

**THE INFLUENCE OF STRESSORS AND COPING STRATEGIES IN
HOSPICE WORKERS**

by

Nasreen Sardiwalla
B.A., B.A. Hons (Psychology)

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Supervisor: Dr. H. v.d. Berg

Co-Supervisor Prof. K. Esterhuyse

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I declare that the article hereby submitted by me for the Master's Degree in Clinical Psychology at the University of the Free State is my own independent work and has not previously been submitted by me at another university/faculty. I further cede copyright of the article in favour of the University of the Free State

Nasreen Sardiwalla (Miss)
Intern Clinical Psychologist
UFS

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ABSTRACT

The present study examines the importance of work-related stressors and coping strategies as factors contributing to burnout experienced by hospice workers. A cross-section survey design was used, with a sample of 78 hospice workers drawn from hospices in Bloemfontein (Free State) and Ladysmith (KZN). The *Life and Work Circumstances Questionnaire* (Van Zyl & Van der Walt, 1991), the *Maslach Burnout Inventory* (Maslach & Jackson, 1996), and the *Cope Scale* (Carver, Scheier & Weintraub, 1989) were administered. A hierarchical regression analysis was used to determine the relative contribution of different job-related stressors such as job insecurity, task characteristics, career matters and organisational functioning to burnout experienced by participants, and also to determine the effect of coping strategies, namely problem-focused, emotionally-focused and ineffective coping strategies on burnout. The results indicated that 43 % of the sample reported high levels of burnout, with 67% experiencing high levels of emotional exhaustion. The most important stressors were related to organisational functioning, stressors outside the work situation, task characteristics, and career matters. Problem-focused and ineffective coping strategies also played a significant role in burnout.

(Key words: Burnout, Work-related stressors, Stressors outside work situation, Coping strategies, Hospice workers, Job security, Organizational functioning, Emotional exhaustion, Problem-focused coping strategies, Emotionally-focused coping strategies, Ineffective coping strategies)

ABSTRAK

In hierdie ondersoek word die belangrikheid van stressors binne die werksplek asook hanteringstrategieë as faktore wat moontlik kan bydra tot die uitbrandingsindroom by hospitiem werkers bestudeer. 'n Dwarssnit-opname-ontwerp is gebruik, met 'n steekproef bestaande uit 78 hospitiem werkers afkomstig van Bloemfontein (Vrystaat) en Ladysmith (KZN). Die Werks- en * Lewenservaringe Vraelys (Van Zyl & Van der Walt, 1991), die Maslach uitbrandingsvraelys (Maslach & Jackson, 1996) en die COPE Skaal (Carver, Scheier & Weintraub, 1989) is toegepas. 'n Hiërargiese

regressie-ontleding is gebruik om die onderskeie bydraes van die verskillende stressors soos 'n gebrek aan werksekuriteit, taakkenmerke, loopbaanaangeleenthede en organisatoriese funksionering in die werkplek en die effek van ondoeltreffende hanteringstrategieë op uitbranding by hospitiem werkers te bepaal. Die rol van probleemgefokusde, emosioneelgefokusde en ondoeltreffende hanteringstrategieë in die ervaring van uitbranding is ook ondersoek. Die resultate het aangetoon dat 43% van die steekproef hoë vlakke van uitbranding aangemeld het en dat 67% hoë vlakke van emosionele uitputting gerapporteer het. Die belangrikste stressors het verband gehou met organisatoriese funksionering, stressors buite die werksituasie, taakkenmerke en loopbaanaangeleenthede. Probleemgefokusde en ondoeltreffende hanteringstrategieë het ook 'n beduidende rol in uitbranding gespeel.

(Sleutelwoorde: Uitbranding, Beroepsverwante stressors, Stressors buite die werksituasie, Hanteringstrategieë, Hospitiem werkers, Werksekuriteit, Organisasiefunksionering, Emosionele uitputting, Probleemgefokusde hanteringstrategieë, Emosioneelgefokusde hanteringstrategieë, Oneffektiewe hanteringstrategieë)

INTRODUCTION

In any job situation, stress is endemic. Stress can in some cases act as a driving force that motivates individuals to achieve their goals. According to Fletcher (1988, p. 3), however, stress at work has an effect on 'physical health, well-being, and life expectancy'. More recently, Weise et al. (2003) also found that chronic work-related stress results in a phenomenon known as burnout. According to James and Gilliland (2001, p. 612), 'being burned out means that the total psychic energy of the person has been consumed in trying to fuel the fires of existence'. Burnout is associated with work-related stress characterised by emotional fatigue, feelings of inefficiency, helplessness and loss of control (Maslach, 1982). This may result in a concept known as 'secondary traumatization', which Figley (2002) describes as the trauma experienced by the therapist or in this case, the caregiver, as a result of the transformation of the caregiver's inner experience because of his/her emotional and empathetic interaction with traumatised victims. This in turn leads to emotional exhaustion and 'compassion fatigue', a term used to describe the state of wanting to help someone, but the inability to do so because one has no energy to do so (Maslach).

The helping professions have always been associated with high levels of stress and burnout because of the emotional intensity of their relationships with patients. With the ever-increasing number of cancer patients and because of the rapid spread of the AIDS pandemic, there has been an increase in hospices and hospice workers striving to take care of and support the growing number of terminally ill patients.

Hospice caregivers and nurses have a very rewarding but also very challenging task. According to James and Gilliland (2001, p. 609):

The hospice worker works with patients who suffer immense physical and psychological pain, and this can wear down the optimism and motivation of any worker. When patients get worse instead of better, despite all the worker's skill and effort, burnout becomes a high probability for the caregiver.

Hospice workers are faced with many stressors. Schaufeli and Enzman (1998) make a distinction between two types of stressors people in helping professions may face, namely job-related stressors (e.g. work overload) and client-related stressors (e.g. confrontation with death and dying).

The nature of hospice work can be both rewarding and challenging. A study conducted by Booth (1995) found that many hospice workers regard their jobs in a positive light in the sense that they experience accomplishment, growth, and satisfaction. However, this does not remove the stressors these workers are exposed to. Hospice work consists of both job-related and client-related stressors in the sense that hospice workers have to interact with patients who have deteriorated physically and emotionally, and also have to endure the stress that goes with losing patients on a regular basis. Job-related stress in hospice workers relate to the fact that caregivers work under conditions where they experience a lack of security. This involves system-related stressors such as low pay, temporary positions, poor working conditions, and low employee status. All of these are characteristic of the fact that hospices are non-governmental organisations (Patel, 1998). This lack of occupational security is tantamount to work overload. Hospice workers also have to deal with quantitative overload (the emotional stress and fatigue that follow after working with too many patients). All these stressors contribute to the development of burnout.

CAUSES

The main function of the hospice caregiver is to devise ways of helping the terminally ill patient spend enough time with his/her family, to make it possible for the patient to deal with the phases of dying and to provide physical and emotional support to the patient and his/her family (Glass et al., 1992). In doing so, the volunteer faces many work-related stressors. Oktay (1992) found that hospice workers, because of their work with dying patients, are more susceptible to symptoms of burnout and have a very high turnover.

In palliative caregiving, burnout can easily befall volunteers who are faced with a multitude of stressors as a result of their wide job definitions. According to Glass et al. (1992, p. 717):

The services performed by volunteers include offers of respite to regular caregivers, errand running, meal preparation, recreational services, companionship, delivery, homemaking, transportation, in-patient services, clerical work, committee and conference participation, and public speaking .

With regard to the work-related stressors that hospice caregivers may face, four different types have been identified.

The first set of work-related stressors includes organisational stressors. Glass et al. (1992) note that these stressors include communication problems between the worker and higher authorities, problems with teamwork, role ambiguity, and administrative factors. In the same light, Hingley (1984) describes a concept called the 'Management Factor'. He explains that in the nursing professions this entails a "teamlessness" factor where nurses feel isolated, experience ineffective communication patterns with the people they work with and are involved in ineffective interpersonal relationships with superiors and colleagues. Hingley discovered that nursing managers are very reluctant to try out new technology, thus adding to the strain by working with outdated equipment on patients. Furthermore, they also seemed unaware of the fact that nurses need resources to channel their frustrations away from themselves, e.g. support groups. The above is very true of the hospice setting as well. When looking at organisational stressors in hospice work, employee assistant programs and participation in and commitment by employers and caregivers to these programs should also be considered in assessing the reasons why volunteers may be over-stressed (Ortlepp & Friedman, 2002). Furthermore, hospice caregivers have to sometimes expose themselves to harsh working environments. In an interview with a caregiver conducted by Galloway (1998), it has been reported that palliative caregivers sometimes have to visit patients at home. These homes are mainly shacks and dilapidated city flats. The caregiver has to render his/her services in these

locations without privacy and amidst overcrowding. These difficulties make the caregivers' jobs more anxiety-provoking, thus increasing stress.

A second work-related stressor involves task characteristics. These could be divided into core characteristics and other characteristics. Once again, looking at the nature of hospice work, caregivers have to face taking care of dying patients and watching them die. This could be termed the core task characteristic of hospice caregivers. Owing to the nature of these patients' illnesses, namely cancer and AIDS, they are usually deteriorating both physically and psychologically. They lose a considerable amount of weight, their appearance worsens, and they are unable to control their bodily functions. Caregivers have to attend to physical symptoms such as vomiting, diarrhoea, loss of blood and so forth. In addition, patients become frustrated with their condition and are affected psychologically by their helplessness. This results in patients sometimes becoming angry, depressed, and very difficult for the hospice worker to cope with. Inevitably, the caregiver also has to face the death of the patient. Boyle and Carter (1998) suggest that individuals working with death develop an anxiety that could affect their positive attitudes towards their patients, resulting in poor palliative care. In addition, hospice volunteers themselves become psychologically affected by monitoring the dying process and then witnessing their patients finally dying. This vulnerability to stress, according to Barnes (2001), is further exacerbated when caregivers find themselves working with children, and when they experience the loss of an innocent child. The anxiety described above is internalised because caregivers are confronted with their own vulnerability to death. This in turn leads them to perform their services in a less effective manner:

In an attempt to overcome emotional challenge, nurses try to hide their feelings. However, this action renders nurses psychologically vulnerable, and increases the likelihood of administering less humane care to dying patients (Wakefield, 2000, p.248).

The other task characteristics involve those factors that have been described under the definition of hospice work earlier. In this regard, the most pertinent problem according to

Glass et al. (1992) is that hospice workers experience role ambiguity in their environment. For them, role ambiguity plays a major role in increasing stress. This has come about because 'these individuals derive pleasure from attempting to be all things to people' (p. 718). In the hospice environment, it is therefore important for superiors to be clear about the role volunteers are expected to play. In practice, this is done only to a certain extent, thus contributing to feelings of stress. The same study above also found that the hospice environment creates a feeling of helplessness in volunteers, as they have to deal with feelings of guilt about death, manage patient-family conflicts, and cope with the grief process after losing a patient. All these factors, in addition to the work-stressors defined previously, result in increased stress.

Social factors make up a third set of work-related stressors. Hospices are the work environment of multi-disciplinary teams, consisting of doctors, professional nurses, psychologists, physiotherapists, clergymen, and social workers. The hospice caregiver, who is also part of this team, is normally considered to be the least educated of all as he/she undergoes only a one-year training program. The caregiver accordingly finds himself/herself at the bottom of the hierarchical ladder, which may lead to problems with teamwork. Khanyile (1992) found that autocratic seniors do not necessarily pay attention to subordinates, and this often results in the victimisation of nurses, something that also applies to hospice volunteers. This creates a power struggle that further increases stress.

For all the traumatic and tedious work volunteers do, they receive very little remuneration and fringe benefits, if any at all. Khanyile (1992) and Chiriboga (1983) found that as a result of staff shortages, long working hours and poor salaries, individuals in the nursing profession, like hospice volunteers, are struggling to cope with their jobs. Another work-related stressor centres on the fact that hospice volunteers in most cases remain volunteers. Chances for promotion are very slim indeed. Hingley (1986) mentions that even if hospice workers receive promotions, they feel it is only because of their ability to empathise with patients, not because of their work-related skills. The fact that promotions are so unlikely means that salaries show little improvement over time, which forces most volunteers to find other part-time jobs to subsidise their expenses. Juggling

two jobs, in addition to their personal lives, can only increase stress. The hospice worker also has to deal with quantitative overload as a result of the number of patients that have to be shared among the few caregivers that are employed by the hospice.

With regard to environmental stressors, one has to look at the broader picture. This means that one has to consider the socio-economic environment most hospice caregivers come from in conjunction with their job skills. Most hospice workers have reported coming from an average socio-economic background. The fact that they receive little or no salary, scarcely allows them to make 'ends meet'. With little or no remuneration, hospice workers are more susceptible to economic and financial problems, and that can contribute to higher levels of stress.

Depending on the gender, age, race, and experience of the hospice caregiver, as well as the social support he/she receives, stress levels may be higher in some individuals. Most hospice workers today are female, and according to Ross (1995), females experience gender-related work stress as a consequence of multiple roles, workplace discrimination, and physiological factors. Furthermore, it is instructive to look at the case of working mothers. They suffer great strain due to inter-role conflict, which causes existential problems (Diraz et al., 2003) – an observation that can surely be applied to hospice volunteers.

Experience and level of education may also play a role in determining an individual's response to stress. An individual who is less educated may be less skilled in developing effective coping strategies and will therefore experience higher levels of stress compared to a more educated individual. A person's life history must also be taken into account. Barnes (2001, p. 251) states: 'The continual death of patients may reinforce feelings of inadequacy and may remind staff of their own unresolved past losses, leading to grief reactions and depression'.

Chronic exposure to these stressors may result in burnout if they are not adequately dealt with. A hospice worker experiencing burnout may become aware of symptoms of

depression, isolation, emotional exhaustion, and discouragement (McCann & Pearlman, 1990). If this happens, not only is the hospice volunteer affected psychologically, but the grieving process of the terminal patient may also be affected. This is so because a hospice caregiver who cannot function optimally may not be able to attend to the physical and emotional needs of the patient with ease and enthusiasm. This will affect how the caregiver cares for and reacts to the patient – something of which the patient may become aware, thus affecting his/her grieving process. Levert et al. (2000) therefore found that workers who burned themselves out, encounter problems when it comes to decision-making and finding creative ways to deal with patients. Experiencing burnout may also affect relationships with co-workers and one's own family.

Burnout is also a result of the secondary traumatization discussed earlier. Ortlepp and Friedman (2001, p. 38) state that the following components play a predisposing role in the caregiver experiencing secondary traumatization:

the caregiver's empathy, the caregiver's behaviour towards the trauma victim, the ability of the caregiver to disengage from the process, and the caregiver's sense of satisfaction derived from helping .

The hospice volunteer who does not interact with patients in a skilful and effective manner, may find that his/her job, personal life and emotions are affected; such a volunteer could run the risk of experiencing burnout.

Heyns et al. (2003) found that without proper intervention, burnout can have severe emotional and somatic effects. Somatic effects include headaches, nausea, dizziness, lack of sleep, skin problems, gastrointestinal problems, and so forth. Emotionally, the individual could become over-sensitive, and irritable and angry, and avoid social and personal obligations, and withdraw from family and friends. This is not a good recipe for an individual who has to take care of other people.

Yang and Meilpatrick (2001) feel that hospice work need not necessarily lead to such negative experiences. They believe that if the correct attitudes are adopted and if the

correct coping strategies are utilised by caregivers, hospice work and caring for the dying should actually be seen as an opportunity for inner growth. Imara (1983, p. 252) has a similar approach to death:

I see the bereavement process as a journey, a passage, a rite encoded in our biological and psychological make-up that moves us from the traumatic ending of one life stage into another .

It is clear that working voluntarily in a hospice, increases the likelihood of suffering from burnout. However, it can be avoided by changing attitudes and adopting new coping strategies. It is important, therefore, to discuss what coping strategies are utilised by caregivers and to gauge if these are effective or not.

COPING STRATEGIES

Coping strategies can be divided into two categories, namely problem-focused coping strategies and emotionally-focused coping strategies (Carver et al., 1989). In view of the nature of the work carried out by caregivers, coping strategies fitting into these two categories can be distinguished. Firstly, active coping strategies need to be employed to enable the caregiver to complete the task-related aspects of the job. Secondly, emotional coping strategies are important to help the caregiver deal with the terminally ill patient and facing the death of such a patient. Pines (1993, p. 386) states: 'Coping with burnout is most effective when done simultaneously on the level of the individual, the work group and the organisation'. Unfortunately, hospice workers run the risk of harming themselves, the organisation, and the patients they serve because of their lack of knowledge about coping strategies and their limited access to resources.

As will be seen, the hospice environment requires proactive coping strategies. According to Aspinwall and Taylor (1997, p. 417), 'proactive coping consists of efforts undertaken in advance of a potentially stressful event to prevent it or to modify its form before it occurs'. Strümpfer (2003) suggests that proactive coping can lead to a reduction in the occurrence of burnout.

According to Hector and Whitefield (1982), the individual should not be burdened with finding effective coping strategies, but should acquire these through well-planned training programs. These programs should include the following informational coping strategies. Firstly, the hospice worker should be furnished with all relevant knowledge about the patient so that he/she will not be startled by a negative experience. Secondly, volunteers must be taught about the concept of euthanasia, (in the case of the hospice worker, this refers to more passive forms of euthanasia rather than active or deliberate euthanasia) so that at no time they blame themselves for attending to a patient's wish to die. Thirdly, effective communication between the volunteer and the multidisciplinary hospice team should be emphasised. Fourthly, the volunteer should pay attention to information about the grieving process that is communicated to the dying patient; he/she should heed it. Relational coping strategies should also be offered to workers. This means, for example, that support should be offered to volunteers when deaths take place on special days like Christmas, as this may cause inner turmoil in the worker. In addition, if a volunteer witnesses a death for the first time, management, and other staff should handle this empathetically and appropriately.

Furthermore, hospice caregivers should receive continued training. Gillespie (1986) reports that there is a need for refresher courses, exercise, and meditation in professions such as the one practised by hospice workers. It is also very important that the hospice worker be trained in how to deal with the traumatization mentioned under task characteristics. On discussing a proposed curriculum for this, Sexton (1999, p. 398) states, 'a key component of this curriculum is training in the identification and working through of intense counter-transference experiences'.

Providing adequate resources to hospice caregivers is also very important in the hospice setting. Better working conditions could also alleviate stress and burnout symptoms in the hospice environment. McNamara et al. (1995, p. 230) notes that 'many of the difficulties and stresses that hospice nurses experience in their care of those who are dying, relates to the structural conditions of their work'. Thus, a change in the structure

could possibly result in more effective coping. This could include more volunteers to deal with patient overload, better communication between team members, and better equipment with which to work.

In an article by Murphy (1988) that discusses reduction and prevention of stress in the workplace, many aspects are outlined that most hospices neglect. These include employee assistant programs, stress management training and stressor reduction interventions such as participation in decision-making, increased job autonomy, and work-schedule autonomy. If one looks at how hospices are structured and considers what has already been said about the job description of hospice volunteers, there is clearly room for improvement.

Hospice workers should also not be afraid to use their religion as a crutch to lean on. Yang and Meilpatrick (2001, p. 440) state that 'research supports the idea that those with greater religious beliefs experience less death anxiety, death depression and death distress and reveal positive attitudes towards death'. This can be considered an important emotionally-focused coping strategy to utilise.

Lastly, and most importantly, hospice workers should utilise effective channels for obtaining counselling, support, and understanding to deal with the symptoms of stress and burnout. Caregivers should avoid isolation, should maintain their identity outside their job, must learn to monitor their own well-being and must be able to identify the signs of burnout (Kasuya et al., 2000).

Wakefield (2000) suggests that one of the coping strategies adopted by people working with the terminally ill, is the masking of depression. This means that in an attempt to do their jobs, they hide their true feelings. According to McNeely (1996, p. 11), this is not effective, because as a result of this masked depression,

Nurses feel that they have let their patients down, and although they believe that they, as individuals have done their best, they feel guilt, anxiety, and a loss of job satisfaction.

Wakefield (2000) also found that other ineffective coping strategies include forming support groups (which consist of nurses who have all burned themselves out), and avoidance of feelings by keeping busy, which can be seen as behavioural disengagement. Support groups formed by the nurses themselves, serve only to give vent to their feelings, another emotionally-focused strategy that can sometimes help, but only if supplemented with proactive coping strategies to find solutions to the problems being aired.

In addition to the above, caregivers believe that they cannot or should not receive counselling – they adopt the idea that ‘the caregiver cannot be counselled’. This leads to more ineffective coping strategies that involve poor nutrition, the taking of medication, and isolation from family and loved ones (Kasuya et al., 2000).

Furthermore, hospice caregivers tend to distort the way they think, as they are apt to generalise what happens at work to all other aspects of their lives. This leaves them with very little time to grieve and to relax (Barnes, 2001).

The fact that caregivers feel they receive inadequate support and understanding implies that there is a (missing) resource that should be available to such individuals to reduce burnout (Erasmus et al., 1998).

Attention will now centre on the research method used in this investigation.

RESEARCH METHOD

The most important aspects of the research method are the formulation and utilisation of the variables in this study, the instruments used to measure these variables, the sample population, the data gathering process, and the statistical analysis and results thereof.

The research intends to determine how the measurement of stress experienced by hospice workers in and outside the working environment, as well as the coping strategies adopted

by them (including a few biographical variables), can be utilised to predict the extent to which they suffer from career burnout. In this investigation, career burnout is the criterion variable, while stress and coping strategies, together with the biographical variables, represent the predictor variables. This approach means that a non-experimental prospective design (Huysamen, 1994) will be used in the study.

Before discussing the measuring instruments and data collection process in some detail, attention will be focused on the variables (criterion and predictor variables).

CRITERION AND PREDICTOR VARIABLES

The *Maslach Burnout Inventory* (Maslach & Jackson, 1996) was used to get an indication of the level of burnout experienced by hospice workers. This instrument provides measurements for three different aspects of the burnout syndrome, namely emotional exhaustion, depersonalisation, and a lack of personal accomplishment. The authors of this instrument clearly indicated in the test manual that the scores obtained on the three subscales of the test should be considered separate scores, and not a single score (i.e. by adding up the responses on all items). Consequently, three criterion scores (one for each of the separate subscales) will be used in this study.

The above-mentioned questionnaire is discussed in greater depth in the paragraph referring to measuring instruments.

Various predictor variables were used in this investigation. Firstly, stress factors referring to work-related and non-work-related stressors were taken into account. A score was obtained for each respondent on seven different stressor scales, namely stressors outside the work situation and stressors within the work situation that include stressors relating to organisational functioning, task characteristics, physical working conditions, career matters, social matters and remuneration and fringe benefits. Secondly, information pertaining to the coping strategies of hospice workers was obtained. In this regard, three subscales (problem-focused, emotionally-focused and ineffective coping strategies) were

of importance. Some biographical variables, *inter alia* the age and marital status of hospice workers, also served as predictor variables. An explanation accounting for the use of only these two biographical variables will be given later.

MEASURING INSTRUMENTS

A self-developed biographical questionnaire was used to obtain the above information for descriptive purposes and to determine the demographic variables.

Levels of burnout were measured using the *Maslach Burnout Inventory (MBI)* (Maslach & Jackson, 1996). The instrument consists of 22 items with three subscales, namely emotional exhaustion, depersonalisation, and lack of personal accomplishment. Reliability is satisfactory with alpha coefficients ranging from 0,70 to 0,90. Construct and content validity is also acceptable (Schaufeli & Enzman, 1998). Reliability & validity has also proven acceptable in all South African studies, Venter (2000) and Wissing (1996). A total score is obtained by summing the items on each scale. A high degree of burnout is reflected in high scores on the emotional exhaustion and depersonalisation subscales, and in low scores on the personal accomplishment scale.

Both work-related and non-work-related stressors were measured using the *Experience of Work and Life Circumstances Questionnaire (WLQ)* developed by Van Zyl and Van der Walt (1991). This instrument consists of 7 stressor scales, namely stressors outside the work situation and stressors within the work situation that include organisational functioning, task characteristics, physical working conditions, career matters, social matters and remunerations and fringe benefits. Level of stress is also measured by the *WLQ* but this scale was not utilised in this study. Reliability of this instrument is good since it has an alpha coefficient of 0,83. The test-retest reliability coefficient reveals the following: stressors outside the work situation - 0,80; organisational functioning - 0,72; task characteristics - 0,65; physical working conditions and job equipment - 0,62; career matters - 0,72; social matters - 0,69 and remuneration and fringe benefits - 0,65. The above indicates that the reliability of this instrument is satisfactory. It also possesses

acceptable content and construct validity. Since the instrument was developed in South Africa, it has been standardised for use with South African populations of workers with a minimum of a grade 11 high school qualification. A total score was obtained by summing the items on each scale. High scores on the stressors outside the work situation scales reflect high to very high levels of stress. Low scores on the work situation subscales of the questionnaire imply problematic areas in those subdivisions, thus reflecting high levels of stress.

The *Cope Scale* developed by Carver, Scheier and Weintraub (1989) was used to measure coping strategies used by participants. This 53-item instrument measures 14 different coping strategies divided into 3 groups, namely active problem-focused coping strategies, passive emotionally-focused strategies and less effective coping strategies. Reliability of the instrument is high as the alpha coefficient ranges from 0,62 to 0,92. Construct validity and content validity is also acceptable (Carver, Scheier and Weintraub, 1989). Reliability and validity has also proven acceptable in all South African studies, Venter (2000) and Wissing (1996). Here again, a total score was obtained by summing the scores on each scale. High scores on problem-focused and emotionally-focused coping strategies, and a low score on ineffective coping strategies, are indicative of an individual's ability to cope more effectively with stressors.

The internal consistency of the measuring instruments was investigated by computing Cronbach's α -coefficient via the SPSS computer programme (SPSS Incorporated, 1983). These coefficients are reported in Table 1.

Table 1. : Cronbach's α -coefficients for the scales of the measuring instruments

| Construct | Scale | a-coefficients |
|-----------|------------------------------------|----------------|
| Burnout | Emotional Exhaustion | 0,795 |
| | Depersonalisation | 0,672 |
| | Personal accomplishment | 0,579 |
| Stressors | Outside work situation | 0,819 |
| | Within: Organisational functioning | 0,655 |

| Construct | Scale | a-coefficients |
|-------------------|--------------------------------|----------------|
| | Task characteristics | 0,728 |
| | Physical working conditions | 0,807 |
| | Career matters | 0,696 |
| | Social matters | 0,711 |
| | Remuneration & Fringe benefits | 0,682 |
| Coping strategies | Problem-focused | 0,830 |
| | Emotionally-focused | 0,768 |
| | Ineffective | 0,690 |

The computed coefficients in Table 1 indicate that the scales of the measuring instruments provide acceptable internally consistent measures.

The biographical variables will be described in the following paragraph:

RESEARCH PARTICIPANTS

The sample was drawn from available hospice workers in Bloemfontein (Free State) and Ladysmith (KZN). Eighty-two hospice workers completed the questionnaire and four of the questionnaires returned were incomplete. Information regarding some biographical variables was obtained from the 78 respondents. Frequencies and percentages were computed for the biographical information measured on a nominal scale. This information is presented in Table 2. The SAS computer programme (SAS Institute, 1985) was used for this purpose.

Table 2. : Frequency distribution of the sample according to some biographical variables

| Biographical variable | N | % |
|-----------------------|----|------|
| Gender: | | |
| Male | 6 | 7,7 |
| Female | 72 | 92,3 |
| Race: | | |
| White | 2 | 2,5 |
| Black | 68 | 87,2 |

| Biographical variable | N | % |
|------------------------------------|----------|----------|
| Coloured | 7 | 9,0 |
| Asian | 1 | 1,3 |
| Marital status: | | |
| Single | 51 | 65,4 |
| Married | 21 | 26,9 |
| Divorced | 6 | 7,7 |
| Widowed | 0 | 0,0 |
| Current salary: | | |
| Less than R1000 per month | 33 | 45,8 |
| R1001 – R2000 per month | 25 | 34,7 |
| R2001 – R4000 per month | 8 | 11,1 |
| R4001 – R6000 per month | 3 | 4,2 |
| More than R6000 per month | 3 | 4,2 |
| Highest level of education: | | |
| Less than grade 10 | 4 | 5,3 |
| Grade 10 | 5 | 6,6 |
| Grade 11 | 20 | 26,3 |
| Grade 12 | 38 | 50,0 |
| Tertiary | 9 | 11,8 |
| Support system at work: | | |
| Yes | 33 | 52,4 |
| No | 30 | 47,6 |
| Missing Values | 15 | 19,2 |

Table 2 indicates that more than 90% of the group consisted of females. Five of the six respondents who identified themselves as male belong to the black population group. A large majority (87,2%) of all the respondents (the group as a whole) indicated that they belong to the black population group. It is also clear that the majority of the respondents (65,4%) are unattached. The support system variable could not be used in the subsequent analyses, as there were too many missing values with regard to this variable that would render the result uneven. As a result of the uneven distribution of frequencies in some variable categories, it was decided to use marital status after the unattached individuals (single and divorced) were grouped together.

In order to describe the research group in terms of the other biographical variables, which were measured on the interval scale, the applicable means/averages and standard deviations were calculated via the SAS programme, and these appear in Table 3.

Table 3. : Means and standard deviations for the research group as a whole with regard to a few other biographical variables

| Variable | N | X | S |
|----------------------------------------|----------|----------|----------|
| Age | 76 | 33,48 | 8,48 |
| Number of years working at the hospice | 58 | 3,72 | 2,63 |
| Numbers of hours per week | 53 | 27,68 | 18,39 |
| Number of leisure hours per week | 39 | 16,77 | 17,09 |
| Number of children | 73 | 1,36 | 1,05 |
| Number of patients per week | 54 | 16,43 | 16,17 |

The average age of the caregivers was approximately 33½ years, with a standard deviation of approximately 8½ years. The youngest caregiver was 19 years old, while the oldest one was 61 years of age. The workers had been working at the hospice for an average period of about 3,72 years. The responses on the questionnaires indicated that the shortest period during which a caregiver worked with patients was one year, while the longest such period was 13 years. On average, the respondents worked about 28 hours per week at the hospice. The standard deviation indicates that scores are widely distributed around this mean. The shortest working hours per week for an individual is 3 hours, while the longest is 90 hours. With regard to the last variable (number of patients per week), it is clear that on average, a caregiver works with 16 patients per week. We also find a large distribution of patients here. It varies from one patient per week to 60 patients per week. It should be clear that a reasonably diverse group is constituted in terms of the number of hours that caregivers work and the number of patients who are cared for.

Table 3 demonstrates that most of the variables had questions left unanswered by some respondents. It would have been risky to use these variables in the subsequent analyses, as this would have made the group much smaller. Consequently, it was decided to use only the respondents' age, which was provided by 76 individuals, for further analysis.

COLLECTION OF DATA

Permission was obtained from head co-ordinators of hospices in Bloemfontein (Free State) and Ladysmith (KZN) to collect data. These hospices were selected, as access to participants in both these regions was convenient. Therefore, availability sampling was used. Given that most hospice workers could speak English, it was decided at the outset to retain English as the language utilised in the questionnaires. However, owing to the educational levels of most participants, they experienced problems in answering the questions posed in sophisticated English.

Questionnaires were distributed to hospice caregivers with instructions on how to complete the questionnaires. The researcher was present at each assessment venue so that assistance and instruction could be given to participants whenever necessary.

RESEARCH QUESTION

The research question of this study focuses on how the nature of the stressors hospice workers face in and outside their working environment affect their levels of burnout, and whether the manner in which hospice workers cope with these stressors plays a role in this regard too.

STATISTICAL PROCEDURES

Descriptive statistics (means and standard deviations) of all the variables measured on the interval scale were calculated and indicated.

The levels of career burnout with regard to emotional exhaustion, depersonalisation and personal accomplishment of hospice workers were calculated with reference to this study's research question (see paragraph on 'Research Question'), and these three variables were used as criteria variables. Since there were three different criteria, the analyses were repeated for each criterion.

A hierarchical regression analysis was performed to determine the extent to which the variance in emotional exhaustion, depersonalisation, and personal accomplishment can be explained by the stressors, coping strategies and biographical variables (independent variables). The one biographical variable (marital status) measured on the nominal scale was divided into two categories, namely unattached (single and divorced) and married, for the purposes of hierarchical regression analysis. In order to utilise the biographical variable in the regression analysis, it was recoded to a dummy variable. The biographical variable has only two categories, and was consequently coded as -1 and 1.

The work method entailed, firstly, the determination of the total variance that is explained by the predictor variables collectively (complete model) with regard to each of the three criteria. Subsequently, one of the predictor variables was omitted every time in order to determine that particular variable's contribution to the explanation of the variance. Finally, all the variables belonging to a particular set of predictors (in the case of more than one predictor of a specific type – stressors are a case in point) were omitted to determine their collective contribution to the variance in emotional exhaustion, depersonalisation, and personal accomplishment. The percentage variance that is explained by a specific set of variables is indicated by R^2 (squared multiple correlation coefficient).

In order to determine the statistical significance of a specific variable or set of variables' contribution to the R^2 value, the hierarchical F -test was used. This test may be explained as follows:

$$F = \frac{(R^2_{y,1\dots k_1} - R^2_{y,1\dots k_2}) / (k_1 - k_2)}{(1 - R^2_{y,1\dots k_1}) / (N - k_1 - 1)}$$

where:

$R^2_{y,1\dots k_1}$ = Squared multiple correlation coefficient for the larger number of independent variables

$R^2_{y.1\dots k_2}$ = Squared multiple correlation coefficient for the smaller number of independent variables

k_1 = Larger number of independent variables

k_2 = Smaller number of independent variables

N = Total number of cases

(Van der Walt, 1980)

When the significance of an increase in R^2 is investigated, it is also necessary to calculate the effect size of the contribution that a particular predictor(s) make(s). The effect size gives an indication of the contribution to R^2 in terms of the proportion unexplained variance of the complete model. According to Van der Westhuizen, Monteith and Steyn (1989), the effect size of the individual contributions can be calculated in terms of f^2 by means of the following formula:

$$f^2 = \frac{R^2 - R^2_1}{1 - R^2}$$

where:

R^2 = proportion variance explained by the complete model

R^2_1 = proportion variance explained by the smaller number of independent variables

The guideline values that may be used, according to Cohen (1977), are the following:

$f^2 = 0,01$: small effect

$f^2 = 0,15$: medium effect

$f^2 = 0,35$: large effect

These effect sizes provide information on the practical importance of the connections/relationships that may be found to exist between variables.

In addition to the hierarchical regression analyses, the intercorrelations between the predictors mutually, as well as the intercorrelations between the predictors and the criterion variable, was indicated and briefly discussed.

RESULTS

The results obtained from the research group were analysed and discussed with reference to the statistical procedures explained above.

The descriptive statistics (means, standard deviations and correlations) of all the relevant variables for the research group as a whole will now be discussed briefly.

DESCRIPTIVE STATISTICS

The descriptive statistics (means and standard deviations) of the criteria and predictor variables for the research group as a whole are shown in Table 4. (Since similar information pertaining to the biographical variables already appears in Table 3, it will not be repeated here.)

Table 4. : Means and standard deviations for the research group as a whole

| Variable | N | X | S |
|-------------------------------------|----------|----------|----------|
| Criterion variables: | | | |
| Emotional exhaustion | 75 | 23,65 | 11,46 |
| Depersonalisation | 78 | 6,63 | 5,97 |
| Personal accomplishment | 75 | 31,85 | 8,63 |
| Predictor variables: | | | |
| Stressors: Outside work situation | 78 | 42,76 | 10,25 |
| Stressors within work situation: | | | |
| Organisational functioning | 77 | 17,03 | 5,78 |
| Task characteristics | 77 | 39,60 | 9,04 |
| Physical working conditions | 77 | 18,31 | 7,26 |
| Career matters | 75 | 20,88 | 6,51 |
| Social matters | 78 | 21,11 | 6,14 |
| Remuneration | 78 | 16,72 | 8,10 |
| Coping strategies: Problem- focused | 77 | 57,91 | 9,96 |
| Emotionally- focused | 78 | 60,40 | 8,84 |
| Ineffective | 77 | 31,88 | 6,24 |

With regard to the mean scores on all the scales and subscales, the following was found in comparison to the normative groups used in the questionnaires. In terms of the stress factors on the *WLQ*, hospice caregivers (in comparison to the normative group) scored very high on stressors outside the work environment, which is indicative of very high stress levels (refer to the guideline values in Appendix 1). In the case of stressors within the work environment, lower scores reflect higher levels of stress because it means the individual's needs and expectations regarding that specific dimension (e.g. remuneration or task characteristics) have not been satisfied. In addition, the caregivers group's scores on the following subscales fit into the category *high stress* that has been described by Van Zyl and Van der Walt (1991): task characteristics, physical working conditions and career matters. Organisational functioning and social matters were found to be normal.

In terms of burnout, a study done on Alzheimer patient caregivers by Venter (2000) indicated the following means with regard to the three burnout components:

| Maslach | N | X | S |
|-------------------------|-----|-------|-------|
| Emotional exhaustion | 226 | 14,26 | 10,26 |
| Depersonalisation | 226 | 4,50 | 5,55 |
| Personal accomplishment | 226 | 36,25 | 8,22 |

It is clear that the present research group obtained higher average scores on emotional exhaustion and depersonalisation, but they also reported lower levels of personal accomplishment.

In terms of the *Cope Scale*, normative scores could not be used to compare results as the total scores of all the problem-focused coping scales, all the emotionally-focused scales and all the ineffective coping scales were added in this study. The highest possible score that can be obtained on both problem-focused and emotionally-focused scales is 80, while the highest possible score on the ineffective coping strategies scale is 52. Higher scores on problem-focused and emotionally-focused strategies indicate that the individual

makes frequent use of a variety of strategies, and this is also true for ineffective coping strategies.

In view of the fact that career burnout represents the criterion of the study, it was decided to calculate the levels of burnout (on the three subscales) experienced by the hospice workers as well. With this purpose in mind, the research group's scores were divided into three categories, namely low, moderate and high, according to the guidelines provided in the *MBI* manual (refer to Appendix 2.). The guidelines according to which these indexes (low, moderate and high) can be determined are applied to various career groups in the manual. It was decided to work with the career group mental health workers' indexes, as this group was most similar to the research group. The percentage of hospice workers who suffer from low, moderate and high levels of burnout with regard to the three components (emotional exhaustion, depersonalisation and personal accomplishment) respectively, are reported in Table 5.

Table 5. : Percentages of hospice workers who suffer from various levels of burnout according to the three components of the *MBI*.

| | Low | Moderate | High |
|------------------------------|------------|-----------------|-------------|
| Emotional exhaustion (ee) | 18,7% (14) | 14,7% (11) | 66,6% (50) |
| Depersonalisation (dp) | 43,6% (34) | 21,8% (17) | 34,6% (27) |
| Personal accomplishment (pa) | 42,7% (32) | 25,3% (19) | 32,0% (24) |

ee: low \leq 13; moderate 14-20; high \geq 21

dp: low \leq 4; moderate 5-7; high \geq 8

pa: low \geq 34; moderate 33-29; high \leq 28

The results in Table 5 indicate that about two thirds (66,6%) of the hospice workers exhibit high levels of emotional exhaustion, while a third (34,6%) display high levels of depersonalisation. About 43% of them show low levels of personal accomplishment.

Secondly, correlations between the predictor variables and the three criteria (emotional exhaustion, depersonalisation and personal accomplishment) were investigated. For this

purpose, Pearson product moment correlation coefficients were calculated. This was done for the group as a whole, and the results appear in Table 6.

Table 6: Intercorrelations for the group as a whole (N=78)

| Predictor variable | Emotional exhaustion | Depersonalisation | Personal competence |
|-----------------------------|----------------------|-------------------|---------------------|
| Stressors: Outside | 0,25* | 0,19 | -0,22 |
| Organisational functioning | -0,11 | -0,05 | 0,09 |
| Task characteristics | -0,11 | -0,11 | 0,21 |
| Physical working conditions | -0,30** | -0,17 | 0,02 |
| Career matters | -0,29* | -0,15 | 0,14 |
| Social matters | -0,18 | -0,16 | 0,17 |
| Remuneration | -0,02 | 0,02 | -0,12 |
| Problem-focused | 0,27* | 0,28* | 0,32* |
| Emotionally-focused | 0,21 | 0,10 | 0,15 |
| Ineffective | 0,38** | 0,25* | 0,07 |
| Age | -0,28* | -0,12 | 0,05 |
| Marital status | -0,11 | -0,04 | -0,19 |

** p <= 0,01

*p <= 0,05

Table 6 indicates the following:

a) With regard to emotional exhaustion, the stressors outside the workplace correlate significantly on the 5% level. This coefficient is positive, which shows that hospice workers who score high on the stressors outside the workplace, also tend to score high on the emotional exhaustion scale. Significant positive correlations were also found between problem-focused and ineffective coping strategies, and emotional exhaustion. Hospice workers who obtained high scores on these coping scales also tended to obtain high emotional exhaustion scores. It is also noteworthy that significant negative correlations were found between emotional exhaustion and physical working conditions, career matters and age. This indicates that workers who are more dissatisfied with their physical work environment and career matters experience higher levels of burnout. High scores are indicative of a greater satisfaction of needs related to career matters and

physical working conditions. In addition, the younger the person, the less emotional exhaustion is experienced.

b) Significant positive correlations were also found between problem-focused and ineffective coping strategies, and depersonalisation. Hospice workers who obtained high scores on these coping scales also tended to obtain high depersonalisation scores. None of the other predictor variables correlated significantly with depersonalisation.

c) A significant positive correlation was also found between a problem-focused coping strategy and personal accomplishment. In view of the fact that a low score on personal accomplishment indicates a high level of burnout, the results indicate that hospice workers who experience a low level of personal accomplishment tend to make use of problem-focused coping strategies. None of the other predictor variables correlated significantly with personal accomplishment.

At this stage, the correlation matrix in Table 6 already suggests that the problem-focused coping strategies in particular contribute significantly to the variance in career burnout experienced by hospice workers. In order to investigate this matter further, the hierarchical regression analyses will now be presented and the most important conclusions discussed.

RESULTS OF THE HIERARCHICAL REGRESSION ANALYSES

Hierarchical regression analyses were performed using the SAS computer programme (SAS Institute, 1985) in order to investigate the contributions of the various predictor variables to the variance in career burnout experienced by hospice workers. Information regarding the levels of career burnout experienced by workers was obtained by collecting measurements of their emotional exhaustion, depersonalisation, and personal accomplishment via the *MBI*.

The percentage variance of the criterion that is explained by each of the predictor variables is indicated by R^2 . In order to determine the specific contribution made by each predictor to a particular criterion's variance, the R^2 value was calculated with, and then without, the particular predictor. The significance of the difference between the R^2 values was calculated by means of the hierarchical F test, while the effect sizes (f^2) was also calculated and indicated. The results of these analyses, which have a bearing on emotional exhaustion, will first be discussed, and then the process will be repeated with depersonalisation and personal accomplishment. The results for emotional exhaustion appear in Table 7.

(Please take note that not only the particular predictor's contribution was determined, but also that of the set of variables – there are always three sets. The first set is stressors within and outside the workplace; the second comprises the coping strategies; and the third consists of all the biographical variables.)

Table 7. : Contributions of the various variables to R^2 with regard to emotional exhaustion

| Variables in analysis | R^2 | Contribution to R^2 : complete minus diminished model | F | f^2 |
|------------------------------------------------|--------|---------------------------------------------------------|----------|-------|
| 1. [biogr]+[coping]+[stressors] | 0,3340 | 1-9=0,1293 | 2,524* | 0,19 |
| 2. [biogr]+[coping]+outside work | 0,3181 | 2-9=0,1134 | 11,813** | 0,17 |
| 3. [biogr]+[coping]+organisational functioning | 0,3321 | 3-9=0,1274 | 13,553** | 0,19 |
| 4. [biogr]+[coping]+task characteristics | 0,3192 | 4-9=0,1145 | 11,927** | 0,17 |
| 5. [biogr]+[coping]+physical conditions | 0,2958 | 5-9=0,0911 | 9,202** | 0,13 |
| 6. [biogr]+[coping]+career matters | 0,3129 | 6-9=0,1082 | 11,155** | 0,16 |
| 7. [biogr]+[coping]+social matters | 0,3288 | 7-9=0,1241 | 13,132** | 0,18 |
| 8. [biogr]+[coping]+remuneration | 0,3264 | 8-9=0,1217 | 12,838** | 0,18 |
| 9. [biogr]+[coping] | 0,2047 | | | |
| 10. [biogr]+[stressors]+[coping] | 0,3340 | 10-14=0,0925 | 1,003 | |
| 11. [biogr]+[stressors]+problem-focused | 0,3025 | 11-14=0,0610 | 5,865* | 0,09 |
| 12. [biogr]+[stressors]+emotionally-focused | 0,3235 | 12-14=0,0820 | 8,200** | 0,12 |
| 13. [biogr]+[stressors]+ineffective | 0,3223 | 13-16=0,0808 | 8,000** | 0,12 |
| 14. [biogr]+[stressors] | 0,2415 | | | |
| 15. [coping]+[stressors]+[biogr] | 0,3340 | 15-18=0,0430 | 0,419 | |
| 16. [coping]+[stressors]+age | 0,3038 | 16-18=0,0128 | 1,219 | |
| 17. [coping]+[stressors]+status | 0,3241 | 17-18=0,0331 | 3,245 | |
| 18. [coping]+[stressors] | 0,2910 | | | |

[] – indicate the set of predictors

** $p \leq 0,01$

* $p \leq 0,05$

The results in Table 7 indicate firstly that all the predictor variables together explain 33,4% ($R^2 = 0,3340$) of the variance in *emotional exhaustion* experienced by the hospice workers. This calculated R^2 value is significant on the 5% level [$F_{12;66} = 2,26$].

One of the sets of variables, namely stressors (within and outside the work environment), makes a significant contribution on the 5% level [$F_{(5;65)} = 2,524$] to the explanation of the variance in emotional exhaustion experienced by hospice workers. This set of variables explains 12,93% of the variance in emotional exhaustion. When the stressors are examined separately, it is clear that they play an important role in explaining the variance in emotional exhaustion experienced by hospice workers. Table 7 clearly demonstrates that all seven stressors make a significant contribution on the 1% level, with organisational functioning contributing 12,7% (the most) and physical conditions contributing 9,11% (the least) to the explanation of the variance in emotional exhaustion.

Although the set of coping variables does not make a significant contribution to the explanation of the variance in emotional exhaustion, the individual coping strategies do, in fact, make a significant contribution. The three coping strategies, namely problem-focused, emotionally-focused and ineffective coping strategies, contribute 6,1%, 8,2% and 8,08% respectively to explaining the variance in emotional exhaustion suffered by hospice workers. The problem-focused strategies' contribution is significant on the 5% level, while the remaining two's contributions are significant on the 1% level.

The set of variables that deals with biographical variables (age and marital status) does not contribute significantly to R^2 in the total model of emotional exhaustion experienced by hospice workers. The individual biographical variables also do not explain a significant percentage of the variance in their emotional exhaustion.

In the light of the guideline values of the various effect sizes, Table 7 makes it clear that the contribution of all the statistically significant predictors has a medium effect, except for physical conditions and coping strategies.

The results of the hierarchical regression analysis with regard to the depersonalisation of hospice workers are provided in Table 8.

Table 8. : Contributions of the different variables to R² with regard to depersonalisation

| Variables in analysis | R ² | Contribution to R ² : complete minus diminished model | F | f ² |
|------------------------------------------------|----------------|------------------------------------------------------------------|----------|----------------|
| 1. [biogr]+[coping]+[stressors] | 0,2302 | 1-9=0,0889 | 1,507 | |
| 2. [biogr]+[coping]+outside work | 0,2160 | 2-9=0,0747 | 6,791* | 0,10 |
| 3. [biogr]+[coping]+organisational functioning | 0,2308 | 3-9=0,0895 | 8,287** | 0,12 |
| 4. [biogr]+[coping]+task characteristics | 0,2274 | 4-9=0,0861 | 7,899** | 0,11 |
| 5. [biogr]+[coping]+physical conditions | 0,2112 | 5-9=0,0699 | 6,355* | 0,09 |
| 6. [biogr]+[coping]+career matters | 0,2292 | 6-9=0,0879 | 8,139** | 0,11 |
| 7. [biogr]+[coping]+social matters | 0,2017 | 7-9=0,0604 | 5,491* | 0,08 |
| 8. [biogr]+[coping]+remuneration | 0,2302 | 8-9=0,0889 | 8,156** | 0,12 |
| 9. [biogr]+[coping] | 0,1413 | | | |
| 10. [biogr]+[stressors]+[coping] | 0,2302 | 10-14=0,1328 | 1,250 | |
| 11. [biogr]+[stressors]+problem-focused | 0,1631 | 11-14=0,0657 | 5,256* | 0,08 |
| 12. [biogr]+[stressors]+emotionally-focused | 0,2113 | 12-14=0,1139 | 9,677** | 0,14 |
| 13. [biogr]+[stressors]+ineffective | 0,2198 | 13-16=0,1224 | 10,552** | 0,16 |
| 14. [biogr]+[stressors] | 0,0974 | | | |
| 15. [coping]+[stressors]+[biogr] | 0,2302 | 15-18=0,0346 | 0,293 | |
| 16. [coping]+[stressors]+age | 0,2058 | 16-18=0,0102 | 0,850 | |
| 17. [coping]+[stressors]+status | 0,2061 | 17-18=0,0105 | 0,875 | |
| 18. [coping]+[stressors] | 0,1956 | | | |

[] – indicate the set of predictors

** p ≤ 0,01

* p ≤ 0,05

The results in Table 8 indicate firstly that all the predictor variables together explain 23,02% (R² = 0,2302) of the variance in *depersonalisation* experienced by the hospice workers. This calculated R² value is not significant on at least the 5% level [$F_{12;69} = 1,42$].

None of the sets of variables makes a significant contribution on at least the 5% level to the explanation of the variance in depersonalisation experienced by the hospice workers.

When the stressors are examined separately, it is clear that, as in the case of emotional exhaustion, the stressors as well as the coping strategies play an important individual role in explaining the variance in depersonalisation experienced by hospice workers. Table 8 clearly demonstrates that all seven stressors make a significant contribution on either the 1% or 5% level, with organisational functioning contributing 8,95% (the most) and social

matters contributing 6,04% (the least) to the explanation of the variance in depersonalisation.

The three coping strategies contribute respectively 6,57%, 11,39% and 12,24% to explaining the variance in the depersonalisation suffered by the hospice workers. The problem-focused strategy's contribution is significant on the 5% level, while the contributions of the remaining two are significant on the 1% level.

As in the case of emotional exhaustion, the set of variables, as well as the individual biographical variables (age and marital status), do not contribute significantly to R^2 in the total model of depersonalisation experienced by the hospice workers.

In the light of the guideline values of the various effect sizes, Table 8 makes it clear that the contribution of all the statistically significant predictors has a medium effect, except for ineffective coping strategies.

The results of the hierarchical regression analysis with regard to the personal accomplishment of the hospice workers are set out in Table 9.

Table 9. : Contributions of the different variables to R^2 with regard to personal accomplishment

| Variables in analysis | R^2 | Contribution to R^2 : complete minus diminished model | F | f^2 |
|------------------------------------------------|--------|---------------------------------------------------------|----------|-------|
| 1. [biogr]+[coping]+[stressors] | 0,3379 | 1-9=0,2005 | 3,931** | 0,30 |
| 2. [biogr]+[coping]+outside work | 0,2403 | 2-9=0,1029 | 9,617** | 0,14 |
| 3. [biogr]+[coping]+organisational functioning | 0,2902 | 3-9=0,1528 | 15,434** | 0,22 |
| 4. [biogr]+[coping]+task characteristics | 0,2542 | 4-9=0,1168 | 11,123** | 0,16 |
| 5. [biogr]+[coping]+physical conditions | 0,3097 | 5-9=0,1723 | 17,760** | 0,25 |
| 6. [biogr]+[coping]+career matters | 0,3378 | 6-9=0,2004 | 21,548** | 0,30 |
| 7. [biogr]+[coping]+social matters | 0,3277 | 7-9=0,1903 | 20,245** | 0,28 |
| 8. [biogr]+[coping]+remuneration | 0,3143 | 8-9=0,1769 | 18,427** | 0,26 |
| 9. [biogr]+[coping] | 0,1374 | | | |
| 10. [biogr]+[stressors]+[coping] | 0,3379 | 10-14=0,0848 | 0,924 | |

| Variables in analysis | R ² | Contribution to R ² : complete minus diminished model | F | f ² |
|---------------------------------------------|----------------|------------------------------------------------------------------|---------|----------------|
| 11. [biogr]+[stressors]+problem-focused | 0,2940 | 11-14=0,0409 | 3,895 | |
| 12. [biogr]+[stressors]+emotionally-focused | 0,3290 | 12-14=0,0759 | 7,590** | 0,11 |
| 13. [biogr]+[stressors]+ineffective | 0,3346 | 13-16=0,0815 | 8,232** | 0,12 |
| 14. [biogr]+[stressors] | 0,2531 | | | |
| 15. [coping]+[stressors]+[biogr] | 0,3379 | 15-18=0,0252 | 0,247 | |
| 16. [coping]+[stressors]+age | 0,3295 | 16-18=0,0168 | 1,647 | |
| 17. [coping]+[stressors]+status | 0,3199 | 17-18=0,0072 | 0,699 | |
| 18. [coping]+[stressors] | 0,3127 | | | |

[] – indicate the set of predictors

** p ≤ 0,01

* p ≤ 0,05

The results in Table 9 indicate firstly that all the predictor variables together explain 33,79% ($R^2 = 0,3379$) of the variance in the *personal accomplishment* demonstrated by the hospice workers. This calculated R^2 value is significant on the 5% level [$F_{12;66} = 2,30$].

One of the sets of variables, namely stressors, makes a significant contribution on the 1% level [$F_{(5;65)} = 3,931$] to explaining the variance in the personal accomplishment demonstrated by the hospice workers. This set of variables explains 20,05% of the variance in personal accomplishment. When the stressors are examined separately, it is clear that in this case, they play an important role in explaining the variance in the personal accomplishment displayed by the hospice workers. Table 9 clearly demonstrates that all seven stressors make a significant contribution on the 1% level, with career matters contributing 20,04% (the most), and stressors outside the workplace contributing 10,29% (the least), to the explanation of the variance in personal accomplishment.

Although the set of coping variables does not make a significant contribution to the explanation of the variance in personal accomplishment, two of the coping strategies do, in fact, make a significant contribution. The two coping strategies, emotionally-focused and ineffective strategies, contribute 7,59% and 8,15% respectively to explaining the

variance in the personal accomplishment displayed by the hospice workers. The contribution of both these coping strategies on the 1% level is significant.

As in the case of emotional exhaustion and depersonalisation, the set of variables, as well as the individual biographical variables (age and marital status), do not contribute significantly to R^2 in the total model of personal accomplishment displayed by the hospice workers.

In the light of the guideline values of the various effect sizes, it is clear from the results in Table 9 that the contribution of all the statistically significant predictors has a medium to large effect.

DISCUSSION

The results obtained by comparing the mean scores of normative groups with the hospice caregiver group, indicates very high stress levels as a result of stressors outside the work environment and remuneration and fringe benefits. This could be attributed to factors such as various personal stressors outside the work environment, problems with transport and insufficient fringe benefits provided to caregivers due the NGO status of hospices. This fits well with what Patel (1998) found, namely that system-related stressors such as low pay and low employee status contribute to burnout. These stressors result in hospice caregivers experiencing financial problems and a lack of social status, which, when compounded by the other stressors they have to face, cause burnout. A comparison between the burnout experienced by respectively the hospice workers in this sample and caregivers of Alzheimer patients (Venter, 2000) shows that the former clearly experience a higher level of emotional burnout, which may be attributed to the fact that unlike the caregivers of Alzheimer patients, hospice caregivers have to face death on a more regular basis and also experience stigmatisation because of their work. The physical working conditions of hospice workers are also less favourable.

From the percentages obtained on the *MBI*, it is evident that a large proportion of hospice workers in this research group experience high levels of burnout. This burnout can generally be ascribed to emotional exhaustion, which highlights the demanding nature of the hospice volunteers' duties. As the findings of Boyle and Carter (1998) suggest, working with death results in anxiety that could in turn result in the provision of poor palliative care to patients. Many caregivers, therefore, also experience depersonalisation and low levels of personal accomplishment. Being made aware of their own mortality, affects the quality of the service they are able to render (Barnes, 2001).

Results obtained from the intercorrelations for the group as a whole suggest that there is a strong relationship between stressors outside the workplace and emotional exhaustion. This means that personal stressors, such as inter-role conflict (Ross, 1995; Diraz et al., 2003) and personal life problems (Barnes, 2001), contribute to the high incidence of burnout among hospice workers. It is also clear that hospice workers who use ineffective coping strategies tend to have higher levels of emotional exhaustion and depersonalisation because they are not equipped to deal with their problems (Carver et al., 1989). Problem-focused coping, although considered an effective tool, is not thought to be appropriate under certain conditions. These would include the situations that hospice workers face on a daily basis, such as being confronted with terminal illness and death. In these kinds of situations, emotionally-focused strategies would prove more beneficial because effective ways must be sought to cope with problems (illness and death) that cannot be solved. This means that workers must learn to cope with their emotional responses to tragedies they cannot do anything about. This ties in with Hector and Whitefield's (1982) conviction that caregivers could benefit from grief and bereavement counselling. This could entail the use of religion as a crutch to lean on (Yang & Meilpatrick, 2001), not masking one's depression (McNeely, 1996) and giving vent to one's feelings (Wakefield, 2000). In addition, it is clear that caregivers who make use of too many problem-focused coping strategies tend to demonstrate lower levels of personal accomplishment. This could relate to the fact that trying so hard to eradicate problems, and yet failing to do so despite their best efforts affect their sense of personal accomplishment. Contrary to research, physical working conditions (Galloway,

1998) do not appear to be a contributing factor to emotional exhaustion in this study. The same was found for career matters and age. This could indicate that anyone is susceptible to emotional exhaustion, irrespective of age.

The hierarchical regression analyses provide the basis for the following inferences. It is clear that all seven stressors play an important role in bringing about emotional exhaustion. The most significant contribution in this regard, however, is made by organisational functioning, a conclusion also reached by other investigators (Glass et al., 1992). As mentioned previously, hospices do not have the benefits and luxuries other organizations have, such as an adequate staff complement, regular working hours, good salaries, and proper training (Khanyile, 1992). As a result, caregivers experience problems with communication, teamwork, and administrative duties; and they may also experience ambiguity in their roles (Glass et al.). This explains the variance in emotional exhaustion suffered by hospice workers.

It was also found that reliance on problem-focused coping strategies may increase the incidence of emotional exhaustion, once again suggesting that more emotionally-focused strategies, like emotional support, positive reformulation, etc., should be utilised. None of the demographic variables appear to play a significant role with regard to emotional exhaustion. Results indicate that the same factors that explain variance in emotional exhaustion, explain variance in depersonalisation, although not to the same degree. The fact that career matters show a connection with personal accomplishment proves that caregivers are considered to be on the bottom rung of the career ladder of health professionals and that their career is not one that makes provision for promotions, which leads to low levels of personal accomplishment being reported (Khanyile, 1992). The lack of job security they experience because of their part-time and temporary appointments, also contribute to burnout (Hingley, 1986). It was also found that ineffective coping strategies contribute significantly to the variance of personal accomplishment, thus proving that by not adopting a variety of effective coping strategies, the personal accomplishment of the caregiver is jeopardised. Here too, the demographic variables seem to display no significant variance.

CONCLUSION

The findings in this study suggest that hospice workers do suffer from a great deal of burnout, which affects their work performance and general functioning. This burnout syndrome is mainly the result of stressors outside the workplace and problems within the structure of the work environment. Recommendations to alleviate this problematic situation would include reviewing the working mechanism of the hospice system, which implies lobbying for more funding so that caregivers can derive benefits from options such as more pay, a decrease in workload, better equipment, more staff and better support systems. Caregivers need to be given access to proper counselling so that they can become acquainted with emotionally-focused strategies rather than always relying on problem-focused and ineffective coping strategies, which makes them more vulnerable to burnout. The present research lends further credence to the fact that the role played by caregivers is often taken for granted by members of society and other health professionals, thus making their ability to cope with their jobs more difficult. The general public and government organisations need to be made aware of the contribution made by hospices. This would require knowledge of their mission statement and services, and what they need to reach their objectives. In addition, the hospice caregiver should be recognised in the same way other professional nurses are recognised. This would include providing them with the necessary equipment and professional training, as well as an administrative body to discuss their grievances with. This could also include providing them with benefits like medical aid, pension funds and annual and sick leave. In the same way as any other professional nurse, the caregiver's opinion and voice needs to be heard by doctors, social workers, psychologists and so on, so as to create a more harmonious and relaxed environment for the caregiver to work in, where he/she does not feel intimidated. Caregivers need to be made aware of the importance of talking with counsellors - and not just with colleagues who may be experiencing the same difficulties - about their problems outside the work environment. They should also be encouraged not to mask their feelings and to use more appropriate coping strategies to deal with their problems. This can be achieved with the correct training programs, which are designed

to facilitate caregivers. Moreover, if issues of low salaries and remuneration are dealt with, the impact of stressors outside the work environment could be reduced.

One of the limitations of the study concerns the sample size. With so few hospices in each region, and with so many caregivers working in rural areas and working different shifts, a higher number of participants could not be obtained. Therefore, the results, although valid and reliable, may require further investigation with larger samples of hospice workers. Another limitation is the problem posed by missing values in the demographic data. This resulted in incomplete data on biographical variables, such as support systems. Other variables such as number of hours worked in the course of a week and number of patients seen per week were also included in the questionnaire, but most participants did not respond to these questions. If such data were obtained, information that is more noteworthy may have been contributed to this study. In addition, most of the participants who belong to the black and coloured population groups had no tertiary education, which may have affected proper understanding of the questions in the questionnaire, thus raising questions about the reliability of the data obtained. However, despite these limitations, the study clearly indicates the need for further research in this area and for the possible implementation of a program to address some of the problems identified in the course of the investigation.

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APPENDIX 1

| SCALE | LEVEL OF STRESS | CAUSES OUTSIDE WRK. SITUATION | ORG. FUNC. | TASK CHARAC. | PHYSICAL WRK. COND. | CAREER MATTERS | SOCIAL MATTERS | REMUNERATION, FRINGE BENEFITS & PERSONNEL POLICY |
|------------------|-----------------|-------------------------------|------------|--------------|---------------------|----------------|----------------|--------------------------------------------------|
| Very High | 98-200 | 41-80 | 2-11 | 9-34 | 2-13 | 3-16 | 2-16 | 0-17 |
| High | 80-97 | 34-40 | 12-16 | 35-40 | 14-18 | 17-21 | 17-20 | 18-22 |
| Normal | 40-79 | 16-33 | 17-34 | 41-69 | 19-34 | 22-39 | 21-34 | 23-48 |
| – x | 72,00 | 28,52 | 20,44 | 47,09 | 22,38 | 26,08 | 24,46 | 28,47 |
| s | 17,02 | 8,30 | 6,22 | 9,44 | 6,40 | 6,70 | 5,48 | 8,83 |

THREE-POINT SCALE FOR THE INTERPRETATION OF SCORES (n = 661)

(Van Zyl & Van der Walt, 1991)

APPENDIX 2

| Categorization: Emotional Exhaustion | |
|-------------------------------------------------|------------------|
| | Frequency |
| High | 27 or over |
| Moderate | 17 – 26 |
| Low | 0 – 16 |

| Categorization: Depersonalisation | |
|----------------------------------------------|------------------|
| | Frequency |
| High | 13 or over |
| Moderate | 7 – 12 |
| Low | 0 - 6 |

| Categorization: Personal Accomplishment | |
|----------------------------------------------------|------------------|
| | Frequency |
| High | 0 – 31 |
| Moderate | 32 – 38 |
| Low | 39 or over |

MBI SCORING KEY

(Maslach & Jackson, 1996)