An-Najah National University

Faculty of Graduate studies

Stress and Coping Mechanism among Nurses in Palestinian Hospitals, A pilot study

By

Ahamd Ismail Sleman Umro

Supervisor

Prof. Waleed M. Sweileh

Co-Supervisor

Dr. Samah Al-Jabi

This Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Community Mental Health for Nursing Program, Faculty of Graduate studies, An-Najah National University, Nablus, Palestine.

2013

Stress and Coping Mechanism among Nurses in Palestinian Hospitals,

A pilot study

By

Ahamd Ismail Sleman Umro

This thesis was defended successfully on 17/4 /2013 and approved by:

Defense Committee Members		**signature**
1. Prof. Waleed M. Sweileh	**(Supervisor)**	.....
2. Dr. Samah Al-Jabi	**(Co-Supervisor)**	.....
3. Dr. Muna Ahmead	**(External Examiner)**	.....
4. Dr. Aidha allkissi	**(Internal Examiner)**	.....

الاهداء

إلى من ربياني صغيرا.

إلى كل من علمني ، وأخذ بيدي ، وأنار لي طريق العلم والمعرفة.

إلى كل من شجعني في رحلتي إلى التميز والنجاح.

إلى كل من ساندني ، ووقف بجانبي.

إلى كل من قال لي : لا ، فكان سببا في تحفيزي.

إلى كل من كان النجاح طريقه ، والتفوق هدفه ، والتميز سبيله.

إليكم جميعا الشكر والتقدير والإحترام.

Acknowledgment

A special thanks to my principle supervisor, Professor Waleed M. Sweileh, and my second supervisor Dr. Samah Al-Jabi for countless hours of reflecting, reading, encouraging, and most of all patience throughout the entire process and their excitement and willingness to provide feedback made the completion of this research. I would like to acknowledge and thank An-Najah National University for allowing me to conduct my research and providing any assistance requested. Special thanks to the nurses who participated in this research.

الاقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان :

Stress and Coping Mechanism among Nurses in Palestinian Hospitals, A pilot study

أقر بأن ما اشتملت عليه هذه الرسالة إنما هي نتاج جهدي الخاص، باستثناء ما تمت الإشارة إليه حيثما ورد، وأن هذه الرسالة ككل، أو أي جزء منها لم يقدم لنيل أية درجة أو لقب علمي أو بحثي لدى أية مؤسسة تعليمية أو بحثية أخرى.

Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's Name: **اسم الطالب :**

Signature: **التوقيع :**

Date: **التاريخ :**

List of Contents

List of Tables

List of Abbreviation's

Abbreviation	Full Name
IRB	Institutional Review Board
MOH	Ministry of Health
NSS	Nursing Stress Scale
SPSS	Statistical Package for the Social Sciences
WCCL	Ways of Coping Checklist

Stress and Coping Mechanism among Nurses in Palestinian Hospitals

By
Ahamd Ismail Sleman Umro
Supervisor
Prof. Waleed M. Sweileh
Co-Supervisor
Dr. Samah Al- Jabi

Abstract

Background: A survey of literature revealed that although a great deal of research has been carried out about stress and coping mechanisms internationally, little has been written about stress and coping mechanisms among nurses in Palestine.

Objective: The objectives of this study were to identify the possible causes and frequency of stress experienced by Palestinian nurses working in governmental and non-governmental hospitals, and to assess the most common ways of coping mechanisms.

Methods: A cross-sectional descriptive study was conducted. Nursing Stress Scale (NSS) and three subscales of Ways of Coping Checklist (WCC) were used to assess stress and coping mechanisms among Palestinian nurses.

Results: Data revealed that nurses were stressed. According to NSS, the greatest perceived sources of stress appeared to be "workload" (mean=2.93) followed by "conflict with other nurses" (mean=2.63) and "emotional issues related to death and dying" (mean= 2.56). Nurses in non-

governmental hospitals have significantly higher “conflict with other nurses” stress than those in governmental hospitals: 2.77 versus 2.55; (p=<0.01). Nurses with longer years of service have significantly higher “Uncertainty concerning treatment” stress than nurses with shorter years of service: 2.41 versus 2.2; (p=0.01). According to the ways of coping mechanism, nurses seemed to be resorting more to “confronting coping” (mean=2.41) while “escape avoidance” was the least coping strategy employed (mean=2. 04). Male nurses seem to resort significantly more to “confronting coping” than female nurses: 2.49 versus 2.29; (p=0.02). Nurses with long years of service seem to resort significantly more to “Distancing” than nurses with shorter years of service: 2.3 versus 2.17; (p=0.03).

Conclusion: Stress among nurses is serious. Providing more nursing staff and decreasing non-nursing jobs might help to decrease nursing stress, according to coping mechanisms nurses seem to employ confronting coping strategy and this is not a healthy style some time, providing more coping strategy by mental health nurses via programs in the hospital will help nurses to choose the best coping strategy for each one.

CHAPTER 1

INTRODUCTION

1. Introduction

In the 1930s, Hans Selye, a medical doctor had described stress as a strain on living organisms. Selye's concept of stress has been used to describe the body's mobilization on dealing with a challenge or threat (Griffin 1990). Dr. Selye, defined stress as "the body's non-specific response to any demand". He classified stress into two categories, each with two variations: distress (harmful or disease-producing stress) and eustress (beneficial stress) (Drafke and Kossen 2002). In his study of stress, Selye introduced General Adaptation Syndrome model, which consisted of 3 stages; alarm resistance and exhaustion. This model brings out a distinction between short and long term effects of stress on the body (Marshall and Cooper 1979).

Besides the physiologically oriented approach to stress represented by the classic General Adaption Syndrome model, which still remains a vital dimension of modern stress research and stress management, attention is also being given to the psychological (for example, mood changes, negative emotions, feeling of helplessness, etc) and the behavioral (for example, directly confronting the stressors, obtaining information about the stressors, etc) dimension of stress (Luthans 1998). All three dimensions (physiological, psychological, and behavioral) are important to the understanding of job stress and coping mechanism in modern

organizations. Stress is an unavoidable feature of modern living impact of dynamic and uncertain environment characterized by restructuring, reengineering, layoff and downsizing which threatened one's personal security of employment (Huber, 1996:561). Generally, stress is always thought of in negative terms. That is, stress is perceived as something bad, annoying, threatening and not wanted (Mckenna 1994). For example, words or phrases such as depression, feeling out of control, overworked, migraine or headache, time pressure, anxiety, cannot sleep, are commonly used to express what stress means to us personally (Sutherland and Cooper 2000). It is one of those words that everybody knows the meaning of but no-one can define it (Woodham 1995). As a result, it is vital to give attention to what stress is not about in today's organization. As pointed out by Luthans (1998) three major misconceptions about stress are as follows:

1. Stress is not simply anxiety. Anxiety operates solely in the emotional and psychological sphere, whereas stress operates both and also in the physiological sphere. Thus, stress may be accompanied by anxiety, but the two should not be equated.

2. Stress is not simply nervous tension. Like anxiety, nervous tension may result from stress, but the two are not the same. Unconscious people have exhibited stress and some people may keep it "bottle up" and not reveal it through nervous tension.

3. Stress is not necessarily something damaging, bad or to be avoided. Stress is inevitable. Stress is not damaging or bad and is something people should seek out rather than avoid. The key is how the person handles stress. Understanding the definition of stress, especially stress in an organization is important because it can have both positive and negative effects and also learning about how to cope with job stress. Stress can be illustrated as a non-specific state that is composed of a variety of induced changes in the human biological system (Rice 2000). For this reason, stress often creates a nonspecific response, which means that certain emotional, physical and cognitive responses occur automatically (Hellriegel 1986). In other words, stress is described as a personal response and a phenomenon that occurs in a body as a reaction to the stimulus of a stressor (Huber 1996). Stress is the subjective feeling produced by events that are uncontrollable or threatening, constant stress brings about changes in the balance of hormones in the body which may lead to the situation or thought that makes us feel frustrated, angry, nervous, or anxious (Randy JL 2008). Stress is particularly acute among people who work in the 'helping professions' (Siegrist 2010) and can have devastating effects on healthcare staff and their working environments (Lambert and Yamase 2003). A previous study about health workers defined stress as a result of emotional worries, lack of control in highly-demanding work situations, feelings of exertion, fatigue and changes in health (Lautert, Chaves et al. 1999). The National Institute of Occupational Safety and Health defined work-related

stress, also called professional or occupational stress, as a consequence of the disequilibrium between work demands and workers' skills/resources or needs or, also, work-related stress represents a pattern of an emotional, cognitive, behavioral and physiological reaction to harmful and adverse components of the work context (European Commission 1999). Risk factors for job stress include: i) role ambiguity; ii) role conflict; iii) insufficient tasks attributed; iv) responsibility for people; v) insecurity at work, aspects related to career evolution, feeling of injustice regarding one's own salary and delayed promotions; vi) lack of participation in work-related decision making; vii) deficient interpersonal relations with superiors, subordinates or colleagues; ix) exposure to violence at work; viii) home/work interface and ix) shift and night work (Sacadura-Leite E 2007). In the health sector, occupational stress is a highly present aspect and, among all health professionals, nurses are the most exposed (Vaz Serra 2002). In the hospital context, intensive care units (ICU) are particularly stressful environments, serving for care delivery to critical patients, who require permanent and specialized medical and nursing care; they are characterized by demanding routines, sophisticated and noisy equipment, mostly without natural light and high chances of death and pain (Cavalheiro, Moura Junior et al. 2008). Also, health professionals' work conditions, motivation and wellbeing have been relegated to the background (Martins 2009). A previous study of nursing stress has found positive relationships between work stress and subjective perceptions of

mental distress, and high incidences of stress-related `burnout' and emotional disorders (Cushway 1992). Burnout has been defined as a syndrome that consists of emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach 1979). Burnout is viewed as an affective reaction to ongoing stress whose core content is the gradual depletion over time of individuals' intrinsic energetic resources, including the expression of emotional exhaustion, physical fatigue, and cognitive weariness (Shirom 1989). It has been found that in order to cope with these constraints, nurses may be using avoidance and escape forms of coping (Marshall 1980). The transactional model argues that stressors, coping and emotional reactions need to be considered jointly in explaining the stress coping process because they are interdependent (Folkman 1979). Researchers described stress as a dynamic and reciprocal relationship between the person and the environment (Folkman 1984). Stress is only experienced when situations are appraised as exceed one's resources, Thus, being given extra responsibilities at work might be viewed as threatening to one person while another person may appraise the situation as a challenge (Folkman 1984). Coping is the process of managing demands that are appraised as taxing or exceeding the resources of the person (Shelley 2003). Thus, coping is not a one-time action that someone takes; rather, it is a set of responses, occurring over time, by which the environment and the person influence each other's (Andrew 2009). How a person copes can influence the degree, duration, and frequency of a stressful event and it's

important for a person to learn how to recognize when his stress levels are out of control (Randy JL 2008). One cannot completely eliminate stress from one's life, but can control how much it affects, one may feel like the stress in life is out of control, but can always control the way one responds (Randy JL 2008). Coping has been viewed as a stabilizing factor that may assist individuals in maintaining psychosocial adaptation during stressful events, the process of coping is a very complex response that occurs when an individual attempts to remove stress or a perceived threat from the environment (Lazarus and Folkman 1984). Thus, the actual reaction to an environmental event may be as important as the event itself. Coping responses can be described as positive or negative and as reactive (i.e. reacting to an individual's own thoughts and feelings), or active (i.e. dealing with actual stressful situations or events) (Lazarus and Folkman 1984). Active or reactive coping responses can be positive or negative, depending on the situation and the content of the response (Lazarus and Folkman 1984).

1.1 Statement of problem

Stress is recognized as an inherent feature of the work life of nurses, and growing evidence suggest that it may be increasing in severity. Work-related stress has been implicated as a major contributing factor to growing job dissatisfaction, rapid turnover, and high attrition rates among nurses. It was found that job stress impacts not only on nurses’ health but also their

abilities to cope with job demands. This will seriously impair the provision of quality care and the efficacy of health service delivery (Lee 2003).

A survey of literature revealed that although a great deal of research has been carried out about stress and coping about nurses internationally, however, to the best of our knowledge, little has been written about stress among nurses in Palestine. Given that the international hospital settings and the provision of health services are different than those in Palestine, it would not be appropriate to use the results of previous international studies to explain stress and coping among Palestinian nurses. This investigation is aimed to identify causes and frequency of stress, and coping strategies used, among nurses in Palestine. It also sought to answer the following question:

1. What are the occupational stressors experienced by nurses in their area of assignment at the clinical area in terms of?

a. Workload. b. Uncertainty concerning treatment. c. Problems with nurse managers. d. Inadequate emotional preparation. e. Conflict with physician. f. Patients and their families

1.2 Aim of the study

To determine the possible causes of stress and coping mechanism between the nurses working in hospitals, governmental and non-governmental organizations in Nablus district.

1.3 Objectives of the study

In specific, the current study aimed:

1. To determine the stressors that Palestinian nurses commonly faced in their work in Nablus district.

2. To determine the coping mechanisms that Palestinian nurses used in their work in Nablus district.

3. To assess the relationships between nurses' stressors and the coping mechanism they used.

4. To assess the relationship between the dependent and independent variables.

1.4 Significance of the study

1. This study will give baseline data and information to explain the prevalence of stress and coping mechanism among nurses in governmental and non-governmental hospitals in Palestine.
2. The results of this study will be useful in the formulation of recommendation to address stress among nurses in Palestine.
3. Identification of stress is very significant to identify strategies used in coping with stress.

1.5 Research question

What are the stressing factors among nurses in Palestinian hospitals in Nablus district?

1.6 Definitions of Concepts

Stress - Stress is a psychobiological reaction of the body to physical or psychological demands that threaten or challenge the organism's well-being (Laposa, Alden et al. 2003). Stress is a process of transaction between the person and the environment (Streeten 1995). Stress is a demand made by the internal or the external environment of an organism (such as you and me), that upsets its homeostasis (or equilibrium), the restoration of which depends on a non-automatic and not readily available energy-expending action (Antonovosky 1974).

Coping - Managing successfully; be able to deal with difficulty (Mc Intosh 1991). Coping is viewed as a process determined by cognitive appraisal and is context dependent (Lazarus and Folkman 1984). Coping is conceptualized as attempts as to reduce or eliminate the negative effects of stress on well-being (Edwards 1993).

Coping strategies - Managing stress successfully; ways and/or skills one uses to deal with stress, the positive steps that can be taken to minimize or remedy the harmful effects of stress (Thompson 1994).

Workload

Nursing workload measures can be categorized into four levels: (1) unit level, (2) job level, (3) patient level, and (4) situation level (Gurses and Carayon 2007). These measures can be organized into a hierarchy. The situation- and patient-level workloads are embedded in the job-level workload, and the job-level workload is embedded in the unit-level workload. In a clinical unit, for example, numerous nursing tasks need to be performed by a group of nurses during a specific shift (unit-level workload). The type and amount of workload of nurses are partly determined by the type of unit and specialty (e.g., intensive care unit [ICU] nurse versus general floor nurse), which is the job-level workload. When performing their job, nurses encounter various situations and patients, which are determinants of the situation- and patient-level workloads.

Workload at the Unit Level

The most commonly used unit-level workload measure is the nurse-patient ratio. The nurse-patient ratio can be used to compare units and their patient outcomes in relation to nurse staffing. Previous research provides strong evidence that high nursing workloads at the unit level have a negative impact on patient outcomes (Amaravadi, Dimick et al. 2000; Needleman, Buerhaus et al. 2002; Lang TA 2004) .

Workload at the Job Level

According to this conceptualization, the level of workload depends on the type of nursing job or specialty (ICU nurse versus operating room nurse). For instance, Schaufeli and LeBlanc (Schaufeli 1998) used a job-level measure of workload to investigate the impact of workload on burnout and performance among ICU nurses. Previous research linked job-level workload (a working condition) to various nursing outcomes, such as stress (Crickmore 1987; Malacrida, Bomio et al. 1991) and job dissatisfaction (Freeman and O'Brien-Pallas 1998).

Workload at the Patient Level

This conceptualization assumes that the main determinant of nursing workload is the clinical condition of the patient.

Situation-Level Workload

Situation-level workload can explain the workload experienced by a nurse due to the design of the health care microsystem. In a previous study, they found that various characteristics of an ICU microsystem (performance obstacles and facilitators) —such as a poor physical work environment, supplies not well stocked, many family needs, and ineffective communication among multidisciplinary team members—significantly affect situation-level workload (Gurses and Carayon 2007).

Chapter 2

Literature Review and Background

2. Introduction

The definition of stress has been varied in term of its conceptualization from different authors and researchers in the study of stress. At this stage, it is vital to assess the relevance of theoretical models of stress to enable us to fully understand the concept of stress, its applications and approaches that have been used and outcome measures stress. The General Adaptation Syndrome is an early model of stress which viewed stress response as a natural human adaptation to a stressor (to change or leave the stressors) in the individual's physical or psychological environment (Champoux 2003). Selye described the process of General Adaption Syndrome into three stages (Cooper and Marshall 1978):

1. Alarm reaction – in which an initial shock phase of lowered resistance is followed by counter shock during which the individual's defense mechanisms become active.

2. Resistance – the stage of maximum adaptation and hopefully successful return to equilibrium for the individual. If, however, the stressor continues or defense does not work, the individual will move on to;

3. Collapse or exhaustion – when adaptive mechanisms collapse.

According to Selye, a full understanding of stress and its many effects must involve great attention to the three related stages (Selye 1956). Arousal rises quickly to high levels and many physiological changes that prepare our bodies for strenuous activity (either flight or combat) take place. The body prepares to fight or adjust to the stressor by increasing heart rate, respiration, muscle tension and blood sugar. This initial reaction is soon replaced by the second stage known as resistance. Here, if a stressor is too intense the individual may feel restless to cope with it. However, after a short period of alarm the individual will gather all strength and start resisting the negative effects of the stressor. The body tries to return to a normal state by adapting to the stressor. If stress persists, the body's resources may become depleted and the final stage known as exhaustion occurs. During the exhaustion stage the body begins to wear down from exposure to the stressor. At this point, the ability to cope decreases sharply and severe biological damage may result if stress persists. If a person experiences the stressor long enough and does not effectively manage the source of stress then stress-related illnesses can appear. The damaging effects of stress occur in this stage for both the individual and organization (Baron and Greenberg 1990; Griffin 1990; Champoux 2003).

2.1 Sources of stress

A variety of studies have shown that quantitative work overloads are potent sources of stress in the workplace in which individuals are asked to do more work than they can complete in a specific period of time (Fox, Dwyer et al. 1993; Cassar and Tattersall 1998; Ganster and Murphy 2000). Another major source of job stress is associated with a person's role at work (Marshall and Cooper 1979). A great deal of research in this area has concentrated on role ambiguity and role conflict as job stress (Jones, Barge et al. 1988; Baron and Greenberg 1990). Role ambiguity refers to an employee who is uncertain about how to perform on the job, what is expected in the job and the unclear relationship between job performance and expected consequences (Rue and Byars 1997). Role conflict arises from inconsistent expectations of the organization or from job-related expectations conflicting with a person's other role (Wright and Noe 1996). Cooke and Rousseau (1984) had conducted a study of Michigan teachers to investigate the effects of family roles and work-role expectations on strain (Cooke and Rousseau 1983). Role theory predicts that multiple roles can lead to stresses (work overload and inter-role conflict) and, in turn, to symptoms of strain. The results of this study were generally consistent with the role theory's prediction for work-role expectations that were found to be related to work overload and inter-role conflict and these stresses were found to be related to strain. The finding also indicated that family roles found to be related to strain in three ways: interaction with work-role

expectation, those who are married, and those who have children (Cooke and Rousseau 1983).

In addition, there is a consistent relationship between the behavioral characteristic of different jobs and the levels of various stresses experienced by a group of employees. The findings indicated that five of the divisional job dimensions correlate with at least half of the 18 stress variables. This study suggested that certain jobs have characteristic that increased the likelihood of the job incumbents to experience stress (Shaw and Riskind 1983). Motowidlo et al. (1986) conducted two studies on occupational stress and its relation to antecedent variables and job performance among nurses in four hospitals. The finding of the first study indicated that work overload, uncooperative patients, criticism, negligent co-workers, lack of support from supervisors, and difficulties with physician caused stress for hospital nurses. As a result, nurses performed their jobs less effectively. The finding of the second study indicated that there was no significant relationship in years of nursing experience, age, tenure in their nursing unit, tenure in their hospital, or whether they worked full time or part time with job-related stress and job performance among nurses (Motowidlo 1986). In addition, Frese (1985) conducted a study on job stress among German male blue-collar workers who had worked at least 6 months in the metal industry of the Federal Republic in Germany. The findings indicated that uncertainty in the job (such as role ambiguity and role conflict), organizational stress, environmental stress (noise),

danger of accident, intensity (speed of work), and job insecurity (danger of unemployment, leisure time stress, lack of wife support and labor union activities) were among the job stressors most experienced in the workplace (Frese 1985). A person who works in shifts frequently experiences physical distress or mental distress, or both (Luthans 1998). Shift work requires an employee to work a variety of shifts from Monday to Friday, for example, working the day shift for a week, the afternoon shift for a week, night shift for a week, and then back to the day shift (Sutherland and Cooper 2000). Also stress increases incrementally as the number and length of the night shifts increase (Daus 2001). There are fairly solid evidences of negative effect on physical, social and psychological of an individual working rotating shift work. Part of the shift-work problem is adjusting to changes in routines and cycles of activities (Saal and Knight 1988). Furthermore, it is important to relate stress with the physical work environment. Poor working conditions such as crowded work area, noise, heat, strong odor, dangerous conditions and physical strain are considered as potential sources of stress in the workplace (Luthans 1998). Sutton and Rafaeli (1987) conducted a survey among 109-clerical workers from University of Michigan explored work station's characteristics as potential occupational stressors. The findings stated that intrusion from other might be stressed because they hamper control and decrease predictability of important events. Interruption from noisy co-worker, noisy machines, ringing telephone, and people walking in and around a workstation lead employees

to perceive that they have little cognitive control over important events and causes stress (Sutton and Rafaeli 1987). Another environmental factor that may affect work behavior is the thermal condition of the workplace. Extreme levels of heat can have detrimental effects on the performance of physical and mental tasks due to heat stress (Saal and Knight 1988). Besides, Parkes (1982) conducted a study among student nurses from British and Irish nationality of medical and surgical wards on the occupational stress and the causal role of work setting in influencing mental health and well-being. The findings indicated that medical wards gave rise to higher levels of distress compare to surgical wards (Parkes 1982). The lack of supportive relationship or poor relationship with peers, colleagues and the superiors are also potential sources of stress, leading to low trust and low interest in problem solving (Baron and Greenberg 1990). Relationship at workplace can be classified into relationship with superiors, colleagues, subordinates, those who use your goods/services, those who supply you with goods/services and those whose decisions affect your status and resources (Ward 1987). Crabbs et al. (1986) carried out a study to illustrate that three of the top six events that caused job stress were concerned with relationships (lack of support from superior, poor relationship with superiors, and poor relationships with colleagues and subordinates) and the other three concerns which involved career development (lack of expected promotion, lack of job security, and requirements of job exceed one’s skills or abilities). These indicated that

poor relationships at work and thwarted career development contribute to stress on an individual (Crabbs 1986). Being responsible for other people demands a stressful extensive period of time spent on interacting with people (Baron and Greenberg 1990) This means increased responsibilities for people, one has to spend more time interacting with others, having to attend more meetings, and having to meet deadlines (Mckenna 1994). Repetitive work is also found to be a source of stress in the workplace (Drafke and Kossen 2002). Cox (1980) proved that workers on repetitive work reported that their jobs were too monotonous, boring, ideas and knowledge were underutilized, tied up with the job, and felt isolated from their work mates (because of the noise, physical constraints of work and pace of work) made them feel distressed/uneasy reporting to work (Cox 1980). Home-work conflict occurs when work role stressors interfere with an individual's ability to fulfill home and family obligations (Dubrin 1980). Homework interface is especially important among female workers who bear the burden of looking after the children, caring for elderly relatives, cooking, cleaning, shopping, etc. Long working hours mean less family life and this will develop stress on the relationship with partners, children, family and friends (Dalton 1998). The main forms of multiple-role conflicts among working women revolve guilt feelings, lack of emotional and domestic social support from partners and inadequate childcare facilities (Dalton 1998).

2.2 Effects of Stress

By understanding the nature of stress and major sources of job stress, it is vital to know the effects of job stress on physical health, psychological and behavioral on an individual. There is overwhelming evidence to indicate that continuous exposure to stressful situations, or an accumulation of stressors over a period of time, is directly associated with the onset of illness, emotional stress and engaging negative activities (Burns 1992). The fact that stress can make people ill and is implicated in the incidence and development of coronary heart disease, mental illness, certain types of cancer, smoking, dietary problems, excessive alcohol consumption and substance abuse, life dissatisfaction, accident and unsafe behavior at work, migraine, stomach ulcers, hay fever, asthma and skin rashes, marital and family problems (Dalton 1998). Generally, the effects of work stress occur in three major areas. Also the effects of stress on physiological include increased of blood pressure, increased of heart rate, sweating, hot and cold spells, breathing difficulty, muscular tension and increased of gastrointestinal disorders. Effects of stress on psychological consist of anger, anxiety, depression, lowered self-esteem, poorer intellectual functioning, inability to concentrate and make decisions, nervousness, irritability, resentment of supervision and job dissatisfaction (Chen and Spector 1991). Decreased performance, absenteeism, higher accident rates, higher turnover rates, higher alcohol and other drug abuse, impulsive behavior and difficulties in communication are few effects of stress on

behavioral (Hellriegel 1986; Hingley and Harris 1986). According to Cunningham (2000), in addition to physical illnesses, individuals experience significant pain and discomfort due to disturbances of the psychological and emotional systems. An angry, frustrated, emotionally unstable person is not capable of rational responses and good judgment. Such stress repercussions hinder a person's effectiveness in relating to others. They result in emotional disturbances, impaired relationships, sleeping difficulties, disturbances in one's thought processes and concentration, behavioral disruptions and occupational burnout (Cunningham 2000). Hackett et al. (1989) conducted a study among nurses of two metropolitan hospitals on reasons absent from work. The findings indicated that the nurses' daily expressed desire to be absent from work were related to tiredness, personal problems, ill health, stress and work interfering with home activities (Hackett 1989). In addition, Muhammad Jamal (1984) examined the relationship between job stress and employees' performance and withdrawal behavior among nurses of two hospitals in a metropolitan Canadian city on the east coast. The results demonstrated that role ambiguity, role overload, role conflict and resource inadequacy significantly related to employees' effectiveness and withdrawal behavior. Job stressors such as role conflict, role overload, and resource inadequacy are found related to job performance, motivation and patient care in a negative linear fashion. Moreover, high levels of stress affects the changes of one's self-reports of sleep, mood, symptoms and social satisfaction over

consecutive rest days following by day and night shift (Jamal 1984). Totterdell et al. (1995) conducted a study to investigate the effects of changes over consecutive day and night shifts among nurses and rest day. The results indicated that measures were worse on rest days that followed a night shift rather than a day shift and tended to be worse on first rest days compared with subsequent rest days. Alertness was lower on the1st rest day following a night shift. Social satisfaction was better on workdays that were preceded by two rest days rather than one rest day (Totterdell 1995). In sum, stress is a normal part of everyday life and affects all living creatures. According to Selye, stress is differentiated between eustress and distress. Eustress refers to the level of stress which motivates us to perform well, solve problems, be creative and grow in confidence. Contrary, distress causes our performances to deteriorate, our adaptive bodily functioning becomes disrupted and our response, whether physiological, cognitive, emotional or behavioral becomes maladaptive.

Numerous studies have indicated that job stress is significant in nursing, and nurses' high job stress is well documented (Healy and McKay 2000; Lee 2003; Lambert and Ito 2004). In particular, the job stress of nurses working in acute and specialized care units has been widely studied, heavy workload, short staffing, dealing with death and dying, inter-staff conflict, a strain of shift work, careers, and lack of resources and organizational support have been identified as the major sources of job stress (Lee 2003).

Currently, stress is recognized not only as a threat to our quality of life, but also to our physical and psychological well-being (Cox and Rial-Gonzales 2002). This perception of stress as a real threat to employees' well-being is widespread in most sectors of the economy (WHO 2001). Not only has this belief been portrayed by the media, but trade unions as well as professional and scientific associations are also increasingly concerned with the extent and impact of work-related stress on workers (Cox 2000).

A study conducted by lee (2003) found that stress level was significantly higher in junior nurses than in senior nurses, and the longer the nurses had worked in their units the more likely they were to experience stress, regardless of their seniority (Lee 2003). Healy and McKay (2000) studied stress, coping and job satisfaction in 129 Australian nurses, each participant was asked to complete standardized questionnaires, including the Nursing Stress Scale, Ways of Coping Questionnaire, the Coping Humor Scale, Job Satisfaction Scale of the Nurse Stress Index, and the shortened version of the Profile Mood States (Healy and McKay 2000). Results indicated that 'workload' was the highest perceived stressor in the working environment, which closely agreed the findings of Cushway (Cushway 1992).With regard to the sources of stress, the study conducted by Lee (2003) revealed that 'workload', 'inadequate preparation' stressors of support' are the most common stressors among nurses who are working in primary care settings in Hong Kong (Lee 2003).

High level of stress at work is a major threatening factor to both physical and psychological health of individuals and affects their cognitive processes involving memory, recall of knowledge and attention (Kornitzer, deSmet et al. 2006). Direct medical costs of stress related problems are estimated to be between $150 to $300 billion annually in the United States (US) (Tenant 2001). A study conducted by landa et.al. indicated that there was a relationship between age, gender, length of service and working experience with occupational stress (Landa, Esther et al. 2008). On the other hand the results of a study that was conducted on urban police officers in the US, showed that dynamic factors such as work environment and coping mechanisms, contributed more to explain the variance of police stress than static factors such as race and gender (He, Zhao et al. 2005). Several studies concluded that income, heavy workload, lack of workspace, lack of resources (including equipment and material to do tasks), absence of proper company procedures, insufficient time to perform duties, meeting deadlines imposed by others, have been introduced as stressors related to work environment (Botha and Pienaar 2006; Sveinsdottir, Biering et al. 2006). In another study, external accountability, responsibility, work relationships, insufficient consultation, communication, inadequate feedback on performance and organizational changes have been introduced as sources of occupational stress (Meyer and Allen 1997). The National Health Services (NHS) in the United Kingdom and in Australia reported

that occupational stress occurred among health professionals at higher levels than in any other comparable profession (Adeb-Saeedi 2002).

Nursing has been shown to be a strenuous profession, and nurses are more exposed to stress-provoking factors than other healthcare workers (Evans 2002). According to Evans (2002), a survey commissioned by the Sunday Times in (1997) reported that nursing was the sixth most stressful profession (Evans 2002). In a study of 102 nurses in a Chinese intensive care unit, excessive workload was the most frequently cited sources of workplace stress, this was a result of the nursing shortage with fewer nurses to care for more patients (Li and Lambert 2008). Lee and Wang (2002) investigated perceived occupational stress and related factors among public health nurses, and reported that personal responsibility and workloads were the major sources of occupational stress (Lee and Wang 2002). In addition to excessive work load was also included as a major contributor to stress among hospital based Brazilian nurses (Stacciarini and Troccoli 2004).

Working with difficult patients, the nurses' feelings about death and dying, interpersonal conflicts, managing the patients' pain and the presence of the family also contribute to nursing stress (McGrath, Reid et al. 2003). The human immunodeficiency virus (HIV) epidemic and high mortality rates have contributed to stressful work conditions for nurses; this was concluded from a study of occupational stress of nurses in South Africa, in addition health risks posed by contact with HIV/ (acquired immunodeficiency syndrome (AIDS) patients, lack of recognition for the

job they are doing and insufficient staff were identified as the most common stressors for nurses (Rothmann, van der Colff et al. 2006). These findings were consistent with literature about the effect of the HIV/AIDS pandemic on the health care workforce, which reported the increase in the emotional burden and stress among health workers due to anxiety and fears of occupational exposure (Dieleman, Bwete et al. 2007). In a study of burnout among nurses in Germany, the nurses who experienced effort reward imbalance reported higher levels on two of the three core dimensions of burnout (Bakker, Killmer et al. 2000). Brown and colleagues (2006) examined demanding work schedules and mental health nursing assistants working in nursing homes, and reported that working two or more double shifts per month was associated with an increased risk for all negative mental health indicators (Brown, Zijlstra et al. 2006). Kashani, et.al (2010) identified the importance of reducing the stress in nurses to ensure that they are capable of providing quality patient care (Kashani, Eliasson et al. 2010). In this study, nurses in a medical facility were given equal opportunity to participate in the study with 270 questionnaires being distributed, and a total of 255 completed surveys were returned, of the nurses who responded, 55% reported very high levels of stress, when asked about whether or not they had mechanisms to cope with stress, 55% again responded they were equipped with coping strategies, including exercise, the nurses in this study spent 3.8 hours each week, on average, exercising (Kashani, Eliasson et al. 2010).

A study by the Center for Disease Control and Prevention in US (2005) found that over 50% of critically ill patients in the US die in an acute care setting where nurses were the primary caregivers, with the aging baby boomer population, there is little argument that end of life care are a nursing concern (Weigel, Parker et al. 2007). Research reveals that exposure to bereavement and patient sufferings were the stressors that nurses endure throughout their careers (Desbeins and Fillion 2007). Dealing with death and dying patients has been identified as workplace stressors that influence nurses (McVicar 2003). Instances of futile care evoke strong emotional responses from nurses, including that the futile care was violent and cruel (Ferrell 2006). Distress can adversely affect a nurse's ability to respond adaptively at work and home, and lead to emotional burnout and physiological disturbance (Caine and Ter-Bagdasarian 2003). Distress in nurses is associated with emotional burnout, frustration, and resignations (Zuzelo 2007). A previous study that includes nurses in different patient-care units including, medical, surgical, cardiovascular, surgery, oncology and hospice nursing, found that the major sources of stress experienced to be workload, death and dying and feelings of inadequacy in meeting the needs of the patients and their families (Graft-Toft and Anderson 1981). Researchers attempted to cross culturally compare factors that may contribute to the nursing shortage within countries that have produced a limited number of research findings on role stress in nurses (Lambert and Ito 2004). Their research examined work

stressors, ways of coping and demographic characteristics as predictors of physical and mental health among hospital from Japan, South Korea, Thailand and the US (Hawaii), the mean scores for workplace stressor and each way of coping were compared across countries, the findings suggested that nurses in all four countries ranked workload and dealing with death and dying to be the highest of all workplace stressors (Lambert and Ito 2004).

It is intuitively obvious that excessive and unreasonable demands will rapidly exhaust even the most proficient individual available sources of energy and will ultimately lead to a situation in which recovery becomes impossible (Maslach, Schaufeli et al. 2001). Research has shown that excessive nursing workloads adversely affect the safety of patients. Montgomery (2007) has demonstrated that fatigue, inadequate sleep and excessive and inappropriate workloads will (regardless of discipline) have a significant effect on the incidence of medical errors that compromise the safety and even the lives of patients (Montgomery 2007). In addition a study that include 553 hospital nurses found that nurses who reported that they had lighter workloads were more satisfied with their jobs than those who reported having higher workloads (Kovner, Brewer et al. 2006). High nursing workloads also affect a nurse's social role (Kovner, Brewer et al. 2006). A study by Yildirim and Aycan (2008) has shown that work overload and irregular work schedules were significant predictors of work and family conflict, and that work and family conflict was in turn

associated with lower job and life satisfaction (Yildirim and Aycan 2008). Furthermore heavy nursing workload increases the incidence of burnout and its related disorders in nurses and their private and professional lives (Yildirim and Aycan 2008). A study undertaken by Li and Lamber (2008) found that nurses who work in intensive care units cite nursing workload as the most serious job stressor to which they were exposed (Li and Lambert 2008). A review performed by Chang, et.al (2005) found that the work-induced stress is consistently cited as one of the main reasons why nurses leave the workforce, they therefore concluded that it was essential for institutions to implement strategies that would help nurses to deal with their occupational stress (Chang, Hancock et al. 2005).

2.3 Coping Mechanisms

Job stress can be a detriment to the health and well-being of an individual. Therefore it is important to discuss effective ways of responding to stress on the individual level. The major purpose of this sub-section is to summarize and integrate a body of literatures pertinent to understanding how an individual copes with stress occurring in organizational and non-organizational life. Coping has been focused on internal and external resources for coping with stress which deal with work and general life stresses (Cartwright and Cooper 1996). Coping can be defined as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Folkman 1984).

Coping is also viewed as a dynamic process and response to situation characterized by uncertainty and important consequences (Latack 1986). Furthermore, coping is illustrated as a process oriented, non-automated adaptive behavior, effort, and managing life stressors (Backer, Bakas et al. 2000). According to Lazarus (2000), he defined that coping consisted of all the things people done to control, tolerate or reduce the effects of life's stressors namely perceived threats, existing problems or emotional losses (Wade and Travis 2003). With these general definitions, coping can be best illustrated as managing taxing circumstances, expanding efforts to solve life's problems and seeking to master or reduce stress (Burke and Weir 1980).

Coping with stressful events is complex, highly dynamic and is directed toward moderating the impact of such events on an individual's physical, social and emotional functioning (Davidson and Fielden 1999). Generally there are three actions to achieve effective coping. Firstly, one has to attempt to anticipate potential stressors before encountering them and prepare appropriate plans of attack for the various outcomes. Then an individual has to reduce the physical arousal caused by stressors. It is vital that the individual has the capability to separate the facts from emotions in order to reduce the stressors. Finally, increasing positive feelings under stressful conditions help to decrease the level of stress (Miller and Pfohl 1982). A helpful attitude by a partner or friends regarding problems gives the individual concerned the opportunity to find support in solving stressful

event. This means an individual begins to build connection between members in the workplace by providing opportunities, understanding, expressing views and to be involved in decision making processes in the work-related matters (Dijkhuizen 1981). Participation in decision-making is found to be able to increase communication among workers and improves the interpersonal relations within work units. Control mechanism, escape mechanism and symptom management also have been widely adopted as a stress prevention mechanism. Latack (1986) conducted a study to identify individual's coping preference to reduce job stress. The findings showed that individuals adopting a control strategy are less likely to report job-related anxiety, job dissatisfaction and leaving the organization. Those favoring an escape or symptom-management strategy are more likely to report psychosomatic complaints (Latack 1986). Besides that, individual who adopted problem-solving mechanism to reduce stress is able to achieve high performance under stress while individual who adopted emotional-defensive mechanism has a lower level of performance when under high stress (Anderson 1976). Individuals with high problem-solving mechanism are capable to manage work stress effectively (Parkes 1990). It was found that individuals with high demands and low coping skill had the most health problems. An individual with low demands and high coping had the lowest level of health problems. On the other hand, individuals with high demands and high coping skill had high reports of job stress, but not high levels of health problems (Erikson and Ursin 1999). The studies

also found that strategies such as seeking reassurance and understanding root causes of job stress (Bernier 1998) and have great sense of control in a stressful situation (Troup and Dewe 2002) are more competent to cope with job-related stress. Christie and Shultz (1998) conducted a research on coping with job stress between men and women showed that men and women differed on few coping responses. Control coping was significantly higher for women as compared to men. Escape coping indicated no significant difference between men and women. Women reported higher levels of social support on all scales compared to men (Christie and Shultz 1998). A healthy person will face stress confidently, deals with it and gets beyond it. It is important for an individual to develop coping mechanisms to reduce job stress and apply these coping mechanisms into use in his/her everyday life (Krohne 1996).

2.4 Efficacy of various coping strategies utilized by nurses

With regard to the relationship between job stress, coping and perceived health status, the findings of the study by Lee (2003) revealed a significant inverse relationship between direct coping strategies and job stress, and a positive relation between perceived health status and coping (Lee 2003). According to Lambert et al (2004) accepting responsibility and escape-avoidance were the two coping mechanisms found to be positively correlated with the likelihood of leaving the current nursing position (Lambert and Ito 2004). Thus, nurses who indicated that they were likely to change nursing positions found that accepting responsibility and escape-

avoidance were their best means of coping (Lambert and Ito 2004). Prior research conducted on nurses from Western cultures suggested that escape-avoidance coping methods were not effective in contending with stressful events and, as a result, could contribute to a nurse's desire to leave his or her current nursing position (Tyler, Carroll et al. 1991). An another study conducted by Tyson and Pongruengphant (2003) indicated that nurses in Thailand's hospitals continued to experience high levels of stress from a lack of adequate support or opportunities to participate in making decisions directly affecting their patients (Tyson and Pongruengphant 2004). With increasing level of stress, Thailand nurses more frequently utilized problem solving, Buddhist relaxation techniques and avoidance as strategies for dealing with the pressures of workload, role ambiguity, and other sources of stress (Tyson and Pongruengphant 2004). In addition nurses in Singapore preferred self-help coping strategies to seeking social support from colleagues or management (Boey, Chan et al. 1997). In a study that included 135 first years urban nursing students, individual differences, environmental factors and situational characteristics of the stressful event were the variables examined as predictors coping (Parkes 1986). Knowledge about stressful episodes during the clinical work was collected via the Ways of Coping questionnaire and interviewed at the end of each work experience. It was indicated that situational, personal and environmental variables were direct predictors of coping (Parkes 1986).

2.5 Roles of mental health nurse

Mental health nurses have historically been at the core of provincial mental health services where they have proven strengths and abilities in providing high quality care. Mental health nurses are underutilized in our province and when working within an interdisciplinary collaborative health team they have the potential to play a greater role in the care of mental health consumers. There is significant evidence to demonstrate that when nursing services are optimized there is improved effectiveness and efficiency of health care services. (Canadian Health Services 2007)

Mental health nursing practice spans the full continuum of care providing comprehensive mental health services necessary for the promotion of mental health and the prevention, treatment, management, and rehabilitation of mental disorders of individuals, families, communities across the lifespan. (Canadian Federation 2006)

Nurses are needed to provide specialized services in mental health promotion, prevention, maintenance and rehabilitation services to address the needs of consumers (where they live, work). The focus of mental health nursing is not on the origins of the diagnostic categories of diseases but on people’s relationships with their problems or with their health and the unique lived human responses to distress such as grief, anxiety, stress, loneliness, and other psychosocial behavioral issues. (Barker 1999b)

Nurses in specific roles (practitioner, mental health and counselor, crisis worker, case manager, advocate, consultant) are also primary care providers. Inherent in these roles are competencies specific to providing consumers-focused health-mental health pro-motive and preventive care, group work as well as the treatment, management and rehabilitation of mental problems. (Controneo 1999)

The World Health Organization has identified four components of the nurse's role: direct provider, teacher/educator, manager and researcher/evaluator (Canadian Health Services 2007). Included in these four components are other specific roles, which include: counselor, crisis worker, advocate, consultant, community developer, case manager, and member of a profession.

2.6 Studies about stress among nurses in Palestine and Arab world

Four studies conducted among Palestinian nurses were found; two in the West Bank and two in Gaza city. Joudeh (2003) aimed to identify the degree of occupational stress among hospital nurses in Northern West Bank district-Palestine and to explore the role of some demographic variables. The sample consisted of 276 nurses who were chosen randomly from five hospitals. About 64% of participants were females and 62% had an associate degree. A 62-items questionnaire developed by the researcher was handed to each participant. Prevalence of psychological distress was 73.89% (Joudeh 2003). Saada et al (2003) estimated that the prevalence of

stress among 144 nurses at Nablus hospitals in the West Bank was 75.6% as measured by a 50- items questionnaire developed by the researcher (Saada J, Tobaila Z et al. 2003). A study among Gaza nurses was conducted by Hajjaj (2007). The total sample was 100 (70% male) nurses working in one public hospital (Shifa) in the Gaza Strip. Two tools developed by the researcher were used in this study; one to explore stress (14 items) and the other for occupational satisfaction (12 items). The results showed that level of stress in nurses was 79.28% (Hajjaj 2007). Another study conducted in Gaza-Palestine about occupational stress among hospital nurses and used a quantitative survey design, with a self-administered questionnaire pack being the data collection technique. Data was collected on psychological distress (GHQ-12), depression (SLC-D), sources of stress (NSS), trauma (IES-R) and demographic variables. Open questions were used to enable participants to describe their experiences of stressful events and enable the researcher to collect more in-depth information regarding any aspects of the stress domains, a sample of the study population is the entire cohort of nurses who were working in the 16 hospitals in Gaza (1801 nurses; 985 males) during the period August 2009 through March 2010. Because of difficulties in access, only 1500 were able to receive questionnaire packs and 1133 were completed and returned (response rate=75.53%). The results of this study revealed a high prevalence of psychological distress (63%, GHQ-12 cut-off=6), depression (59.7%, SCL-D cut-off=1.5) and trauma (69.4%, IES-R cut-off=35). The

most severe occupational stressors were: Not enough staff to adequately cover the unit, Lack of drugs and equipment's required for nursing care, and Unpredictable staffing and scheduling, respectively. As subscales, workload and death and dying were the most frequent and severe occupational stressors (Alhajjar 2013).

Stress is unavoidable in the nursing profession. Many studies have highlighted that the job demands of nurses can increase the job stress (Albar Marin and Garcia-Ramirez 2005). In Jordan, Hamaideh, et. al (2008) carried a study among Jordanian nurses' job stressors and social support, which aimed to describes stressors of Jordanian nurses and the social support they received to decrease the influence of these stressors. The relationships between the two concepts, and each with the sample's demographics were assessed. Predictors of nurses' stressors as well as social supportive behaviors were also studied and they used a descriptive correlational research design. The Nursing Stress Scale and the Inventory of Social Supportive Behaviors were used to collect data from a convenience sample of 464 Jordanian nurses who were working in 13 Jordanian hospitals and found that death and dying issues were the most prevalent stressors that Jordanian nurses reported and they faced at their jobs (Hamaideh, Mrayyan et al. 2008). Death by its nature is stressful and a source of suffering; therefore, nurses showed more symptoms of stress when they were dealing with issues of death and dying. Additionally, because of the increased workload, nurses did not have enough time to

support each other's emotions in general and those emotions related to death and dying in particular. Also workload according to this study was found to be the second prevalent stressor among Jordanian nurses (Hamaideh, Mrayyan et al. 2008). Jordan, as many other countries, suffers from a shortage of nurses, which increases the workload for nurses. In addition, nurses sometimes carry out some non-nursing activities such as paperwork, management and supervising, which in turn add to their stress (Hamaideh, Mrayyan et al. 2008). Another study was conducted by Kamal, et.al (2012) in Saudi Arabia about the effect of nurses' perceived job related stressors on job satisfaction in Taif governmental hospitals. The study which was carried out on a convenience sample of 148 nurse using expanded nursing stress and job satisfaction scales, found that lack of enough staff to adequately cover the unit was the most stressful event perceived by staff nurses in the Taif governmental Hospitals (N=148, Mean=3.17) (Kamal, Al-Dhshan et al. 2012). In addition the study results showed that the most stressful categories of staff nurses in Taif governmental hospitals where patients' demands, their families' complaints and nurses workload (mean=2. 835) as indicated by patient and their families (mean=2. 87) (Kamal, Al-Dhshan et al. 2012) . A study conducted by Mohammed, et.al (2011) in Egypt about pediatric nurses' stresses in intensive care units and its related factors including 135 nurses in the intensive care units at children's university hospital at El-Shatby. Two tools were used to collect the necessary data; nurse's stresses related factors

structure questionnaire, and Nursing Stress Scale. This showed that the most common source of nursing stress is death or expecting death situation as shown by the high stress mean score reported by the ICU nurses (80.7±13.90). While the least mean score mentioned by the studied nurses was a conflict with physicians (23.5±8.60). Inadequate staff were the most perceived health care system stress factor mentioned by 99.3% of the studied nurses, and the stress score was extremely (82.1%), frequently (16.4%), and occasionally (1.5%) (Mohamed, Gaafar et al. 2011).

CHAPTER 3

MATERIALS AND METHODS

3. Introduction

In this chapter the methodology, including research design, population and sample, data collection and data analysis process are outlined.

3.1 Research design

A quantitative, cross-sectional, descriptive analytical survey was carried out. A research design is a blueprint for conducting the study that maximizes control over factors that could interfere with the validity of the findings (Burns and Grove 2001).

3.2 Survey

Uys and Basson (1991) state that survey research is an empirical and logical investigation that involves the systematic and impartial collection of data from a sample of cases, as well as the statistical analysis of the findings (Uys and Basson 1991). According to Burns and Grove (2001) a survey is a technique of data collection in which questionnaires are used to gather information about an identified population.

3.3 Target population

The target population is all elements (individuals, objects, or substances) that meet certain criteria for inclusion in a given universe (Burns and Grove 2001). This is supported by Polit and Hungler (1995), who states that the target population included all the members who are under study that conforms to a designated set of specifications. In this study the population consisted of nurses in any of the following units/wards: medical, surgical, critical care, trauma and emergency, maternity and theatre at all hospitals included in the study (Polit and Hungler 1995).

3.4 Sample and Sampling Method

A total population sample was taken from 5 hospitals in Nablus district, Nablus includes 6 hospitals (2 governmental and 4 non-governmental). Five hospitals were selected in the study: 2 governmental (Rafidia and ALwatni hospital) and 3 non-governmental which are ALarabi and Nablus Specialty and ALithad hospitals. One hospital excluded because it include a small number of nurses and most of them working in the same other hospital which is Alenjelli hospital. The researcher spent two weeks in governmental and two weeks in non-governmental hospitals in Nablus city and recruited nurses to participate in the study. Whoever agreed to participate in the study was included.

3.5 Sample size

Sample size is the number of subjects needed in a sample (Polit and Hungler 1995). The population from which the subject sample was taken was nurse's staff and practical from different unit in all hospitals included in the study. In all Hospitals included in the study, there are 450 nurses working in various departments. The nurse who fills the questionnaires was 200 nurses working in the different nursing units.

3.6 Study tool

Questionnaire according to Polit and Hungler (1995) is a series of questions in a document used to gather self-report information from respondents through self-administration (Polit and Hungler 1995). The purpose of the questionnaire had been to extract information from the respondents with regard to the objectives already stated. Researchers are encouraged to use questions in exactly the same as those in previous studies to facilitate comparison of results between studies (Burns and Grove 2001). These authors argue that, in some studies, the researcher can find a questionnaire in the literature that matches the questionnaire blueprint that has been developed for the study. However the researcher must frequently add items to or delete items from an existing questionnaire to accommodate the blueprint developed.

A questionnaire, which consisted of three sections, was used to obtain information regarding sources of stress and the adopted coping strategies of

nurses working in a hospital setting. The first section attempted to delineate nurses' demographic profile, such as gender, work area and years of experience. Theses scales are:

3.6.1 Nursing Stress Scale

The second section, Nursing Stress Scale (NSS) which was designed to measure the frequency and sources of nursing stress experienced by nurses on different hospital units (Graft-Toft and Anderson 1981). It consists of 34 items that describe situations that have been identified as causing stress for nurses in their performance of their duties which required a Likert type response from 1 'Never' to 4 'Very frequently' according to their perceived occurrence in the workplace.

3.6.2 Subscales

The Nursing Stress Scale identifies seven major sources of stress which are factor analyzed. One factor relates to the physical environment; four factors arise from the psychological environment and two from the social environment of the hospital. The workload subscale relates the physical environment. Death and dying; inadequately prepared to deal with the emotional needs of patients and their families; lack of staff support and uncertainty concerning treatment relate to the psychological environment. The social environment subscales consist of conflict with physicians and conflict with other nurses and supervisors.

(1) Death and dying (7 items) questions 1 - 7

These subscale measures stressful situations resulting from the suffering and death of patients. Four of the seven items on this subscale are related to the death of a patient. Two other items on this subscale are related to patients who fail to improve or suffer and one item is related to the performance of painful procedures. For example: The death of a patient with whom you developed a close relationship.

(2) Conflict with Doctors/Physicians (5 items) questions 8 - 12

The second subscale consists of stressful situations that arise from the nurses' interactions with doctors/physicians. Two items include criticism by the doctors by the doctor and conflict with the doctor. The other items pertain to the nurse's fear of making mistakes concerning treatment in the absence of a doctor and disagreement with the doctor. For example: Disagreement concerning the treatment of a patient.

(3) Inadequate preparation to deal with the emotional needs of patients and their families (5 items) questions 13 – 15

This subscale measures stressful situations resulting from nurses feeling inadequately prepared to deal with psychological and emotional needs of patients and their families. For example: Feeling inadequately prepared to help with the emotional needs of a patient.

(4) Lack of support (3 items) questions 16 - 18

This subscale measures the nurse's assessment of the extent to which opportunities are available to share experiences with other nurses and to vent feelings of anger and frustration. For example: Lack of opportunity to talk openly with other unit personnel about problems in the unit.

(5) Conflict with other nurses and supervisors (5 items) questions 19 – 23

The fifth subscale consists of items that are associated with conflict situations that arise between nurses and supervisors. Two items involve conflict with or criticism by a supervisor and the other three items have to do with a conflict with nurses on the same or other hospital units. For example: Difficulty in working with a particular nurse or nurses in the unit.

(6) Workload (6 items) questions 24 - 29

This subscale includes stressful situations that arise from the nurse's workload, staffing and scheduling problems, and inadequate time to complete nursing tasks and to support patients emotionally. For example: Too many non-nursing tasks required, such as clerical work.

(7) Uncertainty concerning treatment (5 items) questions 30 – 34

Stressful situations also arise where there is uncertainty concerning the treatment of patients. For example: Inadequate information from a physician regarding the medical condition of a patient.

3.6.3 Rating system

4 point Likert type scale from 1 ‘Never’ to 4 ‘Very frequently’ according to their perceived occurrence in the workplace. The original scale was reported to have high reliability as evidenced by cronbachs alpha of 0.92 for the total scale. Any mean above 2 was considered a contributing factor to nursing stressors.

3.6.4 Ways of Coping Checklist

The last section, the Ways of Coping Checklist (WCCL) is based on Lazarus’ transactional model of stress and coping (Lazarus and Folkman 1984). This model views stress as a relationship between the person and the environment that taxes or exceeds the person’s resources and endangers his or her well-being. Two basic categories of coping include efforts to alter the troubled person-environment relationship (i.e. Problem-focused coping) and efforts to regulate emotional distress (i.e. Emotion-focused coping). Problem focused coping includes defining the problem, generating, evaluating, and selecting potential solutions, and attempting to cognitively reappraise the situation by shifting levels of aspiration, reducing ego involvement, finding alternative channels of gratification, or developing new standards of distancing, self-deception, positive comparisons and reality distortion.

3.6.5 Sub-scales

They are three sub sub-scales: confronting coping, question 1 -6; distancing, question 7-12; escape-avoidance, question 13-20.

3.6.6 Rating system

This questionnaire contains 20 items drawn from the existing measures. A four-point response scale was used from 1 ‘Not used’ to 4 ‘Used a great deal’. Any mean above 2 was considered a contributing factor for coping mechanism used.

3.7 Questionnaire response rate

Low response rate which is 44.4% from the total number nurses in included hospitals 450.

3.8 Pilot study

A pilot study was used to test the instrument. (Burns and Grove 2001)defines pilot study as a smaller version of a proposed study conducted to refine the methodology. It is developed much like the proposed study, using similar subjects, the same settings, the same treatment, the same data collection and analysis techniques.

A pilot study was conducted with ten nurses in the intensive care unit from hospitals included in the study to determine the clarity of questions, effectiveness of instructions, completeness of response sets, time required

to complete the questionnaire and success of data collection technique. Pilot subjects were asked to comment on the applicability and appropriateness (validity) of the questionnaire to the Palestinian context. All questions were answered no clarity of questions was required. The researcher determined that it would take twenty (10) minutes to complete the questionnaire. The instrument was also tested for reliability and validity to minimize bias.

3.9 Reliability and validity

Reliability according to Uys and Basson (1991) mean the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure (Uys and Basson 1991) . Because all measurement techniques contain some error, reliability exists in degrees and is usually expressed as a form of the correlation coefficient. Gray-Toft (1981) reported internal consistency coefficient ranging from 0.79 to 0.89 on the Nurses Stress Scale (Graft-Toft and Anderson 1981).

Folkman et al (1988b) reported internal consistency coefficient of 0.61 to 0.79 on the ways of Coping Checklist. The researcher tested the study of virtual (repeatability) of the research and the results by other researchers. This was done through a pilot study that was conducted to test the questionnaire using nurses from the intensive care unit. There were no changes indicated after the pilot study.

Validity on the other hand, means the degree to which an instrument measures what it is supposed to measure (Uys and Basson 1991). With regard to validity, the Nurses Stress Scale and Ways of Coping Checklist are established tools that have been validated (Graft-Toft and Anderson 1981); (Edwards 1993). The questionnaire was circulated to several Palestinian Nursing Managers for comment on face validity of the questionnaire and was found to be acceptable.

According to permission to use the scale to take consent from the original author has been many times to contact him via e-mail, but there was no response. According to the translation of the questionnaire its translated under the supervision of Prof. Walid Sweileh and Dr. Samah Al-jabi from English into Arabic, where they are considered experts in the English language, and checked by English translation expert, the validity of the questionnaire in Arabic language done by distributing it to ten nurses have more than ten years' experience in working were asked whether the questionnaire expressed areas of tension in their profession and the answer was yes.

3.10 Ethical Consideration

Permission was sought from the Ministry of Health (MOH), Institutional review Board (IRB) and the Faculty of graduate studies before conducting the study.

3.11 Permission to conduct the study was requested. Letters clearly stating the purpose of the study were written for the Ministry of Health (MOH) requesting permission to conduct the study.

3.12 Verbal consent nurses were invited to participate voluntarily in this study by verbal consent. Return of the completed questionnaires implied that the respondents had consented to the study. Participants were ensured not to feel obliged to complete the questionnaire and that they might withdraw from the study at any point in time if they so wished.

3.13 Confidentiality All information was treated with strict confidentiality and used only for research purpose.

3.14 Anonymity was ensured. The questionnaire required no names of respondents.

3.15 Data Collection Procedure

In this study the researcher used a questionnaire to collect the data. Questionnaires were distributed to nurses of different units. The questionnaires were distributed at the beginning of the shift and collected at

the end of the same nursing shift. This was done for alternate days and on different nursing shifts until the desired sample was reached. Phone calls were made during the shifts to remind the subjects to return the completed questionnaires.

3.16 Data analysis

The questionnaires were checked for missing data; items in which the subject provided two responses when only one was requested; items in which the subject has marked a response between two options and items that ask the subject to write in some information such as , work area and years of experience.

Statistical analysis of the quantitative data was conducted by using Statistical Package for the Social Sciences version (20) (SPSS). Data were expressed as means ± SD for continuous variables and as frequencies (percentage) for categorical variables. Variables that were not normally distributed were expressed as medians (lower–upper quartiles). Descriptive statistics were used to illustrate the demographic profile of the participants, the frequency, the mean scores and standard deviation of sources of stress and adopted coping strategies. If the assumptions of equality of variance and normality (assumed for the t test) were not met, the Mann-Whitney U test (a nonparametric equivalent of the t test) was performed as appropriate.

CHAPTER 4

RESULT

4. Introductions

In this chapter a detailed description of the analysis and interpretation of data is outlined. Descriptive data together with, Mann Whitney U test, analysis of variance (ANOVA), and Sperman correlations have been reported.

4.1 Demographic information

Two hundred nurses from five hospitals agreed to participate in the study and filled the questionnaire. The total number of nurses in the study hospitals studied is approximately 450. Therefore, the study sample consisted of 44.4% of the total number of nurses working in the study hospitals. Analysis of demographic data of the respondents included, gender, years of experience, and work area.

4.2 Descriptive statistics

Table 1: Demographic data of respondents: describes the socio-demographic characteristics of participants. The results showed that males represented 58% of the study sample. Respondents who had less than 5 years of working experience were (n=94; 47%), while (n=106; 53%) had more than 5 years of experience. Nurses who were working in a governmental hospital were (n=124; 62%) of the total nurses included. (See table 1)

Variables		**Frequency (%)**
Gender	Male	117 (58.5)
	Female	83 (41.5)
Years of experience	< 5	94 (47)
	≥ 5	106 (53)
Type of work area	Governmental	124 (62)
	Non-governmental	76 (38)

4.3 Nursing Stress Scale (NSS)

Table 2: nursing stress scale (34 items)

All items in the nursing stress scale have a minimum of (1) and a maximum of (4). A number of potential sources of stress have been identified in hindering nurses in their performance of their duties. An examination of the mean scores gives an indication as to which potential sources of stress were frequently perceived to be most problematic by the sample.

Upon analyzing the 34 items of NSS, the stress item with the highest score appeared to be “floating to other units that are short-staffed” (mean =3.22) followed by “not enough staff to adequately cover unit” (mean=3.19), and “too many non-nursing tasks required, such as clerical work” (mean=3.16) while the stress item with the lowest score was “feeling inadequately prepared to help with emotional needs of the patient”. (See table 2)

STATEMENT	Mean ± SD	Frequency (%) of respondents with a score of > 2
Performing procedures that patient experiencing as painful	2.58 ± 0.8	104 (52)
Feeling helpless in the case of a patient who fails to improve	2.26 ± 0.78	66 (33)
Listening or talking to a patient about his /her approaching death	2.46 ± 0.83	97 (48.5)
The death of a patient	2.74 ± 0.82	126 (63)
The death of a patient with whom you developed a close relationship	2.51 ± 0.84	104 (52)
Physician not being present when a patient dies	2.45 ± 0.87	88 (34)
Watching a patient suffer	2.92 ± 0.81	135 (67.5)
Criticism by a physician	2.08 ± 0.8	57 (28.5)
Conflict with a physician	2.2 ± 0.73	55 (27.5)
Fear of making a mistake in treating a patient	2.22 ± 0.71	62 (31)
Disagreement concerning the treatment of a patient	2.15 ± 0.7	50 (25)
Making a decision concerning patient when a physician is unavailable	2.34 ± 0.78	76 (38)
Feeling inadequately prepared to help with emotional needs of a patient's family	2.4 ± 0.88	90 (45)
Being asked a question by a patient for which I do not have a satisfactory answer	1.91 ± 1.02	52 (26)
Feeling inadequately prepared to help with emotional needs of the patient	1.9 ± 0.47	13 (6.5)
Lack of opportunity to talk openly with other unit personnel about problems in the unit	2.3 ± 0.77	77 (38.5)
Lack of opportunity to share experiences and feelings with other personnel in the unit	2.35 ± 0.78	77 (38.5)
Lack of opportunity to express to other personnel in the unit my negative feelings towards patients	2.24 ± 0.76	73 (36.5)
Conflict with a supervisor	2.38 ± 0.86	91 (45.5)

Floating to other units that are short-staffed	3.22 ± 0.75	165 (82.5)
Difficulty in working with a particular nurse	2.73 ± 0.93	116 (58)
Criticism by a supervisor	2.31 ± 0.87	75 (37.5)
Difficulty in working with a particular nurse in the unit	2.53 ± 0.91	101 (50.5)
Breakdown or malfunction of computer	2.66 ± 0.92	114 (57)
Unpredictable staffing and scheduling	2.74 ± 0.77	122 (61)
Too many non-nursing tasks required, such as clerical work	3.16 ± 0.81	161 (80.5)
Not enough time to provide emotional support to a patient	2.97 ± 0.87	144 (72)
Not enough time to complete all nursing tasks	2.89 ± 0.91	135 (67.5)
Not enough staff to adequately cover unit	3.19 ± 0.78	162 (81)
Inadequate information from a physician regarding the medical condition of a patient	2.62 ± 0.79	105 (52.5)
A physician ordering what appears to be inappropriate treatment for a patient	2.29 ± 0.83	71 (35.5)
A physician not being present in a medical emergency	2.48 ± 0.83	90 (45)
Not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment	2.2 ± 0.77	65 (32.5)
Uncertainty regarding the operation and functioning of specialized equipment	2.02 ± 0.76	47 (23.5)

Table 3: Sources of stress

Analysis of the NS subscales (Table 3) showed that the most stressful source appeared to be “workload” (mean=2. 93) followed by “conflict with other nurses” (mean=2.63) while the least frequently reported source of perceived stress was “inadequately preparation to meet the emotional demands of the patients and their families” (mean=2.07).

The percentage for the highest items according to nursing stress scale was “floating to other units that are short-staffed” (82.5%), followed by “not enough staff to adequately cover unit” (81%), followed by “too many non-nursing tasks required, such as clerical work” (80.5%). While the stress item with the lowest percentage was “feeling inadequately prepared to help with the emotional needs of the patient” (6.5%).

Percentage for the highest items according to nursing stress subscale was “workload” (93.5%), followed by “conflict with other nurses” (80.5%), while the least percentage reported source of perceived stress was “inadequately preparation to meet the emotional demands of the patients and their families” (49.5%). (See table 3)

Source of stress	Mean ± SD	Frequency (%)	Min	Max
Emotional issues related to death and dying	2.56 ± 0.43	176 (88)	1.57	3.86
Conflict with Physicians	2.2 ± 0.5	113 (56.5)	1.2	4
Inadequate preparation to meet the emotional demands of patients and their families	2.07 ± 0.58	99 (49.5)	0.67	3.67
Lack of support	2.29 ± 0.61	114 (57)	1	4
Conflict with other Nurses/ supervisors	2.63 ± 0.62	161 (80.5)	1	4
Workload	2.93 ± 0.54	187 (93.5)	1.5	4
Uncertainty concerning treatment	2.32 ± 0.55	128 (64)	1	4

Table 4: Sources of stress by gender

No significant difference in various sources of stress was found with regard to gender category. (See table 4)

Subscale	Gender		P value
	Male n=(117)	Female n=(83)	
	Mean ± SD	Mean ± SD	
Emotional issues related to death and dying	2.59 ± 0.43	2.51 ± 0.43	0.498
Conflict with Physicians	2.18 ± 0.5	2.21 ± 0.5	0.75
Inadequate preparation to meet the emotional demands of patients and their families	1.97 ± 0.57	2.2 ± 0.57	0.008
Lack of support	2.1 ± 0.6	2.43 ± 0.62	0.017
Conflict with other Nurses/ supervisors	2.59 ± 0.62	2.69 ± 0.61	0.194
Workload	2.89 ± 0.54	2.99 ± 0.52	0.241
Uncertainty concerning treatment	2.33 ± 0.55	2.31 ± 0.55	0.542

Table 5: Sources of Stress by years of experience

Analysis of the association between demographic factors and sources of stress showed that nurses who had given more than 5 years of service to the profession have significantly higher "uncertainty concerning treatment" stress than less experienced nurses: 2.41 versus 2.22; (p=0.01). (Table 5)

Subscale	**Years of experience**		**P value**
	< 5 n=(94)	**≥ 5 n=(106)**	
	Mean ± SD	**Mean ± SD**	
Emotional issues related to death and dying	2.51 ± 0.35	2.6 ± 0.49	0.292
Conflict with Physicians	2.16 ± 0.49	2.23 ± 0.51	0.343
Inadequate preparation to meet the emotional demands of patients and their families	2.03 ± 0.6	2.1 ± 0.56	0.417
Lack of support	2.26 ± 0.65	2.33 ± 0.58	0.602
Conflict with other Nurses/ supervisors	2.68 ± 0.69	2.59 ± 0.54	0.241
Workload	2.92 ± 0.55	2.96 ± 0.53	0.786
Uncertainty concerning treatment	2.22 ± 0.51	2.41 ± 0.57	0.011*

Table 6: Sources of Stress by type of work area

Analysis of type of work area (governmental versus non-governmental), showed that nurses in non-governmental hospitals have significantly higher "conflict with other nurses" stress than those in governmental hospitals: 2.77 versus 2.55; ($p<0.01$) (See table 6).

Subscale	Type of work area		P value
	Governmental n=(124)	Non-governmental n=(76)	
	Mean ± SD	Mean ± SD	
Emotional issues related to death and dying	2.6 ± 0.48	2.49 ± 0.33	0.151
Conflict with Physicians	2.2 ± 0.54	2.18 ± 0.44	0.964
Inadequate preparation to meet the emotional demands of patients and their families	2.05 ± 0.63	2.09 ± 0.48	0.986
Lack of support	2.34 ± 0.65	2.22 ± 0.55	0.288
Conflict with other Nurses/ supervisors	2.55 ± 0.57	2.77 ± 0.67	0.004*
Workload	2.96 ± 0.56	2.88 ± 0.49	0.281
Uncertainty concerning treatment	2.38 ± 0.58	2.22 ± 0.49	0.101

4.4 Ways of coping

The various subscale scores below gave an indication as to the extent to which subjects employed various coping strategies.

All items in the coping mechanism scale have a minimum of (1) and a maximum of (4).

Table (7) indicates the various items of ways of coping strategies that were employed by the nurses. Nurses seemed to be resorting more to "tried to get person(s) responsible to change his or her mind" (mean=2.64) followed by "Stood my ground and fought for what I wanted" (mean=2.59) and "Avoided being with people in general" (mean=1.78) as items of coping strategies seemed to be the least employed.

Table 7: Ways of coping (20 items)

STATEMENT	Mean ± SD	Frequency (%)
I did something which I didn't think would work, but at least I was doing something	2.22 ± 0.84	70 (35)
Tried to get person(s) responsible to change his or her mind	2.64 ± 0.81	106 (53)
I expressed anger to the person(s) who caused the problem	2.56 ± 0.76	105 (52.5)
I let my feelings out somehow	2.51 ± 0.83	103 (51.5)
Took a big chance or did something very risky	1.93 ± 0.87	49 (24.5)
Stood my ground and fought for what I wanted	2.59 ± 0.93	106 (53)
Went along with fate; sometimes I just have bad Luck	2.16 ± 0.77	59 (29.5)

Went on as if nothing had happened	2.13 ± 0.79	65 (32.5)
Looked for the silver lining, so to speak; tried to look on the bright side of things	2.43 ± 0.79	93 (46.5)
Tried to forget the whole thing	2.25 ± 0.83	73 (36.5)
Didn't let it get to me; refused to think about it too much	2.26 ± 0.78	70 (35)
Made light of the situation; refused to get too serious about it	2.18 ± 0.79	63 (31.5)
Hoped a miracle would happen	2.25 ± 0.83	70 (35)
Slept more than usual	1.92 ± 0.87	50 (25)
Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, and so forth	2.09 ± 0.88	60 (30)
Avoided being with people in General	1.78 ± 0.79	31 (15.5)
Took it out on other people	2.01 ± 0.85	55 (27.5)
Refused to believe it had Happened	1.86 ± 0.77	37 (18.5)
Wished that the situation would go away or somehow turn out	2.44 ± 0.89	85 (42.5)
Had fantasies or wishes about how things might turn out	2 ± 0.91	50 (25)

Table 8: Scores of Ways of Coping Mechanism Subscale

Analysis of coping mechanism subscale showed that nurses seemed to be resorting more to "confronting coping" (mean=2.41), while "escape avoidance" appeared to be employed the least (mean=2.04) (Table 8).

Percentage for the highest items according to ways of coping checklist was "tried to get person(s) responsible to change his or her mind" (53%), followed by "Stood my ground and fought for what I wanted" (53%) and "Avoided being with people in general" (15.5) as items of coping strategies seemed to be the least percentage.

Percentage for the highest subscale according to ways of coping checklist subscale was "confronting coping" with prevalence (74%), while "escape avoidance" appeared to be with least percentage (48.5%). (See table 8).

Coping Strategies	Mean ± SD	Frequency (%)	Min	Max
Confronting Coping	2.41 ± 0.51	148 (74)	1.17	3.83
Distancing	2.23 ± 0.51	133 (66.5)	1	3.83
Escape avoidance	2.04 ± 0.54	97 (48.5)	1	3.75

Table 9: Ways of Coping by gender

Analysis of the association between demographic factors and coping mechanisms showed that nurses male nurses seem to resort significantly more to "confronting coping" than female nurses: 2.49 versus 2.29; (p=0.02) (See table 9).

Subscale	Gender		P value
	Male n=(117)	Female n=(83)	
	Mean ± SD	Mean ± SD	
Confronting Coping	2.49 ± 0.5	2.29 ± 0.5	0.020*
Distancing	2.21 ± 0.47	2.27 ± 0.55	0.427
Escape avoidance	2.03 ± 0.59	2.06 ± 0.46	0.495

Table 10: Ways of Coping by years of experience

Analysis of the association between demographic factors and coping mechanisms showed that nurses with more years of service to the profession seem to resort significantly more to “Distancing” than less experienced ones: 2.3 versus 2.17; (p=0.03) (See table 10).

Subscale	Years of experience		P value
	< 5 n=(94)	≥ 5 n=(106)	
	Mean ± SD	Mean ± SD	
Confronting Coping	2.38 ± 0.57	2.44 ± 0.45	0.343
Distancing	2.17 ± 0.52	2.3 ± 0.49	0.029*
Escape avoidance	1.98 ± 0.48	2.1 ± 0.58	0.222

Table 11: Ways of Coping by type of work area

No significant difference in coping mechanism was found with regard to type of work area. (See table 11)

Subscale	Type of work area		P value
	Governmental n=(124)	Non-governmental n=(76)	
	Mean ± SD	Mean ± SD	
Confronting Coping	2.4 ± 0.49	2.42 ± 0.55	0.757
Distancing	2.25 ± 0.52	2.2 ± .49	0.277
Escape avoidance	2.07 ± 0.56	2 ± 0.5	0.566

4.5 Correlations

Table 12: Inter and intra Correlation between stress subscales and coping subscales

	1	2	3	4	5	6	7	8	9
2	R=0.36 P=<0.01								
3	R=.028 P=<0.01	R=0.41 P=<0.01							
4	R=0.19 P=0.01	R=0.25 P=<0.01	R=0.43 P=<0.01						
5	R=0.23 P=<0.01	R=0.45 P=<0.01	R=0.34 P=<0.01	R=0.31 P=<0.01					
6	R=0.34 P=<0.01	R=0.36 P=<0.01	R=0.3 P=<0.01	R=0.38 P=<0.01	R=0.46 P=<0.01				
7	R=0.26 P=<0.01	R=0.37 P=<0.01	R=0.21 P=<0.01	R=0.2 P=<0.01	R=0.3 P=<0.01	R=0.43 P=<0.01			
8	R=0.34 P=<0.01	R=.31 P=<0.01	R=0.28 P=<0.01	R=0.08 P=0.25	R=0.38 P=<0.01	R=0.39 P=<0.01	R=0.32 P=<0.01		
9	R=0.04 P=0.49	R=0.07 P=0.3	R=0.34 P=0.63	**R=-0.13 P=0.05**	**R=-0.24 P=0.73**	**R=0.12 P=0.07**	R=0.19 P=<0.01	R=0.12 P=0.08	
10	R=0.19 P=<0.01	R=0.2 P=<0.01	R=0.2 P=<0.01	R=0.25 P=<0.01	R=0.22 P=<0.01	R=0.23 P=<0.01	R=0.17 P=0.01	R=0.36 P=<0.01	R=0.28 P=<0.01

1 = Emotional issues related to death and dying 2= Conflict with physicians

3= Inadequate preparation 4=Lack of support 5= Conflict with other Nurses

6= Workload 7= Uncertainty concerning treatment

8= Confronting Coping 9= Distancing 10= Escape avoidance

Findings showed significant positive correlations were found between death and dying and all other stressors and coping mechanism except distancing. Conflict with physicians was found to have a significant positive correlation with all other stressors and coping mechanism except distancing. Inadequate preparation was found to have a significant positive correlation with all other stressors and coping mechanism except distancing. Lack of support was found to be positively correlated with all other stressors and coping mechanism except confronting coping. Conflict with other nurses and supervisors was positively correlated with the stressors and all other stressors and coping mechanism except distancing. Workload showed significant positive correlations with all other stressors and coping mechanism except distancing. Uncertainty about treatment showed significant positive correlations with all other stressors and all coping mechanism. Confronting coping was found to have significant positive correlations with all other stressors except lack of support and coping mechanism except distancing. Distancing was found to have significant positive correlations with stressor uncertainty concerning treatment and coping mechanism escape avoidance. Escape avoidance was found to have significant positive correlations with stressors all other stressors and coping mechanism. (See table 12)

CHAPTER 5

DISCUSSION

5. Discussion

Our study showed that nurses in Palestine were stressed and the most common sources of stress were “workload”, “conflict with other nurses and supervisors” and “emotional issues related to death and dying”. These main sources of stress were independent of gender, type of work area, number of years in service except for “conflict with other nurses and supervisors”.

Palestine, as many other countries, suffers from a shortage of nurses according to employing, which increases the workload for nurses. In addition, nurses sometimes carry out some non-nursing activities which in turn add to their stress. It was suggested that the reported high levels of workload as a stressor could be because it is something most nurses believed that it can and should be dealt with (Dewe 1989). A previous study pointed out that 60% of the oncology nurse’s time was spent upon indirect nursing activities of which general administrative tasks that should and could be performed by less skilled staff form a large component of nurses work time (Blay, Cairns et al. 2002). The “conflict with other nurses” as a source of stress has been reported by many studies as well (Lee 2003; Tyson and Pongruengphant 2004). It was reported that constant demand by nurses from superiors, and experiencing discrimination and

inter-professional conflict continued to be an important source of stress for nurses in their job (Anderson, Chiriboga et al. 1988).

Conflict with other nurses may result from inconsistencies related to beliefs, values, opinions, knowledge or actions that are incongruent. In addition, nurses' personal values, knowledge, and behaviors may be in direct opposition to those of other colleagues. Studies had shown that interpersonal relationships, constant demands from superiors and the highly-demanding routines were the most interpersonal factors related to stress (Cavalheiro, Moura Junior et al. 2008).

Death by its nature is stressful and a source of suffering; therefore, in the current study nurses experienced more stress when they were dealing with issues of death and dying. Additionally, because of the increased workload, nurses may not have enough time to support each other's emotions in general and those emotions related to death and dying in particular.

Several studies in the Arab world have been carried out to investigate stress in the nursing profession. A study on 464 Jordanian nurses who were working in 13 Jordanian hospitals found that death and dying followed by workload issues were the most prevalent stressors that Jordanian nurses faced at their jobs (Hamaideh, Mrayyan et al. 2008). Another study that was carried out in Saudi Arabia on 148 nurses found that lack of enough staff was the most stressful event perceived by staff nurses were patients' demands, their families' complaints and nurses workload (Kamal, Al-

Dhshan et al. 2012) . A study carried out in Egypt about pediatric nurses' stresses in intensive care units and its related factors showed that the most common source of nursing stress is death or expecting death situation while the least mentioned was a conflict with physicians. The study also reported that inadequate staff were the most perceived health care system stress factor (Mohamed, Gaafar et al. 2011). Several other studies in Asia and Europe investigated stress among nurses and have found similar findings with regard to sources of stress. A study examined work stressors and ways of coping among hospitals from Japan, South Korea, Thailand and the United States (Hawaii) suggested that nurses in all four countries ranked workload and dealing with death and dying to be the highest of all workplace stressors (Lambert and Ito 2004).

Our study showed that nurses seemed to be resorting more to “confronting coping” (mean=2.41), while escape avoidance seemed to be employed the least among the coping strategies investigated. It is important to reduce the stress in nurses to ensure that they are capable of providing quality patient care. A study showed that 55% of nurses were equipped with coping strategies, including exercise (Kashani, Eliasson et al. 2010). Cox (1991) argued that no one coping function was seen as more adaptive as any other, rather a successful outcome was engineered by the individual fitting the right strategy to the situation (Cox 1991). According to Lambert et al (2004), accepting responsibility and escape-avoidance were the two coping mechanisms found to be positively correlated with the likelihood of leaving

the current nursing position (Lambert and Ito 2004). Thus, nurses who indicated that they were likely to change nursing positions found that accepting responsibility and escape-avoidance were their best means of coping. In addition, prior research conducted on nurses from Western cultures suggested that escape-avoidance coping method was not effective in contending with stressful events and, as a result, could contribute to a nurse's desire to leave his or her current nursing position (Tyler, Carroll et al. 1991). An another study conducted by Tyson and Pongruengphant (2003) indicated that nurses in Thailand's hospitals continued to experience high levels of stress from a lack of adequate support or opportunities to participate in making decisions directly affecting their patients (Tyson and Pongruengphant 2004). With increasing level of stress, Thai nurses utilized problem solving, Buddhist relaxation techniques, and avoidance more frequently as strategies for dealing with the pressures of workload, role ambiguity, and other sources of stress (Tyson and Pongruengphant 2004). In addition, nurses in Singapore preferred self-help coping strategies to seeking social support from colleagues or management (Boey, Chan et al. 1997). In a study that included 135 first years urban nursing students, it has been concluded that individual differences, environmental factors and situational characteristics of the stressful event were the variables that affected the coping mechanisms used (Parkes 1986).

As a conclusion, stress among nurses was high enough to be considered serious. It would appear that organizational interventions in reducing the

impact of stress such as workload (that is, providing more staff to adequately cover unit) might be more appropriate and may benefit some stuff. Although it may not be possible to decrease the demands of the job, some issues could be addressed in the first instance by providing support and improving working conditions and stress management training.

5.1 Limitations

The following are considered limitations to our study:

1. The response rate is low.

2. The study was confined to Nablus hospitals while other hospitals were not included.

3. Several other variables were not included in the coping questionnaire. Such as praying, acceptance, sharing hobbies with others, and schedule physical activities.

4. The association of stress with other demographic variables like marital status and income and education were not studied.

5. Other variables such as work unit were not included in the study.

5.2 Recommendations and Nursing Implications

5.2.1 Recommendations related to research

The present study has identified the possible causes and frequency of stress experience by nurses working with governmental and non-governmental hospitals. It does not measure the intensity of stress experienced. Future research should be directed at the intensity dimension using physiological measures of stress. Replication of the study to include comparison with other hospitals, as well as different levels and locations of hospitals (secondary or primary, urban or rural, and to include more variables like

salary, level of education, marital status, age, commitment to work etc.). Qualitative research could be used to explore and describe the experiences of nurses in the work environment and future research on the effects of stress management.

5.2.2 Recommendations for nursing profession

Training programs should be available and aimed at recruiting and developing personnel who are competent to respond appropriately to the health care needs of the people they serve. Training should comprise relevant, reality-based curriculum which is aimed at attaining competence within the psychomotor and affective domain of objectives, should provide comprehensive, integrated, community problem based health care delivery training for competent practice within a multidisciplinary team ideology; and should be coordinated, reviewed and rationalized to meet the health needs of the country.

5.2.3 Recommendations related to nursing practice

The findings of the study suggested that nurses used adaptive coping strategies in dealing with their work stress as displayed by their use of confronting coping. It would appear that organizational interventions at reducing the impact of stressors such as workload (that is, providing more staff to adequately cover unit might be more appropriate and may benefit some staff more than stress management).

Employing more nurses is an obvious potential remedy for reducing workload, increasing clerical staff to reduce non-nursing tasks. Although it may not be possible to decrease the demands of the job some issues could be addressed in the first instance by providing support and improving working conditions and stress management training.

5.2.4 Recommendations for health policy makers (Booyens 1998).

1- Developing systems for effective two-way communication.

2- Clarifying role and performance expectations.

3- Promoting prompt, constructive resolution of conflicts.

4- Psychological counseling and therapy should be easily accessible and available for troubled staff members.

5- Policies that reduce stress from shift work should be developed. These could include reducing the number of hours of the night shift, increasing the rest time between shifts, providing adequate meal times, and providing a fair distribution of weekend and holiday work.

6- Support group for nursing personnel is recommended.

5.2.5 Mental health nursing implications

The results of the study indicate that nurses face a lot of stress in their daily working life makes it difficult for them to perform their tasks efficiently. More comprehensive blueprint of nurse stress in the workplace needs to be developed. Empirical studies could then be conducted to investigate these very complex relationships, prospectively, over time. Once work stress is examined from a more solid theoretical and conceptual basis, then intervention studies can be initiated to assess the most useful ways to lessen work stress. Studies need to move beyond the tendency to use descriptive designs. There is sufficient evidence to believe that work stress is a factor among health care personnel. What is less well understood is the effect of stress on nurses with patient outcomes. Studies are needed to enhance the understanding of the effect of stress on nurses with patient safety. Studies are also needed to better understand stress beyond the acute care setting. It is important to explore interventions that will reduce the stress experienced by nurse administrators. By reducing the stressful nature of the nurse administrator's work, nurse administrators could be more satisfied in their positions.

5.3 What this study added to research?

This study highlighted the importance of mental health for nurses in their job, in which as mentioned before that stress is the core principle of burnout , emotional exhaustion , physical fatigue and cognitive a wariness among nurses which lead to inflict danger to patients' lives. So that the lower job stress levels were associated with better mental health. Also it attracts the eyes of attention of health policy maker in our country to develop system for mental health of health professionals especially nurses help him to overcome the obstacles that gained due to stressful situations that nurses face it in their jobs, in which it's the sixth most stressful profession worldwide.

References

Adeb-Saeedi, J. (2002). "**Stress amongst emergency nurses**." Australian Emergency Nursing Journal **5**(2): 19-24.

Albar Marin, M. J. and M. Garcia-Ramirez (2005). **"Social support and emotional exhaustion among hospital nursing staff."** European Journal of Psychiatry 19(2): 96-106.

Alhajjar, B. (2013). **"Occupational stress among hospital nurses in Gaza-Palestine."**

Amaravadi, R. K., J. B. Dimick, et al. (2000). **"ICU nurse-to-patient ratio is associated with complications and resource use after esophagectomy."** Intensive Care Med 26(12): 1857-62.

Anderson, C. R. (1976). **"Coping behaviors as intervening mechanisms in the inverted-U stress- performance relationship."** Journal of Applied Psychology. 61(1): 30-34.

Anderson, M., D. A. Chiriboga, et al. (1988). **"Changes in management stressors on ICU nurses."** Dimens Crit Care Nurs **7**(2): 111-7.

Andrew, J. D. (2009). **"Stress management and personal productivity."** Human Relations 10th ed. Pearson Education. New Jersey 2009:322.

Antonovosky, A. (1974). **"Health, stress and coping. San Francisco: Jossay-Bass."**

Backer, J. H., T. Bakas, et al. (2000). **"Coping with stress: Programs of nursing research. In Rice, V.H. (ed), Handbook of stress, coping, and health: Implication for nursing research, theory and practice.** London: Sage Publications."

Bakker, A. B., C. H. Killmer, et al. (2000). **"Effort-reward imbalance and burnout among nurses."** J Adv Nurs 31(4): 884-91.

Barker, P. (1999b). **"The eye of the needle: research and the proper focus of nursing. In Barker (Ed.), The philosophy and practice of psychiatric nursing.** (pp. 37- 56). Edinburgh, UK: Churchill Livingstone."

Baron, R. A. and J. Greenberg (1990). **"Behavior in organizations: Understanding and managing the human side of work, 3rd ed.** Boston: Allyn & Baron."

Blay, N., J. Cairns, et al. (2002). **"Research into the workload and roles of oncology nurses within an outpatient oncology unit."** Eur J Oncol Nurs 6(1): 6-12; discussion 13-4.

Boey, K. W., K. B. Chan, et al. (1997). **"Work stress and psychological well-being among the nursing profession in Singapore."** Singapore Med J 38(6): 256-60.

Booyens, S. W. (1998). **"Dimensions of Nursing Management. 2nd Edition.** Cape Town. Juta & Company LTD."

Botha, C. and J. Pienaar (2006). "**South African correctional official occupational stress: the role of psychological strengths."** Journal of Criminal Justice 34(1): 73-84.

Brown, H., F. Zijlstra, et al. (2006). **"The psychological effects of organizational restructuring on nurses."** J Adv Nurs 53(3): 344-57.

Burke, R. J. and T. Weir (1980). **"Coping with the stress of managerial occupations. In Cooper, C.L. and Payne, R. (eds), Current concerns in occupational stress.** Chichester: John Wiley & Sons."

Burns, N. and S. K. Grove (2001). **"The Practice of Nursing Research. Conduct,Critique & Utilisation.**4th Edition. United States of America: W.B. Saunders Company."

Burns, R. B. (1992). **"10 skills for working with stress: The essential skills for managing stress at work in the 1990s.** Chatswood: Business & Professional Publishing."

Caine, R. M. and L. Ter-Bagdasarian (2003). **"Early identification and management of critical incident stress."** Crit Care Nurse 23(1): 59-65.

Canadian Federation, M. H. N. (2006). **"Canadian standards of psychiatric-mental health nursing.** 3rd Edition. Toronto, ON."

Canadian Health Services, R. F. (2007). **"Implement nurse staffing plans for better quality of care.** Retrieved February 23, 2007 from http://www.chsrf.ca/mythbusters/pdf/boost7_e.pdf."

Cartwright, S. and C. L. Cooper (1996). **"Coping in occupational settings. In Zeidner, M. and Endler, N.S. (eds), Handbook of coping: Theory, research, applications.** New York: John Wiley."

Cassar, V. and A. Tattersall (1998). **"Occupational stress and negative affectivity in Maltese nurses: Testing moderating influences."** Work & Stress. 12(1): 85-94.

Cavalheiro, A. M., D. F. Moura Junior, et al. (2008). **"Stress in nurses working in intensive care units."** Rev Lat Am Enfermagem 16(1): 29-35.

Champoux, J. E. (2003). **"Organizational behavior: Essential tenets. Ohio: Thornson."**

Chang, E. M., K. M. Hancock, et al. (2005). **"Role stress in nurses: review of related factors and strategies for moving forward."** Nurs Health Sci **7**(1): 57-65.

Chen, P. Y. and P. E. Spector (1991). **"Negative affectivity as the underlying cause of correlations between stressors and strains."** Journal of Applied Psychology. 76(3): 398-407.

Christie, M. D. and K. S. Shultz (1998). **"Gender differences on coping with job stress and organizational outcomes."** Work & Stress. 12(4): 351-361.

Controneo, M. (1999). **"Advancing psychiatric nursing in a reforming health care system.** In Ann Wolbert Burgess (Ed.), Advanced practice psychiatric nursing ": 27-39.

Cooke, R. A. and D. M. Rousseau (1983). **"Relationship of life events and personal orientations to symptoms of strain."** Journal of Applied Psychology. 68(3): 446-458.

Cooper, C. L. and J. Marshall (1978). **"Understanding executive stress. London: Macmillan Press."**

Cox, T. (1980). **"Repetitive work. In Cooper, C.L. and Payne, R. (eds), Current concerns in occupational stress.** Chichester: John Wiley & Sons."

Cox, T. (1991). **"An introduction to individual differences; stress and coping In C.L. Cooper & R. Payne (Eds), Personality and Stress: Individual Differences in Stress and Coping.** New York: J Wiley and Sons."

Cox, T. and E. Rial-Gonzales (2002).**"Work-related stress: the European picture. Ireland." Health and Safety Authority.** : p. 4.

Cox, T. G., A. Rial-Gonzalez, E. (2000). **"Research on workrelated stress."** Belgium: European Agency for Safety and Health at Work: pp 9-10.

Crabbs, M. A., Black, K.U. Morton, S.P (1986). **" Stress at work: A comparison of men and women."** Journal of Employment Counselling. 23(1): 2-7.

Crickmore, R. (1987). **"A review of stress in the intensive care unit."** Intensive Care Nurs 3(1): 19-27.

Cunningham, J. B. (2000). **"The stress management sourcebook: Everything you need to know, 2nd ed.** Los Angeles: Lowell House."

Cushway, D. (1992). **"Stress in clinical psychology trainees."** Br J Clin Psychol 31 (Pt 2): 169-79.

Dalton, A. J. P. (1998). **"Safety, health and environmental hazards at the workplace.** London: Cassell."

Daus, C. S., Sanders, D.N. Campbell, D.P. (2001). **"Consequences of alternative work schedules.** In Cooper, C. and Robertson, I. (eds), Organizational psychology and development: A reader for students and practitioners. Chichester: John Wileys."

Davidson, M. J. and S. Fielden (1999). **"Stress and the working woman. In Powell, G.N. (ed), Handbook of gender and work.** Thousand Oaks: Sage Publications."

Desbeins, J. F. and L. Fillion (2007). **"Coping strategies, emotional outcomes and spiritual quality of life in palliative care nurses."** International Journal of Palliative Nursing 13(6): 291-300.

Dewe, P. (1989). "Examination the nature of work stress." **Individual evaluation of stressful experiences and coping:** Human Relation 42: 993-1013.

Dieleman, M., V. Bwete, et al. (2007). **"I believe that the staff have reduced their closeness to patients': an exploratory study on the impact of HIV/AIDS on staff in four rural hospitals in Uganda."** BMC Health Serv Res **7**: 205.

Dijkhuizen, N. V. (1981). **"Towards organizational coping with stress.** In Marshall, J. and Cooper, C.L. (eds), Coping with stress at work. Aldershot: Gowen."

Drafke, M. W. and S. Kossen (2002). **"The human side of organizations , 8th ed. New Jersey: Prentice Hall."**

Dubrin, A. J. (1980). **"Effective business psychology. Virginia: Reston Publishing Company."**

Edwards, J. R. (1993). **"The measurement of coping with stress: construct validity of the Ways of Coping Checklist and the Cybernic Coping Scale.** Work & Stress. Darden Graduate School of Business Administration: University of Virginia."

Erikson, H. R. and H. Ursin (1999). **"Subjective health complaints: Is coping more important than control ?.**" Work & Stress. 13 (3): 238-252.

European Commission (1999). **"Guidance on work-related stress: Spice of live – or Kiss of Death? Luxembourg: EU – Directorate General for Employment and Social Affairs."**

Evans, L. (2002). **"An exploration of district nurses' perception of occupational stress."** Br J Nurs 11(8): 576-85.

Ferrell, B. R. (2006). **"Understanding the moral distress of nurses witnessing medically futile care."** Oncology Nursing Forum **33**(5): 922-930.

Folkman, S. (1984). **"Personal control and stress and coping processes: a theoretical analysis."** J Pers Soc Psychol 46(4): 839-52.

Folkman, S. S., C. Lazarus R.S. (1979). **"Cognitive processes as mediators of stress and coping.** In Human Stress and Cognition: An Information Processing Approach (Hamilton V. & Warburton D.M. eds), Wiley, Chichester,." pp. 265±298.

Fox, M. L., D. J. Dwyer, et al. (1993). **"Effects of stressful job demands and control on physiological and attitudinal outcomes in a hospital setting."** Academy of Management Journal. 36(2): 289-318.

Freeman, T. and L. L. O'Brien-Pallas (1998). **"Factors influencing job satisfaction on specialty nursing units."** Can J Nurs Adm 11(3): 25-51.

Frese, M. (1985). **"Stress at work and psychosomatic complaints: A causal interpretation."** Journal of Applied Psychology. 70(2): 314-328.

Ganster, D. C. and L. Murphy (2000). **"Workplace interventions to prevent stress.** In Cooper, C.L. and Locke, E.A. (eds), Industrial and organizational psychology: Linking theory with practice. Massachusetts: Blackwell."

Graft-Toft, P. and J. A. Anderson (1981). **"The Nursing Stress Scale: development of an instrument."** Journal of Behavioral Assessment 3: 11-13.

Griffin, R. W. (1990). **"Management, 3rd ed. Boston: Houghton Mifflin Company."**

Gurses, A. P. and P. Carayon (2007). "**Performance obstacles of intensive care nurses."** Nurs Res 56(3): 185-94.

Hackett, R. D., Bycio, P. Guion, R.M. (1989). **"Absenteeism among hospital nurses: An idiographic-longitudinal analysis."** Academy of Management Journal. 32(2): 424-453.

Hajjaj, K. (2007). **"The impact of job stress on organisational commitment and job satisfaction among nursing staff in Shifa hospital of Gaza strip."** Journal of AlAzhar University (Gaza)-Series of Social Sciences 9(2): 95-118.

Hamaideh, S. H., M. T. Mrayyan, et al. (2008). **"Jordanian nurses' job stressors and social support."** Int Nurs Rev 55(1): 40-7.

He, N., J. Zhao, et al. (2005). **"Do race and gender matter in police stress?“ A preliminary assessment of the interactive effects”."** Journal of Criminal Justice. 33(6): 533-47.

Healy, C. M. and M. F. McKay (2000). **"Nursing stress: the effects of coping strategies and job satisfaction in a sample of Australian nurses."** J Adv Nurs 31(3): 681-8.

Hellriegel, D., Slocum, J.W. and Woodman, R.W. (1986). **"Organizational behavior, 4th ed. St Paul: West Publishing Company."**

Hingley, P. and P. Harris (1986). **"Stress. Burn-out at senior level."** Nurs Times 82(31): 28-9.

Huber, D. (1996). **"Leadership and nursing care management. Philadelphia: W.B. Saunders Company."**

Jamal, M. (1984). **"Job stress and job performance controversy: An empirical assessment. Organizational Behavior and Human Performance,."** 33: 1-21

Jones, J. W., B. N. Barge, et al. (1988). "Journal of Applied Psychology." **Stress and medical malpractice: Organizational risk assessment and intervention.** 73(4): 727-735.

Joudeh, Y. (2003). "**Job Stress Sources among Palestinian Nurses Working in Northern West Bank District Hospitals, Master thesis of Public Health, Faculty of Graduate Studies, An-Najah National University,Nablus, Palestine. .**"

Kamal, S. M., M. Al-Dhshan, et al. (2012). **"The effect of nurses' Perceived Job Related Stressors on Job Satisfaction in Taif Governmental Hospitals in Kingdom of Saudi Arabia 2012."** Journal of American Science 8(3): 119-125.

Kashani, M., A. Eliasson, et al. (2010). **"Taking aim at nurse stress: a call to action."** Mil Med 175(2): 96-100.

Kornitzer, M., P. deSmet, et al. (2006). **"Job stress and major coronary events: results from the Job Stress, Absenteeism and Coronary Heart Disease in Europe study."** Eur J Cardiovasc Prev Rehabil 13(5): 695-704.

Kovner, C., C. Brewer, et al. (2006). **"Factors associated with work satisfaction of registered nurses."** J Nurs Scholarsh 38(1): 71-9.

Krohne, H. W. (1996). " **Individual defferences in coping. In Zeidner, M. and Endler, N.S. (eds), Handbook of coping: Theory, research, applications.** New York: John Wiley & Sons."

Lambert, V. A. and M. Ito (2004). **"Workplace stressors, ways of coping and demographic characteristics as predictors of physical and mental health of Japanese hospital nurses."** Int J Nurs Stud 41(1): 85-97.

Lambert, V. A. and H. Yamase (2003). **"Psychological hardiness, workplace stress and related stress reduction strategies."** Nurs Health Sci 5(2): 181-4.

Landa, J. M., L. Z. Esther, et al. (2008). **"The relationship between emotional intelligence. Occupational stress and health nurses: a questionnaire survey."** International Journal of Nursing Studies 37. 45(6): 888-901.

Lang TA, H. M., Olson V, et al. (2004). **"Nurse-patient ratios: a systematic review on the effects of nurse staffing on patient, nurse employee, and hospital outcomes.** J Nurs Adm." 34(7-8): 326-37.

Laposa, J. M., L. E. Alden, et al. (2003). **"Work stress and posttraumatic stress disorder in ED nurses/personnel."** J Emerg Nurs 29(1): 23-8.

Latack, J. C. (1986). **"Coping with job stress: Measures and future directions for scale development."** Journal of Applied Psychology. 71(3): 377-385.

Lautert, L., E. H. Chaves, et al. (1999). **"Stress related to administrative tasks in nursing."** Rev Panam Salud Publica 6(6): 415-25.

Lazarus, R. S. and S. Folkman (1984). **"Stress, Appraisal and Coping. Springer: NewYork."**

Lee, I. and H. H. Wang (2002). **"Perceived occupational stress and related factors in public health nurses."** J Nurs Res 10(4): 253-60.

Lee, J. K. (2003). **"Job stress, coping and health perceptions of Hong Kong primary care nurses."** Int J Nurs Pract 9(2): 86-91.

Li, J. and V. A. Lambert (2008). **"Workplace stressors, coping, demographics and job satisfaction in Chinese intensive care nurses."** Nurs Crit Care 13(1): 12-24.

Luthans, F. (1998). **"Organizational behavior, 8th ed. Boston: Irwin McGraw-Hill."**

Malacrida, R., D. Bomio, et al. (1991). **"Computer-aided self-observation psychological stressors in an ICU."** Int J Clin Monit Comput 8(3): 201-5.

Marshall, J. (1980). **"Stress among nurses. In: Copper, C.L., Marshall. J. (Eds.), White Collar and Professional Stress.Chichester, England, John Wiley."** pp. 19-57.

Marshall, J. and C. L. Cooper (1979). **"Executive under pressure: A psychological study. New York: Praeger."**

Martins, M. (2009). **"Situations that induce stress in the work of nurses in hospitals."**

Maslach, C. (1979). **"Burned-out."** Can J Psychiatr Nurs 20(6): 5-9.

Maslach, C., W. B. Schaufeli, et al. (2001). **"Job burnout."** Annu Rev Psychol 52: 397-422.

Mc Intosh, N. J. (1991). **"Identification and investigation of properties of social support."** The Journal of Organizational Behaviour 3(12): 201-217.

McGrath, A., N. Reid, et al. (2003). **"Occupational stress in nursing. International Journal of Nursing Studies (1989), 26, 359-368."** Int J Nurs Stud 40(5): 555-65; discussion 567-9.

Mckenna, E. (1994). **"Business psychology and organizational behavior: A students' handbook. Hove: Lawrence Erlbaum Associates."**

McVicar, A. (2003). **"Workplace stress in nursing: a literature review."** J Adv Nurs 44(6): 633-42.

Meyer, J. P. and N. J. Allen (1997). **"Commitment in workspace: Theory. research and application. Thousand Oaks. CA: Sage."**

Miller, R. and W. F. Pfohl (1982). **"Management of job-related stress. In O'Brien, R.M., Dickson, A.M. and Rosow, M.P. (eds), Industrial behavior modification: A management handbook.** New York: Pergamon Press."

Mohamed, F. A., Y. A. Gaafar, et al. (2011). **" Pediatric Nurses' Stresses in Intensive Care Units and Its Related Factors."** Journal of American Science **7**(9): 304-315.

Montgomery, V. L. (2007). **"Effect of fatigue, workload, and environment on patient safety in the pediatric intensive care unit."** Pediatr Crit Care Med 8(2 Suppl): S11-6.

Motowidlo, S. J., Packard, J.S. Manning, M.R. (1986). **"Occupational stress: Its causes and consequences for job performance."** Journal of Applied Psychologyy. 71(4): 618-629.

Needleman, J., P. Buerhaus, et al. (2002). **"Nurse-staffing levels and the quality of care in hospitals."** N Engl J Med 346(22): 1715-22.

Parkes, K. R. (1982). **"Occupational stress among student nurses: A natural experiment."** Journal of Applied Psychology. 67(6): 784-796.

Parkes, K. R. (1986). **"Coping in stressful episodes: the role of individual differences, environmental factors, and situational characteristics."** J Pers Soc Psychol 51(6): 1277-92.

Parkes, K. R. (1990). **"Coping, negative affectivity and the work environment: Addictive and interaction prediction of mental health.** ." Journal of Applied Psychology. 75(4): 399-409.

Polit , D. F. and B. P. Hungler (1995). **"Nursing Research: principles and methods. 5th edition.** Philadelphia. JB Lippincott."

Randy JL, D. M. (2008). **"Stress, coping, adjustment, and health. Personality psychology.**3rd ed. McGraw-Hill. 2008, New York:561."

Rice, V. H. (2000). **"Theories of stress and relationship to health. In Rice, V.H. (ed), Handbook of stress, coping, and health: Implication for nursing.** Research, theory, and practice. London: Sage Publications."

Rothmann, S., J. J. van der Colff, et al. (2006). **"Occupational stress of nurses in South Africa."** Curationis 29(2): 22-33.

Rue, L. W. and L. L. Byars (1997). **" Management: Skills and application, 8th ed. Chicago: Irwin."**

Saada J, Tobaila Z, et al. (2003). **"Occupational stress in nurses during Al-Aqsa uprising (Intifada) in Palestinian hospitals at Nablus governorates, Educational sciences."** 30(1): 140-165.

Saal, F. E. and P. A. Knight (1988). **" Industrial/organizational psychology: Science and practice.** California: Brooks Publications."

Sacadura-Leite E, U., AS. (2007). **"Stress relacionado com o trabalho."** Saúde & Trabalho 6: 25-42.

Schaufeli, W. (1998). **"Organisation and management of intensive care: a prospective study in 12 European countries.** Berlin:Springer-Verlag; ." 169-205.

Shaw, J. B. and J. H. Riskind (1983). **"Predicting job stress using data from the position analysis questionnaire."** Journal of Applied Psychology. 68(2): 253-261.

Shelley, E. (2003). **"Moderators of the stress experience."** Health psychology 5th ed. 2003, New York:2196.

Shirom, A. (1989). **"Burnout in work organizations.** In C. L. Cooper & I. Robertson (Eds.)." International Review of Industrial and Organizational Psychology: pp.(26-48) N.Y.: Wiley.

Siegrist, J. S., R Link, C Marceau, L von dem Knesebeck, O McKinlay, J (2010). **"Work stress of primary care physicians in the US, UK and German health care systems."** Soc Sci Med 71(2): 298-304.

Stacciarini, J. M. and B. T. Troccoli (2004). **"Occupational stress and constructive thinking: health and job satisfaction."** J Adv Nurs 46(5): 480-7.

Streeten, R. G. (1995). **"An evaluation of a Stress Management Programme."**

Sutherland, V. J. and C. L. Cooper (2000). **"Strategic stress management: An organizational approach.** London: Macmillan Business."

Sutton, R. I. and A. Rafaeli (1987). **"Characteristics of work stations as potential occupational stressors."** Academy of Management Journal. 30(2): 260-276.

Sveinsdottir, H., P. Biering, et al. (2006). **"Occupational stress, job satisfaction, and working environment among Icelandic nurses: a cross-sectional questionnaire survey."** Int J Nurs Stud 43(7): 875-89.

Tenant, C. (2001). **"Work-related stress and depressive disorders."** Journal of Psychosomatic Research 51: 697-704.

Thompson, N. M., M. Strading, S. (1994). **"Dealing with stress. London. Macmillan."**

Totterdell, P., Spelten, E., Smith, L., Barton, J. Folkard, S. (1995). **" Recovery from work shift: How long does it take?."** Journal of Applied Psychology. 80(1): 43-57.

Troup, C. and P. Dewe (2002). **"Exploring the nature of control and its role in the appraisal of workplace stress."** Work & Stress. 16 (4): 335-355.

Tyler, P. A., D. Carroll, et al. (1991). **"Stress and well-being in nurses: a comparison of the public and private sectors."** Int J Nurs Stud 28(2): 125-30.

Tyson, P. D. and R. Pongruengphant (2004). **"Five-year follow-up study of stress among nurses in public and private hospitals in Thailand."** Int J Nurs Stud 41(3): 247-54.

Uys, H. H. M. and A. A. Basson (1991). **"Research Methodology in Nursing.** CapeTown: Kagiso Tertiary."

Vaz Serra, A. (2002). **"Stress in everyday lifeCoimbra: Editions Minerva."**

Wade, C. and Travis (2003). **"Psychology, 7th ed. New Jersey: Prentice Hall."**

Ward, J. C. (1987). "**Managing Stress. Vermont: Gower Publishing Company."**

Weigel, C., G. Parker, et al. (2007). **"Apprehension among hospital nurses providing end of life care."** Journal of Hospice and Palliative Nursing 9(2): 86-91.

WHO (2001). " **World Health Report 2001. Geneva: World Health Organization."** p. 3.

Woodham, A. (1995). **"Beating stress at work. London: Health Education Authority."**

Wright, P. M. and R. A. Noe (1996). **"Management of organizations. Chicago:Irwin."**

Yildirim, D. and Z. Aycan (2008). **"Nurses' work demands and work-family conflict: a questionnaire survey."** Int J Nurs Stud 45(9): 1366-78.

Zuzelo, P. R. (2007). **"Exploring the moral distress of registered nurses."** Nurs Ethics 14(3): 344-59.

Appendix

معلومات وتفاصيل البحث

نموذج موافقة على المشاركة في بحث

- الباحث: "أحمد عمرو" الطالب في كلية الدراسات العليا / ماجستير تمريض الصحة النفسية المجتمعية، جامعة النجاح الوطنية.
- المشرف: البروفسور "وليد صويلح" المحاضرفي كلية الطب والعلوم الصحية في جامعة النجاح الوطنية، و الدكتورة "سماح الجابي" محاضرة في كلية الطب والعلوم الصحية في جامعة النجاح الوطنية. الجهة المشرفة: جامعة النجاح الوطنية / كلية الدراسات العليا / قسم التمريض / الصحة النفسية المجتمعية.
- عنوان البحث: "مستوى التوتر، وطرق التكيف، لدى الممرضين الفلسطينين الذين يعملون في المستشفيات".

Stress and coping mechanism among nurses working in Palestinian hospital, a pilot study

معلومات حول البحث

مقدمة

أخي/ أختي المشارك/ة:

انا الباحث "أحمد عمرو" طالب ماجستير تمريض صحة نفسية مجتمعية في جامعة النجاح الوطنية، يسرني أن ادعوك إلى المشاركة في بحثي بعنوان "**مستوى التوتر، وطرق التكيف لدى الممرضين الفلسطينين الذين يعملون في المستشفيات**". ولك كامل الحرية والإرادة في المشاركة في هذا البحث، ولك الحق في أخذ الوقت الكافي للتفكير في المشاركة من عدمها، وسؤال الباحث عما تراه مناسبا، والتحدث لأي شخص أو جهة عن هذا البحث.

كما يمكنك الاستفسار عن أي جزء يتعلق في البحث الآن أو فيما بعد، وإذا كانت هناك كلمات أو أجزاء غير مفهومة، فبإمكانك سؤال الباحث وستجد/ين الوقت والإجابة الكافيتين.

هذا ويضمن البحث سرية المعلومات المتعلقة بالمشاركة.

تهدف هذه الدراسة الى التعرف على الأسباب المحتملة، ومستوى التوترالذي يعيشه ممرضونا الفلسطسنيون الذين يعملون في المستشفيات، وأكثرالطرق التي يستخدمونها للتعامل مع هذه التوترات، وتحقيقا لهذه الغاية نرجو منك تعبئة الاستبانة التالية التي لن تأخذ من وقتك أكثر من عشرة دقائق، حيث تتكون هذه الاستبانة من قسمين، القسم الاول ويتكون من استبانة عن عدد المرات التي وجدت نفسك فيها متوتراً/ةً عند حدوث أحد المواقف حسب الاستبانة، والقسم الثاني استبانة عن الطرق التي استخدمتها للتحكم بالتوترعند مواجهتك أحدى المشاكل حسب الاستبانة، لذا يرجى عدم إدخال اسمك على الاستبانة، شاكراً لك مشاركتك في هذه الدراسة

STRESS AND COPING MECHANISM AMONG NURSES IN PALESTINIAN HOSPITALS, A PILOT STIDY

Demographic data:

Sex: **Your unit:**

work place: **Years of experience:**

SECTION 1: For each statement below indicate by means of a (×) how often in your present unit you have found the situation to be stressful.					
NO	STATEMENT	VERY FREQUENTLY	FREQUENTLY	OCCASIONALLY	NEVER
1	Performing procedures that patients experiencing as painful				
2	Feeling helpless in the case of a patient who fails to improve				
3	Listening or talking to a patient about his /her approaching death				
4	The death of a patient				
5	The death of a patient with whom you developed a close relationship				
6	Physician not being present when a patient dies				
7	Watching a patient suffer				
8	Criticism by a physician				
9	Conflict with a physician				
10	Fear of making a mistake in treating a patient				
11	Disagreement concerning the treatment of a patient				
12	Making a decision concerning a patient when a physician is unavailable				

13	Feeling inadequately prepared to help with emotional needs of a patient's family				
14	Being asked a question by a patient for which I do not have a satisfactory answer				
15	Feeling inadequately prepared to help with the emotional needs of a patient				
16	Lack of opportunity to talk openly with other unit personnel about problems in the unit				
17	Lack of opportunity to share experiences and feelings with other personnel in the unit				
18	Lack of opportunity to express to other personnel in the unit my negative feelings toward patients				
19	Conflict with a supervisor				
20	Relieving in another units that are short-staffed				
21	Difficulty in working with a particular nurse outside the unit				
22	Criticism by a supervisor				
23	Difficulty in working with a particular nurse in the unit				
24	Breakdown of computer				
25	Unpredictable staffing and scheduling				
26	Too many non-nursing tasks required, such as clerical work				
27	Not enough time to provide emotional support to a patient				
28	Not enough time to complete all my nursing tasks				
29	Not enough staff to adequately cover unit				
30	Inadequate information from a physician regarding the medical condition of a patient				

31	A physician ordering what appears to be inappropriate treatment for a patient				
32	A physician not being present in a medical emergency				
33	Not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment				
34	Uncertainty regarding the operation and functioning of specialized equipment				

WAYS OF COPING QUESTIONNER

(ITEMS SELECTED FOR THE STUDY)

1- CONFRONTING

2- ESCAPE AND AVOIDANCE

3- DISTANCING

SECTION 2: For each statement below indicate with an (x) how often you use each of the following to manage stressful events in your work/job.					
NO	STATEMENT	USED AGREAT DEAL	USED FREQUENTLY	USED SOMETIMES	NOT USED
1	I did something which I didn't think would work, but at least I was doing something				
2	Tried to get person(s) responsible to change his or her mind				
3	I expressed anger to the person(s) who caused the problem				
4	I let my feelings out somehow				
5	Took a big chance or did something very risky				
6	Stood my ground and fought for what I wanted				
7	Went along with fate; sometimes I just have bad Luck				
8	Went on as if nothing had happened				
9	Looked for the silver lining, so to speak; tried to look on the bright side of things				
10	Tried to forget the whole thing				
11	Didn't let it get to me; refused to think about it too much				
12	Made light of the situation; refused to get too serious about it				
13	Hoped a miracle would happen				
14	Slept more than usual				

15	Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, and so forth				
16	Avoided being with people in General				
17	Took it out on other people				
18	Refused to believe it had Happened				
19	Wished that the situation would go away or somehow turn out				
20	Had fantasies or wishes about how things might turn out				

القسّم الأول: استبانةُ مستوى التوتر(Nursing stress scale)

الجنس : ذكر ☐ ، انثى ☐

مكان العمل:

القسم: سنوات الخبرة:

لكلِ عبارةٍ أدناه ضع أشارةَx مقابل عدد المرات التي وجدتَ فيها نفسك متوتراً أو(معصباً) في قسمكَ الحالي عند حدوث كل من التاليةِ أدناه					
ألرقم	السؤال	مُتكررة كثيراً	مُتكررة	أحياناً	أبداً
1	قيامي بإجراء طبي ما اعتبره المريض مؤلماً.				
2	شُعوري بالعجز التام في حال فشّل المريض في التحسن.				
3	التحدث وألاستّماع الى مريض وهو في حالة النّزاع الأخير.				
4	موتُ المريض أمام عينّي.				
5	وفاة أحد المرضى الذي كنت على علاقة وثيقة معه.				
6	عدم تواجد الطبيب عندَ موتِ أحد المرضى.				
7	مُشاهدة ألمريض يُعاني من آلام.				
8	انتقادات الطبيب المشرف علي/لأدائي.				
9	الخلاف مع الطبيب.				
10	الخوف من ارتكاب خطأ أثناء علاج المريض.				
11	عدم التوافق مع الطبيب في العلاج الذي اختارهُ للمريض.				
12	اتخاذ قرار بِشأن حالة المريض في حالة عدم تواجد الطبيب.				
13	الشعور بِالعجز عنْ مُساعدة عائلات المرضى من النواحي الإنسانية والعاطفية.				
14	عدم قدرتي على إجابة أسئلة المريض الصحية/الطبية				
15	شعوري بِالعجز عن مساعدة المريض من الناحية العاطفية والانسانية.				
16	عدم وجود فرصة كافية للَتحدث بصراحة مع أفراد القسم الآخرين عن مشاكل القسم.				
17	عدم وجود الفرص الكافية للتحدث مع أفراد القسم حول تجاربهم ومشاعرهم الشخصية حول القسم.				

18	عدم وجود الفرص الكافية للتعبير للأخرين حولَ مشاعري السلبية تجاه المرضى.				
19	الخلاف مع المشرف المسؤول.				
20	العمل في أقسام طبية لا يوجد فيها عدد كافٍ من الممرضين.				
21	عدمُ انسجامي في العمل مع أحد الممرضين خارج القسم.				
22	الانتقادات الموجهةَ لي من قِبل المشرف.				
23	عدم أنسجامي في العمل مع أحد الممرضين داخل القسم.				
24	تعطل نظام الحاسوب في القسم.				
25	مفاجآت غير متوقعة من حيث مواعيد العمل وطاقم القسم المداوم حسب البرنامج.				
26	وجود مهام كثيرة غير تمريضية، و مطلوب منكَ/منكِ تأديتها.				
27	عَدم وجود وقت كافٍ لتقديم الدعم العاطفي للمريض.				
28	عَدم وجود وقت كافٍ للقيام بمهامي التمريضية.				
29	عَدم وجود طاقم كافٍ لتغطية المهام المطلوبة في القسم.				
30	عَدم وجود معلومات كافية مقدمة من الطبيب عن الوضع الصحي للمريض.				
31	قيام الطبيب بوصف علاج لا يتناسب مع الوضع الصحي للمريض.				
32	عَدم وجود الطبيب في الحالات الطبية الطارئة.				
33	عَدم المعرفة بما يجب أن يقال للمريض أو لعائلته حول وضعه الصحي وعلاجه.				
34	عَدم اليقين بشأن نتيجة العملية الجراحية، ومدى صلاحية الأجهزة المُستعملة في العملية الجراحية.				

القسّم الثاني استبانة طُرق ألتكيف (Coping mechanism checklist)

ضع/ي أشارةَ(x) مقابل كل عبارة استخدمها/تُها فيها كل من التالية للتحكم بالتوتر أو العصبية اثناء حدوث مُشكلة في العمل					
الرقم	السؤال	تُستخدم بشكلٍ كبير	يكثرُ استخدامها	تُستخدم أحياناً	لا تُستخدم
1	فعلتُ شيئاً مع أنّي كُنت متأكداً أنهُ لن يُفيد.				
2	حاولتُ تغيير رأي المسؤول حولَ المُشكلة.				
3	عصبتُ (نَرفَزتُ) على الشَخص (الأشخاص) الذي تَسَببَ في المُشكلة.				
4	فّرّغتُ عَصبيتي بطريقةٍ ما.				
5	غامرتُ وفعلتُ شيئاً رُبما يكون خطيراً لحلِ المُشكلة.				
6	قاتلتُ بعناد حولَ موقفي.				
7	استسلمتُ للقَدر وقبلتُ بالذّي حدثَ نتيجةً للمُشكلة.				
8	تجاهلتُ وكأنّ شيئاً لم يكن.				
9	نظرتُ للجانبِ الإيجابي من المشكلة (النصف المُمتلئ).				
10	حاولتُ نسَيان كُلّ شيء.				
11	لم أترُك المشكلة تُؤثر علي، ولم أفكرَ بها.				
12	نَظرتُ الى المُشكلة وكأنها مُشكلة سخيفة، وليست بحاجة إلى الكثير من الجَدية.				
13	تَمنيتُ لو أنَ معجزة تَحدث وتَحُلَ المُشكلة.				
14	نِمتُ كثيراً لنسيانِ المُشكلة.				
15	حسنتُ من مزاجي بالأكل والتدخين والشرب.				
16	اعتزلتُ النّاس.				
17	أفرغتُ عَصبيّتي في أناسٍ آخرين.				
18	رفضتُ التصديق أنَ المُشكلة قد حَدثتْ.				
19	تَمنّيتُ أن تتلاشى المُشكلة بسرعة.				
20	بنيتُ أحلاماً وأوهاماً حولَ كيفية حل المُشكلة.				

جامعة النجاح الوطنية

كلية الدراسات العليا

مستوى القلق والتوتر وطرق التكيف عند الممرضين في المستشفيات الفلسطينية، دراسة تجريبية

إعداد

أحمد اسماعيل سليمان عمرو

إشراف

أ.د .وليد صويلح

د. سماح الجابي

قدمت هذه الأطروحة استكمالاً لمتطلبات درجة الماجستير لتخصص تمريض الصحة النفسية المجتمعية بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس – فلسطين .

2013

مستوى القلق والتوتر وطرق التكيف عند الممرضين في المستشفيات الفلسطينية

إعداد

أحمد اسماعيل سليمان عمرو

إشراف

أ.د .وليد صويلح

د. سماح الجابي

الملخص

الخلفية والأهداف: التوتر أمر خطير بصفة خاصة بين الناس الذين يعملون في "المهن المساعدة" ومنها التمريض ، ويمكن أن يكون له آثار مدمرة على موظفي الرعاية الصحية وبيئة عملهم . حيث تظهرالدراسات الاستقصائية أنه رغم إجراء الكثير من البحوث حول التوتر وطرق التكيف عند الممرضين دوليا، الا انه كتب القليل عن التوتر وطرق التكيف بين الممرضين في فلسطين وكان الهدف من هذه الدراسة هو التعرف على الأسباب المحتملة ووتيرة التوتر التي يعاني منها الممرضين العاملين في المستشفيات الفلسطينية الحكومية وغير الحكومية، وطرق التكيف الأكثر شيوعا التي يتم استخدمها من قبل الممرضين للتعامل مع التوتر.

منهجية البحث: تم تحليل البيانات من دراسة مستعرضة وصفية. تم استخدام مقياس التوتر وقائمة طرق التكيف لتقييم مستوى التوتر وطرق التكيف بين الممرضين الفلسطينين.

النتائج: اظهرت البيانات ان الممرضين يعانون من التوتر. حيث ان اكبر مصدر للتوتر حسب البيانات هو "العمل في اقسام طبية لا يوجد فيها عدد كافي من الممرضين" بمتوسط (3.22) ، يليه" عَدم وجود طاقم كافي لتغطية المهام المطلوبة في القسّم" بمتوسط (3.19) ، وفقا لمقياس مستوى التوتر بين الممرضين. المصدر الأكثر تكرارا من التوتر هو 'عبء العمل' بمتوسط (2.93)، يليه "النزاع مع الممرضين الآخرين " متوسط (2.63) وفقا لمقياس التوتر الفرعي. بالنسبة الى طرق التكيف يبدو ان الممرضين يلجأون الى "محاولة تغير رأيّ المسؤول حولَ المُشكلة" بمتوسط (2.64) يليها " **قاتلتُ بِعناد حولَ موقفي**" بمتوسط (2.59) أما بالنسبة الى

استبيان طرق التكيف، يبدو أن الممرضين يلجأون أكثر إلى "المواجهة " بمتوسط (2.41) و أقل أستراتيجية يتم استحدامها من قبل الممرضين هي"تجنب الهروب" بمتوسط (2.04) وفقا لأستبيان طرق التكيف الفرعي.

الأستنتاج والتوصية: أن وتيرة التوتر بين الممرضين حسب تحليل البيانات كانت مرتفعة بما يكفي لاعتبارها خطيرة، وهو ما يتطلب من المؤسسات العمل على استراتيجية للحد من آثارالتوتر على العاملين والتعامل معها.