299; Phillips 2006:358).

Another important mode of describing a person's life is what Roy calls “the adaptive level”. The *adaptive level* represents the function of the life processes. Roy divides the adaptive level into three other levels which she names the integrated level, the compensatory level, and the compromised level. In this system, the adaptive level of a system is determined by the stimuli that affect it. According to Roy, a person's adaptive level is “a constantly changing point made up of focal, contextual and residual stimuli which represent the person's own standard range of stimuli to which one can respond with ordinary adaptive responses” (Roy 1984:27). *Integrated processes* occur when the adaptation level is working as a whole to meet the needs of the human system. The *compensatory process* occurs when the human response systems have been activated and *compromised processes* occur when the compensatory and integrated processes are insufficient for adaptation by the person (Roy & Andrews 1999:30).

When a person encounters internal or external stimuli, behavioural responses occur which may be internal or external (Galbreath 2002:300). Human beings function in terms of internal dynamics that act as processes of control. Roy refers to these as “coping mechanisms” (Roy & Andrews 1999:36). According to Roy, such coping mechanisms can be innate, that is to say, “[They] are genetically determined or common to species and are generally viewed as automatic responses, humans do not think about them” (Roy & Andrews 1999:46). Thus, for example, when a person is bleeding the coagulation cascade is activated to impede the bleeding. But coping mechanisms can be acquired. These are “developed thorough strategies such as learning and the experiences encountered throughout life [and] contribute to the customary responses to particular stimuli” (Roy & Andrews 1999:46). Some people, for example, are able to relieve stress by means of meditation or yoga.

Each human being has two major and unique internal central mechanisms for adapting to the stimuli that appear in the internal or external environments. These are called the regulator mechanism and the cognator mechanism. The *regulator* mechanism works primarily through the autonomic nervous system to manufacture a response that prepares an individual to respond to the environment. The main components of the regulator mechanisms are the neural, endocrine and perception-psychomotor parts of the human organism. Figure 3.1 illustrates the function of the regulator mechanism.

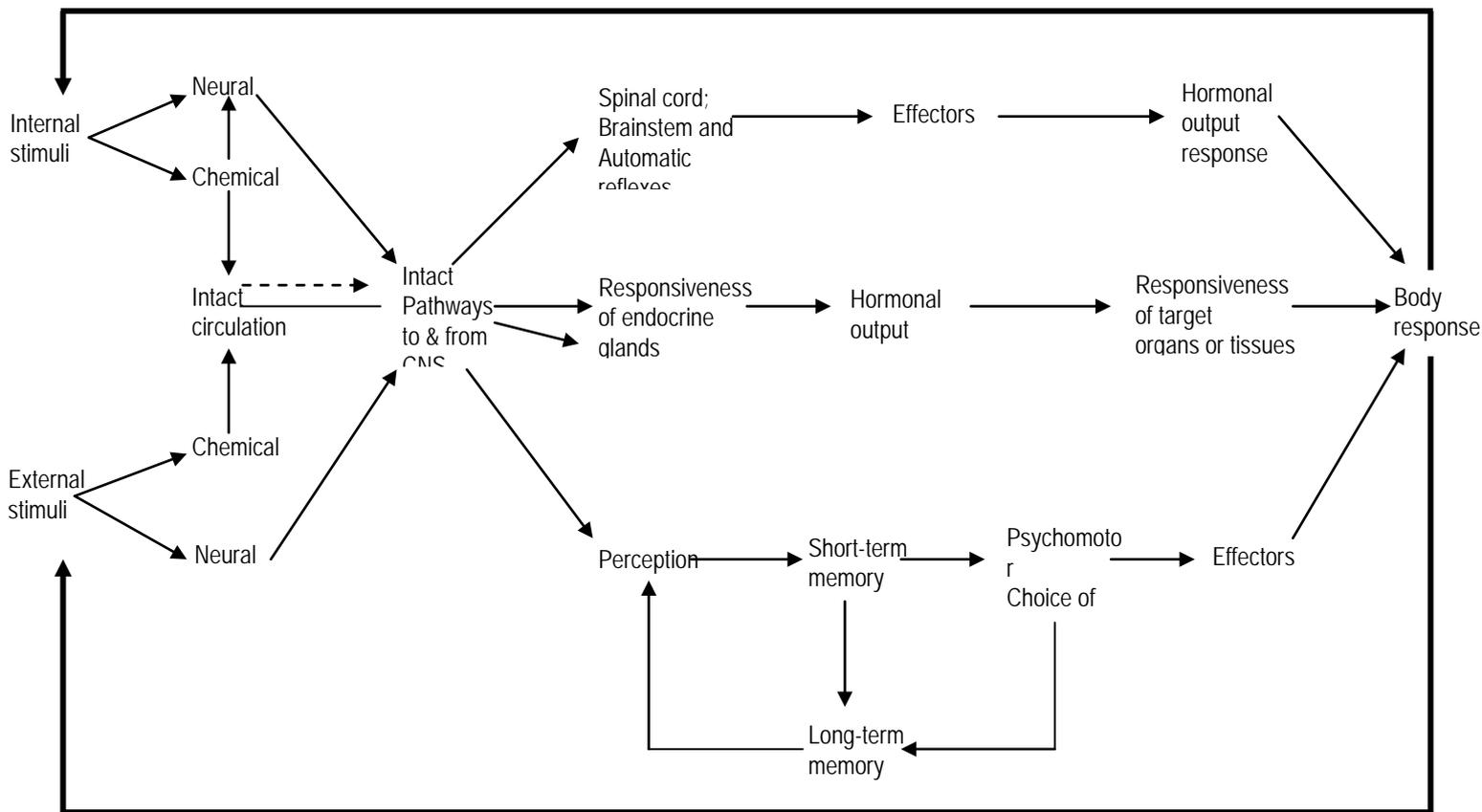


Figure 3.1 The regulator

Source: Roy and Mcleod (1981:61)

When a person receives stimuli from either the internal or the external environment, impulses are transmitted through the neural, chemical and circulatory pathways to the central nervous system. The brain and the spinal cord are then activated to generate autonomic reflexes to the effectors, which then produce output responses. The endocrine organs also become activated so that they produce hormones that activate the target organs to produce a response. The CNS activates a person's perception. Roy defines "perception" as an interpretation of the sensory stimuli and the conscious awareness of it (Roy & Andrews 1999:259). According to Perret (2007:349), the perception of an event is a stronger indicator for adaptation than the focal stimuli that trigger the event. Perception triggers both the short-term memory and the long-term memory of a system. This results in a psychomotor choice about whether and how to respond, and this leads to the activation of the effectors and thus a body response. The

psychomotor choice is then stored in the long-term memory where it exerts a cumulative effect on perception.

The *cognator* mechanisms are related to the higher cognitive functions, which are perceptual/informational processing, learning, emotion, and judgment. Figure 3.2 (below) illustrates the functioning of cognator mechanisms.

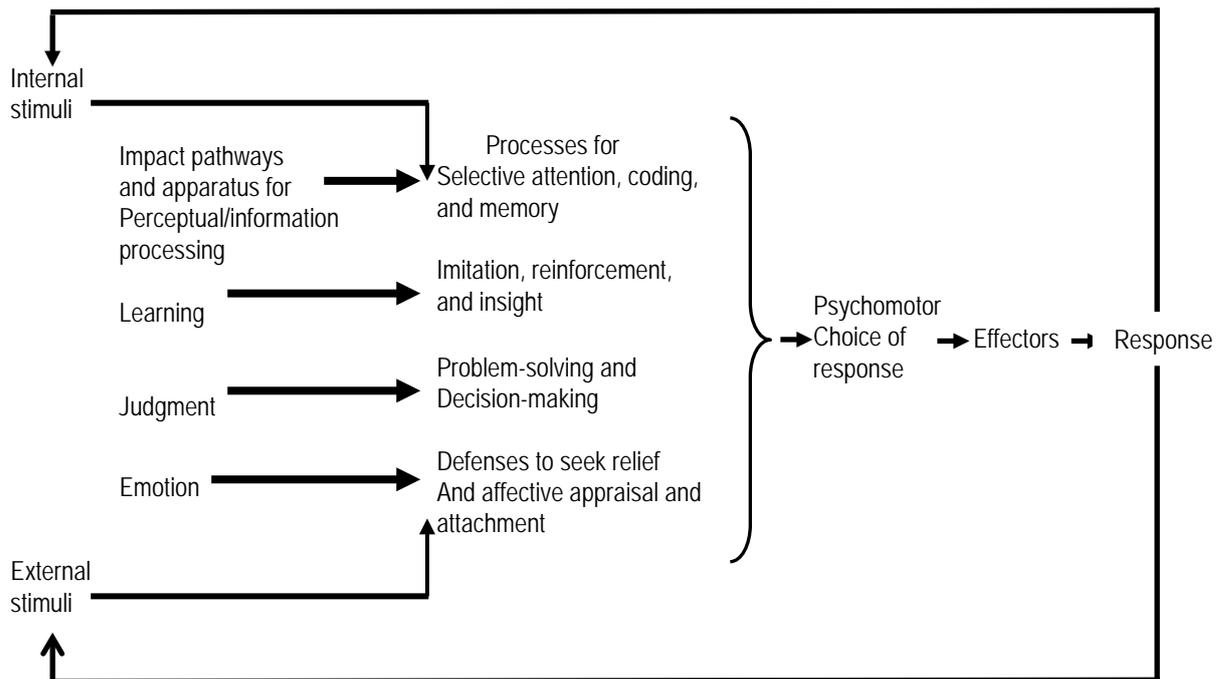


Figure 3.2 The cognator

Source: Roy & Mcleod (1981:64)

When a person encounters internal or external stimuli through the perceptual/information pathways, the kind of selective attention that will be given to the stimuli depends upon the system's memories of the stimuli. It is for this reason that stimuli are coded and classified. The learning that a human being has accumulated by means of earlier imitation, reinforcement and insight, guide the system to deliver an appropriate psychomotor response. Human judgment helps the system to make an appropriate response in order to solve the situation with which the person is confronted. Through the influence of the emotions, a person's defences are activated to seek relief, affective

appraisal and attachment. These processes lead a person to make a psychomotive choice to respond in this leads to a behavioural response.

The regulator and cognator mechanisms cannot, however, be observed directly. They can only be inferred by means of behaviour that can be observed. Roy and Andrews (1999:102) categorise behaviours into four *adaptive modes* or *effectors* which they are designate as physiological, self-concept, role function and interdependence. Figure 3.3 (below) shows how the human adaptive system (the person) operates in terms of the four adaptive modes.

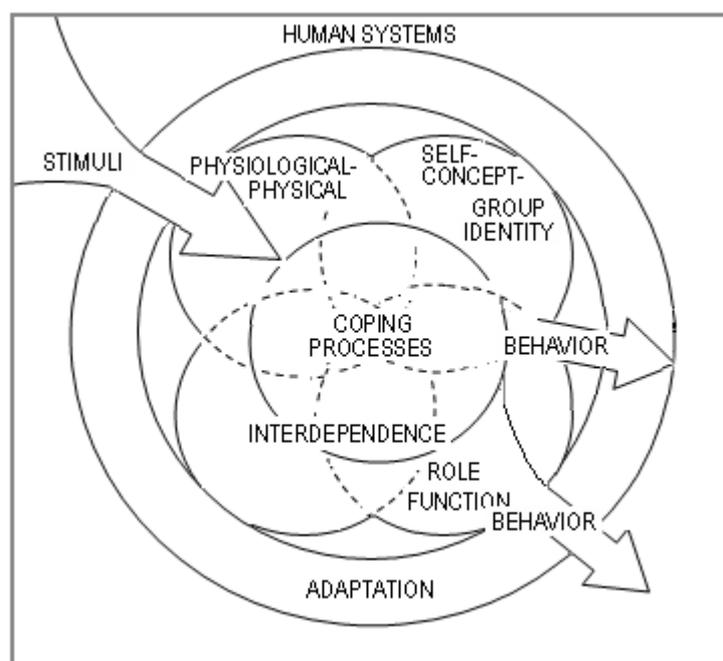


Figure 3.3 The person as an adaptive system

Source: Phillips (2006:364)

The physiological mode refers to the physical and chemical processes that are involved in the functioning and activities of living organisms (Roy & Andrews 1999:102). The basic function of this mode is the maintenance of physiological integrity, and the processes by means of which physiological integrity is achieved are oxygenation, nutrition, elimination, activity, rest and protection. The complex processes that ensure that physiological integrity is preserved are neurological function, endocrine function, fluid

and electrolyte balance, and acid- base balance. It is in this area of the human system that one expects to encounter the emotional exhaustion dimension of burnout.

The self-concept mode strives to preserve the basic human need for psychic and spiritual integrity. Roy defines “self-concept” as a composite of beliefs and feelings that originate from internal perception in conjunction with perceptions that are internalised from other human beings and the environment (Roy & Andrews 1999:107). According to Meleis (2004:294), Roy divides the concept of self-concept into *the physical self* and *the personal self*. The physical self appears to human beings as a cluster of body sensations (which is how the body conveys its presence to the self) and as a body image (which is what a person actually thinks about his or her own body, regardless of the objective facts). A human being maintains his or her personal self by means of self-consistency (which is the psyche’s attempt to maintain self-organization and to avoid disequilibrium), the self-ideal (which is a function of what an individual expects to do and be and the moral-ethical and spiritual self (which is that part of a human being that maintains the individual’s belief system and which acts as a moral self-evaluator or self-regulator). In Roy’s typology, this is where one would expect to encounter the dimension of reduced personal accomplishment dimension.

The role function mode is that part of the human organism that strives to preserve social integrity and communal values, and it regulates the role that a person performs in society. Roy classifies the role function mode in terms of primary roles, secondary roles, and tertiary roles (Andrews 1991:348). “Primary roles” refer to those that are determined by a person’s age, gender and developmental stage. “Secondary roles” are those that a person performs in order to accomplish developmental tasks and the primary roles. Such roles are acquired by human beings as a function of the way in which they have related to others, and are permanent. Tertiary roles are temporary, and this is also where one may expect to encounter that dimension of personal accomplishment.

The *interdependence mode* works towards achieving relational integrity by using processes of affectional adequacy, which means the giving and receiving of love, respect and value through effective communications and the establishment of meaningful relationships (Roy & Andrews 1999:111). It is for this reason that human beings regard significant others (i.e. people who are of fundamental importance to themselves) and support systems (i.e. people who help individuals to meet their need for love, respect and value) as indispensable to their lives and happiness.

3.4.1.1 The person as an adaptive system

Once a human being has experienced stimuli, it is followed by the process of adaptation. Adaptation is “the process and outcome whereby thinking and feeling persons as individuals or groups, use the conscious awareness and choice to create human and environmental integration” (Roy & Andrews 1999:30). The RAM is constructed in terms of four major interrelated constructs, namely, *input*, *control processes*, *effectors* and *output*. How these constructs are related is depicted in figure 3.4 (below).

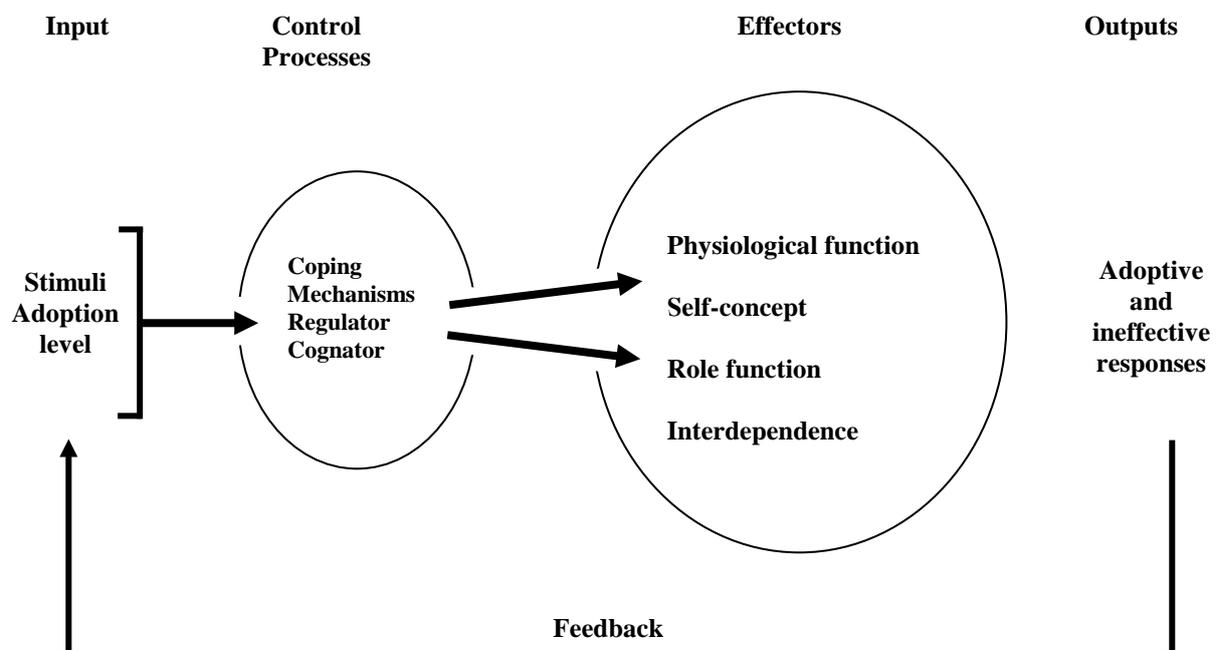


Figure 3.4 Person as an adaptive system

Source: Roy (1984:30)

Galbreath (2002:298) points out that the RAM assumes that a person is an open system who experiences stimuli (focal, contextual and residual) that may originate either in the environment or the self. The person then adapts to these stimuli according to their level. This is referred to as the *input*. Every person has developed coping mechanisms, which together constitute the *control processes* (the cognator and the regulator). The regulator coping subsystems respond automatically through neural, chemical and endocrine coping processes. In the cognator coping mechanisms, the person responds through the process of perception/information processing, learning, judgment and emotion. Regulator and cognator subsystems are interrelated through perception. These regulator and cognator subsystems cannot, however, be observed directly by human behaviour. Human behaviour is then categorised into four adaptive modes or *effectors*: *physiological-physical, self-concept, role function* and *interdependence*. The *output* refers to the adaptive and/or ineffective responses. Adaptation occurs when a person responds positively to the environment because such responses promote the integrity of the person. Ineffective responses, on the other hand, undermine the integrity of a person (Galbreath 2002:298).

3.4.2 Environment

Because it is an open system, the human adaptive system is in constant interaction with the environment with which it constantly exchanges energy, matter and information. Roy defines the environment as “the conditions, circumstances and influences that surround and affect the persons or groups, with particular consideration for the mutuality of the person and earth resources that includes the focal, contextual and residual stimuli” (Roy & Andrews 1999:81). According to Lopez, Pagliuca and Aranjó (2006:259), the whole concept of environment has been subjected to dramatic changes and revisions since the first publication of the RAM in 1970.

3.4.3 Health

According to the RAM, the goal of adaptation is the attainment of health. Roy defines health as “a state and a process of becoming and becoming an integrated and whole human being” (Roy and Andrew 1999: 54). This ability of the human system to maintain and preserve integration reflects the system’s ability to meet the goals of survival, growth and reproduction. Illness occurs when a person produces an ineffective response to stimuli.

3.4.4 Nursing

The goal of nursing is the promotion of health in the systems that constitute the arena in which nurses operate. According to Roy, the focus of the nurse should be to promote the adaptive abilities of the system (Phillips 2006: 364). In order to accomplish this, nurses make use of the nursing process, which involves assessment of the system’s behaviours and stimuli, making a nursing diagnosis on the person’s adaptive state, planning the goals of care or treatment, implementing interventions designed to promote adaptation, and then evaluating whether the goals of adaptation have been achieved or not.

3.5 PROPOSITIONS UNDERLYING THE RAM

The RAM has evoked a lot of interest since its first publication. In 1989, a group of researchers who had already used the RAM in their studies began to meet Roy regularly and formed a society known as the Boston-Based Adaptation Research in Nursing Society – which later came to be known as the Roy Adaptation Association (BBARNs 1999:13). According to Pollock, Fredrickson, Carson, Massey and Roy (1994:361), the overall purpose of this society included the following aims:

- To advance nursing practice by developing nursing knowledge on the basis of the application of the RAM
- To provide the necessary scholarly contacts to extend and disseminate knowledge and promote research
- To enhance networks for the dissemination and utilization of research for nursing practice
- To promote the development of expertise in nurse scientists

BBARNS (1999:13) examined 163 research studies that identified the RAM as the underlying conceptual framework on which these studies were based. Their purpose in doing this was to evaluate the extent to which the RAM had been used in research and to synthesize the contributions made by the findings of these studies for nursing practice. They also undertook to make suggestions for future research and future developments of the theory (Frederickson 2000:123; Perrett 2007:349). Of the 163 studies that were examined, only 116 were identified as demonstrating a sufficiently rigorous use of the model, and so it was these 116 studies that were used for the testing of propositions and the synthesis of knowledge. Barns then created twelve additional generic and ancillary propositions from the 116 studies that they reviewed and synthesised. The generic propositions were categorized as pertaining either to the concepts, to the adaptation processes of the person, and to the stimuli. The propositions that were generated from this review were as follows:

- At the level of the individual, regulator and cognator processes affect innate and acquired ways of adapting.
- At the level of the group, stabilizer and innovator processes affect adaptation.
- The characteristics of internal and external stimuli influence adaptive responses.
- The characteristics of internal and external stimuli influence the adequacy of cognitive and emotional processes.
- The adequacy of cognator and regulator processes affects adaptive responses.

- Through cognator and regulator, adaptation in one mode is affected by adaptation in other modes.
- The pooled effect of focal, contextual, and residual stimuli determines the adaptation level.
- Adaptation is influenced by the integration of the person with the environment.
- The variable of time influences the process of adaptation.
- The variable of perception influences the process of adaptation.
- Perception influences adaptation through linking the regulator and cognator subsystems.
- Nursing assessment and interventions relate to identifying and managing input to adaptive systems

Source: Roy & Andrews (1999:547).

According to Fredrickson (2000:14), four of these propositions specifically address the major concepts of the RAM. This doing, they conceptualise health as an outcome of the adaptive process that reflects patterns of well being and as a process of becoming whole and integrated with the self and with the environment.

The concept of person is addressed in the first proposition, which states that at the individual level, regulator and cognator processes affect innate and acquired ways of adapting. It has already been noted above that the person consists of regulator and cognator processes, which are unique internal mechanisms for adapting to the stimuli. Each person also has innate and acquired coping mechanisms. These innate coping mechanisms are those that are genetically determined and automatic while the acquired coping mechanisms are developed by means of strategies such as learning from experience throughout the course of each person's life span (Roy & Andrews 1999:46). Through perception, which Pollock (1993:169) defines as the interpretation of a stimuli and conscious appreciation, the cognator and regulator influence a person's response to stimuli and consequently how that person copes with the stimuli concerned.

The concept of health is addressed in the fifth proposition, which states that the adequacy of the regulator and cognator affect the adaptive process. Because the regulator and cognator promote adaptation, they also promote health. If the regulator and cognator are inadequate, a person will not be able to adapt adequately to stimuli and will therefore suffer from poor health (Fredrickson 2000:14).

The eighth proposition addresses the concept of environment, and states that adaptation is influenced by the integration of a person with his or her environment. According to Andrews and Roy (1991:18), the changing environment stimulates a person to make adaptive responses through the processes of learning and perception. These interactions result in the growth and balance of both the self and the environment.

Nursing itself is addressed in the twelfth proposition, which states that nursing assessment and interventions relate to identifying and managing input to adaptive systems. This study has been designed to identify that input, namely, the factors that lead to burnout in nurses and the measures that can be instituted to mitigate the development of burnout.

3.6 APPLICATION OF THE RAM: CAREGIVER STRESS

For more than thirty years, the RAM has been implemented in practice, in nursing education and in research. The first nursing school to make the RAM the basis of its curriculum was Mount St. Mary's College in Los Angeles, California in 1970, where it became the framework for a nursing-based integrated curriculum. Since that time, many colleges of nursing have implemented Roy's model as a theoretical framework for their curricula. By 1987, over 100,000 nurses had been educated in programmes that had been based on Roy's Adaptation Model (Phillips 2006:356).

When the researcher conducted a review of the literature by using HINARI, PUBMED and Google search engines, she found that most articles that use Roy's model involve frameworks to conceptualize and plan care for individual patients and/or specific patient populations (Patton 2004:221; Yoder 2005:321; Villarreal 2003:377). The model has also been used in practice settings to develop interventions in patient care (Samarel, Tulman & Fawcett 2002:459).

According to Tsai (2003:137), however, only a few studies on the nurse/caregiver have used the RAM or referred to the RAM. Among these few was the research undertaken by Shyu (2000:323), who studied the role tuning between caregiver and care receiver during discharge transition.

To understand the significance and applicability of the RAM to the caregiver, Tsai (2003:137) developed a middle range theory of caregiver stress. A middle range theory is a technique that was developed by Robert K. Merton in order to test the scientific validity of the vast, overarching theories that have been developed (McKenna 1997:144).

Tsai (2003:137) proposed the theory to predict the degree of caregiver stress and its outcomes from demographic characteristics, objective burdens in care giving, stressful life events, the availability of social support and the effect of social roles. This theory will be used to guide this study because it narrows the applicability of the RAM to the phenomenon of the nurse as a caregiver.

3.6.1 Assumptions of the caregiver stress theory

Like all theories, Tsai's theory is also replete with assumptions that she derived in this instance from the assertions and assumptions of the RAM. These assumptions can be formulated as follows:

- Caregivers have the ability to respond to environmental changes.

- It is the perceptions of caregivers that determine how they will respond to environmental stimuli.
- The adaptation of a caregiver is a function of her environmental stimuli and adaptation level.
- A caregiver's effectors (such as, for example, physical function, self-esteem mastery, role enjoyment, and marital satisfaction) are all consequences of the process of care giving over time.

3.6.2 Conceptual-theoretical structure

This middle range theory uses the same theoretical structure as that of the RAM. Thus the input comprises the focal, contextual and residual stimuli within the internal and external environment of the nurse/caregiver. In the same way, the control processes consist of the cognator and the regulator, while the output consists of the four effectors that are identified in the RAM.

3.6.3 Input

The nurse in her role as a caregiver receives stimuli from both the environment and from the self. The adaptation process is determined by a combination of all the stimuli, and adaptation occurs when the nurse responds positively to these stimuli (Phillips 2004:363). Input occurs in the form of focal, contextual and residual stimuli.

3.6.3.1 *Focal stimuli*

The RAM defines the focal stimuli as the internal and external stimuli that most immediately confront the person (Roy & Andrews 1999:31). Tsai (2003:1139) identifies focal stimuli as the objective burden in the care giving process. These she refers to as the duties and tasks that are associated with care giving, there is to say, the actual workload and the emotional demands that are unavoidable components of care giving.

The researcher noted in the previous chapter that an increased nursing workload is one of the most frequently cited cause of stress and, consequently, of burnout in nurses. This factor of increased workload was regarded by respondents is even more stressful than prolonged work in critical care units (Aiken et al 2002:1987; Adali & Priami 2002:1; Bakker et al 2005:276; Demir et al 2003:807; Embriaco et al 2007:686 Ridley 2007: 429; Poncet et al 2007:698;). Extensive research into the workload of nurses has shown the adverse effects of increased workload on nurses' physical and mental health.

Continuous and escalating emotional overloads have also been shown to exert a negative impact on nurses. The processes associated with death and dying are a source of great stress to nurses, and are often the cause of great distress. Brosche's (2003:173) research demonstrated how the emotional demands of dying patients, compounded by having to control and manipulate a high tech environment, together with the seriousness of the condition of patients in ICUs and the anxieties of their loved ones, can sometimes elicit overwhelming emotions in nurses who work regularly in critical care units. Because of the enormously high levels of stress in critical care units, it is hardly surprising that ICU nurses are more prone than other specialist nurses to develop stress and burnout unless they have mastered personal techniques and effective coping skills and resources to cope with the conditions that they encounter there on a daily basis.

3.6.3.2 *Contextual stimuli*

The RAM defines contextual stimuli as all the stimuli that are a peripheral part of a situation and that therefore contribute to the total effect of the focal stimuli, but that are not the immediate object of a person's attention or energy (Roy & Andrews 1999:31). As far as caregivers are concerned, contextual stimuli include stressful life events other than care giving as well the degree of social support and the social roles that form part of the caregiver's life (Tsai 2003:140).

Stressful life events can influence a nurse negatively or positively. A study by Vedhara, Shanks, Anderson and Lightman (2000:374) showed how stressful life events exert an adverse negative impact on the caregiver and how these may result in undesirable health outcomes. But stressful life events can also strengthen the coping abilities of nurses when they become opportunities to develop or strengthen existing coping skills. Tsai (2003:140) explains that a stressful life event disrupts an otherwise stable process of care giving, and that this sudden appearance of instability in the system requires a nurse to make adaptations to maintain equilibrium. Tsai (2003:140) therefore proposed in her theory of caregiver stress that “stressful life events have an additive effect on perceived stress, over and above the effect of objective burden”.

Social support from family, friends, relatives, and co-workers can have the effect of cushioning or insulating nurses in varying degrees against the ravages of stress. Tsai (2003:140) conceptualizes social support as “the perceived resources available to the caregiver for meeting the demands of care giving and enhancing the caregiver’s well-being”. A lack of adequate social support has been reported in various studies as a major source of stress for nurses (AbuAlRub 2004:73; Bradley & Cartwright 2002:163; Tyler & Cushway 2006:243. Support in the form of emotional processing (i.e. having someone to talk to about a stressful event), or instrumental assistance (i.e. practical, hands-on help and assistance with tasks) from family, friends, colleagues or acquaintances, consistently correlates with measures of well-being. Support from supervisors and co-workers are essential for the maintenance of nurses’ health in the workplace.

Nurses have to fulfil multiple social roles apart from their primary role as caregivers. In the theory of caregiver stress, social roles are defined as “the caregiver’s function and responsibilities toward other people in other aspects of life (for example [as a] worker, parent, and volunteer)”. While the multiplicity of social roles has been reported as a cause of stress for nurses, an absence of social roles, on the other hand, can influence

nurses negatively because such a lack would deprive nurses of forums for socializing, expressing their frustration and discussing their difficulties (Nordenmark 2004:115).

3.6.3.3 *Residual stimuli*

The RAM defines residual stimuli as environmental factors within or without the human system that exert effects on any current situation that cannot easily be calculated (Roy & Andrews 1999:32). In caregivers, such factors are age, gender, race, and personality.

In the literature that describes the various factors that cause stress and burnout in nurses, age is a variable that has consistently been shown to correlate with burnout. And since job stress has been reported to be higher in younger employees than in older ones, stress and burnout are more of a risk factor for workers in the earlier part of their careers than in the later stages (Maslach et al 2001:409).

The gender of workers has also been investigated as a factor in the development of burnout. Some of these studies rate women more highly as prospects for burnout while others rate men more highly on the same scales. It seems as though the main difference between men and women in these studies is that the men score more highly on measures of cynicism while women score more highly on measures of emotional exhaustion (Maslach et al 2001:409).

The educational level of workers has also been investigated for possible correlations with the onset of job-related stress. What has been found is that the higher the education levels of the workers concerned, the more likely they are to develop higher levels of stress. This might well be caused by the fact that people with higher levels of education tend to have higher expectations. When such expectations fail to materialise, the resultant disappointment may become a source of distress.

Several personality traits have also been correlated to the risk of developing burnout. Most of these studies are predicated on what has been called the “Big Five Personalities” (Bakker et al 2006:31; Langelaan et al 2006:521; McManus et al 2004:29). In the Big Five Personalities, neurosis and conscientiousness have most consistently been correlated with the development of burnout (Maslach et al 2001:411).

3.6.4 Control process

The control processes in the RAM are the regulator and cognator. Regulator processes in the form of the physiological adaptive modes respond automatically through neural, chemical and endocrinal events and coping mechanisms, while the cognator responds by way of the individual’s modes of self-concept, interdependence and role function (Andrews & Roy 1991:14). According to Roy, perception links the regulator and the cognator and connects them to the adaptive modes. Perception is the interpretation of stimuli and input into the regulator is transformed into perceptions, which are then perceived by the cognator into turned into responses in the adaptive modes (Phillips 2004:363).

Tsai (2003:140) hypothesizes that environmental stimuli produce adaptation responses in the four adaptive modes through perceived caregiver stress (burnout in this study). In absence of caregiver stress, objective burdens, stressful life events, social support, social roles and residual stimuli will have no influence on the caregiver’s adaptive modes. Caregiver stress is the perceptual component of the coping mechanisms. It includes the activities of both the cognator and regulator subsystems and is defined as the caregivers cognitive appraisal of stress-related caring for those who are ill.

3.6.5 Adaptive modes/effectors

The cognator and regulator processes manifest through the adaptive modes. In the theory of caregiver stress, perceived stress in the caregiver also manifests itself in the

four adaptive modes, which, in most cases, are the consequences of stress and burnout. The theory of caregiver stress hypothesizes that the caregiver's adaptive modes will be interrelated – without specifying causal paths. One can expect the dimensions of the caregiver's adaptation to be correlated with one another because the objective burden of care giving may affect more than one mode, and because a particular behaviour may be indicative of adaptation in more than one mode (Tsai 2003:142).

3.6.5.1 *Physiological mode*

Physiological mode refers to the physical and chemical processes that are involved in the functioning and activities of the living organisms (Roy & Andrews 1999:102). In the theory of caregiver stress, the nurse manifests deterioration in his/her physical well-being. Stress and burnout in nurses have been related to cardiovascular disease, musculoskeletal injuries and peptic ulcers.

3.6.5.2 *Self-concept mode*

The self-concept mode relates to the basic need for psychic and spiritual integrity. Roy defines self-concept as the composite of beliefs and feelings from one's own internal perceptions and from the perceptions of others (Roy & Andrews 1999:107). Tsai (2003:142) represents this mode by means of the caregiver's self-esteem and mastery. Tsai defines self-esteem as the caregiver's perception of her self-worth or perception of how important she is in relation to herself and other people. Low self-esteem represents an ineffective response whereas high self-esteem represents an adaptive response. Mastery, in the context of the theory of caregiver stress, refers to a caregiver's perception of her ability to handle or control the events and circumstances of life. A level of mastery represents an ineffective response; a high level of mastery represents an adaptive response. When a nurse feels that she has very little control over a particular difficult situation or stressor in her life, she will tend to become more stressed by that situation or stressor. Ganster, Fox and Dwyer (2001:954) studied occupational stress in a

longitudinal five-year study on nurses and found that nurses who perceived themselves as enjoying high levels of control during the course of the study, were also rated as having better health during the period covered by the study.

3.6.5.3 *Role function mode*

The underlying need in this mode is social integrity and it focuses on the role of the person in the society. This is classified as primary, secondary, and tertiary roles (Andrews 1991:348).

Role enjoyment, defined as caregivers' expressive behaviour in their major social role, is used to represent role function. Low role enjoyment demonstrates an ineffective response, whereas high role enjoyment represents an adaptive response (Tsai 2003:142).

3.6.5.4 *Interdependence mode*

This mode works towards the achievement of relational integrity using processes of affectional adequacy, that is giving love and receiving love, respect and value through effective communication and relations (Roy & Andrews 1999:111). In the theory of caregiver stress, marital satisfaction is used to represent the caregiver's interdependence mode. Low levels of marital satisfaction reflect an ineffective response, whereas high levels of marital satisfaction represent an adaptive response (Tsai 2003:142).

3.6.6 Propositions in the theory of caregiver stress

The relationships among input (caregivers' objective burden, stressful life events, social support, social roles, race, age, gender, and relationship), control process (perceived caregiver stress, depression), and output (physical function, self-esteem/mastery, role enjoyment, and marital satisfaction) exist while holding constant other factors in the theory. This study shall show the relationship between the input, control processes and

the output in nurses working in the critical care units as proposed in this theory. The propositions in the theory shall also guide this study and these are:

- Caregivers' objective burden leads to perceived caregiver stress.
- Caregivers' objective burden is the most important stimulus leading to perceived caregiver stress.
- High perceived caregiver stress results in ineffective responses: low levels of physical function, self-esteem/mastery, role enjoyment, and marital satisfaction.
- Although caregivers' physical function, self-esteem/mastery, role enjoyment, and marital satisfaction are different dimensions of caregivers' response, they are interrelated.
- Stressful life events have an additive effect on perceived stress, over and above the effect of the objective burden.
- Social support reduces the caregiver's perceived stress, through changing his/her cognitive appraisal of objective burden.
- Social roles moderate the effect of the objective burden on perceived caregiver stress.
- Race, age, gender, and relationship with the care recipient, as a group of residual stimuli, influence perceived caregiver stress.
- Objective burden, stressful life events, social support, social roles, and other stimuli have no influence on caregivers' physical function, self-esteem/mastery, role enjoyment, and marital satisfaction in the absence of perceived caregiver stress.

3.7 CONCLUSION

Human adaptation is the main concept in the RAM and Roy views it as both a state and a process. As a state, it becomes the adaptation level, which can be integrated, compensatory or compromised. The adaptation level is the result of the internal and

external stimuli on the human adaptive system/person. As a process, coping underlies the process of adaptation through the regulator and cognator subsystems.

Adaptation is viewed in the four adaptive modes and if there is ineffective adaptation to stimuli it is observed in the person's physiological function, self concept, relationships with people and their role functions.

The scope of the RAM is narrowed in the middle level theory of caregiver stress proposed by Tsai, which gives a better guide in the context of the critical care nurse as a caregiver. Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach et al 2001:398). The third proposition of the middle range theory of care giver stress states that, high perceived caregiver stress results in ineffective responses. The ineffective responses include burnout, depression, and chronic illnesses amongst others, hence the appropriateness of the RAM for this study.

CHAPTER 4

Research methodology

4.1 INTRODUCTION

This chapter discusses the methodology that the researcher applied to achieve the specific research objectives of this study. The research objectives of this study are:

- to investigate the prevalence of burnout in nurses who work in critical care units at Aga Khan University Hospital, Nairobi
- to investigate the factors that contribute to the development of burnout in nurses working in critical care units in Aga Khan University Hospital in Nairobi
- to provide guidelines for the mitigation of burnout in nurses who work in the critical care units of Aga Khan University Hospital in Nairobi

The research involved two phases. In each phase, the population, sample and sampling method, the data collection instruments, and the data collection strategies are described in detail. Also included was a comprehensive discussion about data analysis methods, ethical considerations and the limitations of the study

4.2 RESEARCH DESIGN

A research design is a blueprint for conducting a study that maximises the researcher's control over factors that might interfere with the validity of the study. A research design is usually the end result of a series of decisions that have been made by the researcher on how to implement the study (Burns & Grove 2003:223). A good research design offers trustworthy answers to the research questions while avoiding or

minimising bias (Polit & Beck 2004:209). According to Bryman (2004:27), the choice of a research design reflects the decisions that the researcher makes about the priority that he or she attaches to a range of dimensions of the research process. The research design also establishes the causal connections among the variables in the study and indicates whether or not the results of a particular study can be generalized to the population at large or not.

This study used a sequential, transformative, mixed methods research design to achieve the specific research objectives of this study, which were:

- to investigate the prevalence of burnout in nurses who work in critical care units at Aga Khan University Hospital, Nairobi
- to investigate the factors that contribute to the development of burnout in nurses working in critical care units in Aga Khan University Hospital in Nairobi
- to provide guidelines for the mitigation of burnout in nurses who work in the critical care units of Aga Khan University Hospital in Nairobi

4.2.1 Mixed methods research

Mixed methods research refers to the collection and/or analysis of both quantitative and qualitative data in a single study in which the data, collected concurrently or sequentially, is given priority. Mixed methods research also requires the integration of the data at one or more stages during the research process (Creswell, Plano-Clark, Gutmann, & Hanson 2003:209). According to Creswell and Plano-Clark, (2006:6), quantitative data includes closed-ended information while qualitative data consists of open-ended information that the researcher gathers through interviews with participants. The use of both kinds of data allows researchers simultaneously to generalize results from a sample to a population and also to gain a deeper understanding of the phenomenon that is being investigated. It also allows researchers

to test theoretical models and to modify them on the basis of the participant feedback that they receive.

Johnson and Onwuegbuzie (2004:14), refer to “mixed methods research” as the third research paradigm whose purpose is not to replace quantitative or qualitative methods but rather to benefit from the advantages of each kind of method while minimising its weaknesses in single research studies and across studies. Johnson and Onwuegbuzie (2004:14) propose that “if you visualize a continuum with qualitative research anchored at one pole and quantitative research anchored at the other, mixed methods research covers the large set of points in the middle area” (Johnson & Onwuegbuzie 2004:15).

It was Campbell and Fiske (1959:81) who popularised multiple data collection methods by using quantitative data in conjunction with multiple quantitative data collection methods to provide more layered answers to research questions. Their work was instrumental in encouraging the use of multiple research methods and the collation of multiple forms of data within the confines of a single study. The term *triangulation*, borrowed from the military, was used to suggest that quantitative and qualitative data might well be complementary rather than mutually exclusive. Campbell and Fiske suggest, that both quantitative and qualitative data collection methods could “uncover some unique variance which otherwise may have been neglected by a single method” (Jick 1979:603). Over the past 15 years, at least ten mixed methods textbooks have been published (Bamberger 2000; Brewer & Hunter 1989; Bryman 1988; Cook & Reichardt 1979; Creswell 2002, 2003; Greene & Caracelli, 1997; Newman & Benz 1998; Reichardt & Rallis 1994; Tashakkori & Teddlie 1998). In addition to this, academic journals such as *Field Methods*, *Quantity and Quality* and *Journal of Mixed Methods* are exclusively devoted to publishing research into mixed methods research designs.

4.2.1.1 *Mixed methods research process*

According to Collins, Onwuegbuzie and Sutton (2006:67), mixed methods research is composed of the following 13 distinctive steps:

- determining the goal of the study
- formulating the research objective(s)
- justifying a mixed research rationale
- determining the purpose of a mixed research design
- formulating the research question(s)
- selecting the sampling design
- selecting the particular mixed methods research design that will be best suited to answering the research questions
- collecting the data
- analyzing the data
- validating and legitimating the data
- interpreting the data
- writing the mixed methods research report
- reformulating the research question(s)

The way in which these steps relate to one another is illustrated in figure 4.1 (below).

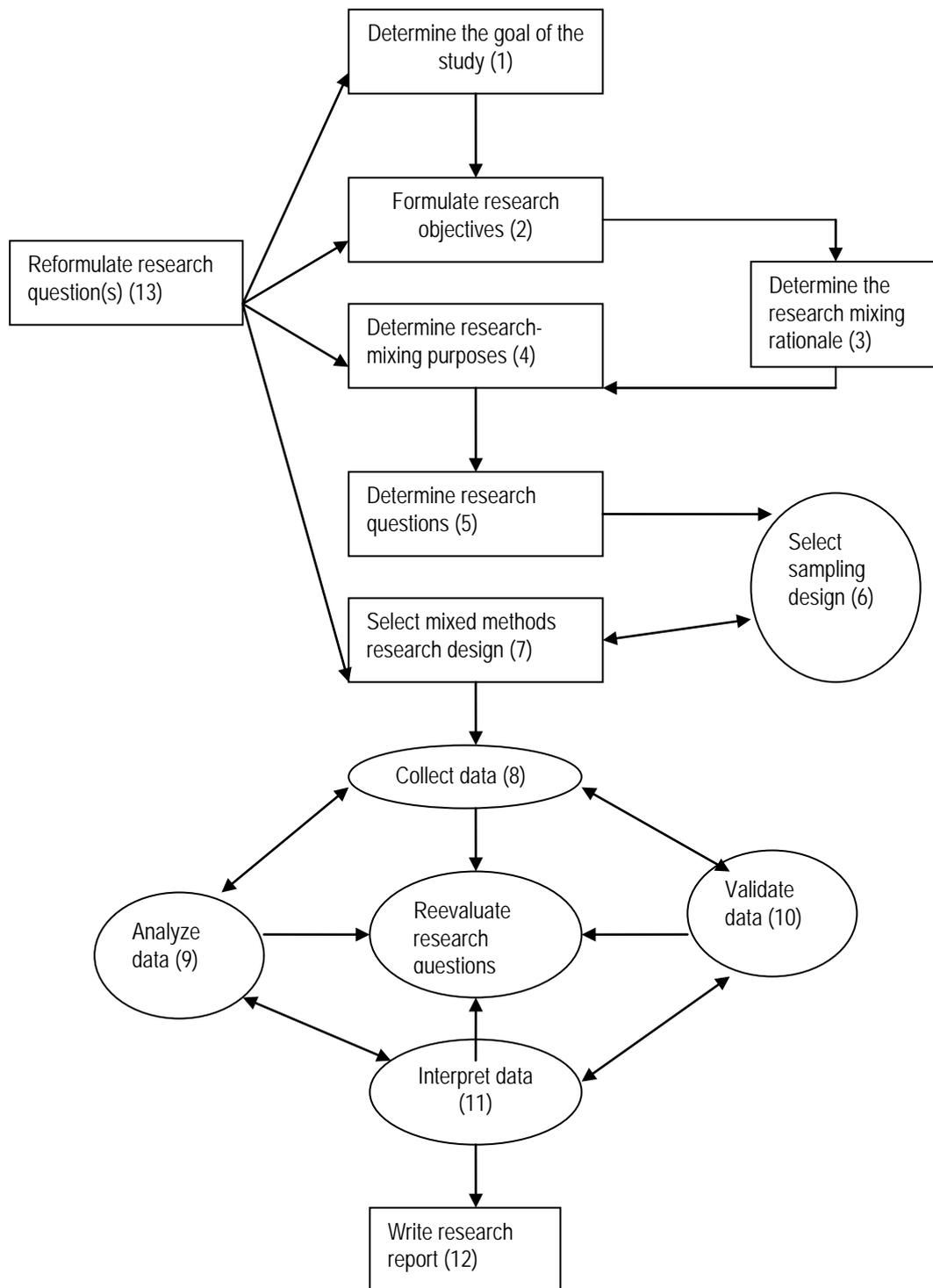


Figure 4.1 Mixed methods research process

Source: Onwuegbuzie & Leech (2006:474)

4.2.1.2 *Rationale for using mixed methods*

There are various rationales or justifications for using of a mixed methods research design. These rationales include the following:

- The results from one method can be used to corroborate the results obtained from using the other method (triangulation).
- The results from one method can be used to elaborate the results obtained from using the other method (complementing).
- The results from one method can be used to help, develop or inform the other method (development and cross-fertilisation).
- The results from one method can be applied to questions or results obtained from using the other method (initiation).
- The use of different research methods extends the breadth and range of an inquiry by applying different methods to different components of the inquiry (selective application).
- It is possible to gain a much more profound understanding of the research problem by bringing together the numeric data obtained from a quantitative method of inquiry into convergence with specific details obtained from data obtained from a qualitative method of inquiry (convergence of methods).
- It is possible to use a mixed method design to identify variables or constructs that can subsequently be measured by means of existing instruments or through developing new ones.
- It is possible to use a mixed method design to obtain statistical and other quantitative data and results from a population and then to use that data to identify individuals who could then be used as a sample in a new phase of inquiry that will enrich and expand the answers to the research questions through the application of qualitative methods of inquiry.

- A mixed method research design can be used to illuminate the needs of individuals or groups of the individuals who are marginalized or underrepresented (Greene et al 1989:255; Mertens 2003:135; Newman, Ridenour, Newman & DeMarco 2003:167).

4.2.1.3 *Principles of mixed methods research*

In order to use the mixed methods effectively, the researcher allowed herself to be guided by the two principles of mixed methods research. The fundamental principle of mixed methods research states that researchers should collect multiple forms of data by using different strategies, approaches and methods in such a way that the combination of the various methods is likely to result in a complementarity of the particular advantages of each method and a minimisation of the weaknesses or disadvantages inherent in each method (Johnson & Turner 2003:297). In order to achieve this, the researcher first needed to consider all of the relevant characteristics of quantitative and qualitative research (see the following section for more information) and to understand the strengths and weaknesses of each.

After she had thoroughly analysed the characteristics of the two paradigms, the researcher needed to recognize and explicate the primary theoretical paradigm that forms the analytical core of the project (Driessnack et al 2007:1046). Thus, for example, Morse (2003:189) indicates that if the primary theoretical drive is quantitative and the secondary component is qualitative, then the sample must be purposefully selected from the main study. The primary theoretical drive is designated by the use of upper case letters, QUAN (quantitative) or QUAL (qualitative). A plus sign (+) is used to indicate that quantitative and qualitative data were collected concurrently, while an arrow (→), followed by lowercase letters, indicates that the data was collected sequentially or after the primary data had already been obtained (Creswell: 2003: 209). QUAN → qual, for example, indicates a quantitatively driven sequential study in which

the quantitative data collection process was followed by qualitative data collection with unequal priority. Following the same pattern, QUAL + quan indicates a concurrent qualitatively and quantitatively driven study in which qualitative and quantitative data collection occurred at the same time. Other possible combinations are QUAL + qual, QUAL → qual, QUAL → quan, QUAN + quan, QUAN → quan, QUAN + qual, QUAN → qual (Driessnack et al 2007:1046).

The second principle of mixed methods research indicates that a researcher should recognise the role of the secondary paradigm which is to obtain a perspective or dimension that cannot be accessed by means of the first approach in order to enhance descriptions or to enable further exploration or the tentative testing of an emerging conjecture (Morse 2003:189).

4.2.1.4 *Sequential mixed methods research*

There are three ways in which data can be collected sequentially. They are referred to respectively as sequential explanatory, sequential exploratory, and sequential transformative. In a *sequential explanatory* design, quantitative data is collected and analyzed, and this is then followed by the addition of qualitative data. Priority in such a case is usually unequal and is accorded to the quantitative data. Qualitative data is used primarily to augment quantitative data. The analysis of the data is usually connected and the integration of the data usually occurs at the data interpretation stage and in the discussion (Creswell 2003:215). These designs are particularly useful for explaining relationships and study findings, especially when these are unexpected.

In *sequential exploratory* design, the qualitative data is collected and analyzed before the quantitative data. The priority in this case is usually unequal and is accorded to the qualitative data. Quantitative data is used primarily to augment the validity of qualitative data. The analysis of the data is usually connected and the integration

usually occurs at the data interpretation stage and during the discussion (Creswell 2003:215).

In a *sequential transformative* design, quantitative data may be collected and analyzed before the qualitative data is collected and analysed. Conversely, the qualitative data may be collected and analyzed before the same process is applied to the quantitative data (Creswell 2003:216). In either case, the form of data that is collected first will depend on the needs and preferences of the researcher. The priority accorded to either kind of data may be unequal or it may be given to one form of data. But in some cases, equal priority may be accorded to both forms of data. Since the data analysis is usually connected, integration usually occurs at the data interpretation stage and during the discussion. The distinctive element of the sequential transformative model is that a theoretical perspective which may be a conceptual framework, a specific ideology, or the intention of advocacy, guides the study (Greene et al 1989:255).

The researcher made use of a sequential transformative design for this research. In terms of this paradigm, the quantitative data was collected before the qualitative data was collected, and both forms of data were given priority. The researcher then proceeded to integrate the data during the discussion stage. A theoretical framework also guided the study.

It was mentioned above that a researcher who intends to use a mixed methods research design should have a clear understanding of the respective weaknesses and strengths of a mixed methods research design.

4.2.1.5 *Strengths and weaknesses of mixed methods research*

➤ **Strengths**

The strengths and advantages of a mixed methods research design are indicated by the following propositions:

- Words, pictures, and deeply layered and textured descriptions and narratives can be used to add meaning and depth to numeric data while quantitative data can be used to verify the accuracy and relevance of qualitative information.
- Quantitative and qualitative research strengths can be used to complement one another.
- The simultaneous use of quantitative and qualitative research methods can produce a broader and more complete range of research questions because the researcher is not confined to a single method or approach.
- The results from the first phase can be used to refine and inform the purpose and design of the second phase.
- A researcher can use the particular strengths of the secondary research method to compensate for the weaknesses in the primary method by using both methods in a research study.
- The researcher can add to the reliability of his or her results by drawing conclusions from a convergence and corroboration of findings from both quantitative and qualitative methods of research.
- A researcher can enrich the descriptions in her study by incorporating insights that could not have been obtained from the use of a single method alone.
- A mixed methods research design makes it more likely that the results of a study will be able to be generalised to other populations.

➤ **Weaknesses**

The weaknesses and disadvantages of a mixed methods research designed are indicated by the following propositions:

- It might be beyond the capacity and resources of a single researcher to carry out both qualitative and quantitative research, especially when two or more approaches are being used concurrently. Research of this kind may require a research team.
- It is absolutely necessary for a researcher who utilises a mixed methods research designed to be completely familiar with all the procedures and techniques that are involved in the use of multiple methods. It is also necessary for him or her to understand how to integrate the two sets of data correctly.
- It is more expensive to use a mixed methods research design.
- It requires far more time to apply a mixed methods research design in the correct proportions.

4.3 RESEARCH METHODOLOGY

“Research methodology” refers to the techniques and methods that are researcher uses to give structure to a study, and to gather and analyse information in a systematic fashion (Polit & Hungler 2004:15). According to Burns & Grove (2003:223), the research methodology encompasses the entire strategy of the study from the identification and assessment of the problem to the final phase of data analysis, conclusions and recommendations. A research methodology determines the particular research process and the kind of tools and procedures that will be used in the study, the specific tasks that have to be accomplished, the individual steps that constitute the research process, and the procedures that are applicable to the kind of design that has been chosen (Mouton 2001:75).

It was mentioned earlier in the text that the researcher achieved the objectives of this study by sequencing the research in the following two phases:

- Phase 1: Quantitative methodology
- Phase 2: Qualitative methodology

These two phases are described in detail below.

4.3.1 Phase 1: Quantitative research methodology

A quantitative research is a formal, objective, rigorous, systematic process for generating numerical data that provides information about selective phenomena in the world. It is used to describe variables, examine relationships among variables, and determine the extent and frequency of any cause and effect interactions (Burns & Grove 2001:26). The researcher used a quantitative methodology to answer the first research question, which was: “What is the prevalence of burnout in the nurses who work in the critical care units at the Aga Khan University hospital?” In order to answer this question, the researcher utilised a self-administered questionnaire, which she distributed to the nurses who were working in the critical care units in the hospital.

The strengths and advantages of quantitative research are summarised in the statements below:

- Testing and validating quantitative research findings occur the within the context of tried and tested theories about how (and, to a lesser degree, why) phenomena occur.
- A researcher can generalize quantitative research findings when the data has been derived from random samples of sufficient size.

- Quantitative research proceeds in an orderly and systematic fashion from the initial definition of the problem, to the selection of the concepts that are central to the study, and then to the analysis and collection of the information that will provide a solution to the problem.
- It is possible to generalize quantitative research findings and replicate them on many different populations and subpopulations.
- The quantitative research method can be used as the basis for making quantitative predictions.
- The collection of data by making use of certain quantitative methods can be accomplished relatively quickly (by means of telephone interviews, for example).
- A quantitative research design provides precise, quantitative, numerical data.
- It takes relatively less time to analyse quantitative data because there are many kinds of statistical software that have been designed specifically for this purpose.
- The research results obtained from quantitative research are relatively independent of the researcher (in, for example, their effect size and statistical significance).
- Research based on a quantitative design may be accorded greater credibility by those who have the power and authority to make important decisions. Such people include private donors, administrators, government officials, those who are responsible for funding international programmes and initiatives, and the administrators of NGOs and charitable and philanthropic organisations.
- It is useful for studying very large samples of people (Bryman 2004:19; Polit & Beck 2004:15).

The weaknesses and disadvantages of quantitative research are summarised in the statements below:

- The categories used by the researcher may not reflect what a population understands by the phenomenon that is being investigated.

- Since it is necessary for quantitative research to reduce human experience to a few rigidly defined concepts in order to operate numerically, it is relatively narrow and inflexible in its scope and tends to obscure the important insights and nuances of information that are embedded in the phenomenon.
- It is very difficult to measure psychological phenomena such as morale, for example, by using a quantitative research design.
- A researcher using a quantitative research design may miss certain phenomena because of the focus on theory or hypothesis *testing* rather than on theory or hypothesis *generation* (called the *confirmation bias*).
- The knowledge that is produced by quantitative research methods may be too abstract and general for direct application to specific situations, contexts, and individuals.

4.3.1.1 Population

Bryman (2004:87) defines “population” as the universe of units from which the sample is selected. He further explains that these “units” may not necessarily mean only people; they may also be towns, regions, red blood corpuscles, etc. Polit and Beck (2004:289) define “population” as the entire aggregation of cases in which a researcher is interested. The population is also described as “accessible” or as “the target”. Polit and Beck describe an accessible population as “the aggregate of cases that conform to the designated criteria and that are accessible as a pool of subjects for the study” (Polit & Beck 2004:290), while they describe the “target population” as “the aggregate of cases about which the researcher would like to make generalizations” (Polit & Beck 2004:290).

The population for this study are all the nurses who were working in the critical care units in the Aga Khan University Hospital in Nairobi, Kenya, at a time when the researcher conducted the study. According to the Nursing Education Services

Department at the Aga Khan University Hospital, the total number of nurses who were working in critical care units at that time totalled fifty-six.

4.3.1.2 *Sample and sampling*

A sample is a subset of the population elements about which information is collected (Polit & Beck 2004:291). According to Bryman (2004:87), a sample must be representative of the population of one hope to make generalizations about the findings from the sample to other similar populations. Bryman also makes another important point about the representativeness of the sample when she states that biases can occur when a sample does *not* represent the population from which it has been drawn. Since sample bias may be either conscious or unconscious, a researcher's personal preferences, leanings and interests may affect the way in which she chooses a sample (Babbie & Mouton 2001:169). Since proper sampling methods will allow the researcher to choose a small number of respondents from a larger population, the costs of the research in terms of money and time are kept to a minimum without forfeiting the possibility of generalisability (Davis & Scott 2007:156). One of the methods of sample selection is the probability sampling method. Since another cause of bias is a researcher's implicit criteria for inclusion (Bryman 2004:88), the researcher should make the greatest possible effort to consciously exclude bias. According to Bryman (2004:88), however, this might not always be possible therefore. The researcher should therefore take steps to minimise the bias as much as possible by using a sampling method that ensures that bias will be avoided.

Sampling is the process of selecting units from a population so that the sample will permit an estimation of the unknown qualities of the population (Tillé 2006:2). Since proper sampling methods will allow researcher to choose a small number of respondents from a larger population, the costs of the research in terms of money and time are kept to a minimum without forfeiting the possibility of generalisability (Davis

& Scott 2007:156). One of the methods of sample selection is the probability sampling method. Probability sampling involves the application of random selection procedures that ensure that each unit of a sample is chosen on the basis of chance and that all the units of a study population have an equal (or at least a known) chance of being included in the sample (Varkevisser, Pathmanathan & Bwownlee 2003:202). The best known and most widely used propability sampling methods are simple random sampling, stratified random sampling, cluster sampling, and systematic sampling.

Another method of sampling is the non-probabability method of sampling. It is a feature of non-probability sampling methods that not every element of the population has an equal opportunity of being included in the sample. According to Burns and Grove (2003:374), although this method decreases the chance that the study can be generalised to other circumstances, it is the one that is most commonly used in nursing studies. Babbie (2005:188) is of the opinion that non-probability sampling methods can be used to research situations that do not permit the kinds of probability sampling methods that are used in large scale surveys. The most common and widely used non-probability sampling methods include convenience sampling, purposive sampling, snowballing sampling, and theoretical sampling methods.

In this phase of the study, the researcher used the convenience sampling method to investigate the prevalence of burnout in nurses working in the critical care units at the Aga Khan University Hospital in Nairobi, Kenya.

According to Polit and Beck (2004: 292), convenience sampling entails the use of people as study participants because they are conveniently available and willing to participate in the research. The researcher chose a convenience sample by distributing the research instrument to all the nurses who were working in the critical care units on different shifts until all the samples had been recruited.

Convenience sampling is a method of sampling that the researcher uses because the subjects of the sample are easily available to the researcher by virtue of their accessibility (Bryman 2004:100). Convenience sampling is used when a researcher believes that the population that is being sampled is either homogenous or that the sample being measured has characteristics that are so randomly distributed that the outcome would not be materially affected by more sophisticated methods of sampling (Dorofeev & Grant 2006:42). During this phase of the research, the fact that the respondents were all nurses working within the critical care units of the same hospital made them more or less homogenous. It was this that rendered them appropriate to be subjects of a convenience sampling method. And because this population was also not large, a sampling frame was not required. This made it feasible to accept the most accessible respondents for inclusion in the sample.

Burns and Grove (2003:37) note that in spite of the fact that convenience sample may be simple, easy and efficient, it is quite possible that multiple, subtle and unrecognizable biases may exist in the actual Sampling procedure. A researcher should avoid these biases by carefully thinking through the characteristics of the people who are eligible for the sample, and should therefore take steps to improve the representativeness of the sample by carefully describing the decisions in terms of which the sample has been selected. This will enable other researchers to evaluate the possibility of biases in the selection of the sample. The researcher took this advice into consideration, she has provided a detailed description of her sampling method and how she implemented the process of sampling.

The criteria that the researcher adopted for possible inclusion in the sample consisted of the following:

- Those who were eligible for inclusion had to be registered nurses who were working in the general intensive care unit, the neonatal intensive care unit and

high dependency units of the Aga Khan University Hospital at the time of the study. All such nurses were regarded as eligible because they work on a rotational basis in all the above-mentioned units.

- Those who were eligible for inclusion had to have been employed for at least six months in the critical care units prior to the time of the selection.

The criteria that the researcher adopted for possible exclusion from the sample consisted of the following:

All nurses who were employed in managerial positions were ineligible for inclusion in the sample. This was because they were not directly involved in patient care and thus was not directly experiencing the different stressors that those nurses who were working in the critical care units were experiencing on a daily basis as part of their job responsibilities.

The researcher is aware that the sample used in a quantitative design is referred to as “respondents”, however to prevent confusion, the participants in this study was referred to as “participants” throughout the study.

4.3.1.3 Data collection

“Data collection” refers to gathering such information as will enable a researcher to address a research problem and answer the research questions (Polit & Beck 2004:317). Data collection may be either unstructured or structured. Unstructured data collection provides narrative data which enables respondents to define important dimensions of a phenomenon and to elaborate on what is relevant to them. Such data is collected, thematically organised and then qualitatively analysed (Polit & Beck 2008:391). Structured data collection, on the other hand, gives respondents only extremely limited opportunities (if any) to qualify their answers or to explain the underlying meaning or

significance of their responses (Polit & Beck 2004:318). Researchers use a quantitative data collection method to collect data when there is a need for a precise measurement technique that will deliver well defined and clear data that is reducible to a numerical format (Johnson 2002:72).

The researcher adopted a structured approach for data collection in this phase of this study by using the Maslach Burnout Inventory-Health Services Scale (MBI-HSS) to investigate the prevalence of burnout in the defined sample of nurses. The nurses who were working in the critical care units of the Aga Khan University Hospital in Nairobi, Kenya, during the period of data collection were each given the questionnaires to fill in. The questionnaire was handed out by the team leader of each station. Although no consent form was attached to the questionnaires, a letter was attached that explained the purpose of the study to the respondents. This letter also explained that all participation in the study was on a voluntary basis, and that all the information that was imparted would remain anonymous and strictly confidential.

4.3.1.3.1 Data collection instrument development

A data collection instrument is a formal printed document that is used to collect and record information (Polit & Beck 2004:318). The data collection instrument that was used in this case was in the form of a self-reporting questionnaire. Although a questionnaire is a highly structured method of data collection that is relatively inexpensive and that produces results (data) quite quickly, the response rate to questionnaires can sometimes be an acceptably low unless the respondents accept that participation in the study can be of great value to them both in the short term and in the long term (Sapsford & Jupp 2006:102).

As has already been noted above, this study utilized the MBI-HSS. The researcher included demographic questions that elicited the demographic, professional and private

details of the participants. These questions were included because the literature indicates that age and years of experience (Ilhan et al 2007:100) and marital status (Sahraian et al 2008:62) are some of the factors that correlate with the development of burnout in nurses. The Roy Adaptation Model also identifies these factors as contributors to the development of ineffective responses to environmental stimuli (Roy & Andrew 1999:32).

The MBI-HSS is the only measure that assesses all three of the core dimensions that were investigated in this study, namely, emotional exhaustion, depersonalization, and reduced personal accomplishment for people working in human services and health care (Maslach et al 2001:402).

Christina Maslach first developed the MBI in 1986. Although those researchers who originally investigated the burnout phenomenon thought that it was restricted to professionals who deal directly with recipients, the concept of burnout was broadened in 1996 and redefined as a crisis that resulted from any worker's relationship with his or her colleagues in the workplace. The three original dimensions of the MBI were thus broadened so that they did not refer exclusively to problems that arose as a result of offering health care and other kinds of services to people. The expanded definition now included exhaustion and fatigue, irrespective of its cause or origins. Cynicism for example, may reflect an indifferent or detached attitude towards work as well as other people, and a lack of professional efficacy encompasses both the social and non-social aspects of occupational accomplishment (Schaufeli & Buunk 2003). These considerations resulted in the creation of MBI-GS, and the original MBI thus became MBI-HSS. Another version – the MBI-Educators Survey, or MBI-ES – was especially developed for use on people who work in educational settings.

Because the MBI- HSS is a copyrighted document, the researcher had to obtain permission to use the questionnaire when she purchased the scale from Consulting Psychologists Press Incorporated in Palo Alto, California.

4.3.1.3.2 *Structure of the Maslach Burnout Inventory-Health Services Scale*

MBI-HSS consists of 22 items, each of which is written in the form of a statement about feelings or attitudes that are related to the job in hand. An example of such a statement is, "I feel burned out from my work." These feelings are then rated according to the Likert seven-point scale that ranges from between 0 (which is equivalent to "never") to 6 (which is equivalent to "everyday"). The general term *recipient* is used in the items to refer to the particular people for whom the respondent provides services, care, or treatment.

There are nine items in the Emotional Exhaustion subscale that assess feelings of being overextended and exhausted by one's own work. The five items in the Depersonalization subscale measure the extent of unfeeling and impersonal responses to the recipients of one's services, care or treatment. For both the Emotional Exhaustion subscale and Depersonalization subscale, higher mean scores correspond to higher levels of burnout. Eight items in the Personal accomplishment subscale assess feelings of competence and successful achievement in one's work with other people. Lower mean scores in this subscale correspond to higher levels of burnout. The scores obtained from each subscale are then considered separately and are not combined into a single, total score. This means that three scores are computed for each respondent in a study.

Burnout is conceptualized as a continuous variable that ranges from low to moderate to high degrees of experienced feelings (Maslach et al 1996:5). Maslach et al explain this in the following way:

- A high degree of burnout is reflected by high scores obtained in the Emotional Exhaustion (EE) and Depersonalization (DP) subscales and by low scores obtained in the Personal Accomplishment (PA) subscales.
- An average to moderate degree of burnout is reflected in average scores obtained in the three subscales.
- A low degree of burnout is reflected by low scores obtained in the Emotional Exhaustion (EE) and Depersonalization (DP) subscales and by high scores obtained in the Personal Accomplishment (PA) subscale.

The scale is self-administered, and instructions for scoring the rates are clearly defined for the respondent on the front page of the questionnaire.

4.3.1.3.3 *Reliability of the MBI-HSS*

Polit and Beck (2005:508) define “reliability” as “the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure”. There are three factors that need to be considered before a measure can be defined as efficient: *internal consistency* (i.e. whether or not the items that make up the scale are consistent), *inter-observer consistency* (test-retest), and *stability* (how stable the measure proves to be over a period of time).

Porte (2002:48) points out that if a researcher intends to use existing instruments of measurement, then the researcher must confirm the established reliability as well as the validity of the instruments. The researcher therefore made reference to the established reliability of the MBI-HSS that was used in the study.

The inventors of this scale and extensive research over a period of time have already established the reliability coefficients. According to Maslach et al (1996:197), the

reliability coefficients obtained had been based on large samples that were used in the selection of items to avoid any improper inflation of reliability estimates.

Internal consistency was estimated by Cronbach's coefficient alpha (n=1,316). The reliability coefficients for the subscales were as follows: .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment. The standard error of measurement for each subscale has been established as 3.80 for Emotional Exhaustion, 3.16 for Depersonalization, and 3.73 for Personal Accomplishment. The stability of the MBI-HSS has been established by means of substantial research that has been undertaken with the use of this scale (Maslach 1997:37).

4.3.1.3.4 Validity of MBI-HSS

“Validity” refers to the issue of whether an indicator or a set of indicators that has been devised to gauge a concept really measures that concept (Bryman 2004:72). Validity can be established in several ways. Construct validity examines the fit between the conceptual definitions and the operational definitions of the variables (Burns & Grove 2003:230). Content validity measures the degree to which an instrument has collected an appropriate sample of items for the construct being measured (Polit & Beck 2004:423). The construct validity of the MBI-HSS has been assessed in different sociocultural contexts with quite acceptable results (Schutte, Topinnen, Kalimo & Schaufeli, 2000:53).

4.3.1.3.5 Pre-testing of the research instrument

“Pretesting” refers to the performance of a small-scale study with a very small sample to determine in advance whether the study approach and the study instrument are both feasible and practicable (Wimmer & Dominick 2006:194).

Pretesting serves the following purposes:

- Pretesting identifies those aspects of an instrument that may be difficult for participants to understand as well as those items or statements that may be ambiguous and therefore confusing for participants.
- Pretesting ensures that the instruments are not culturally insensitive or perhaps even offensive to the respondents.
- Pretesting enables a researcher to check whether the questions in the instruments are comprehensible and clear and whether the instructions that accompany the questionnaire explain clearly and unambiguously to the participants how they should fill in the questionnaires.
- Pretesting enables a researcher to determine whether the data that is produced is sufficiently variable.

(Bryman 2004:159; Polit & Beck 2004:328)

Polit and Grove (2004:328) make the following observation: “Researchers who develop a new instrument almost always subject it to rigorous pretesting... Even when the data collection involves existing instruments, it is usually wise to conduct a small pretest.” The researcher therefore pretested the Maslach Burnout Inventory- Health Services Scale on a sample of five nurses who were not participants in the actual study. This pre-test was undertaken in a medical ward of the Aga Khan University Hospital. The nurses concerned were each given an assessment form with spaces for comments on which they could evaluate the different aspects of the study instruments. The criteria in terms of which they were asked to assess the instrument included layout, legibility, clarity, relevance and methods for preserving the anonymity of the participants in all the study instruments.

4.3.2 Phase 2: Qualitative research methodology

Qualitative research uses a flexible research design to gather in-depth data about phenomena from narratives and other information collected from respondents (Polit & Beck 2004:729). In order to carry out qualitative research successfully, a researcher needs to understand the strengths and weaknesses of qualitative research. The strengths and advantages of qualitative research are summed up in the following statements:

- Qualitative research accumulates data in terms of the participants' own emergent categories of meaning.
- It is better suited to studying a limited number of cases in great depth and detail.
- It is useful for describing complex phenomena that elude the procedures of quantitative research.
- Qualitative research offers a researcher an understanding of people's personal experiences of phenomena by means of the descriptions and narratives that they provide (i.e. it offers the emic or insider's point of view).
- Qualitative research is especially useful for eliciting the rich and layered details of phenomena that are situated and embedded in their local contexts.
- Qualitative researchers can use the primarily qualitative method of grounded theory to inductively generate a provisional but explanatory theory about a phenomenon.
- In qualitative research, data is usually collected in naturalistic settings.
- The approaches, methods and techniques of qualitative research are especially responsive to local situations, conditions, and the stakeholders' needs.
- Since qualitative researchers have opportunities to observe any changes that might occur during the conduct of a study (especially during extended fieldwork), they are in a position to shift the focus of their studies in response to such changing conditions.

- Because qualitative data is derived from the words and categories of the participants themselves, qualitative research is particularly useful for investigating the reasons why phenomena occur (Polit & Beck 2004:729).

The weaknesses and disadvantages of qualitative research are summed up in the following statements:

- The insights and understanding derived from qualitative research cannot be generalised to other people and other settings because the findings of any particular study are unique to the relatively few people and conditions on which the study is based.
- Qualitative research is not used to make quantitative predictions.
- Qualitative research is not ideal for testing hypotheses and theories that involve large participant pools.
- Qualitative research might have lower credibility than quantitative research in the eyes of some administrators and commissioners of programmes.
- It usually takes much longer to collect, analyse and interpret the significance of qualitative data than it does to collect and interpret quantitative data.
- The analysis of qualitative data into significant categories and themes is often extremely time-consuming.
- The results and conclusions of qualitative data are far prone to being affected by a researcher's personal biases, preferences and idiosyncrasies (Polit & Beck 2004:729).

4.3.2.1 Population

The population for this study consisted of all the nurses (with certain minor exclusions) who were working in the critical care units of the Aga Khan University Hospital in Nairobi, Kenya, at the time of the study. The criteria for inclusion and exclusion in the

qualitative phase of the study were exactly the same as those at the researcher used for the quantitative phase.

4.3.2.2 *Sampling*

The researcher used a purposive sampling method in the qualitative phase of the study to assemble a sample of nurses to provide data about the factors that lead to the development of burnout and the measures that could be used to alleviate its effects.

In purposive sampling, each sample is selected for a particular purpose, usually because of the unique characteristics of the elements concerned or because the individuals who are selected are particularly knowledgeable about the issues that the researcher wishes to investigate (Schutt 2006:155). Purposive sampling is often used when the researcher is studying social phenomena that are too rare, individual and unique to be dealt with by using a representative cross sectional of the people or elements concerned (Gray, Williamson, Karp & Dalphin 2007:105). There are various strategies that are available to a researcher who wishes to use purposive sampling. These include the following:

- *Maximum variation sampling.* This variation involves the purposive selection of cases that exhibit a wide range of variations or dimensions that are of interest to the researcher while at the same time ensuring that people from diverse backgrounds are adequately represented (Polit & Beck 2004:306).
- *Critical case sampling.* The samples are chosen when the researcher wishes to focus on a particular subgroup in a population, such as, for example, the most burned-out nurses in the whole population (Bamberger, Rugh & Mabry 2006:326).
- *Homogenous case sampling.* In this variation of purposive sampling, the researcher picks out elements from a particular subgroup to study in depth. This variation in purposive sampling is usually used in studies that make use of focus group

discussions were generating opinions (data) from people who are demographically, educationally or professionally similar (Tashakkori & Teddie 2003:278).

- *Expert sampling.* This variation in purposive sampling allows a researcher to choose a sample of people who are known to have had certain experiences all who can demonstrate experience in a particular field (Trochim 2006).

The researchers selected between a group of five and six nurses from the critical care units for the focus group discussions. The nurses who were selected had all worked in all the critical care units at various stages of their careers. These nurses were of both genders, they were between career levels II and V, and they all had experience of one year or more in critical care units. The researcher did this deliberately in order to obtain as many rich and diverse descriptions as possible from the most knowledgeable and widely experienced nurses in the total population.

4.3.2.3 Data collection

The researcher carried out focus group discussions (FGDs) with the participating nurses during this phase of the study in order to gather their opinions and perceptions about the factors that lead to the development of burnout and possible ways of mitigating its destructive effects.

A focus group discussion is guided by a facilitator and is a group discussion with approximately five to twelve people. The participants in the group are encouraged to speak freely and spontaneously about the selected topic (Varkevisser et al 2003:183).

Focus group discussions are characterised by the following five main features:

- The group is usually comprised of between five and ten people. While the group has to be small enough for everyone to have an opportunity to share insights, it needs to be large enough to provide a meaningful diversity of opinion.
- The people in the group have certain characteristics in common that are important for the research and that is why they were selected for the sample by the researcher.
- Focus group discussions are able to offer a great deal of qualitative data when, at a later stage, the researcher compares and contrasts the data that has been collected from at least three of the focus group discussions.
- Group discussions are designed to reveal and elucidate the various meanings that arise in the discussion and the way in which they negotiate and interpret these meanings.
- Group discussions are capable of making an enormous contribution to the way in which the researcher constructs the research and resolves the research questions (Flick 2006:199; Krueger & Casey 2002:10)

Group discussions are conducted under the guidance of a facilitator who may be the researcher or a research assistant. The researcher should already have a clear understanding of the characteristics that he or she will encounter in the participants and the conditions under which they live (Stewart, Shandasam & Rook 2006:165). The function of the facilitator is to introduce the session, to encourage discussion and involvement, to build rapport and demonstrate empathy, to control the rhythm and progress of the meeting in as obtrusive a manner as possible and to keep the attention of the members of the group on the topic in hand. A facilitator may also act as the recorder of the session.

The focus group discussions were carried out by the researcher under the guidance of an experienced colleague in order to ensure the trustworthiness of the process. All the discussions were tape recorded and took place in comfortable and neutral surroundings (in this case, in the conference room of the intensive care unit). An incentive in the form of breakfast was offered to all participants who were willing to participate in the discussions.

Three discussions were held on different days over a period of two weeks. The discussions were scheduled for the period immediately after night duty and after the researcher had determined that the participants would not be returning to duty on the day of the focus group discussions.

4.3.2.4 *Trustworthiness*

Trustworthiness refers to the degree of confidence that qualitative researchers have in their data (Polit & Beck 2008:768). It is important for the researcher to establish the trustworthiness of the research process because this will enable the researcher to have confidence that the findings and conclusions have made a worthy contribution to the researcher's field of knowledge and because it is only with such confidence that the research can be brought to the attention of other scholars in the field (Law 2002:337).

The researcher used the Lincoln and Guba framework for establishing the trustworthiness of the research. Trustworthiness involves four criteria, namely, credibility, dependability, confirmability and transferability. These four criteria correspond to the concepts of internal validity, reliability, objectivity and external validity (Onwuegbuzie, Jiao & Bostick 2004:211). All these concepts will be discussed in detail below in the context of the researcher's description of the strategies that she used to ensure that her research complied with these four criteria.

4.3.2.4.1 *Credibility*

“Credibility” refers to confidence in the truth of the data and the soundness of the interpretation of the data by the researcher and the reader (Polit & Beck 2008:539). According to Lincoln and Guba (1985), cited in Polit and Beck (2008:539), credibility involves (1) constructing and carrying out the study in a way that enhances the believability of the findings, and (2) taking steps to demonstrate that credibility to external readers and observers. The present researcher increased the credibility of her study by means of triangulation. Polit and Beck (2008:543) define “triangulation” as “the use of multiple referents to draw conclusions about what constitutes truth”. Denzin (1998), as cited in Macnee and McCabe (2008:172), describes four types of triangulation, namely, data triangulation, method triangulation, investigator triangulation, and theory triangulation. In this study, the researcher has used data triangulation in an attempt to maximise the range of data because it has contributed to a more complete understanding of phenomena of stress and burnout. The researcher accomplished this by using person triangulation. She therefore chose nurses in different stages of their careers for the focus group discussions. These nurses were of different ages and had spent varying amounts of time working in critical care units. The researcher then organised combinations of these nurses for three different focus group discussions. The discussions that ensued were stimulating and thought-provoking because all of the participants had been selected on the grounds of their differences and so would be able to bring many different points of view to the table.

The researcher also utilised the strategy of prolonged engagement. This enabled the researcher to collect data that facilitated an in-depth understanding of the factors that were causing stress and burnout and possible ways of mitigating it from the perspective of the nurses working in the critical care units. Through prolonged engagement with the critical care units, the researcher was able to crosscheck all data for any

misinformation and distortions of reality (Polit & Beck 2008:542). Although the researcher worked in a CCU for a period of over five years until last year, she remains actively involved in the teaching of critical care nursing. This enabled her to construct meaningful and trusting relationships with the participants. Macnee and McCabe (2008:170) point out how important it is to be able to establish such relationships because participants must feel free to share their feelings, insights and perceptions honestly and openly – something that they will not do unless they know and trust the researcher sufficiently to develop such openness.

4.3.2.4.2 *Dependability*

Lincoln and Guba (1985) describe dependability as the stability of data over a period of time and under various conditions (Polit & Beck 2008:539). The researcher maximised the dependability of her findings by supplying a detailed description of her research methodology and intended procedures. She also contributed to the dependability of the findings by offering detailed descriptions of the context and circumstances that surrounded the phenomena which were the object of study. In this way, she increased the likelihood that the meaning and importance of the behaviours and events described in the study would be fully comprehended by well-informed and qualified observers (Higgs 2001:44). The researcher also took care to justify the rationale for her chosen method, to clarify the steps and techniques of the research process, to fully document the methods that she used for gathering data, to provide details about the raw data that was generated by the research process (see Annexure 2: Copy of the transcription), and to set out all the details of the analysis process.

The researcher also contributed to dependability by working under a supervisor who is an acknowledged expert in the field, and, in addition, by seeking assistance and advice from a colleague who is an accepted expert in the theory and practice of data collection and analysis.

4.3.2.4.3 *Confirmability*

“Confirmability” refers to the *objectivity* of the research process. It requires the researcher to take measures that ensure that the information provided by the participants and the interpretations of the resultant data are accurate, relevant and objective (Polit & Beck 2008:539).

The researcher maximized confirmability by means of inviting peer review. The researcher accordingly conducted the FGDs under the guidance of a colleague who is an expert in qualitative research. According to Polit and Beck (2008:549), this “exposes researchers to the searching questions of others who are experienced in ... the methods of naturalistic inquiry”. The researcher also increased confirmability by working under the guidance of an expert supervisor throughout the length of the research process.

4.3.2.4.4 *Transferability*

“Transferability” refers to the extent to which the findings of a study are confirmed by or can be applied to a different group in a setting that is different from that in which the data for the present study was collected (Lincoln & Guba, cited in Polit & Beck 2008:539). Macnee and McCabe (2008:172) note that transferability is different from generalisability because, in transferability, the focus is not on predicting the outcomes in a general population but rather being able to certify that what was meaningful in one group in one set of circumstances is also meaningful and accurate for another group in a different set of circumstances. The present research maximise transferability by obtaining rich, textured and layered sets of data from the participants through careful probing in the focused group discussions. The data thus collected was then carefully and meticulously transcribed by an expert transcriber so that the resultant texts represented an accurate reflection of the interviews.

The researcher also provided details about other measures of quality that she used to maximise and ensure trustworthiness during the research process. It should be added that the researcher also purposively selected the most knowledgeable, experienced and qualified participants so that the data would reflect the knowledge and experience of the best practitioners in the field.

4.4 DATA ANALYSIS

“Data analysis” is the systematic organization and synthesis of research data and the testing of research hypotheses or answers the research questions by making use of the data that has been collected. While it is usual for the data analysis to take place only after all the data has been collected, in research that utilises a mixed methods research design, this may not always be the case. According to Onwuegbuzie and Teddlie (2003:351), “The point at which data analysis begins and ends depends on the type of the data collected, which in turn depends on the sample size, which in turn depends on the research design, which in turn depends on the research purpose.” If the qualitative data and the quantitative data for a particular piece of research are collected concurrently, then the analysis will be performed after all the data has been collected. But if the two kinds of data are collected sequentially, then the data analysis will begin before all the data has been collected.

Onwuegbuzie and Teddlie (2003:353) describe the two major rationales – known respectably as *representation* and *legitimation* – for conducting data analysis. “Representation” refers to the process of extracting an adequate and representative amount of information from the underlying data. When a researcher is guided by the mixed methods research paradigm, she utilizes the strengths and advantages of both quantitative and qualitative analysis techniques in order to arrive at a better understanding of the phenomena better. “Legitimation” refers to the validity of the data interpretation that has been performed, and involves assessing the trustworthiness of

both the qualitative and quantitative data and their subsequent interpretation. An analysis based on the mixed methods research paradigm offers a more reliable legitimation than either qualitative analysis or quantitative analysis alone because it incorporates the analytical techniques of both kinds of data (Johnson & Onwuegbuzie 2004:22).

Onwuegbuzie and Teddlie (2003:362) point out that a researcher should take into account the following considerations before undertaking a mixed methods analysis:

- the purpose of the mixed methods research
- whether the analysis is case orientated or variable orientated
- whether a confirmatory data analysis technique or an exploratory data analysis technique will be used, or whether both will be used
- the data types that are being used
- the relationships that obtain between the qualitative and quantitative data types
- the analytical assumptions about the data that underlie the analysis
- the source of typology development
- the nomination source for typology development
- the verification source for typology development
- the temporal designation for data analytical procedures
- whether or not computer software will be used, and, if it is, the details of a particular software that will be used
- the choice of a legitimation process

Onwuegbuzie and Teddlie (2003:370) also describe the seven steps that comprise a mixed methods data analysis as follows:

- data reduction
- data display

- data transformation
- data correlation
- data consolidation
- data comparison
- data integration

Data reduction requires a researcher to reduce the dimensionality of the qualitative data (by means of thematic analysis, for example) and quantitative data (by means, for example, of descriptive statistics). *Data display* involves a pictorial and illustrative presentation of the qualitative data (in charts, graphs and lists, for example) and the presentation of quantitative data (in, for example, tables and graphs). It is during the *data transformation* stage that quantitative data is converted into narrative data that can be qualitatively analyzed (Tashakkori and Teddlie (1998) use the term *qualitized*) and/or that qualitative data is converted into numerical codes that can be represented statistically (Tashakkori and Teddlie (1998) use the term *quantitized*) Tashakkori & Teddlie 1998). This last stage is optional. *Data correlation* involves correlating the quantitative data with the qualitized data or correlating the qualitative data with the quantitized data. This is followed by *data consolidation*, but those during which both quantitative and qualitative data are combined to create new or consolidated variables or data sets. The following stage, namely *data comparison*, involves comparing data from both the qualitative and quantitative data sources. *Data integration* is what happens in the final stage, in which both the quantitative data and the qualitative data are integrated into either one coherent whole or two separate sets of coherent and integrated information (one being qualitative and the other being quantitative).

4.4.1 Quantitative data analysis

The data analysis was composed of descriptive statistics and inferential statistics. Descriptive statistics are used to describe and synthesize data. According to Polit and

Beck (2004:451), descriptive statistics provide simple summaries about the sample and the measures that form the basis for the study. The researcher in fact performed a univariate analysis, which is the examination across cases of one variable at a time (by describing the distribution, the central tendency and the dispersion of each). Research also uses the technique of inferential statistics. Inferential statistics enable a researcher to make valid conclusions that extend beyond the range of the immediate data alone. Inferential statistics are used to make inferences from the data to more general conditions (Polit & Beck 2004:453). The research data was analyzed with the assistance of a statistician who used the Statistical Package for the Social Sciences (SPSS) (version 14.0) – a statistical software program that enable the researcher to answer the first research question.

4.4.2 Qualitative data analysis

Qualitative data analysis involves an analysis of the narrative data that has been collected during the interviews. The first step that the researcher undertook was to transcribe the recorded interviews with the participants. The transcription of these interviews was undertaken by an expert transcriber who included indications of all the meaningful non-verbal events during the interview such as pauses and laughter. The researcher herself then listened attentively to the tapes while reading the transcripts in order to obtain a better understanding of the data and to check the accuracy of the transcriptions.

The researcher then identified those themes that provided answers to the two research questions that the data was designed to illuminate. She then organised the themes into categories that summarised the data and that indicated the primary meanings that were embedded in the text. The themes that emerged were then used to draw the conclusions that shed light on the research questions.

4.5 ETHICAL CONSIDERATIONS

Ethics is a branch of philosophy that deals with questions of morality. It is typically concerned with issues and questions of obligation, rights, duty, right and wrong, justice, choice, intention, responsibility and respect for other people (Burns & Grove 2001:76). Any research that involves human participants requires a researcher to ensure that certain ethical principles have been adhered to throughout the study. One of the most important principles as far as a researcher is concerned is to protect the rights and dignity of the participants and those of the institutions to which the participants belong.

4.5.1 Ethical principles

Since a researcher has a duty and obligation to protect the rights of the participants who are involved in the study, she needs to be guided in this regard by well-established ethical principles. These ethical principles are based on the Belmont Report that was issued by National Commission for the Protection of Biomedical and Behavioural Research in 1978 (Marczyk, DeMatteo & Festinger 2005:237). The researcher confirms that she abided by the three principles of the Belmont Report that govern the process of data collection. These three principles are respect for human dignity, beneficence and justice.

4.5.1.1 *Principle of respect for human dignity*

The principle entails treating individual human beings as autonomous agents who have the right to decide what they want to do and to make their own decisions about the kind of research experiences (if any) they want to be involved in (Marczyk et al 2005:240). This principle also requires the researcher to make a full and detailed disclosure of the nature of the study, of the fact that any person has the right to refuse to participate in the projected study, of the researcher's responsibilities and liabilities, and

of the likely risks or benefits that will ensue from the study (Polit & Beck 2004:147). All this information will give any potential participant enough information to enable him or her to make an informed decision about whether to participate in the research or not.

4.5.1.2 Principle of beneficence

The principle of beneficence involves the minimisation of any kind of harm or discomfort that may attend a participant during the course of the study and the responsibility of the researcher to achieve a balance between the possible benefits and risks to the participant during the study process (Polit & Beck 2004:143).

4.5.1.3 Principles of justice

The principle of justice affirms that participants will be accorded just and fair treatment during and after the study, and that the researcher will take all necessary steps to guarantee their right to privacy, anonymity and the maintenance of confidentiality.

The researcher conformed to all these ethical requirements by attaching a covering letter to each participant that informed the participant about what the research would entail, the probable benefits of the study, and an affirmation that all participation would be purely voluntary and that any participant would retain the right to withdraw from the research process at any particular stage. The researcher regarded the fact that a participant completed the questionnaires as an indication that she had given her consent on the grounds stated above. All the nurses who participated in the focus group discussions were required to sign a consent form. The participants who completed the questionnaires and those who were involved in the focus group discussions were also informed that they were not required to give their name or any identifying information such as, for example, an employee number, anywhere on the research instruments or during the group discussions. Anonymity was therefore respected and implemented

throughout the course of the study and beyond. Confidentiality was maintained during the data collection phase by ensuring that the participants returned the completed instruments to the team leaders alone. These team leaders had previously been carefully briefed on the need to maintain confidentiality.

4.5.2 Permission to conduct the study

Polit and Beck (2008:189) point out that because researchers may not always be totally objective in the procedures that they develop to protect the rights of the participants, it is also necessary to subject the research methodology and the ethical measures to external review. The researcher therefore sought permission to undertake the study from the Ethics Committee and the Research Review Committee of the Aga Khan University, of which the Aga Khan University Hospital is the teaching hospital. She accordingly presented the research proposal to the committees mentioned above and attached the following documents to the research proposal: the covering letter for the participants, a sample of the research instrument, the demographic questionnaire, and the form by means of which the participants gave their consent to take part in the interviews.

4.6 LIMITATIONS OF THE STUDY

The research identified the following limitations for this research:

- The study was limited to a small sample. According to Polit and Beck (2004:291), smaller samples tend to produce less accurate estimates than larger ones. The larger the sample, the smaller is the sampling error. A large sample is therefore more representative of the population.
- The researcher used a convenience sample for the study. Convenience sampling is always accompanied by some potential for bias. Polit & Beck (2004:292)

describe it as “the weakest form of sampling” because it is the least likely to produce accurate and representative samples.

- The study was cross-sectional in nature. This means that it took place at one point in time. Such a study does not take into account staffing changes, managerial changes or the patient census of the units at the time when the study is conducted, and these factors may exert an impact on the responses of the nurses.
- The study instrument that was used in this study was developed, tested and verified in highly developed first-world countries. The reliability and validity of these tools have not yet been tested on nurses in developing and underdeveloped countries such as Kenya.

Because this study was only performed at one selected private hospital in Kenya, it cannot therefore be applied to units in public hospitals because the setting, constraints and working conditions may be different in private hospitals from what they are in public, government-funded hospitals.

4.7 CONCLUSION

This chapter reviewed, discussed and analysed the research design and methodology in detail, and described in detail the population, sampling and sample, the research instrument, the process of data collection, the ethical considerations that were adhered to, the limitations of the study, and the process of data analysis.

Chapter 5 presents and discusses the results of this study.

CHAPTER 5

Data analysis and interpretation

5.1 INTRODUCTION

This chapter presents the results of the data analysis for this study. Because the study was carried out in two phases, the results will be presented in two stages. The first phase of the study used the MBI-HSS to collect quantitative data about the prevalence of burnout in a group of nurses who worked in critical care units in a particular hospital in Nairobi, Kenya. The second phase of the study involved the collection of quantitative data about the factors that these same nurses understood to be the causes of burnout. Focus group discussions also elucidated various measures that the nurses felt could mitigate the extent and destructiveness of the burnout phenomenon in their profession. The results are therefore presented in the two parts that represent the two phases of the investigation.

5.2 PHASE 1: QUANTITATIVE ANALYSIS

5.2.1 Introduction

Phase 1 represented the quantitative phase of the study. Data collection was carried out by means of the MBI-HSS, which also included the demographic characteristics of the respondents in the study. The MBI-HSS was completed and returned by 49 (87.5%) of the respondents who were working in the critical care units at the time of the study. Two questionnaires from among these 49 were not included in the data analysis because two of the respondents made their contributions invalid by failing to complete some parts of the questionnaires. Only 47 (83.9%) questionnaires were therefore retained for

analysis and inclusion in the study. A total of 7 (12.5%) of the total number of respondents did not complete the questionnaire because some of them were on annual leave and others were unavailable during the data collection period.

Guidelines for interpreting the results from the MBI-HSS indicate that the instrument produces three subscale scores (Maslach, Jackson, & Leiter 1996:6). These subscales are defined as Emotional Exhaustion, Depersonalization, and Personal Accomplishment. Nine of the 22 items are summed to produce the "Emotional Exhaustion" (EE) subscale score, and five items are summed to produce the "Depersonalisation" (DP) subscale score. Higher values on these two scales represent higher levels of burnout. The third scale is labelled "Personal Accomplishment" (PA) and is calculated as the sum of the remaining eight items in the scale. The PA subscale is coded so that higher scores represent lower levels of burnout (indicated by higher perceived levels of personal accomplishment). Since the three subscale scores are measured on different absolute measurement scales (because there are a different numbers of items in each subscale, and the score is computed by summing the items in the subscale), the results from the MBI-HSS are most meaningful when they are classified into categories entitled "Low Burnout," "Average Burnout," and "High Burnout" for each subscale.

The demographic characteristics of the sample were also analysed and because they are on a categorical scale of measurement, these are presented in the form of frequencies and percentages. These demographic characteristics consisted of age, gender, marital status, highest qualification, years of nursing experience, and number of years of working in critical care units, level on career ladder, and career progression.

The researcher then analysed the differences in the level of the three subscales of burnout in the characteristics between categories. When examining the relationship between burnout as measured by the scales of the MBI-HSS and the selected demographic characteristics, the researcher used the statistical test to measure the association on the basis of its appropriateness for the level of measurement of each

variable as well as to maximize the interpretability of the results. Since the variables were measured on a categorical scale, the researcher carried out the Analysis of Variance (ANOVA) to measure the differences in the different dimensions of burnout between groups and within groups. The variables that she included were age, gender, marital status, highest qualification, number of years of nursing experience, number of years of working in critical care units, career level, and number of years spent on the same career level. However, because the sample size was so small, ANOVA produced no useful results and no statistical significance was obtained for any of the characteristics. The researcher therefore used descriptive statistics to compare the differences between the groups.

5.2.2 Descriptive statistics for MBI-HSS subscales

The emotional exhaustion raw scores of the respondents in this study ranged from a low of 5 to a high of 54. The mean score on this subscale was 28.23 (Standard Deviation (SD) = 11.90). This reflects a high level of emotional exhaustion. The depersonalisation scores ranged from a low of 0 to a high of 26, with a mean score of 11.09 (SD = 6.66). This can be interpreted as a moderate level of depersonalisation. The personal accomplishment scores ranged from between a low of 14 and a high of 48, with a mean of 33.95 (SD = 7.94). This can be interpreted as a moderate score (see table 5.1).

Table 5.1: Descriptive statistics for MBI-HSS

	N	Minimum	Maximum	Mean	SD
Emotional exhaustion	47	5.0	54.0	28.2	11.9
Depersonalization	47	.00	26.0	11.1	6.6
Lack of personal accomplishment	47	14.0	48.0	33.9	7.9
Valid N	47				

In accordance with the norms established by Maslach et al (1996:6) for the occupational medicine group (N=1,104), which define the mean score for the EE as 22.19, DP as 7.46

and PA as 36.53, the nurses who were working in the critical care units at the time of the study displayed an high degree of burnout. This is reflected by the high mean score of emotional exhaustion, the moderate score for depersonalisation and the moderate score for personal accomplishment. Similar results have been found in other studies on burnout that investigated nurses who worked in critical care units. A study by Cubrilo-Turek, Urek and Turek (2006:131), for example, on the degree of burnout observed in nurses who were working in medical and surgical wards, showed that staff working in medical ICU showed a moderate degree of EE (24.9 +/- 11.2), DP (6.0 +/- 5.6), and as well as a moderate degree of PA (34.4 +/- 8.8). The same parameters revealed more favourable results among staff working in surgical ICU namely: a low degree of EE (17.1 +/- 5.2), a low level of DP (5.2 +/- 5.0), and a moderate degree of PA (33.7 +/- 9.8). The difference between the two groups was statistically significant only for the total MBI-HSS mean score, and for EE ($p < 0.05$). There were no significant differences between medical ICU and surgical ICU staff for DP or PA parameters. The overall degree of burnout for this study was moderate.

The authors of the instrument (Maslach et al 1996:6) caution, however, that the scores of each subscale need to be considered separately and should not be combined into a single total score. Three scores are therefore computed for each respondent. The researcher therefore analysed the frequencies of each subscale in the sample. These are presented in tables 5.2, 5.3 and 5.4 (below).

Table 5.2: Frequency of emotional exhaustion

Score	Frequency	%	Cumulative %
0- 16 Low	10	21.3	21.3
17 - 26 Moderate	10	21.3	42.6
> 27 High	27	57.4	100.0
Total (N)	47	100.0	

Out of the total of the 47 respondents who completed the MBI-HSS, 10 (21.3%) respondents scored *low* on emotional exhaustion, 10 (21.3%) respondents scored *moderate* while 27 respondents (57.4%) scored *high* on the subscale.

Table 5.3: Frequency of depersonalization

Score	Frequency	%	Cumulative %
0 - 6 low	14	29.8	29.8
7 - 12 Moderate	13	27.7	57.4
> 13 High	20	42.6	100.0
Total (N)	47	100.0	

Fourteen (29.8%) respondents scored *low* on the depersonalisation subscale while thirteen (27.7%) scored *moderate* on the subscale. The majority of the respondents (n=20, 42.6%) scored high on the subscale.

Table 5.4: Frequency of reduced personal accomplishment

Score	Frequency	%	Cumulative %
> 39 Low	14	29.8	29.8
32 - 38 Moderate	19	40.4	70.2
0 - 31 High	14	29.8	100.0
Total	47	100.0	

Fourteen (29.8%) respondents scored above 39 in the personal accomplishment category. Maslach et al (1996:6) define this as *low*. Nineteen (40.4%) respondents scored *moderate* while fourteen (29.8%) nurses scored *high*.

In this study, the researcher adapted definitions of burnout that were used in studies by Poncet et al (2007:689) and Embriaco et al (2007:686), in which they defined a high burnout score as a high DP score as >9 and/or a high EE score as >26. By this definition, 63.8% of the respondents in this study met the criteria for having a high level of burnout because 57.4% of them (n=27) were in the high EE range, while 42.6% (n=20) were in the high DP range and 29.8% (n=14) were in the high PA category. These results are

comparable to the results obtained in other studies that were carried out in developing countries. In a study undertaken in the Mathari Psychiatric Hospital in Kenya, 38% (n=398) of the respondents returned a high EE score, 47.8% of the respondents returned a high DP score and 38.6% were situated in the low range of PA (Ndetei, Pizzo, Maru, Ongecha, Khasakhala, Mutiso & Kokonya 2008:199). Research into the condition of health workers in Zambia showed that while 62% (N=42) of the health workers were experiencing moderate-to-high levels of emotional exhaustion, none of them were experiencing any feelings of depersonalisation and most of them reported a sense of personal accomplishment (Dieleman et al 2007:139).

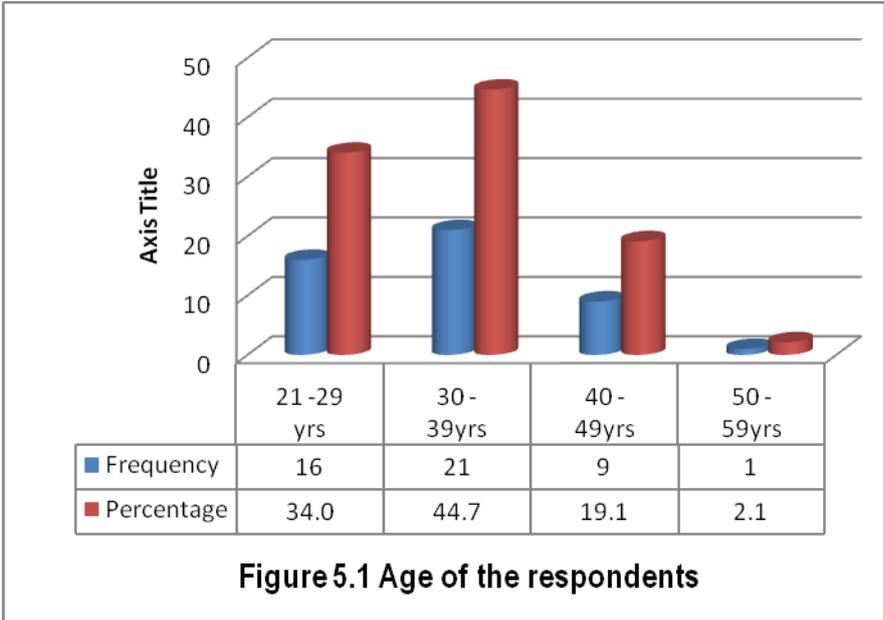
It is notable that these results are better than those that had been reported by nurses in studies carried out in some developed countries. In a study of Hungarian ICU nurses, only 9.4% (N=374) were suffering from burnout (Pálfiné 2008:1463). A study by Verdon, Merlani, Perneger and Ricou (2008:152) of nurses working in the surgical unit showed that out of a total of 93 respondents, 28% showed a high level of burnout, 37% a median level of burnout, and 35% revealed a low level of burnout. In a study undertaken in Colombia, the prevalence of burnout among nurses was as low as 1.9%, with 15.5% nurses reporting high EE, 16.5% high DP and 9.7% diminished personal accomplishment (Tuesca-Molina, Urdaneta, Lafaurie, Torres & Serpa 2006:84). In Brazilian nurses, the averages for the MBI were 19.07 for emotional exhaustion (EE), 4.18 for depersonalisation (DE) and 39.60 for personal accomplishment (PA). In another Brazilian study into nurses, 26.4% of respondents presented with high scores on EE, 17.2% with DP, and 10.5% with a diminished sense of PA in their work (Benevides-Pereira & Das Neves Alves 2007:565).

The high prevalence of burnout in the present study could possibly be explained in terms of the warning given by Maslach et al (2001:411) when they caution researchers to bear in mind that the noticeable national differences in levels of burnout could be attributed to factors such as culture, individual responses to self-reporting

questionnaires and the way in which respondents are conditioned by their local culture to assess their personal achievements in different societies and cultures.

5.2.3 Age

The respondents were asked to circle the applicable age category for themselves from among the six possible age categories that were provided. Figure 5.1 shows the categories and their frequencies. The largest number of respondents (n=21, 44.7%) consisted of those who were between 30 and 39 years old. Sixteen (34%) respondents indicated that they belonged to the age group of those between 21 and 29 years old. Nine (19.1%) respondents indicated that they were in the group of those between 40 and 49 years old, while only one respondent (2.1%) indicated that she was between 50 and 59 years old. No one selected the group that indicated an age above 60 years.



The means and standard deviations of the three subscales in the MBI-HSS were compared for the age groups as presented in table 5.5

Table 5.5: Comparison of means of the MBI-HSS subscales between the age groups

Age groups of respondent	Emotional exhaustion		Depersonalisation		Lack of personal accomplishment	
	Mean	Std dev	Mean	Std dev	Mean	Std dev
21 -29 yrs (N=16)	29.3	11.5	11.7	5.7	35.6	6.4
30 - 39yrs (N=21)	29.7	11.9	11.9	6.3	30.95	8.7
40 - 49yrs (N=9)	23.8	13.3	9.3	8.6	37.3	7.1
50 - 59yrs (N-1)	21.0		0.0		40.0	

A comparison of the means showed that the age group of respondents between 21 and 29 years old had a high level of EE (high EE >27), moderate DP (6-12) and moderate PA (32-38). These EE and DP means were comparable to the means of the respondents in age group or those between 30 and 39 years old, who reported an EE mean of 29.7 (high EE), a DP mean of 11.9 (moderate) and a PA mean of 30.95 (moderate). In the age group of those between 40 and 49 years old, the EE mean was 23.8, the DP mean 9.3, and the PA mean was 37.3. This indicates that emotional exhaustion and depersonalisation decreased with age and that the sense of personal accomplishment also grew less with age. This is in line with the findings of Ilhan et al (2008:100) in a study on Turkish nurses in various specialities. They found that the EE and DP scores were higher in younger nurses and that the scores for a lack of personal accomplishment were also higher.

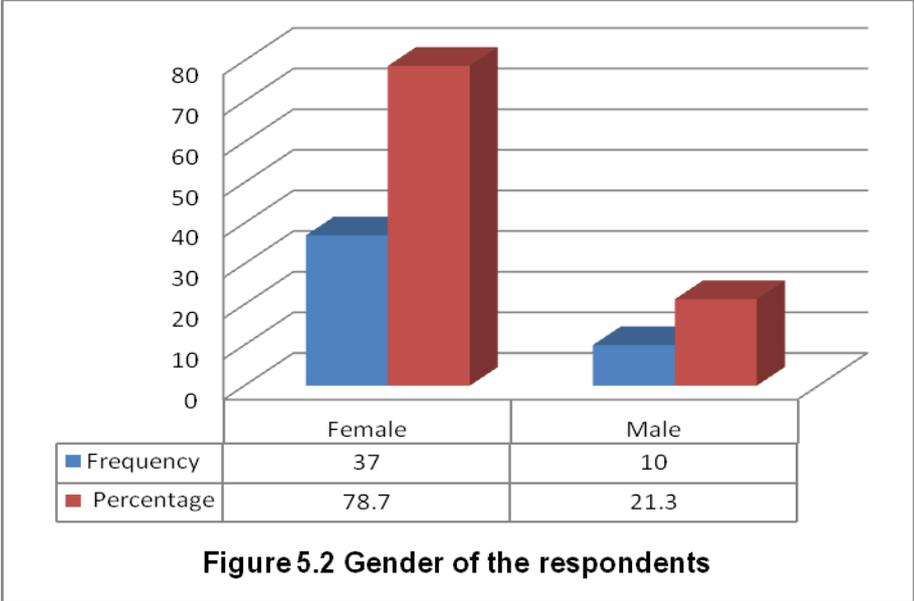
However, when the relationship between the three significant age groups and the subscales of MBI-HSS was tested ($p = 0.05$), there was no statistical significance in any of the subscales that is indicated in table 5.6.

Table 5.6: Relationship between burnout and age

	Sum of squares	Df	Mean square	F	<i>p</i> value
Emotional exhaustion	292.766	3	97.589	.674	.573
Depersonalisation	170.413	3	56.804	1.307	.285
Lack of personal accomplishment	373.213	3	124.404	2.119	.112

5.2.4 Gender

Of the 47 nurses who responded to this item, 37 (78.7%) indicated they were female. The 10 (21.3%) remaining respondents indicated that they were male (see figure 5.2).



The researcher examined the relationship between gender and burnout by comparing each of the three burnout subscale scores by categories of the variable gender. The statistical procedure selected to accomplish this purpose was the independent samples t-test. The results from these analyses indicated that there were no significant differences between the males and females in their levels of burnout as measured by the scales of the MBI-HSS as presented in table 5.7 (below).

Table 5.7: Relationship between burnout and gender

	Sum of squares	Mean square	F	p-value
Emotional exhaustion	249.744	249.744	1.793	.187
Depersonalisation	.003	.003	.000	.994
Lack of personal accomplishment	9.018	9.018	.140	.710

In the descriptive statistics, however, the females returned a higher EE mean of 29.4 (equivalent to high emotional exhaustion) as compared to men, whose score was 23.8 (equivalent to moderate EE), as depicted in table 5.8 (below).

Table 5.8: Comparison of means of the MBI-HSS subscales between genders

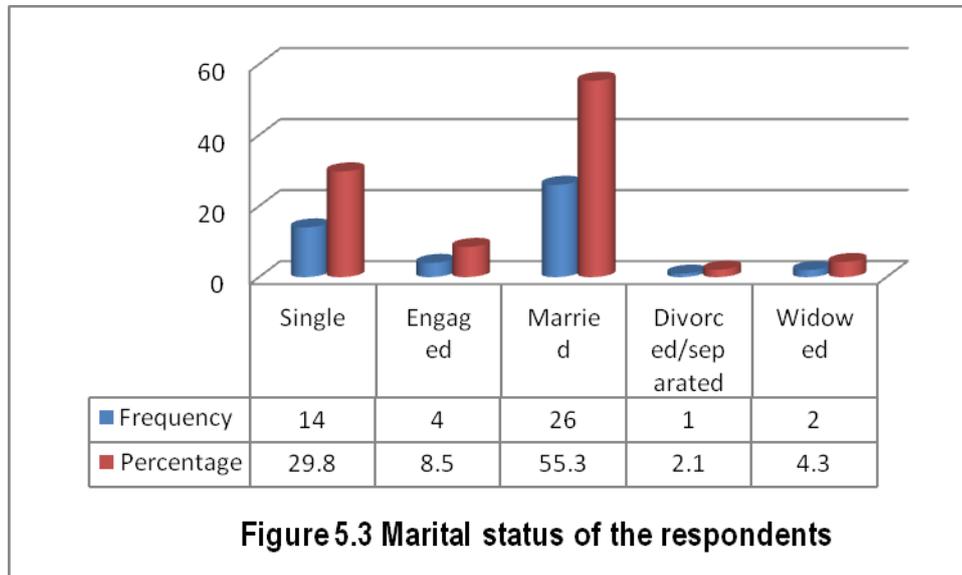
Gender of respondent	Emotional exhaustion		Depersonalisation		Lack of personal accomplishment	
	Mean	SD	Mean	SD	Mean	SD
Female	29.4	12.1	11.1	7.3	33.7	8.2
Male	23.8	10.8	11.1	3.9	34.8	7.3

These results are the opposite of what was reported in a study on gender differences in relation to burnout that was carried out by Bekker, Croon and Bessers (2005:221). The male respondents in their study were found to be more emotionally exhausted than the female respondents. Other studies, however, have found that there is no significant difference in EE between the genders. In a study on Iranian nurses, it was found that while the male nurses (DP mean score 4.86) felt more depersonalised than the female nurses (Mean score of 3.02), the emotional exhaustion mean scores were comparable (Sahraian et al 2008:62). This same result was reported in a study on dentists by Brake et al (2003:321), in which they found that male dentists reported a higher score on DP than female dentists. In the same study, no gender differences were detectable on EE and PA. A study of Mexican nurses by Martinez-Lopez and Lopez-Solache (2005:6) reported that the male respondents were in general more likely to suffer from the burnout syndrome than were the female respondents.

5.2.5 Marital status

All of the 47 respondents provided information on their marital status. The categories that were provided for responders included the following: Single, Engaged, Married, Separated/Divorced, Widowed. The most frequently selected category was “Married”, which was selected by 26 (55.3%) of the respondents. The least frequently reported category was “Separated/Divorced”, which was checked by one individual (2.1%). The

category “Widowed” was selected by two of the respondents (4.3%). All this information is depicted in figure 5.3 (below).



The researcher also sought to find out the differences in the means of the subscales between the groups. Although she performed ANOVA to test the statistical significance, no statistical significance was noted in the results (see table 5.9 below). The researcher therefore used descriptive statistics to analyse the differences (see table 5.8 above).

Table 5.9: Comparison of MBI-HSS subscale means among marital status

Marital status of respondent	Emotional exhaustion		Depersonalisation		Lack of personal accomplishment	
	Mean	SD	Mean	SD	Mean	SD
Single (N=14)	30.9	13.3	13.9	7.5	34.9	7.4
Engaged (n=4)	20.5	10.14	11.8	3.0	31.3	12.1
Married(N=26)	27.7	11.7	9.8	6.6	33.8	7.9
Divorced/separated(N=1)	23.0	-	5.0	-	43.0	-
Widowed (N=2)	35.5	6.4	9.5	3.5	29.5	6.4

The highest level of EE was reported by the widowed with mean score of 35.5. They also reported the highest PA mean score at 29.5 and a moderate score on DP. Those who

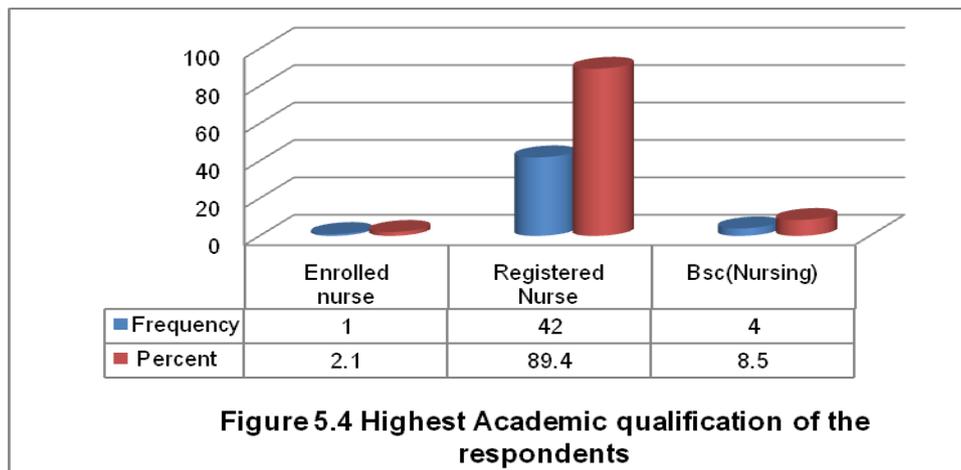
reported themselves as single had high mean score of EE (30.9), high DP (13.9) and a moderate mean PA score (34.9). In terms of the definitions supplied earlier in the text, the most severely burned out nurses in the whole group of respondents were therefore the widowed and the single. This is supported in a study by Ifeagwazi (2006:359) on Nigerian nurses. The respondents in that study comprised 91 female nurses, of whom 51 were married and 40 were widowed. The results showed that the widowed nurses reported a significantly higher range of burnout symptoms than the married nurses. This contradicts a previous study by Yavuzyyılmaz, Topba, Çan, Çan and Özgün (2007:41) which showed that EE was higher for the married than for the single while DP was lower for married people than for the single. A study by Erdem, Rahman, Avcı & Gökta (2008:188) did not, however, show any differences in any of the MBI-HSS scores in relation to marital status.

Table 5.10: Relationship between burnout and marital status

	Sum of squares	df	Mean square	F	p-value
Emotional exhaustion	477.327	4	119.332	.830	.514
Depersonalisation	191.311	4	47.828	1.087	.375
Lack of personal accomplishment	164.352	4	41.088	.631	.643

5.2.6 Highest qualification

Respondents were also asked to indicate their highest academic qualification by checking one of the ranges of responses provided. The majority of respondents (N=42, 89.4%) indicated their rank as “Registered Nurse”. No respondent reported having a master’s degree (“Masters”), while four respondents (8.5%) reported their highest qualification as being a BSc (Nursing). One nurse (2.1%) reported herself as an “Enrolled Nurse”(See figure 5.4).



A descriptive analysis of the MBI-HSS subscales of registered nurses and nurses with a degree in nursing revealed that they were comparable in all the subscales (see table 5.10 below). These two groups of nurses scored high EE (28 and 26.3 respectively), moderate DP (11 and 10 respectively), and moderate PA (33.6 and 36.3 respectively).

Table 5.11: Comparison of MBI-HSS means between highest qualifications

Highest Qualification	Emotional exhaustion		Depersonalisation		Lack of personal accomplishment	
	Mean	SD	Mean	SD	Mean	SD
Enrolled nurse (N=1)	44.0	-	17.0	-	38.0	-
Registered Nurse (N=42)	28.0	11.9	11.0	6.90	33.6	8.3
Bsc(Nursing)(N=4)	26.3	11.7	10.0	3.8	36.3	4.0

A study by Erdem et al (2008:188) showed that while people who had degrees suffered from higher EE, there was no statistical significance in the PA and DP subscales. This is supported by research into Turkish military nurses by Köse, Gökta, Cankul and Güllerci (2007). Their findings were there were meaningful correlations between the education levels and degrees of job satisfaction and burnout in nurses. They also found that graduate nurses experienced lower levels of satisfaction and higher levels of burnout than nurses without degrees.

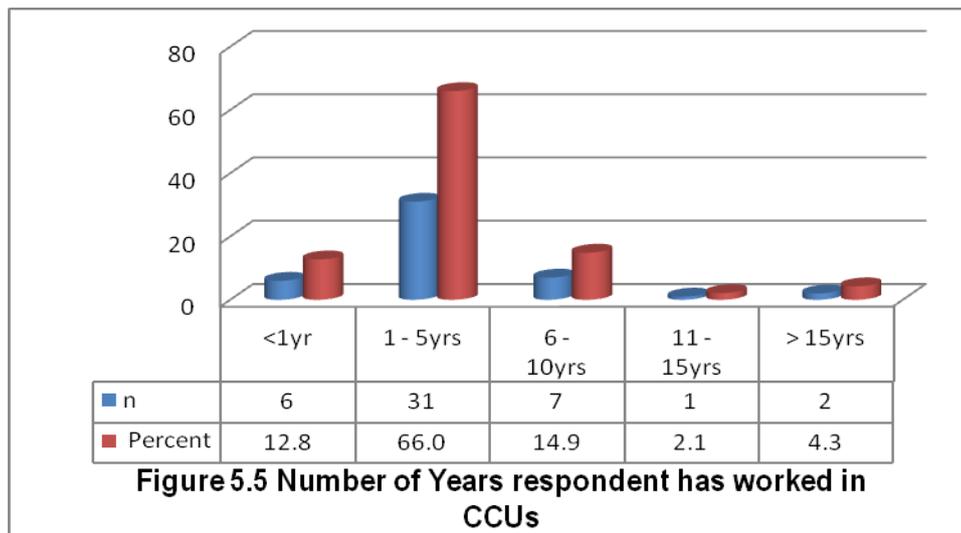
When the researcher applied ANOVA to the results, she found that the category “highest academic qualification” was not related to the EE mean scores, the DP mean scores, or the PA mean scores. This indicates that this study produced no significant relationship between the category “highest academic qualification” and the extent of burnout on any of the three burnout scales (see table 5.11 above).

Table 5.12: Relationship between burnout and highest academic qualification

	Sum of squares	Mean square	F	P value
Emotional exhaustion	265.771	132.885	.935	.400
Depersonalisation	39.755	19.877	.437	.649
Lack of personal accomplishment	41.522	20.761	.320	.728

5.2.7 Years working in critical care units

The respondents were also asked to circle the category that indicated the number of years they had worked in critical care units. The majority of the respondents (N=32, 66%) reported that they had worked in critical care units for a period of between one and five years. Six of the respondents (12.8%) reported that they had worked in critical care units for a period of less than one year. While seven of the respondents (14.9%) reported that they had worked for a period of between 6 and 10 years, only one respondent (2.1%) reported that she had worked for over 15 years in critical care units (see figure 5.5 below).



The researcher found that there was no significant statistical relationship ($p=0.05$) between burnout and number of years that had been worked in critical care units (see table 5.13 below). In spite of this, there was a significant difference (see table 5.12 above) when the researcher compared the means of the MBI-HSS in the different categories

Table 5.13: Comparison of MBI-HSS means between numbers of years worked in CCUs

Years in critical care units	Emotional exhaustion		Depersonalisation		Lack of personal accomplishment	
	Mean	SD	Mean	SD	Mean	SD
<1yr (N=6)	31.2	13.8	15.5	4.4	30.5	7.4
1 - 5yrs (N=31)	28.3	11.4	10.7	6.7	33.6	8.2
6 - 10yrs (N=7)	29.7	14.3	9.0	6.7	38.6	5.9
11 - 15yrs (N=1)	23.0	-	8.0	-	43.0	-
> 15yrs (N=2)	16.0	5.7	12.0	12.7	29.0	7.1

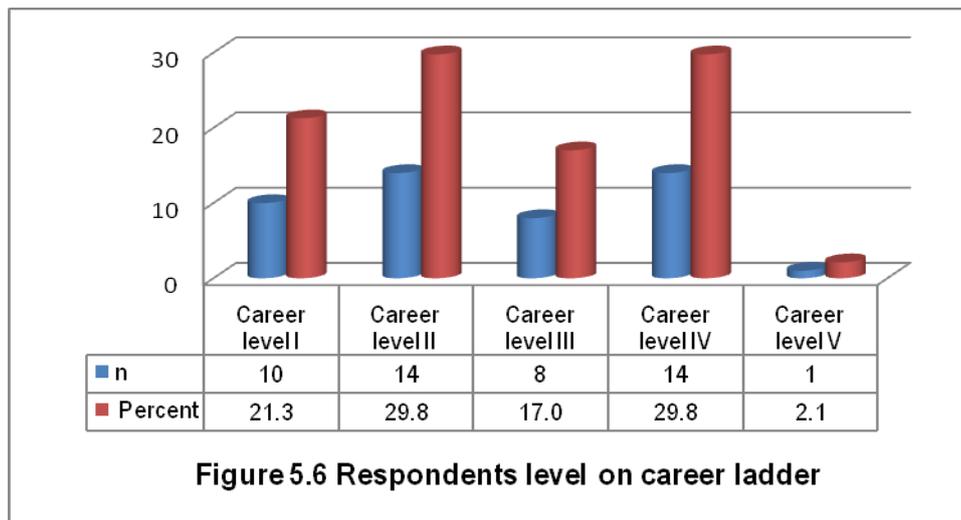
Table 5.14: Relationship between burnout and number of years worked in CCUs

	Sum of squares	Mean square	F	<i>p</i> -value
Emotional exhaustion	393.777	98.444	.675	.613
Depersonalisation	162.224	40.556	.907	.468
Lack of personal accomplishment	355.346	88.836	1.467	.229

A respondent had worked for less than one year in a critical care unit reported high levels of EE, DP and PA. This indicates that they represent a group that suffers from severe levels of burnout. All those respondents who had worked for less than one year, or between one in five years, or between six and ten years in critical care units, all presented with high levels of EE. (Since there was only one nurse in the between 11 and 15 years category, that information was not included in the analysis.) The lowest rate of EE was reported in respondents who had worked for over 15 years in critical care units. This contradicts the finding that was reported in a study by Risquez, Fernández, Hernández, Tovar, Alcaraz, Romera, González, Saura, Real, Sánchez, Domingo, Nicolás, Almagro and Bellón (2008:2), which indicated a greater vulnerability to emotional exhaustion in respondents who had worked for more than 15 years in critical care units. Those respondents with more than one year of experience scored moderate DP. Respondents with work experience of between six and ten years reported the lowest PA levels while respondents with over 15 years' experience returned the highest scores for PA. These results are supported by the results of a study undertaken by Demir, Ulusoy and Ulusoy (2003:807). This study showed that while EE and DP are not influenced by work experience and that PA is significantly related to years of work experience, the lowest PA levels occurred in nurses who had worked for between 1 and 5 years and that the highest levels were returned by those who had worked for 16 years or more.

5.2.8 Career level

The respondents were also required to indicate the level they currently occupied upon the career scale. An equal number of respondents, i.e. 14 (29.8%) nurses, were on Career level II and Career level IV. Ten nurses (21.3%) indicated that they were on career level 1, while 8 nurses (17.0%) were on Career level III. Only one nurse indicated that she was on Career level V (see figure 5.6).



When the relationship between the various career levels and burnout was measured, no significant relationships were identified by means of ANOVA within the subscales of the MI-HSS (see table 5.15).

Table 5.15: Relationship between burnout and career level

	Sum of squares	Mean square	F	<i>p</i> -value
Emotional exhaustion	698.293	174.573	1.260	.301
Depersonalisation	149.260	37.315	.829	.514
Lack of personal accomplishment	272.226	68.056	1.089	.375

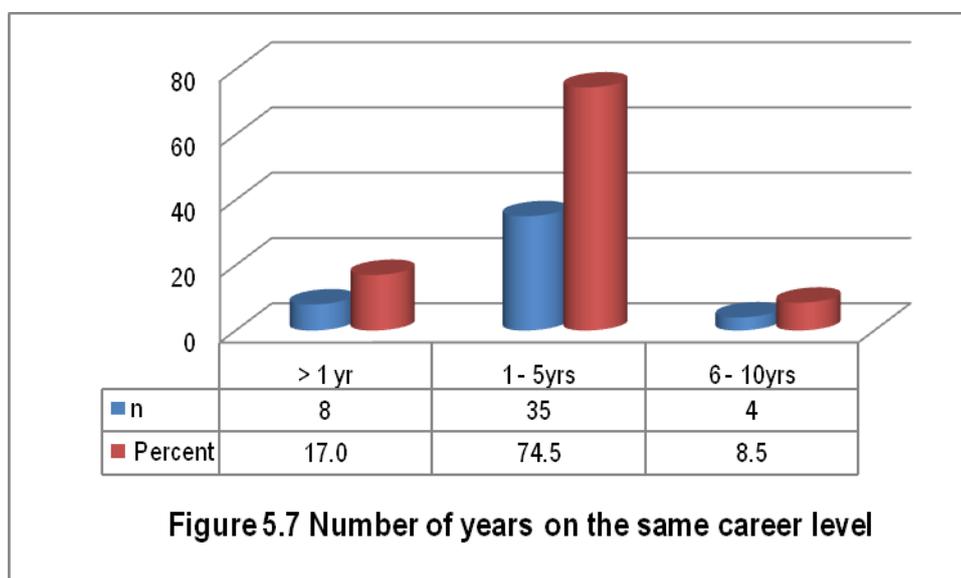
The means of the MBI-HSS subscales within the career levels were compared for significance (see table 5.15 above). Career level V was not included in this analysis because there was only one respondent. Twelve respondents on Career level III reported high EE, high PA and borderline high DP. This enabled the researcher to designate them as the most burned out of all the nurses in the sample. Respondents on Career level IV reported the lowest levels of EE (23 - moderate EE), DP (8.5 - moderate DP) and PA (35.5 - moderate) when compared to the respondents on the other career levels. Respondents on the lower Career level reported high EE and moderate DP.

Table 5.16: Comparison of MBI-HSS means between career levels

Level on career ladder	Emotional exhaustion		Depersonalisation		Lack of personal accomplishment	
	Mean	SD	Mean	SD	Mean	SD
Career level I (N=10)	31.6	13.5	12.9	6.6	33.7	7.1
Career level II (N=14)	28.3	8.7	12.0	4.6	35.4	6.6
Career level III (N=8)	31.9	10.7	12.0	6.8	28.9	9.5
Career level IV (N=14)	23.0	13.6	8.5	8.3	35.5	8.7
Career level V (N=1)	38.0	-	9.0	-	36.0	-

5.2.9 Years on the same career level

The other demographic characteristic that the researcher investigated was the length of time that each respondent had remained on the same career level. The researcher included this information in order to determine whether respondents were stagnating on their current career level, and whether such stagnation could be related in any meaningful way to burnout. The majority of the nurses in the sample (N=35, 74.5%) indicated that they had remained on the same career level for a period of between one and five years. Eight nurses (17%) had remained on the same career level for a period of less than one year while four nurses (8.5%) had remained on the same career level for a period of up to ten years. None of the respondents indicated that they had been on the same career level for more than 15 years (see figure 5.7 below).



Although the researcher tested for any possible relationship between length of time spent on the same career level and the presence of burnout by using ANOVA, she found no statistical significance in the MBI-HSS subscales (see table 5.16 above).

Table 5.17: Relationship between burnout and number of years spent on the same career level

	Sum of squares	df	Mean square	F	<i>p</i> -value
Emotional exhaustion	187.665	2	93.832	.652	.526
Depersonalisation	117.988	2	58.994	1.351	.270
Lack of personal accomplishment	6.479	2	3.240	.049	.952

The researcher compared the means of the MBI-HSS subscales within the number of years spent on same career levels (see table 5.17 above). Those respondents who had remained on the same career level for a period of between six and ten years reported the highest EE and DP scores in comparison to those who had remained on the same level for less than five years. The PA scores were comparable in all categories.

Table 5.18: Comparison of MBI-HSS means between numbers of years spent on the same career levels

Years on the same career level	Emotional exhaustion		Depersonalization		Lack of personal accomplishment	
	Mean	SD	Mean	SD	Mean	SD
Less than 1 yr (N=8)	26.4	11.4	11.8	5.4	34.5	10.5
1 - 5yrs(N=35)	27.9	11.7	10.4	6.7	33.7	7.6
6 - 10yrs (N=4)	34.5	16.1	16.0	8.2	34.8	7.3

5.3 PHASE 2: QUALITATIVE ANALYSIS

5.3.1 Introduction

In the second phase of the study, the researcher collected qualitative data by holding three focus group discussions with a select number of respondents from the critical care units. The researcher described earlier (in chapter 4) how she used purposive sampling in order to select the most knowledgeable nurses in terms of their experience in intensive care units and their ability to impart useful information. By using this method, she managed to collect a total of sixteen respondents for participation in the focus group discussions. After the focus group discussions had been transcribed (see Annexure for a sample of a transcribed focus group discussion), the data was analysed in the way that has already been described in chapter 4.

In order to determine the factors that these critical care unit nurses understood to be the causes of burnout as well as to determine their understanding of how burnout among nurses could be alleviated, the researcher asked these nurses the following questions:

- What is your experience of working in a critical care unit?
- What are the challenges of working in critical care unit?
- What causes you stress in the critical care unit?
- How do you deal with stress/challenges or burnout in an intensive care unit?
- What do you feel can be done to make your work place better? (This refers to possible interventions at an organizational level.)

The key themes and sub-themes that emerged from an analysis of the data contained in the answers provided by the nurses are outlined in table 5.19 (below). The discussions of the findings that follow below will be guided by the framework of the themes and sub-themes and the interrelationships that occur among the themes.

Table 5.19: Key themes and sub-themes that emerged from the qualitative analysis

Objective	Theme and sub-themes
5.3.2 Factors leading to burnout (Stressors)	<p>Workload</p> <ul style="list-style-type: none"> - Patient-nurse ratio - Documentation - Added responsibilities - Time pressure <p>Work shifts</p> <ul style="list-style-type: none"> - Long hours - Prolonged work hours <p>Death and dying</p> <ul style="list-style-type: none"> - Death of a patient - Unavailability of a physician during death - Inadequately prepared relatives - Breaking the news to a relative - Inadequate support for relatives - The prolonging of life <p>Interrelationship conflicts</p> <ul style="list-style-type: none"> - Nurse-nurse conflicts - Nurse-supervisor conflicts - Nurse-Nurse administrator conflicts - Nurse-relative conflicts - Nurse-physician conflict <p>Monetary recognition and appreciation</p> <p>Decision making and autonomy</p>
5.3.3 Organisational mitigation measures	<p>Support groups</p> <p>Rotation of nurses</p> <p>Reduction of work hours</p> <p>Counselling sessions for nurses</p> <p>Forums for grievances: listening to complaints</p> <p>Supportive environment for growth</p> <p>The improvement of channels of communication</p>

5.3.2 Factors leading to burnout

In order to understand the factors that the nurses understood to be the causes of burnout, the researcher asked the respondents to describe the challenges and stressors that they encountered in their work in the critical care units. The researcher also encouraged all of them to share their personal insights and experiences. What follows below is a discussion of the key factors that were a consistently raised by the nurses

themselves in all the focus group discussions, and especially those factors about which they most consistently agreed during the focus group discussions.

5.3.2.1 *Workload*

One of the factors that consistently emerged during the discussions as a stressor in the working lives of the nurses was workload. One of the respondents summarised this by commenting:

FGD: I think basically here the bottom line is here there is a lot of frustrations, frustrations and more work.

The subthemes that emerged from this theme of workload are discussed below.

5.3.2.1.1 *Nurse-patient ratio*

In the course of the focus group discussions, it became apparent that one of the major stressors that the nurses experienced was a necessity of having to nurse more than one patient at a time during a shift. When the researcher sought to find out what the ratios were, the following discussions ensued:

(NOTE: "P" indicates the participant while "I" indicates the interviewer.)

P:when will you attend to your patient? Your two patients? Nowadays you know the ratio has gone up. Plus the CARE 2000-

I: The ratio of patients has gone up to one to two or...?

P: Yes. Two to one.

I: Two ventilated patients to one?

P: Yes. Then in HDU three to one.

I: Oh...

The nurses here expressed their frustrations at having to nurse more than one patient at a time during a shift. They felt that this requirement created risks not only for the patients but also for the nurses concerned. The participants commented:

FGD 2: What about this issue of two patients. Ratio of two to one? Is it really practical? Or is it endangering the lives of our patients? It is absolutely risky. I am telling you it is dangerous.....Leave alone even the nurse. You're killing, you're going to kill these patients

FGD 1.. ...the challenges in ICU, I'd say is ahh the way she's put it is workload. Ahh like at times you are given two patients and you can't cope. You can't just cope because of the workload. So you are left cut in between and what you'll do you'll put your priorities right according to you but when the bosses come they are like you are not doing anything.

Another participant in the same focus group discussion supported this point of view by sharing her personal experiences of how she felt when she had to nurse two patients during one shift.

FGD 2: I think I would second on what they said and specify on the issue of ratios. The staffing in ICU, as much as they're talking about cost cutting, you cannot cost cut at the expense of the patient and the nurse. Because it is going to compromise the care of this patient and by the end of the day, you go home feeling so frustrated like, you said, you're supposed to start this, you didn't get time, like I remember there was a patient I went home, I cried to myself. I was with a patient who is a staff. I felt I needed to give her the best because she is our colleague yet I admitted another patient who arrested on me even before I could go home I went home feeling so so frustrated, you know. And I was imagining is that the best I can do for my friend. What if I am the one on that bed? I mean it is...staffing is an issue. They need to look into it. As much as they are cost cutting, we don't deny that they are cost cutting but there are areas that we can't just ignore. Like critical care. These people are paying more than a 100,000 per day. You cannot just tell the patient that you are cost cutting. You can't have two ventilated patients, those two patients are on dialysis. I mean you can't manage.

According to Unruh (2008:62), the implications of specific nurse-patient ratios in specific clinical situations have not yet been scientifically determined. In spite of this, critical care nurses organisations have made their own recommendations for an optimal nurse-patient ratio. Among the organisations that have made their views clear on this matter are the World Federation of Critical Care Nurses (2005), the Joint Faculty of Intensive Care Medicine (2003) and the British Association of Critical Care Nursing (2001:59). It is a unanimous view of these prestigious professional organisations that the ideal nurse-patient ratio in critical care units should always be 1:1. The evidence clearly shows that adequate staffing and balanced workloads are central to achieving good patient, nurse, and financial outcomes. A large study conducted in the United States concluded that the higher the patient-nurse ratio, the higher were the incidence of patient mortality,

nurse burnout and nurse job dissatisfaction. This study showed that an increase of the patient-nurse ratio by a factor of one increased the incidence of burnout and job dissatisfaction by 23% and 15% respectively, while raising the nurse-patient ratio from 4:1 to 8:1 more than doubled the level of job dissatisfaction among nurses (Audit Commission 2001:3). Storch (2005:219) expresses surprise at the way in which this evidence is generally ignored by noting that “there is a substantial amount of good research [evidence] on the relationship between nurse staffing and patient outcomes that seems to be ignored”.

The findings in this study are supported by similar findings in other studies that have cited the nurse to patient ratio as the leading cause of stress and burnout in nurse work stations. In a study that focused specifically on English nursing staffing ratios, Rafferty, Clarke, Coles, Ball, James, McKee and Aiken (2007:175) found that those nurses in hospitals with the heaviest patient loads were 71% more likely to experience high levels of burnout and job dissatisfaction than nurses in hospitals with more favourable nurse-patient ratios.

5.3.2.1.2 Documentation

Nursing protocols require nurses to document all the activities and circumstances that affect the patient and his or her health care. Since documentation provides evidence of the kind of care that is being given and the response of patients to that care, it constitutes an essential link between the care that is being provided and the condition of the patient. Since documentation also permits those concerned to make an evaluation of the care being provided, it also acts as a means of communication between all those who are involved in the provision of health care in a particular case. In spite of this, the participants in this study reported the necessity for documentation as a source of stress. They expressed the opinion that there was too much paper work that had to be completed and that the process of doing so was too tedious. One of the participants expressed her point of view in the following words:

FGD 3: ... maybe about the documentation, I don't know who decides on the papers, but if it is possible for somebody to decide on the paperwork, I think they can really rethink and to check on the paper work we are doing. Most of it you will find you are doing 4 or 5 times and it's basically the same same thing. If you have a chart, use this chart. Why did you write it there, let's use one chart. That's why you'll find you have so many charts to write so even remembering – give me one, write everything there, I will do it and do it very nicely. So whoever is deciding about the paperwork, if it's possible, then they

The nurses felt that because the required documentation was repetitious and time-consuming, it interfered with their work and prevented them from giving the best possible service to their patients. Some even noted that documentation had become such a problem that the relatives of patients sometimes commented on the amount of time that they spent writing. Here is an extract from a discussion on this topic:

FGD 3: P1: without those duplications the patients can get the best.

P2: the best!

P1: because you have all the time for the patient but you see you have to divide, pt, papers, what, what...

P3: in fact most relatives have complained, here we write all the time

P2: a lot of writing but you don't touch pts. It's very true. If I'm supposed to assess my pt 3 times in a shift, when is that I'm supposed to write all that, make sure that the lab results are there, you have a nursing care plan and make sure the dates are all there, the names of the pt, in the morning, if your cadex is gone thru and the initial assessment form is not filled fully, you fill that one. And then in this morning you are being told "this is a T-sheet, you are handing over a t-sheet which is incomplete, what is this, can you get the doctor to write it!" I mean it has been there for the last five days, you haven't seen it you are seeing it this morning, what are you telling me?

The implications of the nurse-patient ratio and the process of completing documentation was also established during these discussions. The nurses felt that documentation became particularly arduous when they had to provide care of for two or more patients at the same time. Here are some of the remarks to the participants made:

FGD2: Ok, what happens, I think the ratio of ICU should remain one to one because when it becomes one to two, and you have a lot of documentation, it's not like in the ward. You have a lot of papers to write, you have a nursing care plan, our charts are so detailed and you have to fill all of them. If you have to fill them accurately and give that care, and plan your care that you'll be able to deliver to your patient, then the ratio has to be one to one because mostly what happens, you'll plan that care, but you'll find you doing it as a routine, because somebody will come the

following day, checking whether you have a nursing care plan, so you just plan your care and some of these things you are not going to be able to meet them. You're just planning them for routine and to satisfy somebody. So can we work? Can we do things that are realistic? If it is those charts, I think documentation is too much. We can compile them into one big chart and reduce some of those things because they are repetition. And that is part of a stress to us.

FGD3: (sighs) the challenges of writing too much especially when you have two patients. It's really taxing. Because you are expected to perform and you are expected to write and you are expected to do everything and at the end of the day you are just burned out.

Some participants felt particularly unhappy about the issue of documentation because it was inevitable that their supervisors would reprimand them if they had not completed the necessary documentation – regardless of the number of patients that they were being required to handle. The focus group discussion participants made it clear that it was a common practice among nurses to document what they *had not done* in order to avoid the repercussions of not having completed the documentation.

FGD 1: And also a lot of writing as well. Uhhmm it also takes you away from patient care to an extent ... and ahh the fact that you're scared. Ok yah, you could create time work on the patient and sit down to write later. But should your big person come and see that you have not this that should have been done this far then your explanation may not be acceptable ... In fact you are even safer documenting what you have not done and then do it later (laughter from the group) which is a big risk to the patient and also unethical.

FGD 3: Then the other thing I would say is that we do things to avoid, like I'll write that I have taught a patient to avoid being asked a question. I'll write ... There are some forms which we write. In the essence, I haven't taught but because I don't want that thing that can make you stay for another hour, or somebody to nag you – ok I don't mean it nagging if it is a procedure or whatever. If you haven't managed you haven't managed. But it comes to a point where it should be done regardless of what and what and what. So most of the time I'll write whatever I'll write so that I don't get that bashing, so I can go home peacefully.

Nursing documentation as a source of stress has already been cited in other studies of nurse burnout, for example incomplete documents and missing documents.

5.3.2.1.3 Added responsibilities

Because of the nature of the critical care units, nurses are sometimes required to cope with other responsibilities apart from those that are integral to their work in the unit. The participant nurses in this study reacted very strongly to the addition of other

responsibilities to the workload that they had to perform as a routine part of caring for their patients. One of the participants made the following comments:

FGD 1: There are also some added responsibilities that we have been given. In each group there are several responsibilities but sometimes you find that these responsibilities add to the stress of the patient that we have. For instance, shift leading. You have your own patient; the patient is not very stable. You need to supervise the rest of team, you need to order drugs. You need to do, several other things! You need to charge, you need to be the CARE 2000 consultant. You know, everybody shall be consulting you over everything. And at times it becomes very overwhelming. You wonder sometimes.

Other participants supported this point of view in the following words:

FGD 2: Work overload. You might feel overwhelmed. Like now, I'm supposed to be the shift leader, I have a patient, quite a heavy patient, and I'm supposed to look after 8 other patients, like now I know there is a patient I – then there is CARE 2000. There is a patient- Like there's a patient, what's his name? Robert. Today, I didn't see him. And I know he needed me but couldn't. Now I'm reading reports, maajabu (wonders), I'm seeing things which I should have corrected, but I had no time! Goodness. This is cheap, not cheap, it makes the care so cheap because of this ...

FGD3: I think the fact that you are also made to do ummm what can I call it? Like clerical work. You are the nurse, you are meant to charge, you are meant to follow other people from other departments let's say pharmacy, the doctors- who may never come, who are not around. it's quite stressful for the nurse ... you've been working for those 12 hrs and then you are having all this work to do. You do clerical work, you do doctors work; you know all those kind of things. Of course this nurse is not going to smile when she is that tired and she is nursing two and a half patients sometimes three!

The discussions of the nurse participants recorded above show very clearly that any responsibilities that are added to workloads that are already very heavy in any critical care unit become potent stressors that lead to the onset and development of burnout.

5.3.2.1.4 Time pressure

The participants in the focus group discussions also expressed how much they were stressed by the pressure of time during shifts. They unanimously related these time pressures to heavy workloads and poor and inadequate staffing. Some of them reported that they felt so exhausted by the end of their shifts that they could not even attend to their own personal needs such as, for example, preparing and eating a proper meal.

FGD1: by the nature of the unit and the conditions that are handled there it makes you work with the sense of urgency of time. Like for example you have seven things that are all being termed as urgent and you have to come up with a priority, it could be one it could be seven ... workload also becomes an issue in that you are always having something to do at one particular time. So if for some reason you go out ...you run out of time if you had 2 things you needed to have accomplished by lunch time that lags behind all through the day.

FGD 3: Imagine from morning to evening, and like, you have two patients who are critically ill, even going for lunch, you don't even get time to go for lunch, or you take your lunch at 4 PM. So it is quite stressing for us.

Since the effects of time pressure and its implications for nurse burnout have already been identified in various studies, this information supports what the participants in this study reported as a factor that leads to the development of burnout. In a study by Adali and Priami (2002), time pressure was coupled with caring for the critically ill and heavy workloads as major factors that adversely affected the mental and physical health of nurses working in critical care units and emergency departments, and that therefore contributed to the onset and development of burnout. In another study, Estryng-Behar, Van der Heijden, Camerino, Fry, Nezet, Conway and Hasselhorn (2008:107) also identified "time pressure" as a lack of time to complete all the necessary work tasks of the nurse, thus making it one of the most significant causes of burnout.

5.3.2.2 Work shifts

Another theme that emerged strongly in the focus discussion groups was the issue of work shifts.

5.3.2.2.1 Long working hours

Participants cited their long working hours as a source of stress that ultimately led to burnout. The researcher established that the working hours of the nurses in the sample were twelve hours per shift. The respondents agreed that having twelve hours per shift was to their advantage because it meant that they also got more off days. One of the participants expressed it in this way:

P2: ... Initially we thought that it was good. As in, you go for many offs, you work for two days, you go for two off, unlike when we used to work for half day and you go for only one off in a week.

The participating nurses soon, however, realised that such long hours were a severe source of stress.

FGD 2: P1: Yeah.... Of course, we have long working hours.

P2: But now, it's quite stressing. Imagine from morning to evening, and like, you have two patients who are critically ill, even going for lunch, you don't even get time to go for lunch, or you take your lunch at 4 PM. So it is quite stressing for us. You get burnout. Burnt out.

P3: Going on the long hours, it even makes one not give the best care, because, like, maybe in the morning hours you are so busy with a patient, by afternoon, whatever you are supposed to do to the patient, you are not able to. You are already so tired, you have so many things to do, so, you just have to sit there and start documenting.

FGD 3: working hours, like you work from ... for 12hrs. I mean it's such a long time. By the time you get to 12 midday your output is totally nil. You are so tired, you cannot think right. Sometimes you go through without having lunch, a cup of tea, so you get really tired. I think the working hrs are too long for ICU. In ICU I think we need the working hrs to be changed.

Long work hours have been documented by many researchers as a source of stress that ultimately leads to burnout. A study by Arikan, Köksal and Gökçe (2008:182) on a sample of nurses who were drawn from dialysis units, intensive care units and other specialised units from three different hospitals, cited the long work hours as an important cause of burnout. A study by Isikhan, Comez and Danis (2004:234) of nurses who were working with cancer patients supports these findings. They determined that one of the main factors that increase stress and therefore the likelihood of burnout was long working hours.

5.3.2.2.2 Prolonged work hours

Participants were also in agreement about the fact that they often had to work for longer periods than the officially designated 12 hours of the shift. This was attributed to

the fact that there were many other activities that needed to be attended to during the morning sessions. Such activities included continuous education sessions, morning meetings, appraisals, and many others. These sessions sometimes took place regardless of whether the nurses were returning from night duty on the morning concerned. Here are an extract from the comments of some of the participants:

FGD1: Because ideally we should be leaving at about 8.30 like the night staff need to go, but you find like sometimes you leave at about 9, 9.30 and you find that its very demoralizing because the night staff need to come back on duty. Or even if not so people still need to go off.

FGD 2: ... also the leaving time. Like, if you are night duty, most of the time we leave at ten am because there are some masomos (learning sessions) in the morning..... These are stress to the nurses on night duty and even for the nurse who is coming during the day.

FGD 3: I'm coming from night then somebody says we'll have to do this. I'm left with no choice. As in this person is not considering that I'm supposed to come back at night. First there are some rituals to be done, let me call them rituals done after the report in ICU as in there is reading, there is I don't know what, so many things, many funny funny things until lately you are leaving at 9. Then after that somebody says you need to do I don't know what – appraisals- you leave here at 1.

One participant agreed about the damaging effects of prolonged hours, and expressed his disappointment about being called to come to work on his off-days.

FGD 3: Ok suppose we say you are off at home, then supposed just calls you and tells you "E you are on duty come and report to work" you are off and you know you are off but you are being called to come to work. You are called at 3 or 4 in the morning to come to work.

The effect of overtime or working extra hours on burnout has been well established in previous research. In a study conducted on Hungarian nurses, it was found that one of the factors that contributed to development of burnout was requiring nurses to work extra hours above and beyond their normal shift hours (Palfin 2003). Other research conducted on Australian nurses reported that nurses associated having to work overtime with emotional exhaustion and feeling pressured. In this study, the expectation that they would work overtime was positively correlated with emotional exhaustion and depersonalisation (Patrick & Lavery 2007:43).

5.3.2.3 Death and dying

Another key theme that occurred continually in the focus group discussions was concerned with the additional pressures and stressors that nurses associate with the death and dying process in the critical care units. When nurses are taking care of critically ill and dying patients, they should at all times be ready to comfort the relatives of dying patients while, at the same time, dealing with their own sense of grief and loss. Because this places a heavy burden on nurses who work in critical care units, it becomes a significant source of stress. The following sub-themes emerged in relation to the death and dying process.

5.3.2.3.1 *Death of a patient*

Nurses who work in critical care units encounter death far more often than not. This feature of life in a critical care unit can be extremely emotionally draining for the nurses concerned and exert an injurious effect on their physical and emotional lives. The participants in the focus group discussions expressed their frequent contact with death and dying and the need to comfort grieving relatives as a source of stress to them. Participants commented in the following way about this stressor:

FGD 1: the other stress is ... a lot of death is also a big challenge ... ok it's a challenge, we are having so many deaths in fact we don't like to see patients die. Sometimes they die and maybe you are happy because they have suffered but in our mind that's not what we want ... death of a patient is stress in that you shall feel like you are losing ... you've lost a battle. You'd like the patient to maybe improve and go to another ward.

FGD 2:

P1: ... especially like when you lose a patient, you've done quite a lot and at the end of the day, Yeah, you have to let go, you have lost quite a lot apart from the patient ... It's like you've lost so many things, apart from the patient.

P2: Think I'll continue with his point because it is a major stressor. Like, ICU we have a high turnover of patients- losing patients. You know it is the final place where patients are brought from the wards, if they deteriorate so sometimes you lose patients like you can lose patients consequently and this affects the nurse very much. The relatives are talked to by the doctor, they are even counselled, but nobody cares about the nurse.

This finding corresponds to what previous research has shown, namely that one of the major stressors for nurses who work in critical care units is the death of patients under

their care, and all the other events that are associated with death and grieving. Two participants, however, noted that death did not affect them negatively. This is what they said:

FGD 3:

P1: about patients dying it doesn't affect me so much because nearly every day they die (laughter). I don't cry, I don't feel anything about it. I take them to the morgue and I come back take another one and then go home

P2: ok for pts dying, I'll just wait for the next admission (laughter).

Such individual differences in attitude among nurses are not uncommon. When a professional such as the most becomes deeply burned out, a degree of depersonalisation develops that enables the person concerned to become hardened to the tragedies that surround them in the workplace, and this may manifest as being completely unmoved by events that are deeply upsetting to other people. Wartik (2001:193) explains this by saying that the person suppresses the feelings of loss and grief associated with death because they need an emotional shield to protect their inner self against assaults so that they can carry out their duties without collapsing. Such a person would therefore appear to become hardened and indifferent to suffering – which is the essence of the depersonalisation effect.

5.3.2.3.2 Relatives who are inadequately prepared for the death of their loved one

Information is given on a regular basis to the relatives of patients who have been admitted to a critical care unit. The need for providing accurate information is important for the relatives of patients in critical care units because the accuracy of information encourages them either to hope all to prepare themselves for the imminent demise of their relative. But many of the participants in the focus group discussions felt that the information that was being given to relatives was sometimes not entirely accurate, and that this could become a source of crisis, conflict and disappointment.

FGD1:

PI: *maybe to add to the ah stress coming from a patient. Whereby the doctors don't tell the relatives the truth. They mislead the relatives. They tell the relatives ah ... even a case you see there is no hope for life. But the doctors continue saying there is hope, there is hope there is hope. That also adds a lot of stress. Coz at the end of it this patient will die and by the time this patient is dying, this doctors won't be there. So it will be you explaining to the relatives what has happened.*

FGD 2: *I think the other thing is that doctors don't prepare the relatives for the death. Coz you find sometimes patients come here, they come from the ward. Maybe somebody has a terminal illness, they are brought here and the doctor says you do everything. the relatives are not even prepared. When the patient is now going into asystole is when you're saying, start preparing the relatives. SURELY!! And then here you are with the patient, you're asking the doctor, 'Daktari, have you talked to the relatives?' 'No, we'll talk to them, I'll talk to the daughter, I'll talk to the son.' You as the nurse they come, you don't know what to tell them because you don't know what they have been told, so you are really ... you feel so frustrated.*

These findings are consistent with the results obtained from other studies. A study by Zaforteza, Gastaldo, de Pedro, Sánchez-Cuenca and Lastra (2005:135) into the perception of nurses about the factors that influence their relationship with the relatives of patients in their intensive care units revealed that nurses thought accurate information could serve to mitigate the anxiety and concerns of the patient's relatives. In spite of this, they often refrained from giving this information because they wanted to avoid conflicts with the doctors. A study by Verhaeghe, van Zuuren, Defloor, Duijnste and Grypdonck (2007:1488) on the opinions of the relatives of patients in this matter, found that accurate and realistic information influences the state of mind of the relatives concerned. They also found that the relatives of the patients in critical care units all wanted information to be as accurate as possible so that they would not entertain false hopes and would be more prepared for the death of the patient if that seemed to be imminent. Any hopes that the relatives may have about the patient is completely based on the belief in the accuracy of information that they receive at all times. Because of this, they are understandably completely averse to being given inaccurate, vague and realistic information because such information simply encourages a person to entertain false hopes – and ultimately leads to additional stress, grief and disillusionment. False or inaccurate information also undermines the confidence that normal people feel in the nursing and medical professions.

5.3.2.3.3 *Inability to provide support to the relatives*

Participants felt that they were inadequately equipped to offer proper support and counselling to the relatives of the deceased in the immediate aftermath of their relative's death. They attributed this insufficiency mostly to a lack of time and the kind of excessive workloads that make it difficult (if not impossible) to devote themselves to comforting the relatives of the deceased because they are simultaneously required to attend to other critically ill patients in intensive care unit who need their immediate and continuous attention.

FGD 1: deaths are also a major problem and this time we are thinking of the family because for one there is too much of the workload that even if you knew as much as you feel you need to give emotional support to the family you may not have time and if at all you just do a bit of counselling between here and there ... I'm saying like she is saying like you feel you cannot support the family at that point adequately because uh.. I think by your job description it's like it is not there. You know like there are things that will happen and everyone will feel we need to reorganize ourselves coz we must give someone a time to heal. So this one she's out there with the relatives to ... or whatever, she'll come back and work. So if you spend an hour out there you'll know how you'll recover that and go back to your other patient. So as much as you may be crying out to help then you have another drive, telling you "even that is not done" you must go back.

P2: even for the relatives they may have been expecting the death and are prepared but at that point, I find there is no adequate support for them. Yah, so I find that a big challenge. How can I support them?

Some of the participants blamed the organisation for failing to make proper arrangements for qualified counsellors to be on call to support the relatives of the deceased in their time of grief. This, they point out, has simply been left to the nurses on duty, and this adds an extra burden to the natural distress that most nurses feel when one of their patient's dies.

P1: I cannot afford time to sit with them to grieve. You know. It is not provided for and there is no like maybe, counsellor or such. You know somebody who can help them through that short ... that period of grief.

P1: actually feeling like the institution has failed (murmurs from others) and they push you to that role and they wail and scream and you all walk out. And unlike other roles, we have for example something might happen and I'm told " N give your patient to J while you tackle this". No one can accept that it is not provided for, as much as you make it easy...

Similar findings emerged in relation to caregivers in a study about caregivers who work with people who are infected or affected by HIV/AIDS in KwaZulu-Natal, South Africa

(Demmer 2006:97). These caregivers expressed their conviction of how difficult it was to help their clients to process their grief. They attributed this grief to several factors that included the fact that many clients have more pressing needs, they often reticent and unwilling to talk about their grief, as well as the fact that they (as caregivers) have been inadequately prepared to cope and deal with death and bereavement as professionals. The participating caregivers in this study also mentioned the scarcity of funds and other necessary organisational resources.

5.3.2.3.4 Breaking the news of death to relatives

The participants in the study noted that they often found themselves in a situation of having to break the news of the death of patients to their relatives during the course of their work. Some participants believe that such situations arose because of the unavailability of the doctors during the process of dying and in the aftermath of death. In order to break the news of a relative's death to his or her next of kin is a difficult and delicate undertaking that requires a proper training and education in the techniques and methods of grief counselling and communication. Without such training, nurses can only perform this difficult task by relying on natural human instincts and even though such instincts may be sound and admirable, the lack of training in such circumstances and an enormous burden to the already difficult tasks that all nurses (and particularly nurses who work in critical care units) have to perform. A study performed by Issacs and Mash (2004:20) demonstrated that even doctors find grief counselling difficult and demanding. Their study identified the fact that doctors identified that one of the most difficult tasks they had to perform after the death of a patient was breaking the news of the patient's death to his or her relatives. It is hardly surprising therefore that the participants in this study also experienced the necessity for comforting grieving and distressed relatives as a source of stress.

FGD 1:

P1: ... When a patient dies. The relatives ... how to break the news. I think that's my biggest challenge in ICU. Breaking the news.

P2: *Coz at the end of it this patient will die and by the time this patient is dying, this doctors won't be there. So it will be you explaining to the relatives what has happened ... the primary doctors were nowhere to be found!*

Me: *and you had to explain to the relatives?*

P2: *yes.*

5.3.2.3.5 Futile/prolongation of life

Another sub-theme that emerged during the course of the discussions was the futility and ultimate pointlessness of maintaining some of the highly technological procedures for sustaining the life of patients in critical care units when they have little hope of survival. The participants in the study often experienced a great deal of distress because of decisions to apply aggressive life-maintaining therapies and techniques that they knew would eventually only increase the burden of suffering on the patient and his or her relatives in the long run. They are nevertheless required to implement these decisions which they personally perceive as morally and ethically wrong. This conflict of conscience can become a powerful factor in the development of burnout. The following excerpts from participants express their feelings and convictions on this point:

FGD 1:

P2: *YES, we had a pt in Bed 2. That patient stayed in ICU for over a 100 days. And the doctors were telling the ... the primary doctors were telling the relatives "there is still hope there is still hope". Then they called a neurosurgeon who told the relatives, there is no hope. The pt was brain dead. But they continued reassuring the relatives up to...ah..ah..after he has undergone how many craniotomies? Several, around three craniotomies. And then the last one, which even the neurosurgeon was reluctant to..to...to..do. But the primary doctors told the relatives that it shall be the only hope for their patient. Only to open and find pus (laughter from the group) and maggots (laughter*

FGD 2:

P1: *We had a patient who had been caloric negative twice, and then they say the patient was, for three days, not on dialysis, then they all of a sudden decided to dialyse the patient and then there was a problem with the machine, and then the patient eventually died. They say it's the dialysis and the patient was caloric negative even for about two weeks.*

P2: *Having to be there when the patient is being subjected to that and you're going through. I think it's very, very unfair even for the nurse (I: when you're extending the life of the patient and...) Is it the life or the suffering? And you're made to be a part of it. Me, I find very cruel and it's harrowing, you know?*

The opinions of the participants on this matter have also been reported in other studies. A study undertaken by Gutierrez (2005:229) found that the three most serious circumstances they increased the burden of stress on nurses were excessively aggressive treatments to prolong the life of a dying person, an inappropriate use of health care resources, and the way in which some physicians gave incomplete or inaccurate information to both patients and relatives. McClendon and Buckner (2006:199) found that the nurses in their study ranked the two factors that caused them the most distress were those situations in which they were required to follow the family's wishes to continue with futile life-support measures and being required to initiate aggressive life-saving therapies and measures which would only prolong a human life under impossible circumstances.

5.3.2.4 Interrelationship conflicts

Collaboration between the health care providers, an organisation's administrators and the relatives of patients is absolutely indispensable in a critical care unit if the patient is to be given appropriate treatment and care. Unfortunately, however, collaboration is not always achieved among those concerned, and this can lead to the development of conflicts between the nurse and the other parties with whom they come into contact. Shimizutani, Odagiri, Ohya, Shimomitsu, Kristensen, Maruta and Iimori (2008:326) note that all forms of conflict are interrelated. They point out, for example, that nurse-nurse or nurse-physician conflicts are closely related to the conflict that arise between nurses and patients and their relatives. The escalation and interrelation of these conflicts add an immense burden to the stresses that nurses already have to bear. These researchers suggest that increases in the incidence of nurse-nurse conflicts and nurse-relative conflicts elevates the scores of other stressful factors, and that such increases ultimately lead to burnout.

Participants in the focus group discussions expressed their point of view that conflicts of this kind were an immense source of stress and that they ultimately lead to the

development of burnout. What follows below is a discussion of the different types of conflict that participants experience, along with excerpts from their discussions of this topic.

5.3.2.4.1 Nurse-nurse conflict

The participants in the study explained that their relationships with their fellow nurses were not always cordial, as is suggested by their remarks below:

FGD 1:

P1: ... there's something else I want to add. There's also a stressor that also comes from within ourselves. Maybe I may not mention ... I may not say it's a particular group but I've had instances where a colleague reports the other colleague ... without even discussing. Maybe there's an issue. We're in the same group, G amefanya kitu kibaya, nitangojea asubuhi (G has done something wrong, I wait till morning ...) so you wonder why, your colleague cannot come to you and tell you what you did not tackle from 6AM ...

P2: Actually me I have been a victim of such incidents. Just somebody we're in the same group at night comes and looks at my chart he see's G have not done this, calls the boss, in the morning boss comes straight to what I have not done directly and there is something inside.

FGD 3:

P1: Exactly. There are those of us who feel so sweet and so clever that we can actually go and discuss the rest of us with the bosses. I mean that is really demotivating. It demoralizes, because how do you for heaven's sake feel that I'm the worst and you go and discuss me in a very high powered eh, kwani who the hell are you (laughter) and then of course that will ripple down of course the wrong way, yah and you won't be happy.

Nurse-nurse conflicts and their relationship to burnout have also been independently established in various other studies. Of particular interest in this regard were the views of one of the participants who explained how she had experienced conflict with her fellow nurse when she was a new nurse in this an intensive care unit. She explained that because she had not been given the necessary support, she had been labelled as ignorant and inefficient, and that this had so severely demoralised her that she had chosen not to return to work.

FDG 3: ... When you just come and throw me to patient and tell me "that is your patient dialyse that pat". I don't know what a dialysis machine is; I don't know how to connect this dialysis

machine. I'll give an example. I was given a patient, I was very new, I was only 2 or 3 weeks old in ICU and I was given a pt for PD (peritoneal dialysis). I had never seen a PD before. I'm asking my seniors "I'm I doing the right thing?" "Oh yes you are doing alright" they are not checking. But morning comes and I get all the beating. Why? Because I did the wrong thing the whole night. I had two very senior nurses and I kept on asking, is it ok: yes it is ok" but you see at the end of the day I felt very de-motivated. In fact the next day I didn't come to work. I reached the door and went back home. Why because I was feeling I don't deserve to be here. I mean if I can't be shown something in the right way then you come in the morning there is your head nurse or your team leader shouting at you telling you "you should have asked". You know you asked but people are saying "no she never asked anybody; in fact she was very comfortable".

The feelings expressed by this participant had been reflected by nurse participants in other research studies that have shown that nurses have a difficult time in making transitions to new work environments. In a study by Casey, Fink, Krugman and Propst (2004:303), a novice nurse described the difficulties she experienced with peer relationships. She felt that these difficulties were attributable to a lack of acceptance and respect on the part of other nurses, and that this had made her transition into the RN role much more difficult than it should have been.

5.3.2.4.2 Nurse-nurse supervisor conflict

This sub-theme was discussed extensively in all the focus group discussions, and was related to many other themes. In one of the focus group discussions, some participants expressed the opinion that they preferred to work shifts at night and on weekends because at such times they were able to enjoy a minimal amount of contact with their supervisors.

FGD 1:

P1: I enjoy working at night.....with minimal supervision ... I'm able to work perfectly ... and comfortably ... if I work during the day, especially on a week day ... eh ... Every time I work, I'm panicking the papers will be found on the floor... I'll be ... I'll be insulted or I'll be ... So so I prefer working at night and especially the time I work comfortably is at night, weekends.

P2: But let me tell you some of these experiences are so traumatic and degrading, you know. For an adult to get to a level of, you know, you know (gestures). Me I come from those machinani (up country) place where the teacher you know, as you grow up the teacher was, I don't know what type of a figure and it would even call for you to change your path kama umeona mwalimu kwa mbali (if you see the teacher from far). You know for an adult to get to that level and it's not on any specific personal issue that person is really stressed, that person s really traumatised. That I

shall see you (the supervisor) from this side.... you have nothing specific but I'm sure you shall pick on something so I thwart my ...

The participants described how their immediate supervisors used what they called a “dictatorship” mode of management. They also call it “the Moi regime” mode of management – an allusion to a former president of Kenya whose style of ruling was extremely autocratic.

FGD 3:

P1: I call it the Moi regime. By the way I've even called it the Moi regime in this ICU. Because it is very, I am bombarding it as dictatorship. You are going to do appraisal so you are not expected to say no.

P2: Mmm I think what I'd say is that. I would say there is autocratic mode of management.

This dictatorial and non-consultative style of management has led participants to feel that they are not supported and trusted by their immediate supervisors. The participants felt that they were unable to approach their supervisors about important problems in matters of procedure because of the fear of supervisors that had been instilled in them and because of the apparent inapproachability of their supervisors.

FGD 1: So all the nurses have very very low esteem. They are demoralised and uhhh everybody feels like taking off. Because you can't actually sit down and have a proper discussion with the boss. You will be threatened, you will be abused...you'll be traumatised and you'll be threatened even with sacking on the spot. So that makes it a very hostile environment to work in.

FGD 3: When a relative comes and I answer pts relative and I tell her this is this and then she goes and says the nurse was rude- you should first come to me and ask me what happened, how did this go? And in most cases, even in most offices, you cover your people then apologize and all but don't go bombarding the same nurse in front of this patient who you expect to live with the same pt, how will the patient trust you.

FGD 3: So they will be doing this thing out of fear. In fact I do not like the instilled fear in nurses such that somebody behaves worse than a PTS (novice nurse)! You know worse than ... I believe that nurses should be a working class like every other person. Because there is no way you see your manager you fear, you don't even know what to do ... I really hate it.

FGD 1: alternatively just observe peoples moods. Such that if there is a day this particular person is away, people can speak and laugh. People can share. You can walk in confidently but this other days, people are like what have the voices got to say first, who's around, can I say it or ... you know. You are so panicky...I mean...there is a tension, apprehension. You know, you don't know what shall be picked on this time. It comes.... I think it's a very unhealthy way of life....

Some participants also explained how they had on occasions been degraded and humiliated by the comments of their supervisors. One of the participants described how very demoralizing this kind of treatment was for them.

FGD 3: Somebody goes from the blue and goes and picks something sijui (I don't know) from where and then comes and tells you 'and you actually failed' it doesn't make sense, it's very demoralizing ... It is part of demoralization.

FGD 1: We are even below nursery. And somebody can even go as far as telling you "my daughter is in class two, her English is better than yours".

FGD 3: Something needs to be done either someone needs to talk to the boss to educate her on how to handle people. Her people skills are zero. People skills are zero. Something needs to be done. Or if people skills cannot be taught, maybe we get another boss. If we cannot get another one, maybe it's time for us to leave.

The feelings and opinions expressed by these participants in the focus group discussion made it very clear indeed that this style of leadership in supervisors is a major source of stress to them. The conflictual relationship between nurses and their supervisors has also been confirmed by other research to be a root cause of other dependent stressors.

The widespread occurrence of nurse-supervisor conflict has been established in many research studies on burnout. In a study by Flecher (2001:324) of 1780 nurse respondents, it was found that the quality of supervisor support and supervision were lowest for nurse managers. The nurses in the study described the following problems: inadequate unit leadership, a frequent turnover of nurse managers, prolonged physical absences on the part of the supervisors of units, and the failure to address important problems. In the latter case, the nurse managers simply swept the problems aside or were not even aware that they existed. The evidence shows that they were mostly also unaware of all the difficulties relating to staffing issues.

5.3.2.4.3 Nurse-administrator conflict

Nurse-administrator support is a vital and indispensable feature of a healthy and supportive nursing work environment. Roussell, Swansburg and Swansburg (2006: 90)

explain that a supportive climate results in clear communications that support the productivity of the nursing team and permit the accurate identification of problems. This, they explain, can only be achieved as a result of the development of close and respectful professional relationships between nurses and nurse administrators. The participants in this study explained that they did not get the required support from their nurse administrators, and that this was a severe source of stress for them.

FGD 2: sometimes we have very many problems and even we call for meetings, but when we raise our grievances, they're not addressed in any way.

FGD1: One thing, you have a complaint, it is not taken, that complaint as you have said it. It is taken now against you. They don't support you. You complain about somebody. Now, that complain of yours, it's now like you are doing campaign for that person to be elevated ... and you to be flattened, you lie like an envelope. What can you say about that? You complain about somebody ... And it is not only one complaint. They are major complaints. And that ... all those complaints, instead of the institution coming out and seeing – How comes it's only this person? Investigate that person. Then go ahead, give him a post. (laughter) And that post, that person does not even have the qualification for it. (laughter).

FGD 3:

P1: when people like our managers to be told of increasing ratios and they accept that, either they are protecting their jobs, they are ... either protecting their job, that is one. Secondly they don't want to be seen as defiant so they are more or else towing the line to achieve whatever they think is in order for them and actually it's not! Because like if they formed a group they become three or four managers who can stand and say "no this is not how it's going to be ... "Yah this is the condition here, this can't work to them" but now they don't want to do that because they don't want to be seen to be more or less defiant or anything or they are like protecting.

Conflicts between nurses and nurse administrators is a factor that has been documented in research as one of the leading causes of burnout in nurses and of job dissatisfaction. In a study conducted by Milisena, Abrahamc, Siebensa, Darrasf and Dierckx de Casterle'a (2006:745), which is designed to ascertain how Belgian nurses experienced their professional environments, it was found that 63.8% (n=9638) of the nurses reported that their communication with nurse administrators was inadequate while 43% reported that, in some instances, it was simply non-existent. Only 48.9% of the nurses felt minimally supported by the leadership of the nursing administrators, and 39.1% felt the same way about their nursing management.

5.3.2.4.4 Nurse-physician conflict

Another interrelational conflict that the participants in the study identified as a factor that leads to the development of stress is the conflicts that occur between nurses and physicians. Because hospital is such a complex organisation, it needs to employ a large number of staff in different capacities. Among these employees, physicians and nurses are indispensable for the efficient operation and organisation of a hospital. The interactions between physicians and nurses therefore play an extremely important role in the provision of service, equal in importance to the soundness of the hospital's infrastructure. Some of the respondents in the study noted that some physicians made comments to the effect that particular nurses should not be allowed to handle their patients. Such comments are obviously a source of extreme humiliation and demoralisation. They were also of the opinion that some of the physicians treated them like machines.

FGD 2: I think the doctors – they are some, but not all. They make us feel like we are not doing like ... yeah. Because, they like, harass you and create an emergency which is not an emergency. In that case you feel like, they are actually taking you, like, a machine and it is as if you don't know what you are doing. You feel frustrated at the end of the day even if you came in ...

P2: Even here there are some doctors who will say. You see, if your patient is given to that nurse, that one is better. This one, I don't like, you see?

That this kind of conflict is extremely widespread in clinical settings has also been expressed in other studies. In a study of Zambian nurses, Munthali, Bowa and Odimba (2008:34) reported that 29% of the respondents attributed their conflicts with doctors as a major source of workplace stress. This is confirmed in a study undertaken by Rosenstein (2002:26), who conducted a survey of nurses, physicians, and healthcare executives in a variety of different hospitals. The majority of the respondents in this study reported some degree of disruptive physician behaviour in their institutions. It also reported that both the physicians and the nurses in the study agreed that such conflicts undermine the confidence and morale of nurses. The respondents also agreed that such conflicts adversely affect the attitudes of all members of staff to patient care,

but they inhibit the effectiveness and viability of teamwork, and that they exert negative outcomes on patient care. These findings of further supported by Demir and Kasapoğlu (2008), who undertook a qualitative study on Turkish nurses with the purpose of obtaining more information about the influence of nurse-physicians relationships on the therapeutic effectiveness of hospitals. These researchers established that the situations that made nurses most uncomfortable in their work arose out of the conflicts they had with the physicians with whom they had to work. They claimed that the physicians did not respect them, that they (the physicians) had poor communication skills that they acted in a superior manner and interfered with the work of the nurses in a way that made their tasks even more difficult. They also noted that it was female physicians who were the worst offenders in this regard.

5.3.3.4.5 Nurse-relative/patient conflict

The relationships between nurses and patients and the relatives of patients should be a therapeutic one. But since nurses have to work closely with people who hold different values and beliefs and who have been raised in cultures that are different from their own, relationships with such people can be a source of conflict and disagreement. This was expressed by the participants in this study.

FGD 3: Basically what I feel is that the relatives have been given so much freedom, such that a relative can come shout at a nurse, go to the office, somebody sits there and listens to this relative ... When a relative comes and I answer pts relative and I tell her this is this and then she goes and says the nurse was rude ...

FGD 2: So if something, even if it's not anything major, the patient will just call. Like we had a patient just two days ago the patient could tell the nurse call for me my doctor so and so. Then when the nurse is trying, the patient is calling the doctor on the mobile. When the nurse going to give him a feedback ati "I can't get the doctor, the phone is engaged" at "I've already talked to him" So you feel just there, you feel intimidated.

5.3.2.5 Recognition and appreciation

One of the key themes that emerged from the focus group discussions was the lack of recognition and appreciation that is given to nurses as a whole. The participants in this

study expressed the opinion that an adequate salary or monetary remuneration is one of the most important factors in maintaining a person's faith in their career and employment situation. One of the participants declared that the reason for working is to obtain sufficient funds to sustain a reasonable standard of human life. If employees therefore feel that they are being unfairly and inadequately remunerated for the work that they perform, then they are bound to develop burnout in the long run because of the difficulties of trying to sustain the necessities of life and family on inadequate and unrealistic salaries. This was the view of the participants in this study.

FGD1: The other thing is money. I don't think we are given something commensurate to what we are undergoing. If it's a difference of Kshs.1, 500 and we run the whole night not like the ward where at ...

FGD 2: and also the salaries, I think ICU salaries should be good money, you know, Money that is motivating. Ok, we are not working for money, ok, we are working for money ... Ok yes we are working for money and at the same time, we are concerned with the lives of our patients. But Money is a way of ... it's part of motivation for the nurses. So, I think the salaries should be reviewed. Yaani that thing that is motivating to people. At least when you leave here, and you say, yeah, at least I've worked for that patient, and at least my family is comfortable. I have food for my patient and good food for my patient. I can afford fare, you know? It's no longer a matter of living, mouth to ... hand to mouth.

FGD 3: And again there is lack of motivation in terms of money. Because you toil like this, the same, if you are taken to the ward, you'll have a good time and yet you are not being recognized. As in now we are talking about ICU allowance, what is 2000 or 500. It's not motivating. Its better you work where you are relaxed, your mind is relaxed, you won't get ulcers, you won't get ma hypertension and you are just earning the little money. I mean there is no money!

One participant expressed the opinion that she would rather find another job with less salary than continue to experience the degree of stress that was afflicting her life.

FGD 3: You can imagine It has reached a point where I've said even if I'm paid less money I'll go for that job. I don't want to like the same type of routine, the same kind of stress, the same kind of people. The people don't change, I mean the management never changes. It's you who is expected to cope with any changes that come along.

The effect of poor remuneration on personal levels of stress was established in a study undertaken by Tyson and Pongruengphant (2004:247). In this study, they found that the nurses who worked in public hospitals were paid less and reported higher levels of stress than their counterparts who were employed private hospitals. In order to confirm

these findings, Alotaibi (2008:237) conducted a study on Kuwaiti nurses in order to identify the factors that resulted in their voluntary departure from the hospitals in which they were working. These nurses stated that their major sources of frustrations were the low salaries, the lack of rewards, and a definite lack of appreciation on the part of their supervisors.

The participants expressed their feelings about the lack of appreciation in the following words:

FGD 3: When I look at those appraisals, you work as a team and most of the time it is the management who are appraising you and they are not with you. So it is us the team who know each other and if I learnt what I learnt in school, appraisals should be done by the people who are with you. Not somebody to come from wherever to sit there and appraise. but you see if somebody is coming to appraise me you are never with me during the night, you are not with me when I'm working the 12 hrs. Then you decide out of the blues that I never charge, or I never do I don't know what. It is not measurable, how did you find out that I never write CVP's or I never do CVP's. I never write SPo2's. How did that person come up with....you know when I'm going for that appraisal, somebody has some preconceived ideas. You are already appraised even before you do it.

5.3.2.6 Decision making and autonomy

It has already been noted in the literature review chapter that when nurses are denied legitimate opportunities to participate in decision making and the professional autonomy that they deserve, this is a potent factor that leads to the development of burnout in nurses. The participants in this study also expressed similar views that are described below. They were of the opinion that these two issues were major factors in the development of burnout.

FGD 2: ... also think in terms of change, there are some situations where change is being introduced into the system with not much consultation. Not one consultation. Coz It's like when you need a change, you need to consult with the people involved. You may even need to do like a small study. So that we get the feelings of most people.

P2: I think for change, like he says, when you are making a change, the people on the ground are not involved. The people, who are involved, are the people in the senior positions who don't come in touch with the patients. And you see, they don't know. They don't have that feeling of what you are experiencing. So, if they are making a change, the change is bombarded to you, you do not even know why they are changing some of the things and I think they need to consult people on the

ground. 'Are you comfortable with what we are putting in place? What has been happening with you? Are you experiencing problems with what has been happening? 'So change just comes without consultation on the people on the ground, and this affects us because it just comes and you are bombarded with change and it's not a process, and you are not involved with ...

FGD 3: P1 you are just informed this and this is happening and you have no choice about it. The decisions are already made and again at times you say "no" ...

P2: the people who decide, like in this hospital are up there like we said and it is not affecting them, there's no day they are going to sit there and fill those papers so all they expect is that after all, the decisions will come to us when they are already made. "Fill in these 10 papers" in fact you are told "this one has a log, this one has a trademark for AKUH you just have to fill it" and then you have to content their job. They have to pressurize you from down and they have to maintain that position

Dickinson and Wright (2003:82) support is finding in a literature reviews that they conducted to identify the main stressors that nurses believe lead to the onset and development of burnout. The factors thus identified by the nurses who participated in the study were interpersonal conflicts, excessive workloads, and being denied opportunities to be involved in the making of those decisions that should form an integral part of their daily professional routine.

Since it is professional autonomy that empowers a nurse (or any other trained professional), nurse should not be denied opportunities to make a kind of independent decisions which they have been trained to make over a period of many years. Clinical decision making should be an essential component in the conduct of professional nursing. Nurses must be encouraged to make decisions and assume responsibility for them. The nursing profession as a whole, nurse managers, nurse educators and health care administrators, all have a vital responsibility to provide opportunities that will encourage nurses to take responsibility for their own professional decisions, and all other healthcare professionals should support nurses to the hilt when they make such decisions. A lack of opportunities to make independent professional decisions about the care and treatment of patients has been shown to result in low levels of personal accomplishment, self-esteem and personal vocational satisfaction (Adali & Priami 2002:16). The participants in this study also expressed their frustration about their lack of personal autonomy in the clinical setting.

FGD 1: And leadership again comes here because their priority list may not be like yours and at times they don't give people space to work within their own judgement. What may be prudent judgement to me may not be prudent to the other. So I feel if it is not so much disorganized ... you know not so much out of the bracket you should allow that person to work within that if it doesn't cause harm to the patient.

P2:

FGD 2: And also that comes with autonomy also. There are some patients that you are allocated. Patients belonging to some consultants and you don't have that autonomy that if their blood sugar is like this, I'm supposed to keep humulin R. But you have to call them every other time, at BP is like this, like this, like this, you have to be on the phone, and you know what you can be able to do? You're a critical care nurse who has been trained, you know what you are supposed to do when BP started dropping, you know how to resuscitate BP, but you have to keep on the phone calling him. There's no autonomy and we're supposed to have autonomy.

The importance of personal professional autonomy and the necessity for the involvement of nurses in decision making in clinical settings and their involvement in the organisation as a whole cannot be overstated. In a three-year longitudinal study on nurse burnout and nurse empowerment, Laschinger, Finegan, Shamian and Wilk (2003:7) observed that the perceived access to structural empowerment (opportunity, support, information, resources, formal and informal power) led to an increase in perceptions of psychological empowerment (autonomy, confidence), and this in turn resulted in reduced levels of emotional exhaustion after a three-year exposure to a stressful environment. El-Jardali, Dumit, Jamal and Munro (2008:1490) confirm these findings in a study had attempted to identify the reasons why so many Lebanese nurses emigrate from their country. The nurses reported that the one of the main reasons for their emigration abroad was because of their lack of personal professional autonomy and the fact that they were denied the power to make professional decisions in clinical settings in their home country. They noted that in the countries to which they had immigrated, they were accorded far more autonomy in their current positions and were also incorporated on a regular basis into decision making in the clinical setting. They also stated that they would not return to their own countries before measures had been taken to rectify these defects in the nursing profession in their own countries.

5.3.3 Measures to mitigate burnout

The third objective of the present study was to describe and detail measures that the organisation could adopt (from the perspective of the nurses themselves) to mitigate the occurrence of burnout in those nurses who were working in the critical care units. Before she elicited the views of the nurses themselves, the researcher first sought to find out the methods that the nurses in the sample routinely utilized to deal with their own stress as individuals on the job. The participants offered the following examples of some of the coping methods that they used to cope with unreasonable levels of stress and conflict:

– Crying:

FGD 1: at times crying, shedding tears and just letting them flow as hot as they maybe down the cheek that's one. Umm I like locking myself in a room and meditate, cry if I have to cry, pray, speak to self.

– The use of alcohol and cigarette smoking:

FGD 1:P1: and one for the road. I've even learnt to travel with it (Laughter from the group) so that once I'm stressed I just rush (more laughter) so that when George goes to puff something I also come and puff something here.

P2: Yah so, unless you now just console yourself, and then ... and then take two or three to get asleep and forget (P2: smoke a cigarette) and then smoke a cigarette, two or three and then ...

FGD 3: But about the work stress, just to keep quiet while you talk to me and look at you like a fool (laughter) I go home, I forget, I go and drink with other people.

– Self-gratification:

FGD 1: Alternatively there are stresses that you get and immediately you can't talk to somebody. You go and sit somewhere and think ... "why I'm I going thru all this" and you get no ... and you go home when you are low and then you try to do something for yourself

5.3.3.1 Organisational mitigation measures

Organisational mitigation measures are the recommendations that the participants feel that the institution can implement to reduce the effect of the factors that they have identified as imminent causes of the onset and development of burnout. But when the

researcher asked the participants what they would like the institution to do for them, they explained that the institution was quite unwilling to make any changes at all because they already knew what interventions needed to be made, and yet were unwilling to make them.

FGD 1: First and foremost, the organisation is against us. That is the first point ... One thing, you have a complaint, it is not taken, that complaint as you have said it.

FGD 3: I: What would you like the institution to do for you? The organization ...

P1: They won't. They are all nurses up there ...

P2: They know the interventions ...

P3: That has been done many times ...

In spite of this, the researcher encouraged the participants to express what *they* would like to happen (at least as an exercise in creative thinking about their profession) in spite of their perception that the institution was unwilling to make the necessary changes and interventions.

The recommendations that the participants then made included the remediation and rectification of all the burnout-causing factors that they had already described. When one of the participants was asked what the institution could do to mitigate the factors that had been identified as leading to burnout, she summarised the views succinctly simply by saying:

FGD 3: Well basically all those things that we have talked about.

What therefore follow are the various other recommendations that had been discussed by the participants (although not in relation to what had already previously been discussed).

5.3.3.1.1 Support groups

One of the most prominently recurring recommendations that the nurses in the study made for mitigating and alleviating the effects of stress and burnout (recommendations that were mentioned in all the focus group discussions) was the making of opportunities for sharing matters of concern with colleagues in the serious discussion groups. The participants emphasised that they, as individuals, had found that the most effective way of dealing with the factors that were described above was by talking and by sharing their concerns and the stresses that they experienced in their work situations with their professional colleagues.

FGD 1: P1; in our group what we normally do ... like the way we are ... like the way we are. We just share. If it's the boss who has stressed us, we just make fun of it. And then you find the burden has loosened. Yah.

P2: Umm I think as people have said our best consolation amongst ourselves is just being in a group and sharing it out amongst ourselves.

FGD 2: I thank God for a good team. I think our team is ... In this level of ours is beautiful. The communication is very easy and people are very ... That's what saves us coz You release it. You are able to talk. Otherwise I think we would all....

FGD 3: I thank God for a good team. I think our team is ... In this level of ours is beautiful. The communication is very easy and people are very ... That's what saves us coz you release it. You are able to talk. Otherwise I think we would all ...

The effectiveness of social support in the form of co-worker support as an intervention to alleviate the causes of stress and burnout has been well documented. Maslach (1978) was among the earliest researchers to establish the validity and effectiveness of social support for alleviating stress and burnout. Maslach found that burnout rates were lower for health care workers who were capable of actively expressing, analysing and sharing their personal feelings with their colleagues. The utility and effectiveness of co-worker support has been well described by Peterson, Bergström, Samuelsson, Åsberg and Nygren (2008:506), who undertook a randomized controlled trial on the effectiveness of peer support groups as an intervention designed to reduce stress and burnout in health care workers over a period of twelve months. They found that the participants experienced significant beneficial changes in their general health, their perceptions of the quantitative demands of their work, and their perceptions of

increases in development opportunities at work. The participants explained that being able to talk to others in the same situation had given them a better perspective on their own problems, had made them more knowledgeable about the causes and treatment of stress, had imbued them with a sense of belonging, and had increased their levels of self-confidence and self-esteem. They added that the intervention had given them a better understanding of their real problems and that this had led to a decrease in the volume and severity of their stress symptoms and had resulted in positive changes in their behaviour.

Jenkins and Elliot (2004:622) conducted a study in which one of the objectives was to determine the impact of social support on burnout. They reported that nurses who received a higher level of support from their co-workers experienced lower levels of emotional exhaustion. But they also identified higher scores for depersonalisation in nurses with higher levels of social support. They therefore issued a warning that although staff support groups may be useful in the alleviation of feelings of burnout, the discussion and communication in such groups should be controlled in such a way that they minimise negative communication and encourage staff to discuss their concerns and problems in a constructive and non-personal way.

5.3.3.1.2 Rotation of nurses

One of the suggestions that the participants made to reduce burnout was that the institution should routinely implement a system of rotating the whole complement of nursing personnel between the various kinds of wards so that every nurse will eventually have an opportunity of working in a critical care unit so that they will be able to understand and appreciate the special difficulties and strains that such nurses are subjected to on a daily basis.

FGD1: I'd like nurses to rotate the hospital. You know, out there when you tell someone I've had one patient and I've not sat down for one minute. They wonder why you have not sat down, one

patient? What were you doing? They cannot understand. So I'd really like people from different units to rotate and see exactly what we are doing and have an idea of what happens in ICU.

This intervention will undoubtedly reduce the immediate causes of stress and burnout over a long period of time. The rotation of nurses among the various kinds of wards will enable all of the nurses employed in the hospital to share the most stressful workloads because some wards induce much higher levels of stress in the nurses who work in them than others. Rotation can also have the effect of making the professional working lives of nurses more varied, more interesting and more stimulating. Fujino and Nojima (2005:37) undertook a study on the effect of ward rotation and they found that well-considered ward rotations enhance the confidence of nurses and promote their role development and, by so doing, lead to an improved sense of personal accomplishment, satisfaction and achievement.

5.3.3.1.3 *Reduce working hours*

The participants in this study identified that one of the main measures that the institution could adopt to mitigate the development of the effects of burnout was to reduce their working hours. It has already been reported above that prolonged and augmented working hours have been positively correlated with high levels of burnout levels in nurses.

FGD 3: Umm, working hours need to be reduced especially in ICU. There is so much to do and those long working hours make you so tired and you get burned out very fast. You stop getting interested in your work. So you just do the little that you can, the rest of the day you just do things. The patient ends up suffering.

While Patrick and Lavery (2007:43) have observed that Australian nurses suffer from had low levels of burnout, they attributed this to the fact that Australian “health care management [...] recognise the importance of working reasonable hours and in particular, [...] understand the potential detrimental effect that having to work pressured or unexpected overtime has on staff”.

5.3.3.1.4 *Counselling sessions for nurses*

The participants in this study were of the opinion that the emotional turmoil that they suffered because of the death and suffering that they were frequently forced to witness in the critical care units could best be dealt with by inviting nurses to participate in personal and group counselling sessions. Participants felt that such sessions would provide nurses the opportunity to interact with one another and share their experiences, thus ameliorating and reducing the amount of stress to which they were exposed.

FGD 2: I'll start with the stress related with maybe losing patience and the type of work we do in the critical care. I'd urge the management to, maybe, look for a counsellor who'll be meeting critical care nurses at least once weekly, if not once weekly, at least once two weekly and they can be able to pour out their stress. Yes. A person does, I think we also need to organize some sessions run by the hospital doctor where we can be interacting as humans. And if we interact more, we'll also do the same here at the end of the day we may not feel much of the stress.

Counselling is a vitally important facility for personnel who work in critical care units. The absence of such counselling has been shown to be a leading cause of the development of burnout. A study by Di Iorio, Cillo, Cucciniello and Bellizzi (2008:158) produced evidence that most of the nurses and doctors who did not receive counselling about problem areas in their work areas and causes of irritation and dissatisfaction, were far more prone to develop the symptoms of burnout than those who received such counselling.

The effectiveness of counselling as a measure for preventing burnout has been well established in previous studies. Sherwood and Tagar (2002:32) undertook a study on the effect of counselling on nurses who were suffering from burnout. The counselling that was provided for the nurses was able to address and remedy the feelings of victimization, the disorientation, the denial of legitimate decision making power, the absence and neglect of interpersonal boundaries, and the feelings of disconnection from their own inner being and their personal internal resources. Nurses, who had self-reported symptoms of burnout rated their experiences prior to and after this intervention, found that they experienced significant reductions in the intensity of the burnout experience on all these measures.

5.3.3.1.5 Forums for grievances: Listening to complaints

The participants in this study also expressed a strong desire that the institution should begin to listen to their grievances and to respect their opinions and expertise. They were of the opinion that if this were to happen, the administrators of the organisation would become familiar with the severity and importance of all the factors that have been identified as leading to burnout and would therefore be able to deal with them intelligently and decisively. Some of them expressed their opinions on the following words:

FGD 3: ... try some guides from down below here, but they have meetings once or twice a month... which they do but if they could listen to views, it might help. Some of them they might not be able to implement them but some of them are very genuine.

FGD 1:

P1: And then the institution should, also, give us a voice to talk when we have problems.

P2: Apart from that, we also need serious forum where we can be listened to. Yeah, where someone can act on our grievances. Because, for how long will we stay down?

5.3.3.1.6 Supportive environment for growth

One of the participants expressed her feeling that she would like to work in an environment in which she would be allowed to take courses that would enable her to improve her personal professional development and thus ultimately the prospects of her career. The participants in the discussions, however, expressed their opinions that their work schedules were arranged in such a way that it was never possible to take part in any educational programmes that would improve their professional expertise and status.

FGD 3:

P1: ... is something I would like is the chance to further your masomo (studies) so as to further your career. The schedule here is so tight you cannot get an off to go and study or to go and study somewhere else.

Another participant shared her opinion that the organisation should also support nurses even when they engaged in personal growth courses that were not necessarily *directly* related to their professional work. She went to say that it should not be mandatory for the nurses to attend the same courses over and over again when there were a range of other courses they could attend which would be far more beneficial for them.

FGD 3: ... In fact the other thing I really hate is this business of being pushed to do ACLS, BLS, I don't know what, what ... let me tell you something there are so many courses like if you go to AMREF – you are an ICU nurse, you need to do those leadership and something, you don't have to do those because you are an in charge. Everybody went to do nursing but you keep sharpening, isn't it? I feel they should – if a nurse comes, goes to the nursing education in charge and says I

want to go and do HIV or something and I am an ICU nurse, don't tell me "you never even go for BLS and now you want to go" (Laughter) you know they look at you as though you are going to do HIV to look for another job, but I'm telling you the majority of us are in ICU we do not know the regime for HIV. But you find somebody out there, and that's why you find relatives challenging us because them they have done these courses. They have gone they have done, they are open. But because we've limited ourselves so so much that like when you are in ICU you have to be doing ICU this or ICU that . I think we should just change that kind of thinking.

5.3.3.1.7 Improve channels of communication

The participants expressed the opinion that if change were to occur in the organisation, the existing channels of communication would have to be radically improved and restructured. The participants noted that the current channels tended to make them vulnerable because they were always conducted in a condescending top-down manner. One participant made the following observations:

FGD 2:... and also the issue of communication. I think our channels and modes of communication should be improved because like ah a patient just communicates to the CEO directly. You are changing the patient, the patient picks the phone and just communicates with the CEO, you know you feel intimidated. Channels of communication should be reviewed. They should be done the right way. You know a consultant shall come, he shall find something has not been done he doesn't even want to know why it has not been done. He just picks the phone and calls the senior person. So the senior person starts calling downwards. Upwards coming down. You know it's not very good. It shows our communication channels are not ok, they are not well. And they are not being followed if they are there. They should be reviewed in a way everybody feels that I know that am supposed to communicate to this or that person if this happens.

If the work environment of the hospital is to improve, then the channels of communication should be clearly and unambiguously defined so that everyone within the organisation understands where they stand in the organisation and who they can report to, and the occasions on which this can happen.

5.4 CONCLUSION

This chapter presented the results of the two phases of this study. In the first phase, the researcher sought to determine the extent and prevalence of burnout among the nurses who were working in the critical care units. With a response rate of 83.9%, the researcher found that 63.8% of the respondents met the criteria for severe burnout. In

the second phase, the respondent sought to find out from the nurses themselves what they understood to be the leading causes of burnout and what measures the organisation could take to mitigate the causes of burnout in their work stations. The key themes and sub-themes are presented in table 5.18 in this chapter.

Chapter 6 presents the conclusions, limitations and recommendations of this study.

CHAPTER 6

Conclusions, limitations and recommendations

6.1 INTRODUCTION

This chapter concludes the research project by presenting the conclusions in relation to the objectives of the study, the limitations that the researcher identified, and the recommendations that flow from the data analysis and results.

6.2 CONCLUSIONS

The conclusions are based on an analysis of the data that the researcher obtained from the phase 1 and phase 2 of the study. The research conclusions for the whole study are related to the objectives that guided the study and the premises of the Roy Adaptation Model.

6.2.1 Objective 1

Objective 1 of this study was to investigate the prevalence of burnout in nurses working in the critical care units of the Aga Khan University Hospital in Nairobi, Kenya. The researcher accomplished this objective by making use of the MBI-HSS to collect quantitative data. Demographic characteristics of the sample were also collected at the same time. The researcher then analysed the data by making use of SPSS 16.0 in order to find out whether there was any statistically significant relationship between the onset and establishment of burnout and the demographic characteristics of the nurses in the sample.

6.2.1.1 Prevalence of burnout in nurses working in critical care units

The prevalence of burnout among the nurses in the sample who worked in the critical care units was high. The researcher arrived at this conclusion by noting that 63.8% (n=47) of the nurses who answered the questionnaire conformed to the criteria for high burnout in this study. Almost two thirds of the responses on the MBI-HSS were represented in the three subscales. Ten of the nurses (21.3%) and twenty seven (57.4%) of the nurses scored moderate emotional exhaustion and high emotional exhaustion scores respectively, while the scores of thirteen (27.7%) nurses and twenty (42.6%) nurses were in the moderate and high depersonalisation range respectively. In the reduced personal accomplishment category, nineteen (40.4%) nurses achieved scores for moderate personal accomplishment scores while fourteen (29.8%) nurses achieved scores for low personal accomplishment

6.2.1.2 Age

A large number of the nurses who worked in the critical care units fell into the age groups 30-39 years (n=21, 44.7%) and 21-29 years (n=16, 34%). The nurses in these two age groups also obtained higher burnout scores in all the subscales of the MBI-HSS wherein compared to the nurses from other age groups. This conclusion was based on the results, which indicated that nurses in these two groups had high emotional exhaustion scores, moderate depersonalisation scores and moderate personal accomplishment scores.

6.2.1.3 Gender

Most of the nurses working in the critical care units were female (n = 37, 78.7%). The results show that the female nurses experienced higher emotional exhaustion than the

male nurses who experienced moderate emotional exhaustion. Both the male and female nurses experienced moderate depersonalisation and personal accomplishment.

6.2.1.4 *Marital status*

A large proportion of the nurses who were working in the critical care units at the time of the study were married (n=26, 55.3%). It was notable that it was the single nurses (who made up 29.8% of the total number of nurses) who were the most burned out in the critical care environment. The researcher based this conclusion on the findings that indicated the single nurses had a high mean EE score (30.9), high DP mean scores (13.9) and moderate PA mean scores (34.9). While it is important to note that the widowed nurses (n=2, 4.3%) also had a high EE mean score, moderate DP scores and low PA mean scores, their number was too small to draw any meaningful conclusions.

6.2.1.5 *Highest academic qualification*

The responses of the nurses in the sample indicated that the majority of the nurses who were working in the critical care units were nurses with diplomas (n=42, 89.4%). This was concluded by the nurses' responses to the question about their highest academic qualifications. Only a small percentage of respondents indicated that they had a degree in nursing (n=4, 8.5%). None of the nurses who worked in the critical care units had a master's degree. Those nurses who had obtained their diploma in nursing as well as those with a degree in nursing all had high EE, moderate DP and moderate PA.

6.2.1.6 *Years of working in critical care units*

A large proportion of nurses working in the critical care units had worked in those units for between one and five years (n=32, 66%). The nurses who had worked for one year or

less in the units (n=6, 12.8%), had the highest EE and DP mean scores and the lowest PA mean scores.

6.2.1.7 Career level

Most of the nurses in the critical care units were between career levels II and IV (n=14, 29.8% respectively). Nurses on career level III (n=8, 17%) had high EE, DP and the lowest DP.

6.2.1.8 Years in the same career level

The majority of the nurses had remained on the same career level for periods ranging from between one and five years (n=35, 74.5%). The nurses who had remained on the same career level for between six and 10 had high EE, DP and moderate PA.

6.2.2 Objective 2

The second objective of the study was designed to identify the factors that the nurses in critical care units perceived as contributing to the onset and development of burnout. This researcher achieved this objective by using various qualitative methods of research in the second phase of the study. The researcher organised a number of focus group discussions to achieve this objective. What follows below are the six major themes and their related subthemes that emerged from these discussions

6.2.2.1 Workload

The nurses in the focus group discussions identified the following features of the workload as factors that lead to the onset and development of burnout:

- The patient-nurse ratio: the fact that nurses were required to nurse more than one patient in critical care during a shift made their workload too heavy.
- Documentation: the workload of each nurse was also increased by the amount of documentation that had to be completed in connection with the care of each patient. They experienced this paperwork as repetitious and time-consuming. The amount of documentation that has to be completed is compounded when the nurse-patient ratio rises and when the nurse concerned has to comply with the expectations and demands of her supervisor.
- Added responsibilities: the various other responsibilities over and above the care of the patients add to the nurses' workload and make it a source of stress. One such responsibility is the leadership of the shift. This requires a nurse to ensure that the unit is running smoothly even as she attends to her own patient or patients.
- Time pressure: since the nurses had insufficient time in which to accomplish everything that had to be done during the shifts, they were always working and never had enough time to attend to their own needs and concerns.

6.2.2.2 *Work shifts*

The nurses in the sample identified the following features of their shifts as possible causes of burnout.

- *Long hours.* The length of the shifts in the critical care units (twelve hours at a stretch) left the nurses feeling exhausted.
- *Prolonged work hours.* The nurses noted that they sometimes had to work beyond the normal twelve hours of a shift because of some activities that had taken place in the morning. This made night duty shifts longer than those that were worked during the day.

6.2.2.3 Death and dying

The following factors relating to the death and dying process were identified by the nurses as possible causes of the onset and development of burnout:

- *Death of a patient.* The death of patients was identified by the nurses as a factor that caused them varying degrees of emotional distress. While the nurses who worked in the critical care units obviously experienced many deaths, some of these deaths were so sudden that nurses sometimes experienced them as a personal loss. Some of participants in the sample noted that they were not adversely affected by the death of their patients.
- *Inadequately prepared relatives.* The nurses expressed a concern that the relatives of patients in the critical care units were not always given accurate information about their patient's condition and prognosis. Because of this, the relatives tended to develop false hopes and expectations about the recovery of their family members. If then the patient concerned died, their relatives were taken by surprise and it was left to the nurses to break the news and comfort the deceased patient's relatives as best they could.
- *Breaking news to a relative.* The fact that nurses sometimes experienced varying degrees of stress as a result of having to break the news of the death of a patient to the patient's relatives was identified by them as a factor that increased the possibility of burnout. Although breaking the news of a patient's death to the relatives is normally the responsibility of the doctor concerned, the nurses themselves often had to accept this responsibility because of the unavailability of the doctors.
- *Inadequate support of relatives.* The nurses had neither the time nor the resources to provide the necessary emotional and social support to the relatives of deceased patients in the period immediately after the death of their loved one. They were hampered in their attempts to provide adequate support to the grieving relatives

because of their extremely heavy workloads and the pressures and schedules that characterise work in any critical care unit. They felt that the institution had failed in its duty to its clients by not providing some kind of supportive service to the recently bereaved relatives of deceased patients.

- *Prolonging of life.* Many of the respondents shared their opinion that because the implementation of aggressive life-sustaining procedures and support therapies were ultimately futile and pointless, a great deal of emotional suffering and false expectations were created that affected not just the relatives and the patients but also the nursing staff as well.

6.2.2.4 *Interrelationship conflicts*

Although close collaboration between nurses who work in critical care units is absolutely necessary, the relationships between the nurses who worked there (and between the nurses and various other people) were not always cordial and were therefore viewed as a source of stress. The respondents identified the following forms of interrelationship conflicts in the critical care units:

- *Nurse-nurse conflict.* Some nurses did not have a good working relationship with those of their colleagues whom they regarded as being poor team players. Instead of attempting to deal with the resultant problems themselves, they reported these nurses to their supervisors and discussed the problems that arose with their supervisors.
- Some nurses described the leadership style of their immediate supervisors as dictatorial (a “dictatorship”). The style of leadership imbued them with fear and they made them unable to approach their supervisors when they needed to. The course of this difficulty, they felt unsupported and disrespected. This factor was discussed extensively and related to other factors.

- *Nurse-nurse administrator conflict.* The nurses felt that they were not being properly supported by their nurse administrators because they were given no proper forum in which to air their problems, complaints and grievances. When some nurses did make legitimate complaints, these were not addressed by the nurse administrators.
- *Nurse-relative conflict.* The nurses felt that because the relatives of patients were given too much power, freedom and credence, they sometimes took the opportunity to made false accusations about the nurses.
- *Nurse-physician conflict.* The nurses felt that some of the physicians failed to show proper respect towards nurses. This would result in the professional expert advice of nurses being disregarded and in accusations that they, the nurses, were incapable of handling their patients properly.

6.2.2.5 *Monetary recognition and appreciation*

The nurses felt that their salaries were unfair and inadequate because their salaries did not correspond to the kind of work they performed and the heavy responsibilities that they were required to bear in the critical care units. They also felt that their salaries were too low – even in comparison to the remuneration received by nurses working in other wards. Because of this, they did not feel properly appreciated as the valuable members of the organisation. They were even on occasions labelled as “junior nurses”.

6.2.2.6 *Decision-making and autonomy*

Because decision-making in the hospital was carried out in a top-down style, no nurses were involved in the decision-making process. Although they lacked autonomy in clinical settings which prevented them from making decisions about patient care, they had protocols which had been drawn up to guide them in the management of their units.

6.2.3 Objective 3

The purpose of objective 3 was to describe the measures put in place by the organisation for the mitigation of burnout from the perspective of the nurses who were working in the critical care units. The perception of the nurses in the study was that the organisation was unwilling to introduce any measures that might assist them. They nevertheless felt that the organisation had the means and power to help them to mitigate the conditions that lead to burnout by dealing with the factors that were described in objective two (see section 6.2.2). In addition to expressing that opinion, they mentioned the following measures that could contribute to the alleviation of conditions that resulted in burnout:

- *Support groups.* They suggested that the hospital organise work groups which would allow nurses to establish supportive relationships with one another so that they might have opportunities to share their experiences and difficulties with colleagues who were in the same situations as themselves. This they believed would enable them to obtain a better and more coherent understanding of their problems.
- *Rotation of nurses.* They suggested that all nurses be rotated between wards so that all the other nurses in the hospital could obtain an idea of what ordinary nurses experience when they work in critical care units. Rotation of this kind would also give critical care nurses periodic opportunities to work in less stressful environments.
- *Reduction of work hours.* The nurses felt that ordinary working hours should be reduced to less than twelve hours per shift because they were acutely aware of the harmful and detrimental effects on themselves and other nurses of having to work excessively long hours.

- *Counselling sessions for nurses.* The nurse suggested the possibility of providing counselling sessions for nurses in which they could be debriefed from time to time.
- *Forums for grievances – listen to complaints.* The nurses expressed that the organisation needed to provide a permanent forum in which the nurses would be able to describe their problems and air their grievances. If they did this, it would be to the advantage of the organisation because the organisation could become aware of all the factors that were causing stress and burnout long before they precipitated crises in the professional and personal lives of nurses.
- *Supportive environment for growth.* The nurses requested opportunities to further their education by means of study leave unhampered by work schedules so that they would have opportunities to pursue their personal career development.
- *Improve channels of communication.* The nurses felt that the communication channels and lines of command in the hospital should be clearly and unambiguously defined and adhered to so that everyone would know whom they had to report to and under what circumstances.

6.2.4 Fit of the findings to the Roy Adaptation Model

The RAM regards human beings as open systems who receive stimuli from both internal and external environment. They then respond to the stimuli they receive through the cognator and regulator control mechanisms as individuals, and through the stabiliser and innovator processes in groups. The responses (output), which are either adaptive or ineffective, become visible to others by making inferences from the effectors which are the adaptive modes.

The factors that were identified by the nurses as leading to the development to burnout are a variety of stimuli that affect the nurses who work in a critical care units. Stimuli are focal, contextual or residual. The focal stimuli are those that most challenge the

person on whom they act. Focal stimuli are the factors that are associated with care giving. These include the actual workload (in all its ramifications) and the emotional demands that are made on nurses. The focal stimuli that were identified in the study were increases in the magnitude of workloads because of poor nurse-patient ratios, the requirements of extensive documentation, the stresses associated with death and dying, and work shifts.

Contextual stimuli are those situational stimuli that strengthen the effect of the focal stimuli. The study identified the contextual stimuli as additional responsibilities (over and above normal work routines), interrelationship conflicts, the fact that nurses are not given the power to make certain decisions, the fact that they are denied autonomy, and the absence of adequate remuneration (salaries), and a noticeable lack of expressed appreciation for their services and their willingness to sacrifice themselves by going the extra mile in extremely difficult circumstances.

Residual stimuli are other factors whose effect on the situation cannot be determined. These residual stimuli are age, marital status, gender, career level, academic qualification, years of experience in critical care units and years spent on the same career level.

Control processes are the coping mechanisms that nurses utilise to deal with the stimuli. At an individual level, they are the regulator and cognator (which are termed as the innovator and the stabiliser when they are applied to groups). The innovators are the emotional and cognitive strategies nurses apply to move themselves onto higher levels of potential. The stabilisers are the established structures, values and processes that assist individuals to achieve the purpose of the group. The stabilisers in this study are the measures that the nurses who worked in a critical care units identified as those that the organisation could implement to mitigate and forestall the effects of burnout. Such

measures include the establishment of groups, counselling services, and various others (mentioned above).

Effectors are the modes by means of which adaptive or maladaptive responses become visible to others. In this study (in which the rate of burnout is high in nurses who work in critical care units), maladaptive responses would be the consequences of burnout for nurses individually, for their personal and professional relationships, and for the organisation as a whole.

Outputs are the behaviours or the responses to the stimuli that can be adaptive or effective. This study has revealed that the majority of the nurses make ineffective responses to the stimuli and that a large number of participant nurses are therefore suffering from the effects of burnout.

6.3 LIMITATIONS

The following limitations of the study could limit the generalisability of the research results:

- Because this study was only carried out in a selected private hospital in Kenya, its findings cannot therefore be generalised to other private and public hospitals in the Kenya.
- Because this study was only carried out in the critical care units of the hospital, its results are not representative of all the nurses who work in other units and wards of the Aga Khan University Hospital.
- Since this study is cross-sectional, its data was collected at one point in time. Such a procedure does not take into account the effect of staffing changes, managerial changes and the patient census in the units at the time when the study was conducted. This may have exerted an effect on the nurses' responses.

- Because the sample used in the study was small, it could not be used to test the relationship between the demographic factors and the MBI-HSS scores. Polit and Beck (2004: 301) warn researchers to be aware that small samples can lead to misleading, inconclusive and inaccurate results. But they also note that if the population being studied is homogenous, a small sample size can indeed be used to represent the greater population.
- The researcher inadvertently but erroneously included the word “burnout” in a letter that she addressed to participants, the purpose of which was to solicit volunteers for participation in the survey. The researcher notes that this might have made the participants aware that MBI-HSS is a burnout measure – a factor that might have sensitized those who responded to the issue of burnout. To the extent that this was the case, the responses of some of the nurses might have been skewed.
- There was a very limited amount of literature about the phenomenon of burnout in the Kenyan context. This gave the researcher no precedents on which to rely for her own research.

Despite these limitations, the study managed to identify the extent of burnout in nurses working in critical care units in the hospital, the factors that nurses who work in critical care units perceive as leading to the development of burnout and a variety of measures that the organisation could introduce to mitigate and forestall the destructive effects of burnout on critical care nurses.

6.4 RECOMMENDATIONS

The researcher has made use of all of the above conclusions and limitations to formulate the following recommendations about burnout and about the possibilities of further research into this phenomenon that is so widespread in certain sectors of the nursing profession:

- This study should be duplicated in the entire Aga Khan University Hospital so that data can be obtained about the prevalence of burnout in the hospital as a whole. Such research would give the hospital the information that it would need to implement strategies for preventing burnout among all categories of nurses who work in the hospital.
- Comparative research should be conducted to determine the differences in the incidence of burnout among nurses in both private and public hospitals.
- Research should be carried out to identify the negative consequences of burnout for individual nurses, for their private and professional interpersonal relationships, and for the organisation (the hospital) as a functioning whole.
- A longitudinal study to investigate the relationship between burnout and palliative measures to prevent burnout in nurses would provide valuable information about the effect and usefulness of such measures over a period of time.
- A questionnaire could be developed from the results obtained from phase 2 of this study for the use of future research into burnout in nurses who work in the critical care units.
- The hospital should take responsibility for implementing the measures identified by the nurses for creating a working environment that would be conducive to improvements in the professional life as well as the mental, physical and emotional health of the nurses who work in the critical care units.
- The hospital should commit itself to obtaining an adequate number of staff for all its wards. This would enable the hospital to allocate manageable and fair workloads to its staff. This factor is vitally important because of the fact that unmanageable workloads were identified by the nurses in the study as one of the main causes of burnout in the critical care units.
- Work shifts should be arranged in such a way that they are not too long. They should also be organised in such a way that nurses are given adequate breaks

during shifts so that they can revitalise themselves to give of their best during the remaining hours of long shifts.

- The hospital should organise a conflict resolution mechanism that will enable nurses to channelize their legitimate grievances and conflicts. This will enable the authorities to process such grievances and conflicts in a timely way and thus prevent the build up of unnecessary stresses, strains and anger.
- Organisations should organise a forum in which the achievements and outstanding performances of nurses can be publicly recognised and appreciated.
- The hospital should enforce protocols in the critical care units that will give nurses the authority and autonomy to make important decisions in their own jobs and situations. Such protocols would improve the self-respect of nurses and make them feel that they are a valued part of the organisation.

6.5 FINAL CONCLUSION

This chapter presented the conclusions of the research. The conclusions of the study examined the way in which the findings relate to one another and fit into the theoretical framework on which the study is based. The limitations of the research that would limit generalisability were also described in full. This chapter also presented a variety of recommendations that were based on the findings and the limitations.

6.6 CONCLUDING REMARKS AND REFLECTION

This research has shown that there the nurses who are working in a critical care units in the Aga Khan University Hospital in Nairobi, Kenya, suffered from high levels of emotional exhaustion, depersonalisation and a diminished sense of personal achievement. It is therefore imperative for the hospital as an organisation to mitigate and forestall the occurrence of burnout in nurses by taking active steps to deal with the

factors that were identified as causes of burnout and to implement those measures that have been noted as contributing towards the prevention of burnout in nurses.

The literature review revealed that some of the push factors that have been implicated in nurse immigration are unacceptable levels of stress and the extent of burnout among nurses. The WHO has called for measures that, if implemented, will work towards discouraging the immigration of nurses to developed countries. While the motives of nurses who immigrate are readily comprehensible in view of the data presented in the study, their absence from their home countries weakens and depletes one of the most vitally important sectors of the national workforce. The sheer volume of immigration also makes it unlikely that many of the developing countries will be able to achieve their health-related Millennium Development Goals. Some of the recommendations contained in the Kampala Declaration for dealing with the global workforce crisis were:

...to assure adequate incentives and an enabling and safe working environment for effective retention and equitable distribution of the health workforce ... while acknowledging that migration of health workers is a reality and has both positive and negative impact, countries [should] put appropriate mechanisms in place to shape the health workforce market in favour of retention (WHO 2008:2).

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ANNEXURE A

UNISA Clearance Certificate

ANNEXURE B

**Permission from the Aga Khan
University Research and Ethics
Committee**

ANNEXURE C

Cover letter to participants

ANNEXURE D

**Data collection instruments:
Maslach Burnout Inventory – Human
Services Survey**

ANNEXURE E

**Data collection instruments:
Demographic questionnaire**

ANNEXURE F

**Informed consent for the Focus group
discussions**

ANNEXURE G

**Copy of transcribed Focus group
discussion**

ANNEXURE H

DECLARATION BY EDITOR





THE AGA KHAN UNIVERSITY

Faculty of Health Sciences

Post Graduate Medical Education

29 May 2008

Ms. Nickcy Mbuthia
Aga Khan University-EA
P.O. Box 30270 – 00100
Nairobi

Dear Nickcy,

Re: An investigation into the factors that nurses in the critical care units perceive as leading to burnout

Thank you for submitting your proposal to the Aga Khan University-EA Research Committee. The proposal has been reviewed and the Committee is satisfied that it is a proposal of scientific merit. This study is has therefore been approved subject to the following conditions;

1. Approval is given for a specified period as stated in your protocol. If the project takes longer than the specified period to complete, a request for an extension of time should be sought.
2. Any alterations to the approved protocol must be submitted to the Research Committee for approval prior to alterations being effected.
3. Progress reports must be submitted to the Research Support Unit within the first six months of he study.
4. Research could be audited by the Research Support Unit to ensure compliance with guidelines.
5. The Research Support Unit must be informed when a project is curtailed, terminated or completed.
6. A copy of the research project final report must be submitted to the Research Support Unit upon completion of the project.

Please note that as the Principal Investigator, you have the full administrative, scientific, and ethical responsibility for the management of the research project in accordance with the University policies and guidelines.

Best regards,

Prof. William Stones
Chair, Research Committee

FOCUS GROUP DISCUSSION ONE

VENUE: ICU CONFERENCE ROOM

DATE:

Interviewer: Good morning, I'm just here for the second phase part of my research that I had started before.. I'm sure most of you had done the first phase of it. I just want to get your experiences about ICU, the challenges, how you deal with stress and how you like...you know, all that information about burnout while working in ICU. It is a completely confidential study, part of my masters programme, so any information you give here is going to remain with me. So, if you have any questions, if you have any feelings tell me before we start this. I shall need you to sign the consent forms provided. You don't have to put your name, We can use your name but just know that it shall remain confidential. This is my colleague Eunice, she is my facili....mode.. moderator. She is my guidance and counsellor so...um.. when we are ready we can start. I'll require sign the consent form before we start. You can sign it now or sign it later.

(silence as people sign the consent).

Interviewer: Ok. Um... I just want to know what it is like to work in ICU, I want to hear to from each one of you and... we start with anyone of you....what are your experien.... What do you enjoy most about your work?

(silence for 7secs...)

interviewer:Anyone???

(Laughter from all the participants)

JK: it doesn't ...

GK: Me, me

CK: Let's start with the other....

JK: with the other..(with laughter)

GK: No no

AN: Nooo

Interviewer: Nooo....lets hear what you enjoy the most

BO: yes yes

GK: I enjoy working at night

Interviewer: you enjoy working at night.

GK: yes

(laughter from some participants)

GK: with minimal supervision

(Laughter from JK and BO)

GK: I'm able to work perfectly

BO: comfortably

GK:...and comfortably

Interviewer: perfectly and comfortably....

GK: Yes

Interviewer: what do....Just elaborate the perfect and..

GK: if I work during the day, especially on a week day.. eh.. Every time I work, I'm panicking (BO: aaaarch), the papers will be found on the floor...

JK: (with laughter)on the floor, you'll be told you've not...

GK: ...I'll be...I'll be insulted or I'll be.... So so I prefer working at night and especially the time I work comfortably is at night, weekends.

I: so what would you say is the problem...who would you say is the problem? ...is it...?

GK: ah.....(hesitation)

I: no its okay, you can say!

GK: CEO

JK: Yes there is CEO

(Laughter from the group)

GK: CFO (Laughs)

I: cfo?

GK: yeah

JK: the...

GK: ...them, them (points towards the office)

I: Just say it, it's ok. this is....

GK: Team leader, the, the team leader

(Laughter from the group)

I: So the leadership is what you are talking about?

GK: Yes IT IS

I: continue.....

(Prolonged Silence)

JK: What I enjoy most about ICU....ok (silence for 3sec) I enjoy working with my group. First of all, my group is very co-operative and we do some things together??? and umm um we work together and when there is a problem, we sort each other out..tunamalizana kufanya kazi. Another thing I like about working in ICU is that there is a lot of knowledge. There is a lot of knowledge that is shared and.. um.. I think ... and we are able to share it amongst ourselves and with others HDU and others??? Yah things like that

BO: ummh...what I enjoy most in ICU is the team working, I appreciate my team coz..yah cooperation, we work together ..aaa.. we help each other. Number two, I like working in ICU because of satisfaction like...ummh.. when you get a very sick patient and you work on him and at one point you loose hope, this one cant make it, but eventually the patient walks back home and he comes back to say hi to you and you feel more satisfied. Ummh...as George has said, I also enjoy working in ICU at night and over weekends when the bosses are not there. Coz you work comfortably, stress free and you go home satisfied that you've done your work with no stress but during at times the weekday you just work haphazardly coz you don't know what to expect you know. Ammm...Judy's point also comes in Knowledge. There is a lot of knowledge in

ICU compared to other wards coz like before we start our work every morning we go thru policies, we analyze them...

JK: is that a good thing to do before you start working?

Me: umm... you said you work.. Weekends you work more stress free. What kind of stress is mounted on you by the supervisors/leaders?

BO: umm... basically it's um... I'll give a scenario. There was a time I was working at night and just before the shift was ending we admit. I had a patient so I had to admit another patient and a couple of people were there. So before I handed over...I handed over this patient and then I received the other he came an hour before the beginning of the next shift. So you can imagine when a patient comes from theatre he has bled a lot and there are a few things you need to do, order for investigations, give drugs, blood has to run and everybody is working on a patient. So you have to do these things and then come down assess and start writing. But the boss comes from home and she's like.. she doesn't understand why I'm still writing and she's making noise and it became an issue. So you see if she was not there I could have just sat, written my stuff and gone home a happy person.....yah

AN: I can just say that of the greatest that I enjoy is seeing that patient in a life threatening situation and you do what you need to do and you get them out of danger and for real they make it through and you are happy that they are well that is the greatest satisfaction. I also enjoy the fact that, like everyone has said that there is a lot of knowledge.... And may a times there'll always be something new and especially so now that you are sort of at per I share with you because I'm better at this, I can bail you from the other one. I know when I have a problem with this I can contact another person, she's good at thisso its easy to identify different people. Yah

Me: alright c

CK: mmm..Everybody has talked about group work that is one thing I'm enjoying about, group work. We have been placed in different groups. I have been in one that was not so good

Me: so sometimes you don't usually have team work?

CK: sometimes there is no team work. The other thing is uhhh...maybe I might compare it to another place, generally we have what we need. Maybe we have someone to send as compared to HDU, you need gauze, you need CCSSD you have

some one to send. Challenges ok. People have talked about leadership, I think that's a main problem. Because we are on our way to doing something about it. Leaders are supposed to be stoop to the level of - to our level. At least to understand us. That's a challenge. The other thing is ok, at times, this thing called CARE 2000 IS ALSO A BIG ISSUE. Care 2000 ok knowledge wise, there are so many things that are not...

Me: CARE 2000 is the?

CK: The new computer program (billing system). It's still a big challenge. Like when you want to order things ok. Like if you want to order blood you want six FFP's , you have to order one by one, its so tedious. You have to go back to get to the...you still have a patient. Like now you have three patients: you have your two patients and you have this patient in the name of a comp. Ok the other stress isa lot of death is also a big challenge (*Me: abit louder*)..... Ok it's a challenge, we are having so many deaths in fact we don't like to see patients die. Sometimes they die and maybe you are happy because they have suffered but in our minds that's not what we want. Generally that is it.

Me: so you are saying the death of a patient gives you stress?

CK: death of a patient is stress in that you shall feel like you are loosing...you've lost a battle. You'd like the patient to maybe improve and go to another ward.

Me: A do you feel the same about the death of a patient?

AN: ummm...well yes I do. In fact initially I just thought of what I enjoy. Now maybe I can add to what I had said. I also very feel good in that I see myself exposed to a lot of facilities, equipment that you may not come across when you are in another unit and they ability to use the sophisticated equipmen...you know.. Makes you feel...well I can handle. Ummmm the stressors one...

Me: Just to go back, the use of those equipment, does it..

AN: make your work easier?

Me: yes make your work easier?

AN: yah it makes your work easier>

Me: But its not a source of distress or anything?

AN: NO no no you enjoy that I can comfortably work with it, I can do that. And it makes your work infact easier. Ummm... stressors. Its quite a heap, starting with ahhh...by the nature of the unit and the conditions that are handled there it makes you work with the sense of urgency of time. Like for example you have seven thing that are all being termed as urgent and you have to come up with a priority, it could be one it could be seven. And leadership again comes here because their priority list may not be like yours and at times they don't give people space to work within their own judgment. What may be prudent judgment to me may not be prudent to the other. So I feel if it is not so much disorganized...you know not so much out of the bracket you should allow that person to work within that if it doesn't cause harm to the patient. Umm...deaths are also a major problem and this time we are thinking of the family because for one there is too much of the workload that even if you knew as much as you feel you need to give emotional support to the family you may not have time and if at all you just do a bit of counseling between here and there. Mmm ... workload also becomes an issue in that you are always having something to do at one particular time. So if for some reason you go out ...you run out of time if you had 2 things you needed to have accomplished by lunch time that lags behind all through the day. And also a lot of writing as well. Uhhmm it also takes you away from patient care to an extent. (*Me: abit louder*)And ahh the fact that you are scared. Ok yah, you could create time work on the patient and sit down to write later. But should your big person come and see that you have not this that should have been done this far then your explanation may not be acceptable.

Me: your work is reflected by how....

AN: how you document. Yah. In fact you are even safer documenting what you have not done and then do it later (laughter from the group) which is a big risk to the patient and also unethical.

Me: You've talked about work load. Would you say the work load is related to the number of nurses or is it the one patient you have is a lot of work? Would you say you are not enough for that patient?

AN: at times....its both at times. Sometimes you can have one single patient allocated to you but you feel you need assistance from others depending on how heavy the patient is. Other times is the allocation. The nurse to patient ratio.

Me: this is in icu or in hdu also?

AN: it's even worse in HDU

Me: *what's the case in hdu?*

AN: in hdu you can handle....say like uhh...At times you can handle four five patients in a day. You receive your two patients, you take one out, you receive an admission and maybe there is a pressure for beds and your other patient has to go out so you discharge and admit. So at times and can be quite hectic and the documentation that goes with the transfer of a patient and the urgency of time. Yah.

BO: the challenges in ICU, I'd say is ahh the way she's put it is workload. Ahh like at times you are given two patients and you can't cope. You can't just cope because of the workload. So you are left cut in between and what you'll do you'll put your priorities right according to you but when the bosses come they are like you are not doing anything. Number two I'll also talk about leadership, I'll still go back there. Umm.. I think also the way they talk to us its like we are nobody. Somebody just shouts at you..."betty what are you still doing, why are you putting on that mask"...

JK: and it's very low self esteem

BO: yah

JK: So all the nurses have very very low esteem. They are demoralized and uhhh everybody feels like taking off. Because you cant actually sit down and have a proper discussion with the boss. You'll be threatened, you'll be abused, (AN: you'll be traumatised) you'll be traumatized and you'll be threatened even with sacking on the spot. So that makes it a very hostile environment to work in. uhm and... sorry for interrupting (AN: its ok) if I could also say. There are also some added responsibilities that we have been given. In each group there are several responsibilities but sometimes you find that this responsibilities add to the stress of the patient that we have. For instance, shift leading. You have your own patient, the patient is not very stable. You need to supervise the rest of team, you need to order drugs. You need to do, several other things! You need to charge, you need to be the CARE 2000 consultant. You know, everybody shall be consulting you over everything. And at times it becomes very overwhelming. You wonder sometimes. And when things are not done, the same same bosses are on your neck, why one two three was not done and they don't accept any explanation. So it's very challenging when it comes to that. Another thing is like say, education days. We tend to have like ahhh.... Well learning is good but sometimes it goes beyond time. Because ideally we should be leaving at about 8.30 like the night staff need to go, but you find like sometimes you leave at about 9, 9.30 and you find that its very demoralizing because the night staff need to come back on

duty. Or even if not so people still need to go off. Yes. Those are the challenges. Yea I think for now

AN: George

GK: just to add to that

Me: Sorry B hadn't finished

BO: I also wanted to add to the challenges based in ICU esp. for the ahhh... how do I say... for the patient with acute bed not the patient with chronic illness. Maybe somebody has been well like uhm there is a baby who came from buruburu clinic one time, I think it was some time last year, with a history of a fall from a table. That baby....(whispers from AN) yah a low table, a dining table. This baby comes here in a respiratory distress and she's intubated and apparently she was the only child to the parents. She's intubated, parents were so hopeful, they've been reassured and four hours down the line, we lost the patient. Yah so such deaths are also challenging. Deaths that are not prepared for.

Me: they become an emotional thing...

BO: yah

Me: G

GK: Ok other thing, apart from what they have said...maybe to add to the ahh stress coming from a patient. Whereby the doctors don't tell the relatives the truth. They mislead the relatives. They tell the relatives ah...even a case you see ther is no hope for life. But the doctors continue saying there is hope, there is hope there is hope. That also adds a lot of stress. Coz at the end of it this patient will die and by the time this patient is dying, this doctors won't be there. So it will be you explaining to the relatives what has happened.

Me: you are the person sharing the news.

Gk: Yes.

Me: do you have an experience that you have had something like this and how you have dealt with it?

GK: YES, we had a pt in Bed 2. That patient stayed in ICU for over a 100 days. And the doctors were telling the....the primary doctors were telling the relatives "there is still

hope there is still hope". Then they called a neurosurgeon who told the relatives, there is no hope. The pt was brain dead. But they continued reassuring the relatives upto...ah..ah..after he has undergone how many craniotomies? Several. Around three craniotomies. And then the last one, which even the neurosurgeon was reluctant to..to...to..do. But the primary doctors told the relatives that it shall be the only hope for their patient. Only to open and find pus (laughter from the group) and maggots (laughter)

ME: and the patient died....

GK: the primary doctors were nowhere to be found!

Me: and you had to explain to the relatives?

GK: yes.

Me: J, what's your most challenging experience with patients in ICU?

JK: I think ahhh... at the end of the day, Death is still a very big challenge to me. When a patient dies. The relatives...how to break the news. I think that's my biggest challenge in ICU. Breaking the news.

Me: do you have a situation where you've had to break news to the relative by yourself or with a doctor?

JK: yes I have. And still so much as I am with the doctor, I still feel that its not always adequate. The relatives are not sometimes well prepared. In fact most of the time they are not well prepared. And esp. the PP patients.

Me: those are the private patients.

GK: Yes. Most of them are not prepared so when the death comes, it comes as a shock to them. Even if it was an expected death. And ummm....even for the relatives they may have been expecting the death and are prepares but at that point, I find there is n adequate support for them. Yah, so I find that a big challenge. How can I support them.

Me: you were...

JK: I still have workload, I still have other things to do in the unit. Huh, how?...can I?...I cannot afford time to sit with them to grieve. You know. It is not provided for and there is no like maybe, counselor or such. You know somebody who can help them through that short...that period of grief.

Me: they grief with the nurse....

JK: Yah. So sometimes I go home feeling like....

An: actually feeling like the institution has failed (murmurs from others) and they push you to that role and they wail and scream and you all walk out. and unlike other roles, we have for example something might happen and I'm told " N give your patient to Judy while you tackle this". No one can accept that it is not provided for, as much as you make it easy..

Me: what is that uh....

AN: I'm saying like she is saying like you feel you cannot support the family at that point adequately because uh.. I think by your Job description it's like it is not there. You know like there are things that will happen and everyone will feel we need to reorganize ourselves coz we must give someone a time to heal. So this one she's out there with the relatives to... or whatever, she'll come back and work. So if you spend an hr out there you'll know how you'll recover that and go back to your other patient. So as much as you may be crying out to help then you have another drive, telling you "even that is not done" you must go back.

Me: Charles...what's your?...AN experience? The whole picture that you remember as being most challenging even in HDU

CK: (Silence for about 4sec) I don't have one at the moment (more silence for 5 secs)

Me: ok, while you think of one....what's ..e can move on to the next discussion. How do you deal with stress as an individual? How do you deal with stress or burnout at the end of the day or while you are still working. How do you deal with it? or what would you share with your colleagues to do when they are stressed?

Gk: in our group what we normally do... like the way we are...

JK: "I"

Gk: like the way we are. We just share. If it's the boss who has stressed us, we just make fun of it. And then you find the burden has loosened. Yah.

Me: so it doesn't stay with you when you leave?

GK: No no no.

Me: and you deal with it. What about when, like George for you in a case when a pt dies or like when you had to deal with the decision....information, giving information to relatives about the death of a patient?

GK: yeh sometimes you carry it with you. But now when you are... (laughter from the group).... At home you join your friends. But you now it's still burning in you ...

Jk: you want to talk it out...

GK: but you can't talk to them coz they are They wont even understand. Yah so, unless you now just console yourself, and then...

Me: hope another day...

AN: and then take kiroro like...

(Laughter)

Gk: AND then take two or three to get asleep and forget (Jk: smoke a cigarette) and then smoke a cigarette, two or three and then.....(jk: Then its over)

Me: and you J, what do you do?

JK: I think a big part of it involves talking to our colleagues about what has happened. Because some of this experiences are very traumatic. If you don't talk about them, they stay with you.. and for those who don't take those ones for the road, you pray and fast (laughs) and then yah we live with it. There are some you just have to live with. Yah.

Me: B

BO: umm...stress. The way they've said it. Sharing is one way of dealing with it. Like um....me when I'm stressed immediately I always run to somebody and tell them " (in a whisper) J" (laughter) " I've been told this and that " and then we laugh it off. Alternatively there are stresses that you get and immediately you cant talk to somebody. You go and sit somewhere and think..."why I'm I going thru all this" and you get no....and you go home when you are low and then you try to do something for yourself

Me: Like what?

BO: you make yourself happy.

Me: what do you do?

Bo: Ummm (Laughs) you can go and spoil yourself, ummm...like me I like traveling. I can just decide to go away out of town and come back the next day and come to work feeling refreshed. But the immediate one is rushing to J and saying "eh J, what did I do now" (laughter from the group).

Me: A?

AN: as they said it depends on the magnitude of the stressor and whether it s a group or an individual stressor and even if its an individual thing there is what you can share as an (cant hear) umm... at times crying, shedding tears and just letting them flow as hot as they maybe down the cheek that's one. Umm I like locking myself in a room and meditate, cry if I have to cry, pray, speak to self and occasionally go out and take one, two as much as I can.

Me: C?

CK: umm I think as people have said our best consolation amongst ourselves is just being in a group and sharing it out amongst ourselves. Umm if it comes to the worst at times we pray, although we don't usually do it. But when stressed so much we always pray. Remember there is God. We usually pray ourselves. Then the other way is also motivating yourselves okay, like, okay like knowing that this is where you work and ensuring that you have good clothing, you, you, you equip your house well, so that at the end of the day you can be seeing something positive out of your job. Yah I think that's the way we...

An: and one for the road

CK: aahh of course and one for the road. I've even learnt to travel with it (Laughter from the group) so that once I'm stressed I just rush (more laughter) so that when George goes to puff something I also come and puff something here (points towards the loo)

JK: and as he prays (with laughter from the group also) you also come and pray as well

AN: but let me tell you some of these experiences are so traumatic and degrading, you know. For an adult to get to a level of, you know, you know (gestures). Me I come from those machinani place where the teacher you know, as you grow up the teacher was, I don't know what type of a figure and it would even call for you to change your path kama umeona mwalimu kwa mbali. You know for an adult to get to that level and its not

on any specific personal issue that person is really stressed, that person s really traumatized. That I shall see you Nixi from this side (JK: Nitarudi), you have nothing specific but I'm sure you shall pick on something so I thwart my ...

BO: or I hear your voice and I was going to the toilet.....

CK: nitarudi (laugheter from the group)

AN: alternatively just observe peoples moods. Such that if there is a day this particular person is away, people can speak..

JK: and laugh

AN: and laugh. People can share. You can walk in confidently but this other days, people are like what have the voices got to say first, who's around, can I say it or.. you know. You are so panicky....I mean...

Me: live in fear?

AN: there is a tension, apprehension. You know, you don't know what shall be picked on this time. It comes.... I think it's a very unhealthy way of life and I would advise that we don't take so long before we take action. Maybe (mumbling form the group)

Gk: I also agree. This stressors even if I am not stressed but a group member is stressed..

JK: it bothers

AN: It bothers you

GK: yes and ahh I think...

AN: And you do not know if follow up of that group members stress you'll also be caught up in it (laughter from group). You know you keep anticipating, you know. 'K alishikwa na hii, will it flow down?" you know.

GK: you see the boss thing it's becoming too much!

JK: there are some things, like there are too many incidences being written about very small things, and those tiny things cause a lot of stress ...

Me: for example?

Jk: for example you report... (GK: g) g reports on duty...

GK: I always write incidents per week

JK: yes

Me: what type of incidents?

GK: very stupid incidents (laughter from group) like ahh, checking the. Like the last incident I wrote, I was checking the crash cart at ahh (BO: 11) no at ahh 12 (Bo: yah at twelve) and then I was told 'why are you checking the crash cart at 12? Write an incidence'. I tried to explain ahh..

JK: 4 hours after reporting'

GK: yees, she told me that you are supposed to check the crash cart eh..

AN: within an hour.

GK: within an hour of reporting. I told her "look we reported at ah 7, we went for learning session , ended at around 9.30 and then after 9.30 (BO: handing over) handing over, that's around 10, 10.30, I have to assess, do physio (JK: dr's round) dr's round assess the patient." Now could I have changed my priorities?

AN: and should you Have started with the crash cart and at 11 and "I" realize that you've not charted your observations, since eight and you have not assessed you'd be in trouble...so you'd still have written the incident whichever case.

GK: me I do write them (Laughter form group) and they are coming to an end soon

me: *why are they coming to an end?*

GK: no no I can't continue with all this.

Me: you want to leave?

Gk: yes

An: I also want to talk about something else that is really bothering me as a person. There are things you can talk to me about by virtual of the position you hold, and there are things you can talk to me about because we are colleagues. For example one morning I reported on duty, and I was listening to some radio station on my phone. So the earphone is on. I'm in the changing room, its 7.15 then somebody says " (voice is

louder)I hope you are not going on duty with that!". I mean why don't you give me a chance to see if I shall do that. Alternatively inform me nicely, " n I hope.." you know, but the tone, the wording , the facial expression tells me I mean (cant hear) you seem to know of

Jk: it threatening you "dare you"

AN: I mean again in this stage, I'm still...I'm not even on duty. You couldn't wait? Now you are speaking to me as?... I mean where do I place this?

BO: to add on that eh.... We Are not a 110% perfect..

AN: no one is..

BO: There is room for making mistakes and room for correction. But the way somebody does it. There is a proper way of calling Nixi and telling them "Nixi, you did one two and three you are not supposed to do it..." Maybe Nix didn't do it intentionally. Definitely you might not have done it intentionally but there is a way of correcting somebody. You don't just land on somebody and you are like... First of all call me nicely. Call me in a place. (cant hear) .."b you don't have a name tag, why?" and you've improvised one. "Can you go home!" That is at night. I go home at night 7.30 come back at nine. Name tag disappeared here. Si I'm told to go home , so I go home and come back. (laughs). I still come back without a name tag so I'm still told "go home". I say I can't go home coz its risky for me. I cant risk my life because of a name tag. It becomes an issue and it ends up in...(silence for 14secs as the door opens. Some mumbling) so there is no freedom here, we are like prisoners anyway in short

AN: I wish we can get to a level of ...I believe at our ages (cant hear). I'd really appreciate somebody who is criticizing me to develop you know. But don't in the name of trying to develop me demean me because even that knowledge, you could actually be having a lot of it in yourself but I'll not be ready to champion you. You know. But there is a way... let me tell you. At times you find yourself in a group, something has been (cant hear) you think you can give it a try but you cant bear because you are not certain of the repercussions lest you'll just be showing your ignorance and you know. So we, you sit...alternatively you think you are not so comfortable I'd like to consult about this but where will that take me? I had better have done it, you know the way I'm not sure about than let it be known that me N has problem (cant hear)

GK: even there are other people who are recognized. If you went to that Khadija class, if you didn't go to that khadijah class you are not learned, not even...

JK: You know nothing!

GK: you know nothing and they treat you..

(mumbling from the group)

AN: by the way let me share an experience, let me share an experience. Ther is this issue of who have done it not about what has been done (JK: not about what has been done). I once became a victim and it was the renewal of the licences ah Mary and I had not renewed and so we

CK: mary who?

AN; g. So we set a date we were to go do that. She went but it was after office hours, she dropped the money and the documents and then she was told to check on a Monday. Monday I'm free so she tells me I paid the money, look for A LADY called so and so give them the receipt and have the receipt so that you can come and show. So N goes does that, carries the receipt but for some reason I do not present the receipt immediately to the office and later the receipt gets misplaced with me. Then the next thing I'm told, I have had my leave form. I'm being sent on compulsory leave because I have not renewed my license they are like yah I have nothing that I can show. And then I try to explain my situation, "I paid, I have the receipt but I have looked around but I can't find where it is, give me some time I'll bring it" Then what amazed me was that when my column remained marked in red, this other person, I believe who has an explanation like mine is cleared. Where would you put yourself. its about who does what and not what had been done.

Me: its more like ...

AN: and for that reason now you have to be like ...

GK: they are called Mercenary groups.

AN: I actually

Me: Ok umm..... Somebody... u want to say something?

JK: ummm... there's something else I want to add. There's also a stressor that also comes from within ourselves. Maybe I may not mention... I may not say it's a particular group but I've had instances where a colleague reports the other colleague

Me: You don't even know it...

AN: ...without even discussing. Maybe there's an issue. We're in the same group, George amefanya kitu kibaya, nitangojea asubuhi...

CK: no, you don't even wait for the morning. Somebody comes in late and somebody rushes behind here with a phone.

JK: They're called the loyal three.

CK: The loyal three, yes... The pillars... The pillars of ICU...The pylons.

JK: So you wonder why, your colleague cannot come to you and tell you what you did not tackle from 6AM and 'I'm the boss why didn't you tell me?' EH WHY DIDN'T YOU , and you sort it out.

BO: maybe she has a good reason

JK: YOU JUST GO TO The boss unajipata hapo (Incfhg

GK"or even somebody comes

JK: You know, and we work it out. What are they trying to do? Are they trying to be the friend of the boss, or the favorite of the boss or what? Are they trying really, to help me?

GK: Actually me I have been a victim of such incidents. Just somebody we're in the same group at night comes and looks at my chart he see's George have not done this, calls the boss, in the morning boss comes straight to what I have not done directly and there is something inside.

BO:Now you're left not wonder...

AN: And other charts are not perused.

Jk: The other charts are not perused. Only that particular chart.

Me: Ok...umm... we've heard what you do and what you have..... within the organiz-... within the ICU. You've seen yourself how you do you deal with this. But what would you like the organization to do for you to reduce the levels of stress in ICU? Go on G

GK: First and foremost, the organization is against us. That is the first point.

Me: How is it against you?

GK: One thing, you have a complaint, it is not taken, that complaint as you have said it. It is taken now against you. They don't support you. You complain about somebody. Now, that complain of yours, it's now like you are doing campaign for that person to be elevated.

JK: And you to be flattened.

GK: and you to be flattened, you lie like an envelope. What can you say about that? You complain about somebody

JK: Or something.

GK: And it is not only one complaint. They are major complaints. And that... all those complaints, instead of the institution coming out and seeing - How comes it's only this person? Investigate that person. Then go ahead, give him a post.(laughter) And that post, that person does not even have the qualification for it. (laughter)

Me: J, What would you like the organization to do for you? As a whole in all the stresses that we talked about.

JK: One: I'd really like the staffing level to be improved. Two: I'd like nurses to rotate the hospital. You know, out there when you tell someone I've had one patient and I've not sat down for one minute. They wonder why you have not sat down, one patient? What were you doing? They cannot understand. So I'd really like people from different units to rotate and see exactly what we are doing and have an idea of what happens in ICU.

GK: Actually I don't think that one will be possible, coz –

JK: It's a plan!

BO: A plan of action in future.

GK: ... they are not even educated. That is in quotes.

Jk: but even us we are not, we are not the "three"

GK: If you are from ICU you are going for a resuscitation, you are not supposed to leave that patient until you come with that patient all the way, even if it will take five hours. But you come with that patient to ICU now. NOW! How do they expect you...

JK: Now.. I'm stating the third one. Three: All the nurses to be taught ACLS so that we are not victims of circumstances. You go for resuscitation, you want something, CT Scan, you want to go sijui for EEG... when will you attend to your patient? Your two patients? Nowadays you know the ratio has gone up. Plus the CARE 2000-

Me: The ratio of patients has gone up to one to two or...?

JK: Yes. Two to one.

Me: Two ventilated patients to one?

All: Yes. Then in HDU three to one.

Me: Oh...

JK: So everyone is to know ACLS, such that we are not the only ones who are suffering. Yah? Number three:

Gk: Number four

JK: Oh, number four. Something needs to be done either someone needs to talk to the boss to educate her on how to handle people. Her people skills are zero. People skills are zero. Something needs to be done. Or if people skills cannot be taught, maybe we get another boss. If we cannot get another one, maybe it's time for us to leave.

Me: B?

BO: Umm... maybe what I would have liked the administration to do, is not... what I would like then to do in the near future they are going to do against it. We've been having a ratio of three to one and they are talking a ratio of two to one in future which will announce beginning of this month so, very soon, maybe it will be less than what we are talking of. Number two, Leadership. Umm... I don't know whether we should have a... the institution should call for management and decision making course there's a muzungu who used to come sijui from wherever to come and teach managers how to manage people and manage work and customer care. So that managers can be brought together to be taught how to manage people because here we're managed like... I don't know... how are we managed?

(mumbling from participants)

JK: Even nursery is better

BO: We are even below nursery. And somebody can even go as far as telling you "my daughter is in class two, Her English is better than yours"

Me: Degrading?

BO: Yeah

Me: OK... A? What would you like?

BO: And then the institution should, also, give us a voice to talk when we have problems.

AN: That is what I was going to say.

BO: We can't talk. We are called to a meeting and we are like, if I talk, what will happen? So I sit down with my problem and...

JK: Die with it.

AN: I think that's the major thing. Have a way of ... actually a reliable way, free from victimization, of communicating, and communicating both positively and negatively. It's unfortunate that everything and anything positive is that comes out of us then it has been downtrodden by one, two, three bad things or incorrect things that we've done. And..... I can, you know, I can imagine how good it is when you can freely speak to your....

Me: Your bosses...

AN: exactly, because they also get to understand you better, and you tend to give a better output. So... me I think, that's the major thing, and of course now the working that means the staffing. And, another thing, I'd really want that people are given a chance to make decisions when they are left.

Me: Autonomy.

AN: Do I really have...? I have eight nurses reporting for duty today. Five in the morning. I have five patients. Three of them ventilated, two are not. Do I have to call you to confirm that I should give so and so a PH?

JK: Or just to tell you that we still have five.

BO: Let me give you a simple and... it's a practical example. I'm coming from home, I stay in eastlands, I pass Jogoo rd. Jogoo rd is very unpredictable. You're supposed to be here at 7:30. Umm... I leave my house at 5:30 and somewhere along the line there's jam even if it's on a Sunday, Judy is shift leading here, I have to inform them there's a problem so I will be a bit late maybe by five minutes or two minutes. I don't call Judy, I call you at home. The boss. So what is the role of Judy? I thought Judy is on ground? Yah?

Me: Thank you very much... J...

JK: Sorry. Let me just add one more thing. I think another thing that will actually help this ICU is training. If more ICU nurses could be trained and if they'll be given that chance to do what is right and to be appreciated ... uhh... for what they do.

Me: How would you like the institution to appreciate you, what you do?

JK: Appreciation? Very simple. When I do something, my patient is neat, clean, uhh... has been taken care of, vitals are good, pat on the shoulder. Your patient is well taken care of. That is enough.

Bo: that one is never there

AN: The problem with the institution, it is going to be represented at the ground level. (JK: yes) so if you go opening your mouth complaining about it, who said it shall be sorted out

JK: yes so it becomes the role of the shift leader. Its just me as the shift leader who will come and say, 'Hey, George, leo mgonjwa wako yuko sawa.' You know, and you feel good. That you've done something.

Me: You the shift leader who also....

JK: or even my team mates will come and say.... We have appreciated each other,

AN: then the other one will come and say Lakini..... You people, you are very untidy.

Gk: But now you see, it depends on how the boss sees you. If you see George. There is nothing that George will ever do that is good. Since the time the time she started acting as a boss, George never does anything good. So everything George does, it has

to be questioned, even if somebody says George has done something good, they'll say...

BO: You have to write an incident.

GK: Yes. It's ok. Yes, but it will just be a by the way, the way I can tell Betty, How was your day? And she says fine, and we go on. You complain about George, Incident.

Me: C

CK: I think what the institution can do first is listen to our complaints because in every institutions there are complaints and... uhh... sometimes they are genuine. In most cases, they are genuine complaints. I think they are supposed to ... ok, listen to our complaints. The other thing they are supposed to address, is that sometimes they do not have enough supplies, we don't have, at times, maybe enough pumps. Like the other day, in HDU they added some pumps but we actually need lots of them. The other thing that we need to consider is staffing. We are poorly staffed. Like now when we have that issue of care 2000 at a time and not everything is there. At least we need somebody to be there at all times. Uhh... the other thing is money. I don't think we are given something commensurate to what we are undergoing. If it's a difference of Kshs.1, 500 and we run the whole night not like the ward where at... ok When we went to second floor, to HDU, the first complaint the first week was that these guys never settle. But we're not settling because its not our wish.

JK: it's the nature of the work.

CK: at 2am we are still walking around with trolleys, mara ni PAC, mara ni alarm! So I don't think we are given what we deserve. The coverage. Ok... there are times that bosses are supposed to be going round. They don't just have to sit in the office because some complaints like this one, we could be talking to them when they are here or we could even see them. Because maybe we have a new C.E.O and maybe lilian even doesn't know then when he comes on the door please remove your jacket, that's when he is going to understand how the environment of ICU is, straight from the doorstep. Remove your coat, sijui, shoes,... I've never even known you're not supposed to be in brown shoes. That's the code of nursing I knew. Even when we were training, I always knew brown and black. One time I was told to remove. So I'm left even wondering, because, even in other wards, I've been wearing those shoes. Even other people wear them so, you'd rather even be in rubber shoes other than the brown shoes, which is, maybe, leather. The other thing, maybe, I would ask us all as

colleagues. We had this kind of forum one time in HDU and like George said there was victimized. But I believe we should never give up. We should never give up. In fact, even if today you said we go, I wouldn't mind. Whether you say- I'm ready. Today I'm hurt. It would be a blessing to me because there are so many opportunities guys out. Because we shouldn't keep with these complaints. This might not be the right forum. If we tell nixi, she cannot go and say that because, ok, is it nixi who has the complaint? They'll even say, Nixi has left ICU and she's now inciting. She's now inciting. Whether it will take 20 years, it will take 90 years, ok, I'll not go as an individual, but when you go as an institution and we go so many times. I believe we are representatives of ICU. Even the people who are... ok, I was in a different and at one time I tried to sell that idea. No, we cannot say, we are going to be victimized.... Hakuna shida, I do not mind, because, it is us to make the institution. It is not people from outside.

AN: Another thing, I also think it would be good, especially, when you're making radical changes to consult with the people involved, and to have people who have a feel of that particular unit in decision making. If, for example I've been in charge of a maternity ward, I may not be very good in judgment about ICU. So when I speak from the experience of taking care of post-natal antenatal mothers, and I think maybe you can manage three patients. I only have what I think but not what I know. So, get to understand, what exactly do these people do before saying, it will be done my way.

Me: Ok.... Uhh... I think we have a feel of things. Is there anything that you'd like to add?

AN"Actually I'd....

Me: Go on.

I'd say the same. It looks like you're managing our stress by bringing us together.

Me: So you like like forums,

AN:Because guys have vented out. We are not sorted out but I believe we are lighter. So...

Jk: Apart from that, we also need serious forum where we can be listened to. Yeah, where someone can act on our grievances. Because, for how long will we stay down?

We have had so many forums.

Me: Have you?

GK:Yes! Even the umm... Programme director, He's called Programme director? And she just assumed she has heard our nini and she was just making fun of it. Ati 12, uhh.. 21 ICU problems, or 31 HDU problems.... And no feedback. No feedback.

Jk: It came out as though, this guys are complaining too much over small issues. And that's how it ended.

GK: And now, the next person you can go to complain to, is now the C.E.O. You don't even know which office he is normally in. And how can you go there? And who has sent you? (LAUGHTER)

Me: Ok... Thank you. Unless there's anything else? Please, I'd like you to sign the consent forms again. Thank you very much for your participation.

END OF BURNOUT FOCUS GROUP DISCUSSION 1

COVER LETTER

Nickcy Mbutia
Aga Khan University
P.O.Box 39340
00623,
Nairobi,
Kenya

Dear Research Participant

REQUEST FOR PARTICIPATION IN A SURVEY

Thank you for agreeing to take part in this survey. The survey is being conducted to investigate the prevalence of burnout in nurses working in the critical care units at Aga Khan University Hospital Nairobi.

Your participation in this survey is completely voluntary and your responses shall remain completely confidential and anonymous and therefore you are not required to indicate your name on the questionnaire. The survey is being carried out on all the nurses working in the critical care units. The critical care units include the General Intensive Care Unit, General High Dependency Unit and the Neonatal Intensive Care Units.

The survey shall involve completion of the Maslach Burnout Inventory- Human Service Survey and general demographic questions.

I am carrying out the research as part of my Masters program in Critical Care Nursing. I greatly appreciate your participation. Please complete all the sections in the questionnaire provided.

Thank you

Nickcy Mbutia
MA(CUR) Student
University of South Africa

DEMOGRAPHIC QUESTIONS

Instructions: Please complete the following questions by circling the appropriate number

A. How are you employed in the critical care units?

1. Part time
2. Full time

B. What is your age?

1. Less than 21
2. 21 – 29 years
3. 30 – 39 years
4. 40 – 49 years
5. 50 – 59 years
6. Over 60 years

C. What is your gender?

1. Female
2. Male

D. What is your marital status?

1. Single
2. Engaged
3. Married
4. Divorced/Separated
5. Widowed

E. What is your highest qualification?

1. Enrolled nurse
2. Registered nurse
3. Bachelor of Science(Nursing)
4. Masters
5. Others: Please specify _____.

F. How many years of nursing experience do you have?

1. Less than 1 year
2. 1 – 5 years
3. 6 – 10 years
4. 11- 14 years
5. More than 15 years

G. How many years have you worked in the critical care units?

1. Less than 1 year
2. 1 – 5 years
3. 6 – 10 years
4. 11- 14 years
5. More than 15 years

H. What is your level on the career ladder?

1. Clinical nurse I
2. Clinical nurse II
3. Clinical nurse III
4. Clinical nurse IV
5. Clinical nurse V

I. How long have you remained in the same level on the career ladder?

1. Less than 1 year
2. 1 – 5 years
3. 6 – 10 years

- 4. 11- 14 years
- 5. More than 15 years

J. If you have any comments you would like to make about the survey or any information that would contribute to the understanding of burnout of staff working in the critical care units, please write below:

Your participation in the study is highly appreciated. Please return the questionnaires to the Team Leader.

AN INVESTIGATION ON BURNOUT IN NURSES WORKING IN CRITICAL CARE UNITS AT THE AGA KHAN UNIVERSITY HOSPITAL, NAIROBI

PARTICIPANT CONSENT FORM

Investigator: This focus group discussion is being carried out by Ms Nicky Mbutia as part of a Masters program from University of South Africa

Introduction and Background:

You are being invited to take part in a focus group discussion about factors leading to the development of burnout in nurses working in critical care units and ways of mitigating burnout in nurses.

Burnout is physical or emotional exhaustion, often as a result of long-term stress or dissipation. Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity.

Research Purpose: The purpose of the focus group discussion will be to explore the factors that lead to the development of burnout in nurses working in the critical care units at the Aga Khan University Hospital, Nairobi and also what measures can be taken to mitigate the development of burnout

Explanation of Procedures:

Discussion is going to take place between the research assistants and the participants. The session shall take about one hour and shall be tape recorded.

Potential Risks:

There are no risks associated with this focus group discussion.

Benefits:

No financial benefits are associated with this study. By participating in the focus group discussion you will be increasing knowledge related to retention of a stable work force in the hospital.

Costs:

The cost for participating in this study is the time it takes for you to participate in this focus group discussion. You do not pay anything to participate in the study.

Confidentiality:

Your participation in this focus group discussion will remain confidential during the discussion and also during data analysis. You are not required to print your name on the consent form. During the discussion, code words shall be used to identify each person.

Voluntary Participation:

Your participation in this study is completely voluntary.

Participant Questions:

Before you decide whether to accept this invitation to take part in this study, please ask any questions that might come to mind.

Consent

Before signing this consent form, you have had the opportunity to discuss your participation with the investigator and all of your questions have been answered in terms you understand.

I have read this consent form and I voluntarily consent to participate in this study.

Participant Signature

Date

MBI—Human Services Survey

The purpose of this survey is to discover how various persons in the human services or helping professionals view their jobs and the people with whom they work closely.

Because persons in a wide variety of occupations will answer this survey, it uses the term *recipients* to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way *about your job*. If you have *never* had this feeling, write a “0” (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How Often

0–6

Statements:

1. _____ I feel depressed at work.

If you never feel depressed at work, you would write the number “0” (zero) under then heading “How often.” If you rarely feel depressed at work (a few times a year or less), you would write the number “1.” If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a “5.”



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MBI-Human Services Survey

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How Often 0-6	Statements:
1. _____	I feel emotionally drained from my work.
2. _____	I feel used up at the end of the workday.
3. _____	I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____	I can easily understand how my recipients feel about things.
5. _____	I feel I treat some recipients as if they were impersonal objects.
6. _____	Working with people all day is really a strain for me.
7. _____	I deal very effectively with the problems of my recipients.
8. _____	I feel burned out from my work.
9. _____	I feel I'm positively influencing other people's lives through my work.
10. _____	I've become more callous toward people since I took this job.
11. _____	I worry that this job is hardening me emotionally.
12. _____	I feel very energetic.
13. _____	I feel frustrated by my job.
14. _____	I feel I'm working too hard on my job.
15. _____	I don't really care what happens to some recipients.
16. _____	Working with people directly puts too much stress on me.
17. _____	I can easily create a relaxed atmosphere with my recipients.
18. _____	I feel exhilarated after working closely with my recipients.
19. _____	I have accomplished many worthwhile things in this job.
20. _____	I feel like I'm at the end of my rope.
21. _____	In my work, I deal with emotional problems very calmly.
22. _____	I feel recipients blame me for some of their problems.

(Administrative use only)

EE: _____ cat. DP: _____ cat. PA: _____ cat.

* Callous: Unsympathetic / Hardened

Roger Loveday
Reconstructionist and Interventionist Editor

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24 February 2009

TO WHOM IT MAY CONCERN

I, **Roger Kelsey Loveday**, Interventionist Editor,
of 25 Third Avenue, Fish Hoek, Town, herewith declare
that I rendered professional editing services in February of 2009 to

Ms Nickcy Nyaruai Mbuthia

in the editing of her master's dissertation,
which she then submitted as a requirement for the

Degree of Master of Arts

in the subject of

Health Studies (Critical Care Nursing)

under the supervision of

**Professor Susan Hattingh D. Litt et Phil (UNISA); MA (Cur) (UNISA); BA
(Cur) Hons (UNISA)**

of the Department of Health Studies of the University of South Africa.

I further declare that the content of the research study that I have seen
has remained, and will remain, strictly confidential and anonymous,
and that it therefore complies with all the ethical requirements of her research.

Roger Kelsey Loveday

Interventionist Editor

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24 February 2009