ABSTRACT
This research explores the prevalence of stress and burnout in Mental Healthcare Workers (MHCWs), as well as the physical, psychological, and emotional consequences of stress and burnout to the employee and the organization. The researcher hypothesizes that MHCWs in a KwaZulu-Natal (KZN) psychiatric hospital are under a significant amount of stress and burnout, thus leading to certain managerial challenges within the organization.

A quantitative study was undertaken with the application of the Stress Diagnostic Survey and the Maslach Burnout Inventory as the research instruments. Surveys were delivered to 120 doctors and nurses (MHCWs) currently managing patients in the psychiatric wards in a KZN psychiatric hospital, as well as interviews conducted on five operational managers. The empirical findings of this study do not indicate that MHCWs are significantly more stressed than a sample of 41 community service doctors in KZN, or more burnt-out than a sample of 1104 healthcare professionals as specified in the Maslach Burnout Inventory. Although MHCWs are experiencing high levels of stress and burn-out, it is not of a significant degree. It is critical that hospital management identifies and acknowledges the effects of stress and burnout on MHCWs and on the organization, and implements the necessary stress-reduction interventions.

Key words: stress-burnout- psychiatric health care workers- Stress Diagnostic Survey and the Maslach Burnout Inventory

INTRODUCTION
This study undertakes to determine managerial challenges with regards to healthcare employees who are suffering from stress and burnout in a psychiatric hospital in KwaZulu-Natal (KZN). The context within which the research will be carried out will be highlighted, followed by an identification of the research problem. Literature on stress and burnout that has been published in the fields of psychology, medicine, and occupational therapy, will then be reviewed, and will give insight into the causes and effects of stress and burnout, the different stress theories that have been proposed, contributing and mediating factors in stress and burnout, as well as interventions that can be employed to curtail the incidence and consequences of stress and burnout.

Research Context: Background and problem statement
The role of stress and burnout in healthcare workers has been a topic of increasing concern over the last few decades, as it is a global issue that affects millions of healthcare workers,
their patients, the organizations that employ them, as well as their families. It is the opinion and experience of this researcher that psychiatry, as a discipline, poses its own unique challenges and stressors with regards to the physical environment in which healthcare workers function on a daily basis, as well as the emotional and psychological effects of working with aggressive, psychotic and mentally retarded patients who have a poor insight and understanding of their illness and/or the rationale for them being committed to a psychiatric institution.

According to Stodel and Stewart-Smith (2011:115), there has been “an increase in the migration of medical doctors worldwide, with an exodus of doctors from South Africa...placing extra strain on those who remain”. In light of the growing media attention surrounding stress and burnout in recent years, bodies of information have been researched and documented in order to gain more insight into this mentally, physically, emotionally, and economically significant phenomenon. From a medical and psychological perspective, this research is an attempt to understand the challenges faced by healthcare workers in terms of the aetiology, effects and manifestations of stress and burnout, with a specific focus on the unique circumstances surrounding managing patients in psychiatric institutions. The purpose of this study is thus to investigate the causes and effects of stress and burnout in Mental Healthcare Workers (MHCWs) and the symptoms thereof, and to identify the challenges faced by management in dealing with MHCWs who are stressed and burnt out. Recommendations will then be made to management in order to improve the productivity and morale of MHCWs.

Research Objectives

The research objectives are as follows:

- To determine the challenges faced by management in dealing with MHCWs experiencing stress and burnout;
- To determine the impact of stress and burnout on MHCWs; and
- To investigate the importance of integrating appropriate mental healthcare programmes to prevent, identify, and rehabilitate those MHCWs experiencing stress and burnout.

Primary data will be obtained by administering a written questionnaire among a selection of doctors and nurses at a psychiatric hospital in KZN, as well as conducting unstructured interviews with five operational managers at the psychiatric hospital.

Sampling Strategy and data collection

The study population relevant to this research includes employees working at a KZN psychiatric hospital. For the purpose of this study the sample that was representative of the target population comprised one hundred and twenty doctors and nurses. Non-probability sampling, a non-random and purposive sampling design, was used to identify the target population.

The research procedure that is most suitable method of primary data collection for this study is that of the survey and interview methods. In addition to being effective and time-efficient, this type of data collection instruments enabled the researcher to pose questions to the MHCWs in the study in search of answers to the research objectives mentioned above.

The measuring battery used for the purpose of this study included the Maslach Burnout Inventory (MBI) and the Stress Diagnostic Survey (SDS). According to Dhaniram (2003:170) the rationale for using the SDS is that the higher the respondent’s total score, the higher the levels of job stress experienced by that individual. As no reliability and validity studies are currently available for the SDS, Dhaniram (2003:172) quotes a study done by Arumugam in 1992, who found “significant associations between the levels of experienced stress and the
stressor categories in a sample of Indian Pentecostal Ministers”. Dhaniram (2003:172) further recommends the SDS for its face validity.

**Administration of Questionnaires**

Self-administered questionnaires were hand delivered by the researcher to one hundred and forty doctors and nurses in the acute male and female wards in a KZN psychiatric hospital on 7 October 2011. This method of questionnaire administration was convenient and efficient for both the researcher and respondents alike, as the researcher works in the above mentioned wards on a daily basis. The researcher was thus also able to briefly explain the reason and nature of the study, as well as the importance of confidentiality in the study to those respondents who raised concerns.

**Data Analysis**

Analysis of data is the process of inspecting, transforming, and modelling data with the goal of highlighting useful information and supporting decision-making. Respondents will be given two self-answered questionnaires which rely on the Stress Diagnostic Survey (SDS) and on the Maslach Burnout Inventory as its backbone. The SDS measures the level of perceived stress as experienced by the respondents, whilst the MBI measures the three aspects of burnout: depersonalization, emotional exhaustion, and reduced personal accomplishment. Both the SDS and MBI provide a score to measure stress and burnout respectively.

Measures for each aspect of burnout will be calculated by means of the MBI research manual. Mean scores and standard deviations for the sample will be calculated. A z-test will be used to compare these measures to a normative sample of medical doctors (n=1104) to discern if there is a statistically significant difference in the means.

Descriptive statistics (means, standard deviations, frequencies, and percentages) will be calculated for each subscale of the SDS, namely role conflict, role ambiguity, work overload, career development, and responsibility for people. A t-test will be applied to compare these measures to a normative sample of community service doctors (n=41) to discern if there is a statistically significant difference in terms of the means.

A measure for each aspect of burnout was calculated by means of the MBI research manual. Mean scores and standard deviations for the sample were calculated. A z-test was used to compare these measures to a normative sample of medical doctors (n=1104) to discern if there was a statistically significant difference in the means.

Descriptive statistics (means, standard deviations, frequencies, and percentages) were calculated for each subscale of the SDS, namely role conflict, role ambiguity, work overload, career development, and responsibility for people. Each of these five stressor categories was classified into low, moderate, or high stress according to the sum of their item scores. T-tests were applied to discern if there was a statistically significant difference in the means.

**Literature Review**

Stress is especially prevalent in the human service professions (that is, the health professions, teaching, and counselling, amongst others) making these caregivers more susceptible to occupational stress and burnout than the general public. Jongeling (1990) ascribes this increased risk of occupational stress and burnout to the fact that individuals in the human service professions are responsible for people, and not material objects, thereby adding to the stress of responsibility of care.

**Definition of Stress**

According to Ivancevich and Matteson (cited in Oosthuizen and Lille, 64) stress is “an adaptive response, mediated by individual differences and/or psychological processes, which is a consequence of any external action, situation or event that places excessive psychological or physical demands on a person”. There are three important aspects of the definition by Ivancevich and Matteson that must be emphasised:
Stress is the response or reaction to a situation or event, and thus does not refer to the stressor itself;
Stress can be mediated by individual differences; and
Stress is a response to excessive psychological and/or physical demands. Thus only special situations can be said to produce stress, as opposed to minor life adjustments (Luthans, 2002:396).

Robbins (2010:563) further adds that “stress is a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important”. The aforementioned author thus includes in his definition of stress the idea that the consequences or outcomes of the event must be of some importance to the individual in order to be considered stressful, as well as the presence of uncertainty over the outcome. The transactional model of stress (van der Walt, 2004:22) as proposed by Richard Lazarus theorizes that stress is a “stimulus-response transaction in which an individual feels threatened”.

It is important to note, however, that not all stress is bad stress. Strumpfer (1985:61) makes a distinction between eustress and distress: eustress occurs when “people face life with competence and hardiness, with a positive, facilitating response to demands”, whilst distress occurs when one “wears oneself out to the point of dangerous exhaustion”. Oosthuizen et al. (2010) are in agreement that stress is more than just anxiety and nervous tension. The aforementioned authors assert that “eustress represents a positive response to stress that should be encouraged, while distress represents a negative response that should be avoided”. Strumpfer (1985:61) and Dudley (1990:76) add that eustress can be psychologically stimulating and career-enhancing both to the individual and the organization, whereas distress (often equated to “stress”) can destroy physical, psychological, and social health. Donald, Taylor, Johnson, Cooper, Cartwright and Robertson (2005:9) agree that there is a relationship between stress and productivity, stating that the physical arousal associated with job stress enhances performance to a certain degree, after which further stress results in a decline in performance (see Figure 2.2 below).

**Figure 1.2: The human function curve**

*Source: Kelly (1990:57)*

As stated by Benson and Allen (1980:88), the beneficial and harmful effects of stress on performance and efficiency were first described by Drs Yerkes and Dodson, who
demonstrated that as stress increases, so do efficiency and performance. However, after a certain level, if stress continues to increase, performance and efficiency decrease (see Figure 1.3 below). Understanding the Yerkes-Dodson Law can thus have important management implications during strategic planning, enabling the organization to profit from the beneficial effects of stress on the left-hand upside of the curve, as well as preventing the detrimental effects of excessive stress on the right-hand downside of the curve.

**Figure 1.3: Yerkes-Dodson Law**

Source: Benson and Allen (1980:88)

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**Definition of Burnout**

Burnout is a pathologic syndrome resulting from prolonged occupational stress (Woodside, Miller, Floyd, McGowen, and Pfortmiller, 2008). Burnout, according to psychology professor and burnout expert Christina Maslach (cited in Nelson, 2005: [http://www.sundaytimes.co.za](http://www.sundaytimes.co.za)) is an evocative term with no standard definition. Professor Maslach’s research in the field of stress and burnout is recognized as being both insightful and comprehensive, and has been the groundwork of numerous studies in this field of research. The Maslach Burnout Inventory (MBI) was subsequently designed for use in the human service and was first formulated in 1981, and has been “used to study burnout across professions and cultures” (Stodel et al., 2011:115). Professor Maslach states that burnout consists of three inter-related dimensions which as a whole comprise this psychological syndrome, namely emotional exhaustion, depersonalization, and reduced personal accomplishments. However, Stodel et al. (2011:115) warns that burnout should be viewed as a continuous variable and not as a dichotomous variable that is either present or absent.

**Emotional Exhaustion**

The first dimension in the burnout concept is that of emotional exhaustion. Although it is commonly accepted that burnout is composed of three factors (emotional exhaustion, depersonalization, and reduced personal accomplishment) several authors, including Maslach, view the emotional exhaustion component as the foremost factor (Kickul and Posig, 2001; Van Emmerick, Jawahar, and Stone, 2005:93). Exhaustion is characterized by a lack of mental and physical energy, with a subjective feeling that one’s emotional resources are drained (Goodman and Boss, 2002; 35). Maslach, cited in (Kickul et al, 2001) adds that emotional exhaustion is a feeling of being emotionally depleted and exhausted by one’s work, and as such may be seen as an “extreme result of chronic emotional stress”. Kickul et al
(2001) further highlights the significance of emotional exhaustion as a fundamental aspect in the progression of stress to burnout. The afore-mentioned authors state that emotional exhaustion is “a strong predictor of job and life satisfaction, subsequent job performance, absenteeism, commitment, and turnover intentions”.

**Depersonalization**

The second dimension of burnout is that of a negative evaluation to one’s job and the people one works with. Maslach (cited in Nelson, 2005: http://www.sundaytimes.co.za) warns that a hallmark of burnout is the development of a “very strong negative, hostile, cynical, dehumanised response” to one’s job, one’s workplace, and work colleagues. This negative evaluation leads to an unconstructive change in the way that people do their jobs, that is, they do the very minimum instead of doing their best. Van Emmerick, Jawahar, and Stone (2005:95) agree that, in the helping professions, depersonalization often signifies treating people like objects. This cynical or indifferent attitude encompasses treating both patients and colleagues alike in a depersonalized manner, in an attempt to put distance between oneself and others.

**Reduced Personal Accomplishments**

The third dimension of the burnout syndrome is that of a negative self evaluation, which is marked by a decline in one’s sense of one’s own professional effectiveness. Goodman and Boss (2002:35) claim that this sense of diminished accomplishment leads to a decrease in feelings of job competence and decreased successful achievement at work. Van Emmerick et al. (2005:96) explain that reduced personal accomplishment or feelings of inefficiency are “prompted by a work situation with chronic, overwhelming demands that erode one’s sense of effectiveness”.

**The Four Stages of Burnout**

Bailey’s (1985:38) view of burnout as a progressive stress process describes the caregiver as a “previously committed helper who disengages from work as a result of the appraised and stressful transactions experienced in the job”, and highlights the psychological stages of progressive burnout that occurs over a period of time. Edelwich and Brodsky (cited in Bailey, 1985:28) describe burnout as a transactional process in which there is a “progressive loss of idealism, energy and purpose, experienced by people in the helping professions as a result of their conditions of work”. Bailey (1985:39) explains that it is within the beliefs, nature, and appraisal of the caregiver’s professional demands that the process of burnout takes place.

Burnout is divided into four stages (Bailey: 1985):

- **Idealistic enthusiasm** - the caregiver has high energy, hopes and motivation to achieve his/her often unrealistic goals. The caregiver endeavours to employ helping skills to make an observable impact on the patient. Towards approximately the end of the first year of employment these unrealistic goals, principles, and priorities about professional demands comes into question, and the caregiver moves into the stagnation stage of burnout;

- **Stagnation** - the caregiver starts to slow down, becomes disappointed and his/her energy levels begin to decrease. Motivation also decreases, and the caregiver’s priorities and goals are no longer pursued with the vigour as in the idealistic enthusiasm stage. The caregiver is likely to now experience disappointment in his/her expectations about the job. Personal needs are no longer seen as being satisfied entirely by the job, and interests outside of work (such as friends, family, and sport) may become more important;

- **Frustration** - the caregiver is unable to achieve his/her goals and needs, as well as to not being able to satisfy the needs of the patient, leading to the frustration stage of burnout. The caregiver feels that his/her goals have not been realized, and becomes frustrated with the efforts to achieve the high goals of the helping profession. The
caregiver may become frustrated at having to sacrifice his/her own needs for that of the patient; and

- **Apathy**: this could be a sign of impoverished coping, where the caregiver tends to see “the job is a job is a job”. Signs of apathy include arriving late for work and leaving early, going about his/her duties in a mechanical way, and keeping to safe and secure routines. This stage is characterized by cynicism, complaints, and general job dissatisfaction (Bailey, 1985:41; Ellis, 1996: 292).

### Signs of Stress and Burnout

Ellis (1996:294) states that stress and burnout are highly individual and variable, and that the symptoms of burnout should be seen as a component of one’s relationships with one’s work, home, and environment. It is thus a combination of the demands and stresses of these relationships, together with one’s coping skills, that lead to the components of burnout namely: emotional exhaustion, depersonalization, low productivity, and a feeling of low personal achievement. Bailey (1985:31) suggests that the following common features of burnout are useful clinically in identifying those professionals who are experiencing personal difficulties, and practically by looking out for them in oneself and one’s colleagues in the helping professions. Another effective way of identifying progressively increasing levels of stress and features of burnout is to compare the caregiver’s current performance to that of their previous level of psychological and physical functioning.

The physical signs of burnout are as follows:

- Headaches;
- Gastrointestinal disturbances;
- Inability to shake off lingering colds;
- Sleeplessness;
- Shortness of breath;
- Skin complaints; and
- General aches and pains.

The psychological/emotional signs of burnout are as follows:

- Feelings of exhaustion and fatigue;
- Irritability;
- Tearfulness;
- Unprovoked outbursts of anger;
- Marked sadness;
- Screaming, shouting, and irrational anger;
- Unwarranted suspicion and paranoia;
- Lethargy;
- Depression;
- Depersonalization; and
- Avoidance of commitments to caring (Bailey, 1985).

Ellis (1996:324; 2005:6) further adds that whilst many doctors can cope well with stress, others do not. This maladaptation to stress may lead to doctors working harder, retreating from family and friends, using alcohol and drugs, anger towards patients and staff, anxiety, fearfulness, loss of confidence, loneliness, guilt overlapping with depression, and delaying seeking help.

### Sources of Stress

Robbins (2010) identifies three categories of potential sources of stressors, namely organizational, environmental, and individual factors. In a study of one hundred and ten interns working at three major state hospitals in Johannesburg, Sun, Saloojee, Van Rensburg, and Manning (2008) ascertained that forty percent of interns rated internship as being “significantly” or “overwhelmingly” stressful due to the following reasons: heavy workloads,
long work hours, HIV/AIDS-related concerns, lack of equipment, staff relationships, and perceived quality of care issues. Robbins (2010:565) identifies three potential sources of stress, namely, environmental, organizational, and individual factors.

**Stress Models and Theories**

**Cognitive Activation Theory of Stress**

In an attempt to further comprehend the relationship between life events, work life, and individual health, the cognitive activation theory of stress (CATS) was developed as a psychobiological explanation of the stress phenomenon. Reme, Eriksen, and Ursin (2008:177) elucidate that the physical and psychological symptoms of the stress response depend on one’s cognitive evaluation of the situation and what one can do about it. The afore-mentioned authors also explain that CATS is an activation theory “since the psychobiological consequences of cognitive activity are explained by increases in arousal (activation)”. The CATS model is relevant in the context of this study as it explains how an individual’s perception of a situation can lead to a physiological and physical response to the perceived stressful situation. If this stress response is sustained it may then lead to illness and disease through established pathophysiological processes (Reme et al., 2008:177).

Whilst the CATS model emphasizes individual psychosocial factors as modifiers or direct causes of ill health, the demand-control model (Karasek and Theorell, 1990) focuses on objective work conditions as predictors of stress related disease. The jobs with the highest risk of illness have high demands, low control, and low social support. Conversely those jobs with low psychological demands and high levels of control have the lowest risk, with the control dimension being the most powerful predictor of risk of illness (Reme et al, 2008:178).

**Salutogenic Model**

The salutogenic model, proposed by Antonovsky in 1979, is built on the foundation that individuals are able to cope with stress and be responsible for their own health in an environment that allows them to act autonomously (Dhaniram, 2003). Antonovsky’s research has pioneered and encouraged a theoretical understanding as to why some people flourish under stressful situations whilst others develop ill health and disease.

**Sense of Coherence**

Sense of coherence (SOC) is defined as “a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected” (Antonovsky, 1979:123). When a person with a strong sense of coherence is confronted by a stressor, he/she will:

- Wish to/be motivated to cope (namely: meaningfulness);
- Believe that the challenge is understood (namely: comprehensibility); and
- Believe that resources to cope are available (namely: manageability) (Antonovsky, 1996:15).

The afore-mentioned author asserts that there are three kinds of life experiences which shape the strength of one’s sense of coherence, namely: consistency, underload-overload balance, and participation in socially valued decision-making. An understanding of these three factors is important for managers who endeavour to undertake stress and burnout rehabilitation programmes in their organizations.

**Hardiness**

Hardiness is a set of personality characteristics that is valuable as a source of resistance during stressful events (Ellis, 1996:325), and is a personality trait that differentiates persons who do not fall ill from stress, from those who do (Ellis, 1996:325). Hardiness is actually a constellation of three crucial personality types according to Ellis (1996:325), namely: commitment, control, and challenge.
**Locus of Control**

Internal locus of control refers to the extent to which an individual expects his/her actions to influence the outcome of his/her behaviour. External locus of control refers to the extent to which an individual expects the outcome to be unpredictable, or under the control of other people. During the course of their research, Oosthuizen and Lille (2010:68) observed that employees with high levels of external locus of control experienced relatively high levels of stress and those with low external locus of control scores experienced relatively lower levels of stress. There is thus a direct relationship between external locus of control and stress.

Kobasa (1979) states that the highly stressed individual who remains healthy is able to do so because he/she has:

- decisional control, or can autonomously choose among various courses of action to handle the stress;
- cognitive control, or the ability to interpret, appraise, and incorporate various stressful events into an ongoing life plan, and thus deactivate the negative effects of stressful event; and
- coping skills, or a greater armament of suitable responses to stress.

On the other hand, highly stressed individuals who become ill are powerless, nihilistic, and low in motivation for achievement. When stress occurs these individuals give up what little control they possess, and succumb to the incapacity of illness (Kobasa, 1979:3).

**Learned Resourcefulness**

Learned resourcefulness is a set of “complex behaviours, cognitions and emotions that are in constant interaction with an individual’s physical and social environment…serve as a coping skill in stressful situations” (Oosthuizen and Lille, 2010:65).

**The Relationship between Stressors, Health and Productivity**

Whilst there is evidence of a relationship between workplace stressors and physical and mental health, there are further management issues that must be addressed. Several studies have attempted to show a relationship between stressors, health, and productivity. However, the majority of empirical work is confined to specific populations and small samples (Donald et al., 2005). In a 1994 study conducted by Singh, Goolsby, and Rhoads (cited in Donald et al., 2005:13) the authors endeavoured to demonstrate a relationship between emotional exhaustion and psychological and behavioural outcomes amongst three hundred and seventy seven customer service employees in a telemarketing company. The study revealed that there was indeed a negative association between productivity and emotional exhaustion: employees who felt emotionally exhausted admitted to noticing a decrease in their productivity as compared to that of their colleagues who were not emotionally exhausted. If these results indeed stand firm in future research, implications for organizational leaders are clear. Organizations should thus implement strategies that are specifically targeted to reducing this type of burnout in order to improve employee productivity.
Levels of Stress

The SDS is scored using a scoring key, as described in Dhaniram (2003:172). Each of the six individual level stressors categories can be classified into low (<10), moderate (10-24), or high (>24) stress scores according to the sum of their item scores. From Figure 1 it can be seen that the highest level of stress was experienced in the role conflict category and role ambiguity categories. Six percent and 5% of the sample experienced high levels of stress in the role conflict and role ambiguity categories respectively. It is of note that no respondent experienced high levels of stress in the work overload, career development, and responsibility for people categories. The majority of the responses occurred in the moderate stress category across all six subscales. Seventy four percent of MHCWs experienced moderate levels of stress in the role conflict category. This was followed 70% of respondents citing role ambiguity as the second most common moderate stressor. Sixty two percent and 54% of respondents cited career development and responsibility for people as the third and fourth most common stressors respectively. Sixty two percent of respondents experienced moderate levels of stress with regards to career development, with 54% of respondents experiencing moderate levels of stress in the responsibility for people category.

In the low stress category 50% and 49% percent of respondents reported work overload quantitative and work overload qualitative respectively as the most significant stressors for this category.
Levels of Burnout
Figure 4.7 Burnout Scores for Emotional Exhaustion, Depersonalization, and Reduced Personal Accomplishment

**Emotional Exhaustion**
The score for emotional exhaustion can be categorized as follows:

- Low: <19
- Moderate: 19-26
- High: >26

These scores represent the lower, middle, and upper thirds of a normative sample of 1104 doctors, with a mean of 22.19 (SD: +/- 9.53) (Stodel, 2009:31). The mean score for emotional exhaustion from the sample of MHCWs was 25.75 (SD: 10.5).

The probability of a significant difference in the mean score for emotional exhaustion was calculated by means of a z-test as follows:

- \( H_0 = \mu_1 - \mu_2 = 0 \)
- \( H_a = \mu_1 - \mu_2 > 0 \)
- z-score = 2.47
- p-value = 0.9934

Since \( p > 0.05 \), the observation is, in fact, consistent with the null hypothesis. The null hypothesis is therefore not rejected. That is, the levels of emotional exhaustion amongst MHCWs are not significantly higher than one would expect from a population of doctors when compared to the normative sample \( n=1104 \) identified in the research guide by Maslach, Jackson, and Leiter (1996). As is evident in Figure 4.6 above, 27% of MHCWs have low levels of emotional exhaustion, 22% have moderate levels of emotional exhaustion, and 51% have high levels of emotional exhaustion.

**Depersonalization**
The score for depersonalization can be categorized as follows:
Low <6 Moderate 6-9 High >9

The mean of the normative sample identified in Maslach et al (1996) is 7.12 (SD: +/- 5.22). The mean depersonalization score for the sample was 9.80 (SD: 4.58). The probability of a significant difference in the mean score for depersonalization was calculated using the z-test as follows:

\[ H_0 = \mu_1 - \mu_2 = 0 \]
\[ H_a = \mu_1 - \mu_2 > 0 \]
\[ z\text{-score} = 0.51 \]
\[ p\text{-value} = 0.6950 \]

The null hypothesis is, therefore, again not rejected. That is, the levels of depersonalization amongst MHCWs are not significantly higher than one would expect from a population of doctors when compared to the normative sample (n=1104) identified in the research guide by Maslach, Jackson, and Leiter (1996). As is evident in Figure 4.6 above, 15% of MHCWs have low levels of depersonalization, 33% have moderate levels of depersonalization, and 52% have high levels of depersonalization.

**Reduced Personal Accomplishment**

The score for reduced personal accomplishment can be categorized as follows:

Low >39 Moderate 40-34 High <34

The mean of the normative sample identified in Maslach et al (1996) is 36.53 (SD: +/- 7.71). The mean score for reduced personal accomplishment for the sample was 26.0 (SD: 8.46). The probability of a significant difference in the mean score for reduced personal accomplishment was again calculated using the z-test as follows:

\[ H_0 = \mu_1 - \mu_2 = 0 \]
\[ H_a = \mu_1 - \mu_2 > 0 \]
\[ z\text{-score} = -1.37 \]
\[ p\text{-value} = 0.0853 \]

The null hypothesis is, therefore, again not rejected. That is, the levels of reduced personal accomplishment amongst MHCWs are not significantly higher than one would expect from a population of doctors when compared to the normative sample (n=1104) identified in the research guide by Maslach, Jackson, and Leiter (1996). As is evident in Figure 4.6 above, 4% of MHCWs have low levels of personal accomplishment, 7% have moderate levels of personal accomplishment, and 89% have high levels of personal accomplishment.

Peltzer’s, Mashego’s, and Mabeba’s (2003:275) study of occupational stress and burnout in South African doctors showed that whilst job stress predicted emotional exhaustion and depersonalization, it did not predict personal accomplishment. However, in contrast to the MHCWs in the present study, reduced levels of personal accomplishment were found to be higher among these South African doctors than in their American counterparts.

**Results of Interviews**

Open-ended interviews were carried out on five nursing operational managers to assess the challenges faced by management in dealing with stressed and burnt-out employees. The prevalence of specific managerial challenges is presented in Table 3 below.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absenteeism</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Decreased motivation to complete tasks</td>
<td>3</td>
<td>60%</td>
</tr>
<tr>
<td>Impatience with staff and patients</td>
<td>3</td>
<td>60%</td>
</tr>
<tr>
<td>Unwillingness to perform certain duties</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>Clerical errors</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Forgetfulness</td>
<td>2</td>
<td>40%</td>
</tr>
</tbody>
</table>
Anger and irritability 4 80%
Verbalizing intention to leave 2 40%
 Verbalizing dissatisfaction with working conditions 5 100%
Alcohol use at work 3 60%
Arriving at work drunk/hung-over 3 60%
Acknowledging signs of stress/burnout 5 100%
Lack of utilization of EAP 5 100%

The greatest challenges faced by the all of the interviewed managers were:

- Increased absenteeism/sick leave in stressed and burnt-out MHCWs;
- Clerical errors when completing reports, legal documents, prescriptions, or patient notes;
- Some MHCWs verbalizing dissatisfaction with working conditions in the hospital. This includes dissatisfaction due to lack of hospital resources, as well as having to manage aggressive patients with minimal support staff especially at night;
- Getting distressed MHCWs to acknowledge that they were experiencing stress or burnout, and that their attitudes and behaviours were negatively impacting on patients and colleagues alike; and
- Encouraging distressed MHCWs to utilize the hospital’s employee assistance programme.

Eighty percent of the managers complained of having to deal with MHCWs who displayed anger outbursts and irritability during their interactions with patients, staff, as well as with their managers. Sixty percent of the managers noticed that subordinates who exhibited signs of stress and burnout were sometimes demotivated to complete their tasks, and showed impatience when dealing with patients and fellow staff members. These MHCWs were also, on occasion, found to either be drunk or consuming alcohol on duty. Forty percent of the managers cited unwillingness/opposition to perform certain duties (for example performing venesection, changing geriatric patients’ diapers, admitting more patients), as well as verbalizing intentions to leave as lesser challenges in dealing with stressed and burnt-out employees.

**Interpretation of Results**

From the interviews with five members of the management team it was clear that MHCWs were indeed displaying signs of stress and burnout. Ellis (1996:324) cautions that maladaptation to stress by doctors can take the form of alcohol and drug use, as well as delayed help-seeking behaviour, both of which have posed challenges to the afore-mentioned managers, as evidenced in Table 4.3 above, and in psychiatric trainees (Moloney et al, 1999:148).

According to Kickul and Posig (2001), emotional exhaustion can be a strong predictor of job satisfaction, absenteeism, commitment, and turnover intentions. Fifty one percent of MHCWs reported high levels of emotional exhaustion according to the MBI, which can account for the increased sick leave/absenteeism, decreased commitment to the task at hand, and verbalization of intent to leave and dissatisfaction with work that the managers have had challenges with. Moloney et al. (1999:147) caution that there are high rates of burnout in doctors in general, and in mental healthcare workers in particular. This, together with job dissatisfaction, high levels of stress, and other mental health problems may also lead to failure to complete psychiatric training.

Bailey (1985:40) explains that in the second stage of burnout caregivers are likely to experience decreased motivation and disappointment in the expectations about the job.
Furthermore, 52% of MHCWs reported high levels of depersonalization which can also account for their unwillingness to fulfil certain job obligations, anger and irritable behaviour, and impatience with MHCUs and fellow staff members. When stress is high and job satisfaction is low the risk for emotional exhaustion increases considerably (Visser et al., 2003:273). The study by Visser et al (2003:273) also showed a relation:

- between personal characteristics and stress and satisfaction;
- between job characteristics and stress and satisfaction; and
- between physicians’ perceptions of their working conditions and stress and satisfaction.

Physicians who perceived that work intruded on their private lives, and that the workload made one unable to work according to one’s standards complained of job stress. Job satisfaction depended on physicians feeling well managed, well resourced, and supported by their colleagues and the organization, as well as the promotion of personal growth and job security (Visser et al., 2003:273). These findings have important management implications and advocates a focused approach to stress and job satisfaction on an organizational level. Thomas et al. (2006:1162) also caution that the effect of occupational stress on doctors “not only has potential negative consequences for these recipients, but also represents a substantial potential cost to the public health sector in terms of impaired doctors’ performance, together with the need for retraining and additional recruitment to offset wastage”.

This study provides a profile of the stress and burnout levels in MHCWs in a KZN psychiatric hospital. The study identifies some of the variables important in contributing to stress and burnout in healthcare professionals, and compares the findings of the present study to that of research already conducted in the field of stress and burnout.

The response rate of 73.5% of MHCWs suggests that the study has representative validity in terms of current MHCWs in KZN. Inferential statistics was applied in testing the hypotheses posed in Chapter One, section 1.6 and the findings then discussed. The results of the study show that MHCWs do not experience significantly higher levels of stress than a normative group of CSOs in KZN, or significantly higher levels of burnout than a normative group of healthcare professionals. This does not imply, however, that MHCWs are not experiencing high levels of stress and burnout.

Results of interviews with managers confirm that MHCWs are indeed displaying signs of stress and burnout, and that these changes in attitudes and behaviours are potentially impacting on patient care, interactions with colleagues, and individual health. The implications of stress and burnout were discussed, and recommendations briefly outlined.

**Findings from the Primary Research**

With regards to the levels of stress in MHCWs, the findings identified role conflict and role ambiguity as causing high levels of stress in <6% of MHCWs. Moderate levels of stress were experienced in >50% of MHCWs in all six categories of the SDS, with role conflict and role ambiguity again being identified as the most significant stressors, followed by career development and responsibility for people. In the low stress category qualitative and quantitative work overload appeared significant for <50% of MHCWs. With regards to the level of burnout in MHCWs, the findings indicated that the present sample reported high levels of burnout in the emotional exhaustion and depersonalization subscales of the MBI. However, 89% of the sample also indicated feelings of high personal accomplishment.

An analysis of interviews with operational managers suggested that managers are experiencing challenges in dealing with stressed and burnt-out MHCWs. Operational managers in the wards have noted that their greatest challenges include MHCWs exhibiting irritability towards patients and other staff members, increased absenteeism, reluctance to perform certain duties, as well as decreased motivation to complete tasks. Managers have
also reported that there has been an increase in sick leave, and that it is a challenge to induce MHCWs to identify and acknowledge that they are stressed and burnt-out. This lack of understanding and acceptance of the prevalence of stress and burnout has also posed managerial challenges to the uptake and utilization of the hospital’s employee assistance programme. The conclusion is thus that the management is experiencing challenges in dealing with stressed and burnt-out employees.

- Findings from the literature review indicate that the salutogenic variables of hardiness, sense of coherence, locus of control, and learned resourcefulness can act as protective/mitigating factors in coping with stress and burnout (Oosthuizen and Lille, 2010). However, in Dhaniram’s (2003:279) study on stress and burnout in community service doctors in KwaZulu-Natal, no significant relationship was found between stress, burnout, and salutogenic variables.

- Empirical findings from interviews with members of the management team revealed that signs and symptoms of stress and burnout were recognizable in MHCWs leading to decreased productivity and increased absenteeism, amongst other things. The findings also uncovered managerial challenges in assisting staff in acknowledging that they are stressed and/or burnt-out, as well as utilization of the hospital’s employee assistance programme.

In order to validate the generalizations of this study, it is recommended that future studies on stress and burnout be conducted on MHCWs at a national level, as this study was limited to MHCWs in a single psychiatric hospital. Comparative studies would also be able to ascertain the differences in the levels of stress and burnout between the various psychiatric hospitals, as well as the underlying reasons for these differences. Undertaking longitudinal studies on the impact of stress reduction programmes in the future would give an indication of the effect of these programmes on individual and organizational health.

**Bibliography**


