



***CAUSES, CONSEQUENCES AND COPING TECHNIQUES OF
WORK RELATED STRESS AMONG NURSES VIS-À-VIS THEIR
DEMOGRAPHIC CHARACTERISTICS IN ADAMA CITY***

By

DEREJE GUTA

***A THESIS SUBMITTED TO THE DEPARTMENT OF
PSYCHOLOGY IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS
IN SOCIAL PSYCHOLOGY***

***SCHOOL OF GRADUATE STUDIES
ADAMA SCIENCE AND TECHNOLOGY UNIVERSITY***

***MAY, 2014
ADAMA, ETHIOPIA***

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APPROUVAL BY BOARED OF EXAMINERS

We, the undersigned, members of the board of examiners of the final open defense by Dereje Guta have read and evaluated his thesis entitled “Causes, Consequences and Coping Techniques of Work related stress among Nurses vis-à-vis their Demographic Characteristics in Adama City.” and examined the candidate. This is, therefore, to certify that the thesis has been accepted in partial fulfillment of the requirement of Degree of Masters of Arts in Social psychology.

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DECLARATION

I, the undersigned, declare that this entitled thesis on "causes, consequences and coping techniques of work related stress among nurses vis-à-vis their demographic characteristics in Adama city " is my original work and has not been presented for a degree in any other University; and that all relevant sources of materials used for the thesis have been duly acknowledged.

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ABSTRACT

The main objective of this study was to examine causes, consequences and coping techniques of work-related stress among nurses vis-à-vis their demographic characteristics in Adama City. To attain this objective descriptive study design was employed. The total numbers of nurses' who currently employed in both public and private health institutions were about 450. Among these, 40 (25 females and 15 males) nurses from private health institutions and 68 (53 female and 15 male) nurses from public health institutions were selected by using stratified and simple random sampling. Data were collected from participants through structured questionnaire and then analyzed using descriptive statistics, independent t-test, analysis of variance (ANOVA) and Pearson Correlations. The findings reveal that socio-demographics such as, sex, work place, work experience, nature of employment were found statistically significant differences on causes of work stress. Work experience (> 11 year of work experience group and educational status (degree educational status and diploma educational status of respondent were also reported statistically significant difference on coping techniques of work related stress among nurses ($p < .05$). These include, death and dying of patients, conflict with doctors and lack of support, inadequate preparation to deal with patients' needs were some of stressors. In other way, an increase in liability to legal claims, turnover and patients complain were highly reported as stress consequences whereas Quitting the job", keep oneself busy to take mind off the issue, were some of coping techniques adopted among participants. At the end, providing counseling and guidance service, basic health safety training with specially emphasis on stressors nurses and also providing effective coping techniques of work related stress were recommended.

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Now a day, talking about stress has become part of normal every day conversation. People might talk about being stressed by their partners, their children, and their financial worries and their jobs. Most people may recognize the symptoms of stress as feeling anxious, worrying more than usual, not being able to concentrate, and not sleeping well (Mind Report, 2005).. But they are not always taking their feelings of stress that seriously, assuming either that its part and parcel of life or that it will pass. But when their jobs are the cause of their stress, they can feel powerless to do anything about it, which of course raises their stress levels even higher. People may feel they can not admit to feeling stressed to anyone at work, because it is somehow a sign of weakness or of extreme physical pain (Mind Report, 2005).

During last decade there has been increasing recognition of the work related stress experienced by hospital health professional staff (Mustaka, 2011). Mustaka further explain that, although some stressful situations are specific to a particular type of hospital unit, health professionals are subject to more general stress which arises from the physical, psychological, and social aspects of the work environment. Gibbens (2007) shows that health Professionals provide presence, comfort, help and support for people confronted with loneliness, pain, incapacity, disease and even death.

Study conducted in South Africa shows that role of perceived sources of stress, perception of work environment, type of hospital ward and nurse rank in work-related stress, coping among practicing nurses (Makie, 2007). He further explains that heavy workload, poor staffing, dealing with death and dying, inter-staff conflict, strain of shift work, careers, conflict with physician, inadequate preparation and lack of resources and organizational support have been identified as the major sources of work related stress among health professionals.

Another study conducted by Sontyale (2010) in South Africa Metropolitan city shows that work related stress is resulted from specifically organizational factors, job design factors, career and promotional factors, role-related factors and cultural factors. Bakibinga (2012) also reveals that Ugandan nurses reported that the serious stressors they experienced in relation to their work included poor pay, having too heavy workloads, trying to make do without vital supplies, struggling to deal with difficult patients, coping with uncooperative workmates, and being distressed by overly demanding and unfair bosses.

In Ethiopia, USAID (2012) reports show that, lack of universal precautions for protection against infectious diseases, shortage of sterile equipment and wide spread of HIV/AIDS are experiencing work related stress among nursing profession. In the same document, USAID further suggests that, work related stress has been caused due to low supply of water for health institutions (nurse may wash their hands less frequently). The additional workload of procuring water reduces nurses' productivity by taking them away from direct patient care. Fear of physical hazard, worrying due to death of patients in clinic, thinking to leave the Nursing and Midwifery work due to fear of catching communicable diseases during their work, fear of giving nursing care to patients with communicable or life threatening diseases and taking drugs without prescription are the major causes of the work-related stress among nursing profession (Teferi, 2009). Moreover, in Ethiopia, nurses have a 29% and 31% lifetime risk of unsafe exposure to bodily fluids and needle sticks, respectively (Reda et al. 2010) due to the hospital acquired infections. Again the study conducted in Addis Ababa showed that, high rate of work related stress and the strongest predictor of needle prick injury, blood splash, and skin cuts and risk for blood borne pathogens among other nurses and midwifery's (Teferi,2009).

The need of this study is highly relevant to the workforce in general and nursing in particular. Many studies of stress in nurse in developed countries have shown chronic stress as a major contributor to suicide or suicidal thoughts, smoking, excessive coffee consumption, and alcohol

intake (Kerlinger & Pedhadzer, 2000). Nurses are the backbone of any healthcare unit (Ibid). Therefore, Nurses are responsible for creating the good environment in which nursing is practiced and patient care is given, it is important to identify the causes, consequences and coping techniques that reduce the stress which were experienced by nurses. By reducing the stressful nature of the nurses' work, nurse could be more satisfied in their positions. This can lead to improve the work environment for staff nurses (Brown & Edelmann (2000).

In addition, as far as the knowledge of the researcher, there was little research document conducted concerning work related stress among nurses which may help for the intervention. Therefore, this study was planned to investigate the causes, consequence and coping techniques of work-related stress among nurses vis-à-vis their demographic characteristics in Adama City.

1.2. Statement of the problem

Stress is recognized as an inherent feature of the work life of health professionals, and growing evidence suggest that it may be increasing in severity (Makie, 2006). 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 work-related 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 (Makie, 2006).

Nursing is by its nature, a stressful job because of exposure to a wide range of potentially stressful situations and conditions. Stressors for nurses consistently identified in the literature include work overload, pressure associated with demands of the contemporary work environment (World Health Organization, 2004), unpredictability of staffing and scheduling, having to complete too many non-nursing tasks and having to make decisions under pressure (Fox, 2003; Mc Vicar, 2003). Huang (2004) reveals that, watching a patient suffer and feeling helpless in the case of patients who fail to improve or who may be dying may cause stress among nurses. Lack of time to give patients emotional support, tiredness, criticism by doctors and conflict with immediate supervisors

can also create difficult situations for nurses. It is apparent that staff nurses are working in a situation where it is very difficult to meet demands from many parties which may result in conflicts. They have to achieve a certain performance standard by their superiors and at the same time, patients holistic care has to be met at the same other end (Nurudin, 2000).

A considerable body of literature on nursing stress involved not only the administrative, interpersonal relationship, workload, responsibility, but also the clinical aspect or the nursing tasks. Other previous findings support that nursing is highly stressful and highly risky (chiu & Konsinski, 2000). These can also resulted in workers being less productive, may impact on the quality of services provided by health professional and may also place these nurses at more risk of making errors (International labour Organization, 2005). The failure to identify these problems amongst nurses at an early stage is thus likely to have a major impact on the effectiveness of nursing services and patients care (Nurudin, 2000) .

As some of literatures show that, even though a great deal of research has been done concerning causes, consequences and coping techniques among nurses at international level, little has been written among nurses in Ethiopian. Given that the international hospital settings and provision of health services are different compared to other developed country; it was not be appropriate to use the results of previous studies to explain causes, consequences and coping techniques among nurses in Ethiopia in general. Therefore, the needy of the study was rapid changes in health care technology, diversity in the workforce, organizational restructuring and changing work systems was possible reason to assess causes, consequences and coping techniques of work related stress among nurses vis-à-vis their demographic characteristics in Adama City.

1.3. Research Questions

1. What are the relationships among nurses' work related stress causes, consequences and coping techniques nurses in Adama City?
2. Are there relationships between causes of work-related stress and demographic characteristics of nurses in Adama City?
3. Are there relationships between consequences of work-related stress and demographic characteristics of nurses in Adama City?
4. Are there relationships between coping techniques of work-related stress and demographic characteristics of nurses in Adama City?

1.4. Research Objectives

1.4.1. General Objective

The main objective of this study was to examine causes, consequences and coping techniques of work-related stress among nurses *vis-à-vis their demographic characteristics* in Adama City.

1.4.2. Specific Objectives.

1. To examine whether or not there is statistically significant relationships between work-related stress causes, consequences and coping techniques in Adama City
2. To analyze whether or not there is statistically significant differences between causes of work-related stress in terms of demographic characteristics among nurses in Adama City.
3. To analyze whether or not there is statistically significant differences between consequences of work-related stress in terms of demographic characteristics among nurses in Adama City.
4. To examine whether or not there is statistically significant the differences between coping techniques of work-related stress in terms of demographic characteristics among nurses in Adama City.

1.5. Significance of the Study

This study was attempted to identify the major causes, consequences and coping techniques among nurses *vis-à-vis their demographic characteristics* in Adama City. Therefore, the findings of this study are believed to:

1. Provide well understanding of the major causes, its consequences and coping techniques of work-related stress among nurses in Adama city.
2. Help the concerned bodies of the health service institution by identify the most work related stress that should be given priority for improving measures,
3. Give the higher officials at different levels of health institutions in Oromia insights into the areas of priority in rendering health service support for health institutions,
4. Serve as guide for nurses to identify their strength and weakness in coping with stress, which is detrimental to their health, family relationship and unwanted behavioral traits.
5. Help hospital/health station authority to adopt and adapt the preferred actions and planed interventions to establish a positive atmosphere and avoid stressful working condition for nurses in their workplace.
6. Serve as a base for further research in the study area.

1.6. Delimitation of the Study

The scope of this study was delimited to Adama City nurses, specifically, nurse units such as: medical nurse unit, surgical nurse unit, critical care nurse unit, trauma and emergency, midwifery nurse unit, Pediatrics nurse unit, obstetric/gynecologic units and Cardio-Vascular Care Unit.

1.7. Limitation of the Study

Causes of the stress would be many. It may not necessarily from work related stress that would be described by respondents'. To a certain degree; respondents may not realize distinctively the demarcation line between work related stress and other causes of stress.

The research methodology adopted for this research has certain limitations which should be taken into consideration if generalizations or conclusions are to be drawn from the research findings. The data were collected through survey questionnaires using the quantitative approach. This approach has some limitations including the fact that the questionnaires impose restrictions on the depth of data, which can be collected about the phenomenon under investigation. Lack of similar literatures on nurses in the country.

1.8. Operational Definition of Term

Work-Related Stress - For the purpose of this study, the operational definition of work-related stress refers to intrinsic and extrinsic stressors of nurses which are related to their job including; stress associated with various work roles; personal strains due to physiological, psychological and behavioral processes that occur under the influence of stress and disrupt the normal functioning of service sector employees”.

Causes –Events/independent variable/ that provide the generative forces that originate stress.

Consequences- The outcome of an event especially as relative to an individual. Generally, the consequences have seen in three major areas. The consequences 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. Consequences 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 & Spector, 1991:398-407). Decreased performance, absenteeism, higher accident rates, higher turnover rates, higher alcohol and other drug abuse, impulsive behavior and difficulties in communication are few consequences of stress on behavioral (Beh & Loo, 2012).

Coping - managing successfully; be able to deal with difficulty. Coping is the process of thoughts and behaviors that people use to manage the internal and external demands of situations they

appraise as being stressful or exceeding their own resources. Coping efforts seek to manage, master, tolerate, reduce or minimize the demands of a stressful environment (Bartram, 2008)

Coping Techniques- According to Psychology dictionary, coping techniques define as 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 work stress. It is constantly changing cognitive and behavioral effort to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Richardson & Poole, 2001)

The cognitive-nature of the appraisal process and the inevitability of its influence on the success of coping construct evaluation of coping outcomes largely one-sided and, therefore, very difficult to guess (Hart & Cooper, 2001). Therefore, due to the transactional-theories of stress center on the person's moving reactions and cognitive development related to their environment, the researcher need to use this theory for this study accordingly.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. Introduction

This chapter provides a review of literature related to sources of stress, consequences' and coping techniques among nurses in public and private health centers. The first section of the review is related to sources of work related stress then, the second section includes the consequences of work related stress and the third section reviews coping techniques of work related stress.

2.2. An Overview of work related stress

Stress is an inevitable and unavoidable component of life due to increasing complexities and competitiveness in living standards (Nayak, 2008). In the fast changing of world today, no individual is free from stress and no profession is stress free. Everyone experiences stress, whether it is within the family, business, organization, study, work, or any other social or economical activity.

Thus in modern time, stress in general and work stress in particular has become a part of the life and has received considerable attention in recent years. Nayak (2008:40) also stated that "Stress is a subject which is hard to avoid. It is a part of day-to-day living that every individual is subjected to stress either knowingly or unknowingly". Greenberg and Baron (2003:122) define stress as the pattern of emotional states and physiological reactions that occur in response to demands from within or outside an organization. They further define a stressor as any demand, either physical or psychological in nature, encountered during the course of living.

In other way, work-related stress is defined as harmful physical and emotional responses that occur when the requirements of a job do not match the capabilities, resources, or needs of the worker and can lead to poor health and even injury (Alves, 2005). In addition work related stress as the product of an imbalance between environmental demands and individual capabilities.

Studies have shown that work stressors may result in psychological, physical and behavioral stress reactions (Coetzer & Rothmann (2006).

2.3. Concepts of work-related stress

Stress can be defined as any factor that threatens the health of the body or has an adverse effect on its functioning, such as injury, disease, or worry (Singh, 2011). According to Randy and David (2008) "Stress is the subjective feeling produced by events that are uncontrollable or threatening." They also said that 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.

There have been many different definitions of stress proposed by researchers, psychologists, medical professionals, management consultants or other individuals over the past hundred years. Many conflicting definitions of stress appeared in the literature, with passionate debates and arguments defending and opposing different definitions (Manktelow, 2005). Therefore, as stress is multi-faceted, a single definition will not suffice. Stress is also considered a cluster of related experiences, pathways, responses and outcomes caused by a range of different events or circumstances that affect respective individuals differently (Ibid).

According to Ogundokun and Fatusi, (2011), the concept of work related stress is often confused with challenge, but the two are not the same challenge energizes us psychologically and physically, and can motivate us to learn new skills and master our jobs. When a challenge is met, we feel relaxed and satisfied. Thus, challenge is an important ingredient for healthy and productive work. Stress, on the other hand, may affect productivity negatively and reduces creativity and motivation.

The growing awareness of implication of work related stress on nurses is evident by the number of studies have primarily examined the causes and consequences of work related stress without providing a clear definition of the stress concept (Lane, 2004). Furthermore, little or no attention

has been given to theoretical framework that confirm the stress process. Work-related stress is a pattern of reactions that occurs when workers are presented with work demands that are not matched to their knowledge, skills or abilities, and which challenge their ability to cope (Ibid). These demands may be related to time pressure or the amount of work (quantitative demands), or may refer to the difficulty of the work (cognitive demands) or the empathy required (emotional demands), or even to the inability to show one's emotions at work Houtman (2005), demands may also be physical, i.e. high demands in the area of dynamic and static loads.

2.4. Theoretical Model of Work-Related Stress

2.4.1 Transactional Theories of Stress

Transactional theories of stress focus on the person's touching response related to their surroundings. The traditional causal model of stress has been prolonged from a unidirectional conceptualization to a transactional explanation, whereby stress is "entrenched in an ongoing procedure that involves individuals handle with their environments, making appraisals of those encounters, and efforts to cope with the issues that arise" (Cooper, et al., 2001, p. 12).

At the transactional analysis, strain occurs because of a perception that environmental demands go beyond personal possessions (Lazarus & Folkman, 1986). Moreover, causation can be mutual, whereby the level of nervous tension experienced by an individual may produce a tendency to meet stressors. According to Folkman and Lazarus (1991), assessment comprises the successive processes of primary appraisal continuous-monitoring of environmental-conditions with a center on whether there are likely to be consequences for the individual's happiness, and secondary evaluation, what can be done should such cost occur, that is, the identification of a possible managing strategy. Coping refers to any effortful attempt to vary environmental circumstances or manage feeling regardless of outcome (Ibid). Following to the operation of a coping plan, reappraisal of the situation, and of the final effects of the coping response, occurs.

The cognitive-nature of the appraisal process and the inevitability of its influence on the success of coping construct evaluation of coping outcomes largely one-sided and, therefore, very difficult to estimate (Hart & Cooper, 2001). Therefore, due to the transactional-theories of stress center on the person's moving reactions and cognitive development related to their environment, the researcher need to use this theory for this study accordingly. As well as the working behavior of nursing, it is important to understand how differences between individuals may affect how they deal with stressors at work (Cox & Ferguson, 1991). Transactional theories of stress place emphasis not just on work characteristics, but also on subjective perceptions of stressors, and individual differences in ways of coping, viewing problems, past experience, personality-type etc.

All these may be important in informing and affecting the workplace-individual stress interaction (Ibid). Individuals are proposed to appraise environmental stressors, including their level of potential threats and costs (primary appraisal), then to make potential plans to deal with stressors using known coping methods and past experience (secondary appraisal), and then to initiate coping. 'Coping' has been described as any cognitive or behavioral efforts to manage, minimize, or tolerate events that individuals perceive as potentially threatening to their well-being (Gruen & DeLongis, 1986). Coping does not imply success in dealing with situations and coping responses to stressors can also be maladaptive. Methods may include problem solving, self-blame, escape/avoidance, wishful thinking, seeking advice and support, etc. Therefore coping occupies a dual role, both as a process following on from appraisal, but also as an individual difference variable, when people exhibit patterns of coping behaviors (carried out during the coping stage of transactional theory) that many suggest may be stable, or slowly changing over time (Folkman & Lazarus, 1980).

For the purposes of this study, coping is treated as an individual difference variable. Folkman *et al.* (1986) claim that problem-focused forms of coping (so called *positive* coping types) are likely to be associated with lower levels of negative health outcomes, and that coping of an emotional-

focused (or *negative*) type, such as self-blame, wishful thinking, or escape/avoidance are likely to be associated with increased negative health. For example, Healy and McKay (2000) found that avoidance coping predicted poor mental health in nurses, and problem solving coping was positively related to satisfaction and health. Evidence is more mixed for the relationship between seeking advice and health outcomes.

2.5. Causes of Work-Related Stress

Rollinson (2005) defines work related stress as the conditions arising from the interaction of people and their jobs, which are characterized by changes within people that force them to deviate from their normal functioning. Stressors in the workplace are those conditions that have the potential to result in a person's experiencing a situation as stressful. He also suggested that, the degree of stress experienced and the ways in which a person reacts to it can be influenced by a number of other factors such as personal characteristics, lifestyle, and social support, appraisal of the stressor, life events and socio-demographic and etc.

Consistent with the transactional model of stress, the causes of this phenomenon are considered to be the result of an imbalance between the individual and the work environment. In this regard, specific reference is made to the characteristics, skills and abilities of the individual and how well he/she fits in with the demands of the work environment (Cotrell, 2001). The current study, however, draws the focus closer by grouping causes of stress under two main categories: causes of stress outside of the work environment and causes of stress within the work environment. According to Lee (2003) the work environment includes the heavy workload, poor staffing, dealing with death and dying, inter-staff conflict, strain of shift work, careers, and lack of resources and organizational support, physical environment have been identified as the major work related stress.

2.5.1 Death and Dying

Most nurses caring for patients will encounter death as part of their work. This experience often causes anxiety (Brisley & Wood, 2007). Providing care to acutely dying patients has been identified as one of the more common and important internal work related causes of stress among nursing staff (Moszczynski & Haney, 2002). In other hand, Gillespie and Kermode, (2004) reported that feelings of inadequacy, incompetence and self-blame were commonly described by nurses in relation to incidents which culminated in patient death. According to Brisley and wood (2003) most cases new graduate nurses could not recall clearly the detail of the education they received regarding the care for dying patients and their relatives because they all found that the reality was very different to the theory (Ibid).

Nurses often experience sadness and grief when dealing with the deaths of patients, and without any support, can suffer stress (Hanna & Romana, 2007). An extended communication in the field of end of life care recognizes the call for attention to meeting the emotional needs of nurses in coping with patient death. Nurses have the unique privilege of working at the bedside and therefore they are at the frontline in patient death. Dickenson (2007) quoted “of all health professionals, nurses are in the most immediate position to provide care, comfort, and counsel near the end of life for patients and families”.

The nurse-patient relationship is considered an essential dynamic to care (McVicar, 2003). This can put an emotional strain on nurses. A study by the Center for Disease Control and Prevention (2005) found that over 50% of critically ill patients in the United States die in an acute care setting where nurses are the primary caregivers with the aging baby boomer population.

The emotional demand of caring is a theme that many nurses have consistently identified. Emotional labor is when nurses have to work at caring. They do this in order to meet the professional demands expected of them. The work of emotional labor can lead to increased frustration. This may cause a nurse to be less personal with patients, which affects quality of care (McVicar, 2003).

2.5.2 Lack of Support

The demands of nursing and a lack of social support seem to cause of work related stress and increase emotional exhaustion (Janssen, 1999). Lack of Social support from colleagues increases stress and positively affects work satisfaction (Begat, 2004). Nurses reported that strong social support helped them experienced less stress and have a higher level of job satisfaction; this in turn contributed to enhancing quality of patient care (AlArub, 2008). Nurses believed that their psychosocial work environment became improved when they were able to dialog their problems with their colleagues (Begat, 2005). Chang (2006) found that better social support through engaging in social activities helped cope with work-related stress.

According to Shader (2001) lack of social support and group cohesion increased stress and absenteeism and job dissatisfaction and increased the likelihood of nurses leaving the profession. A supportive work setting is necessary to alleviate the effects of stress in the workplace. Employees need both tangible and emotional support, including trust and confidence, guidance, recognition, feedback and active interest from the immediate manager (Coetzee & De .Villiers, 2010).

2.5.3. Conflict with Physicians, Supervisors and Other Nurses

According to Costa and Martins (2011), as for the bases of power the physician exerts and their relation with stress in nursing technicians and auxiliaries, coercive power revealed a significant ability to predict stress among the professionals. They reported that, there are in line with findings in the literature review, although only a small number of studies were located that aimed to investigate the relation between these two variables. Another noteworthy factor identified is the participating technicians and auxiliaries' greater perception of physicians' legitimate power (Ibid). A study of public hospital professionals reveals that physicians have a kind of specific knowledge that grants them legitimacy to exert control (Farias & Vaitsman 2002). As the authors did not specifically investigate bases of power though, they denote this knowledge as legitimacy.

In several studies, nurses working in acute care settings have indicated that conflict is occurring more frequently in their current work environment than in the past (Hesketh et al., 2003). Workplace relationships that consist of conflict, rather than collaboration and support, leave nurses feeling angry, betrayed, frustrated and dismayed (Bishop, 2004). Nurses have often reported conflict with doctors, nurse colleagues, managers, families, and patients (Boychuck-Duchscher & Cowin, 2004). However, recent studies have found that nurses identify their managers and nursing colleagues as the most common source of conflict, and that conflict with nursing colleagues is also the most stressful type (Lawrence & Callan, 2006).

2.5.4 Inadequate Preparation to deal with the emotional needs of patients and their families.

The stressors associated with nursing work, new nurses may face additional stressors associated with work/loss and or fear of failure while carrying out nursing tasks/responsibilities, fear of making mistakes or harming patients while performing procedures that patients as painful and feeling inadequately prepared to help meet the emotional needs of patients and patient's family (Gillespie & Kermode, 2004). On the other hand, the beginning level nurses may lack familiarity with the hospital and have experience in dealing with the new complex working environment, medical emergencies and the operation and functioning of specialized equipments (Arnedo, Uranga and Marin, 2005). Being in charge of clinical situations with inadequate experience and not knowing what a patient or a patient's family ought to be told about the patient's condition and its treatment may also present stressors, work which does not fulfill their needs and work tasks/responsibilities over which new graduate nurses have little control or which are ambiguous are also found to be significantly associated with increased level of emotional exhaustion leading to work related stress (Stordeur, Dhoore & Vandenberghe, 2001).

A series of previous National Council of State Boards of Nursing (NCSBN, 2006) research studies have demonstrated that many nurses graduate from their initial education programs feeling inadequately prepared to perform certain functions necessary for safe and effective care (Smith &

Crawford, 2003). Inadequate preparation may lead to frustration and early burnout as graduates struggle to care for very ill clients while feeling confused, unhappy and poorly prepared (Ibid). Preparation for the practice setting is a direct outcome of nursing education. The perceived lack of preparation of many new nurses for specific practice issues is an indication that some nursing education programs are less successful than others in preparing graduates for various aspects of practice (NCSBN, 2006). Lack of training and sleeping disturbance are also increased the risk of work related stress (Zewdie , Dagneu & Takele, 2011).

2.5.5. Uncertainty Concerning Treatment

Uncertainty concerning treatment is a basic human experience that transcends international boundaries (Penrod, 2007). Uncertainty treatment as a complex phenomenon is inherent in many nursing and medical encounters and can vary along different dimensions (Ogden et al. 2002). Uncertainty treatment is a fact of life for practicing clinicians and cannot be avoided. It is argued that healthcare reforms, changing roles and identities across professional boundaries have created a culture of uncertainty, a process that paradoxically has the potential both to inspire innovation and to threaten innovation in health care (Williams & Sibbald, 1999).

In another word, it is impossible to avoid and being present everywhere at once fact of decision-making. Healthcare settings are increasingly filled with uncertainty, risk and complexity due to increased patient acuity, multiple co-morbidities, globalization and enhanced use of technology (Rabey 2006; Simmons, 2010). In health care, as in other areas of human activity, judgment and decision tasks are uncertain. Particularly in nursing, decisions are characterized by incomplete knowledge of all available alternatives, and a lack of reliable probabilistic data of the consequences of these alternatives (Thompson & Dowding, 2001). It means that professionals are legitimately unsure and uncertain about what it is right or best to do realizing that they may be mistaken and that a successful outcome is far from guaranteed (ibid).

Uncertainty is correlated positively with workload, role conflict and intrinsic work motivation, job satisfaction and negatively with social support (Tummers et al. 2002b). It is important to know that there are calls on all sides for increased productivity and measures for improving productivity involving staff retention and support, and the development of an organizational culture that focuses on incentives and recognition (Rabey 2006). In another view of point, nurses worldwide are increasingly more autonomous, responsible and accountable for patient care (Simmons 2010). In this regard, many variables may affect the outcome of clinical reasoning, including the complexity of the task, uncertainty of outcome, time, practice setting and risk involved (Ebright et al. 2006).

2.6. Consequences of Work-Related Stress

According to Cooper, et al., 2000 there has been well-liked in stress writing to categorize the response to stress. There are a variety of feelings reflecting the individual nature and situational factors. These damages are seen as unwanted consequences of stressors. A part from their own unwanted nature, some strains may have additional negative consequences for individual task performance and wellbeing. Researchers agree that a certain extent of stress is a usual part of life, but prolonged stressors could lead to signs that are physical, psychological or behavioral (O'Driscoll & Beehr, 2002).

2.6.1 Psychological Consequences of Stress

Specters (2008) described that suffer exhaustion is an upset psychological state; a nurses pain from burnout is expressively exhausted, has low work motivation, it involves being miserable about work and having little energy and keenness for the job. Suffer exhaustion contains emotional tiredness, depersonalization and concentrated personal events. High levels of suffer exhaustion have been associated with low levels of apparent control and high levels of conflict, health symptoms, and meaning of give up the job and work-overload (Sutherland & Cooper, 2011).

Depression and anxiety disorders are also extremely common in the general health professions (Merikangas, & Walters, 2005). Symptoms of depression include depressed mood, anhedonia,

altered appetite, nervousness, and irritability (Davis, & Kalynchuck, 2006). These psychopathologies develop by a complex interaction between genetic predisposition and an adverse environment (Pryce et al., 2005). Stressful, or adverse, life experiences enhance the development of these affective disorders (ibid). In addition of this, the response to a stressor depends on how the individual assesses their environment and the stressor they experience (Neale, & Johnson, 2007).

In general, stress stimulates the nervous system, causing the individual to become more alert, preparing one's body for “fight, flight, or freeze” mostly due to the hormones epinephrine and norepinephrine. Unmanaged stress for long periods of time typically can cause a risk factor in many health problems, such as hypertension, weight gain, depression, heightened anxiety, and insomnia (Boyd, 2008). Chronic stress has also been linked with increased drug use and vulnerability to addiction (Sinha, 2008).

2.6.2 Physical Consequences of Stress

According to Humaida (2012) stress constitutes a potential threat to health and adjustment because many serious physical complaints among human beings due to its direct consequences on body's biological systems such as the nervous system, digestive system, respiratory system, and cardiovascular system. There are different views regarding the impact of stress on cardiovascular disorders. He also suggest that, clinical data indicate people with stress report higher levels of hypertension, angina pectoris, and heart attack due to persistent stressful situations. (Boyd, 2008). Common physiologic responses to stress are increased heart rate, respirations, fidgeting, diaphoresis, grinding or gritting teeth, rashes, itching, hives, sighing, palpitations, headaches, tremors, urinary frequency, and impaired sexual function (American Institute of Stress, 2011).

2.6.3. Behavioral Consequences of Stress

A better understanding the consequences of stress on behavior and brain physiology will allow us to determine the factors that lead to these disorders and will lead to the development of more effective treatment (Heim & Nemeroff, 2001). Black et al. (2001), describes examples of behavioral response to stress which include decreased ability to think clearly and function, increased tobacco and alcohol use, overeating and disrupted sleep patterns. Healey (2003) associated stress with mood changes, which includes feelings of tension, anxiety, fatigue and depression. According to Levi (1987), the common negative behavioral response includes the abuse of alcohol, tobacco or drugs, unnecessary risk-taking in working life and in traffic and unprovoked aggressive and violent behavior towards oneself or a fellow. It is clear that these destructive behaviors caused by stressor be as the ways of releasing stress are harmful for an individual. And these behaviors influence not only individual physical health, but also psychological one, for example the abuse of alcohol may lead to unstable emotion.

2.7. Stress in Nursing Profession

According to Chase (2005), the profession of nursing is in the midst of a crisis brought on by a nursing shortage. Many are choosing to leave the profession of nursing coupled with fewer numbers choosing nursing as a profession. As a result, nurses are challenged with increased acuity of patient care in the face of short staffing.

Nursing is recognized as a stressful work (Higgins, 2003). This means that working in the nursing profession is demanding and often stressful when compared to other professions, because nurse are more exposed to factors known to cause stress and significant work demand (Ibid). Halverson (2006) argues that stress affects nurses on a daily basis and that crises on the job occur frequently. One qualitative study of the job resources and strategies used by six preoperative nurses to cope with multiple demands up on their role revealed that all participants expressed that they experiencing stress (Schroeder & Carter, 2002).

Moreover, nurses face a wide range of human emotions, for example listening or talking to patient about his/her approaching death (Sumner & Rocchiccioli, 2003). Working in the nursing profession often involves sharing the traumas of illness, injury, and death, not only with the patients but with multiple family members and friends (Gillespie & Kermode, 2004). This can cause nurses to harbor emotions such as anxiety, depression, fear and anger (Halversen, 2006). Other Australian studies have also reported that nurses are frequently and in some cases, excessive exposed to various traumatic incidents as a part of their daily work (Gillespie & Kermode, 2004).

In many cases someone becomes a nurse because they want to help people but when they are confronted with the reality of the job they soon realize that is not what they thought it would be (Hudgins, 2008). Healthcare institutions are different in size and nature, and nurses are confronted with different work tasks and working hours -nightshifts-, working conditions – understaffing and stress related situations – the suffering and death of patients (Cooper, 2000).

Another serious stressor is that the health professionals have always paid a heavy price concerning infectious diseases because due to the nature of their work they come into contact with biological dangers people (Marie, 2007). As they use sharp equipment like needles and through skin contact are exposed to the same active infection dangers as the patients by handling patients' blood and bodily liquids (Bouvet, 2007). Except these, the chemical substances in the hospital along with the use of dangerous medication, such as those used in chemotherapy, expose nurses to health dangers (Anbrens et.al. 2008).

2.8. Coping Techniques

Coping is the process of managing demands that are appraised as taxing or exceeding the resources of the person (Taylor, 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 (Durbin, 2009). It's important to learn how to recognize when your stress levels are out of control. 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 & David, 2008). 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. 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. Active or reactive coping responses can be positive or negative, depending on the situation and the content of the response (Lazarus & Folkman, 1984)

Appraisal: The transactional model of stress and coping by Lazarus and Folkman (1984) regards coping as a function of stress appraisal; stress is defined in their model as perceived threats to well-being or of demands that are perceived to be taxing of individual internal and/or external resources (Folkman & Moskowitz, 2004). Essential to their model is the idea that stress and coping is a *transaction* mediated by the person's appraisal of both the perceived threat and the perceived resources available to respond to the threat (Carver et al., 1989). As a result, coping is a highly perceptually driven process that yields strategies appropriate to individual needs across a variety of situations (Carver et al., 1989).

Coping Response: Stressors provoke coping responses that fall into two general categories: *problem-focused coping*, which involves directing action to resolve or alter the threat and *emotion-focused coping*, which involves management of the emotions elicited by the threat (Carver et al., 1989). Problem-focused coping is oriented to approaching the source of stress, encompassing coping strategies such as planning, problem-solving, restraint, seeking information/instrumental advice and cognitive reappraisal (Westphal, & Charney, 2010). Emotion-focused coping is

managing and/or mitigating problematic emotional responses to stress, such as fear and distress, by using strategies like avoidance, denial, venting, disengagement, acceptance, positive reappraisal and emotional support (Carver et al., 1989). Typically, people employ both forms of coping to some degree when managing stress, adjusting their strategies as context and individual preferences dictate (Folkman & Lazarus, 1980).

CHAPTER THREE

3. METHODOLOGY

In this chapter the study area, research design, study population and sampling size determination, sampling procedure, research instrumentation, reliability and validity of research instrument, data collection procedure and techniques of data analysis and ethical consideration were included.

3.1 Study Area

The study site for current study is Adama city, which is located 99km from the capital city Addis Ababa, is the main commercial, conference and industrial center in Oromia Region. A railway links Addis Ababa to Djibouti and a highway from the capital to the port passes through Adama. All these natural and manmade attributes make Adama and its surroundings a potent base for investment in several sectors, such as hotels, recreations centers, small and heavy industries as well as health sector and etc. Due to Adama City is the main commercial, conference and industrial center, rural people who are living around the city and the people who come to this City per day are highly use the Adama City health institutions as well as Hospitals.

3.2 Research Design

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 & Grove 2001). This author states that research design guides the researcher in planning and implementing the study in a way that is most likely to achieve the intended goal.

Hence, in this study descriptive study design was employed for the study. In view of this, the study was adopted the descriptive survey method to collect quantitative data. Through descriptive research, concepts are described and relationships are identified that provide a basis for further quantitative research and theory testing. In this study, the nurses were requested to describe their experiences of stress, their consequences and coping techniques in their work environment. Furthermore, co-relational method was also employed to study the relationship between the variables.

3.3. Study Population

The study population for this research was all public and private health institutions in Adama city. There were five (5) public health institutions; One (1) Public Hospital (Adama referral hospital) and the rest 4 public health stations. And also 58 private health institutions: 11 higher health institutions, 25 medium health institutions, 20 lowest health institutions and 2 hospitals. The total numbers of nurses' who currently employed in both public and private health institution were about 450. Among these, 40 nurses (25 females and 15 males) were selected from private health institutions and 68 nurses (53 females and 15 males) were selected from public health institutions.

3.4. Sampling Size Determination

Determining appropriate sample size was the key component in research process. Sample subjects were taken from eight units: medical nurse, surgical nurse, critical care nurse, trauma and emergency nurse, midwifery nurse, Pediatrics nurse, obstetric/gynecologic nurse and Cardio-vascular care nurse. According to Holleran and Ramakrishnan (2012), obtained thirty percents of total population was enough to conduct the study. Therefore, the researcher was planned to take 30% of the total population for this study. Hence, 108 nurses were involved in the study. Among these, 102 nurses' were completed by respondents whereas the remaining six questionnaires were rejected due to significant missing values.

3.5. Sampling Techniques

The sampling methods used to obtain the representative sample of the study were stratified and simple random sampling technique. The stratification was done in terms of private and public health centers, gender and units. In each stratum, the number of subjects to be sampled were determined by proportion they have in the whole population. Finally, simple random sampling technique was employed to obtain the desired sample group of the study. Random number table was used to conduct simple random sampling techniques. To this end, complete lists of the population in each health institutions were obtained in advance.

3.6. Sampling Procedures

First a complete list of the nurses in each health institutions was obtained. Next, the number of individuals to be drawn from each health institutions was determined according to the proportion of the population of nurses in the whole population. The number of individuals to be taken from each stratum was determined in terms of the proportion of the population of each stratum in the population. Finally the individuals to be included in the desired sample group of the study were drawn from each stratum through simple random sampling technique by the help of random number table.

3.7. Research Instrumentation

Structured questionnaires were used as a data-gathering instrument. These were consisting of three parts. 1) The “Demographic data questionnaire”, (2) The “Nursing Stress Scale” and (3) Ways of coping checklist (WCCL). Nursing Stress Scale (NSS) measurement was adapted from Gray-Toft & Anderson (1981), Ways of Coping Checklist (WCCL) was also adapted from Lazarus’ transactional model of stress and coping Lazarus and Folkman (1984) and strain questionnaire was developed by the researcher.

3.7.1 Procedures for Pilot study

In order to test the reliability and validity of the study questionnaires and to minimize bias the pilot study was applied. This was used 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 (Gibbens, 2007). To do so, one health institution was use for the pilot study and the remaining health institutions were for the main study. The selected subjects were informed the purpose of the study and consent was obtained. Then, the number of individuals to be taken was randomly select from duty rosters in the wards/units and take part in the pilot study of this research.

3.7.2. Reliability and Validity of Research Instrument

Reliability is the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure (Uys & Basson 1991:75-76). Gray-Toft (1981b) reported internal consistency coefficient ranging from 0.79 to 0.89 for the total scale on the Nurses Stress Scale. In addition, the internal consistency of the Chinese version of the Nurse Stress Scale for an overall coefficient alpha is .91 for the total scale, and ranges from .67 to .79 for the sub scales (Meas, 2007). In other way the French Ways of Coping Checklist WCC- (Cousson et al., 1996) the reliability (internal consistency coefficient) of emotion-focused coping 0.76 and problem-focused coping 0.79. The study conducted with 129 nurses recruited from Victorian metropolitan and regional institutions in Australia reported a reliability coefficient of 0.89 for the total scale and coefficient ranging from 0.64 to 0.77 for the subscales (Healy & Mckay, 2000). With regard to validity, the Nurses Stress Scale and Ways of Coping Checklist are established tools that have been validated (Gray-Toft 1981b; Edwards & Baglion 1993; Folkman 1988). The reliability Alpha coefficient of this study on total scale of causes of stress, consequences & coping techniques were .915, .685 and .874 respectively.

3.8. Data Collection Procedures

Questionnaires were distributed to participant of each units/wards. The questionnaires were distributed at the beginning of the shift and collected at the end of the same shift. This was doing for alternate days and on different nurse professional workers shifts until the desired sample was reached. A phone call was making during the shifts to remind the subjects to return the completed questionnaires.

3.9. Techniques of Data Analysis

The questionnaire was checked for missing data; items in which the subject provided two responses when only one was requested; items in which the subject has mark a response between

options and items that ask the subject to write in some information. Statistical analysis of the quantitative data was conducted using Statistical Package for the Social Sciences (SPSS).

Descriptive statistics was also used to illustrate the demographic profile of the participants, the frequency, the mean scores and standard deviation of causes of stress, consequences and adapted coping techniques. Analytical statistics was used to compare relationship among variables which include independent t-test, analysis of variance (ANOVA) and Pearson correlations. A correlation analysis was used to examine the extent of the interrelatedness of variables, such as cause, consequences and ways of coping techniques.

3.10. Ethical Consideration

Ethics in research refers to the norms for conduct that distinguish between acceptable and unacceptable behavior (David and Resnik, 2010). This was to protect the rights of respondents. To render this in the study, the rights to anonymity, confidentiality and informed consent were held.

CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose of this research study was to assess the causes' consequences and the coping techniques of work related stress among nurses their vis-à-vis in Adama city. The main objective

of this chapter was to report the results of data analyses performed in the empirical research undertaken.

4.1. Socio-Demographic Characteristics

Table 1: Socio-Demographic Characteristics

Characteristics		Sex		
		Male N (%)	Female N (%)	Total N (%)
Age				
	< 25	2 (8.7)	9(11.4)	11(10.8)
	26-35	13(56.5)	32(40.5)	45(44.1)
	36-45	6 (26.1)	24(30.4)	30(29.4)
	>46	2 (8.7)	14(17.7)	16(15.7)
Work place(type of institution)				
	Public health institution	15(65.2)	43(54.43)	58(56.9)
	Private health institution	8(34.8)	36(45.57)	44(43.1)
Nature of Employment				
	Permanent	7(53.85)	54(68.35)	71(69.61)
	Contract	4(30.77)	20(25.32)	24(23.53)
	Par time	2(15.38)	5(6.33)	7(6.86)
Marital Status				
	Single	8(33.33)	40(50.63)	47(46.6)
	Married	16(66.67)	39(49.37)	55(53.4)
Work Experience				
	< 5 years	8(14.2)	48(85.7)	56(54.9)
	6-11	10(29.4)	24(70.5)	34(33.3)
	>11	5(41.6)	7(58.3)	12(11.8)
Education Status				
	Diploma	16(69.57)	49(62.03)	65(63.7)
	Degree	7(30.43)	30(37.97)	37(36.3)
Training institution				
	Public university (college)	13(56.52)	33(41.77)	46(45.1)
	Private university (college)	10(43.48)	46(58.23)	56(54.9)

Of the total 102 participants, the overall respondents were 45 (44.1 %) with their age ranged from 26 to 35 years. With regard to work place, from total 102 participants 58 (56.9%) respondents were from public/governmental health institution whereas 44 (43.1 %) respondents were from private health intuitions.

In the same way, 71 (69.6%) of respondents were permanent employees, 24 (23.5%) of respondents were contract employees and 7 (6.9 %) of respondents were par time employees. With regard to marital status of respondents 47 (46.1 %) of respondents were single and 55 (53.9%) were married respondents. The work experience of the respondents indicated that 56 (54.9%) of respondents had less than 5 years of work experience, 34 (33.3%) of respondents had 6-11 years of work experience and 12 (11.8%) of respondents had greater than 11 years of work experience.

The educational background of the respondents indicated that 65 (63.7%) of the respondents were with diploma educational status whereas 37 (36.3%) of the respondents were with degree educational status .With regard to training institutions the respondents graduated from shows that 46 (45.1%) of respondents were trained in public university/college/ whereas 56 (54.9%) of respondents were trained in private university/college/.

4.2. Inter Correlation for causes of Work Related Stress

4.2.1. Pearson Correlation within Work Related Stress Sub-scales

Table: 2: Pearson correlation matrix within subscales

	1	2	3	4	5	6
1. Death and dying	—	.658**	.457**	.352**	.253*	.051
2. Conflict with doctor		—	.507**	.364**	.145	.132
3. Inadequate preparation			—	.316**	.141	.115
4. Lack of support				—	.340**	.402**
5. Conflict with supervisor					—	.364**
6. Uncertainty treatment						—

P** <.01, P* < .05, N= 102

The above Pearson correlation coefficient was computed to assess the relationship between work related stress cause sub-scales. There was a significant positive correlation between death and dying of the patients and conflict with doctors ($r = .658$, $N = 102$, $p = <.01$). Significant positive correlations were also found between death and dying of patients and inadequate preparation ($r = .457$, $N = 102$, $p = <.01$) and significant strong positive correlation between conflict with doctors & inadequate preparation ($r = .507$, $N = 102$, $p = < .01$) and also significant strong positive correlations was observed between lack of support & uncertainty treatment ($r = .402$, $N = 102$, $p =$

<.01). In addition there was moderate positive correlations between lack of support and conflict with supervisor ($r = .340$, $N = 102$, $p = <.01$).

Significant moderate positive correlation was observed between lack of support and death & dying of patients, ($r = .352$, $N = 102$, $p = <.01$). Conflict with supervisor was also found to have significant weak positive correlations with death and dying of patients, ($r = .253$, $N = 102$, $p = <.05$). Again conflict with supervisor was found to have significant moderate positive correlations with lack of support, ($r = .364$, $N = 102$, $p = <.01$).

Uncertainty treatment was found to be significant moderate positive correlations with conflict with supervisor, ($r = .364$, $N = 102$, $p = <.01$). There were also significant moderate positive correlations were observed between inadequate preparation and lack of support, ($r = .316$, $N = 102$, $p <.01$).

4.2.2. Pearson Correlation Matrix within Total Scales

Table: 3: Pearson correlation matrix within total scales

Total Scales	1	2	3
1. Causes	-	.148	-.423**
2. Consequences		-	-.049
3. Coping			-

P** <.01 total-scales N= 102

Inter correlation was computed to assess the relationship between the total-scale of work-related stress causes, consequences and coping techniques (Table 3). It was observed that work related stress was observed to have weak non-significant positive relationship ($r = .148$, $n = 102$, $p = >.05$) with consequences, but moderate significant negative relationship with coping techniques ($r = -.423$, $N = 102$, $p <.01$). Besides no significant negative relationship was observed between consequences and coping techniques ($r = -.049$, $n = 102$, $p = >.05$).

4.3. Analysis of Demographic Variables on Causes of Stress

According to Balkin (2008) when utilizing a t-test or ANOVA, certain assumptions have to be in place. In other words, a statistical test cannot be arbitrarily used, but a specific set of conditions must be met for the statistical test to be deemed appropriate and meaningful. These conditions are known as assumptions. The assumptions for t-test or ANOVA include independence, normality, and homogeneity of variances. The researcher applied t-test and ANOVA to ascertain the differences of means and the relationship between the demographic variables with causes, consequences and coping techniques of work related stress. The seven demographic variables include; gender, work place, marital status, age, education, nature of employment and work experience. The causes of work related stress sub-scale consists; death and dying of patients, conflict with doctors, inadequate preparation of nurses, lack of support, conflict with supervisor and uncertain treatment of patients. The total scales also consists causes, consequences and coping techniques.

The research questions of this research examine the demographic variables (sex, age, work place, training institution, that have a mean difference in causes, consequences and coping techniques of work related stress in Adama city. According to t-test and ANOVA result analysis there were mean differences in some of demographic variables of participants. Under t- test and ANOVA analysis, the following variables are discussed in detail.

4.3.1. Causes of stress by Demographic Variable (t-test analysis)

Sex, work place, educational status, marital status and training institutions distribution of the respondents were categorized in two groups and independent means differences were carried out.

Table 4: Results of t-test analysis by demographic variables

Sex	Mean	t	df	p
N	2.1			
Male	2.9	-6.637	100	
23		.000		

Female					
79					
Work place(type of institution)					
Public institution		2.6	-2.749	100	
58		2.9	.007		
Private institution					
44					
Educational Level					
Diploma		2.7	.783	100	.436
65		2.6			
Degree					
37					
Marital status					
Single	47	2.8	.587	100	.559
Married	55	2.7			
Training institutions					
Public university (college)	45	2.5	-2.649	99	.008
Private university (college)	56	2.9			

As can be observed from Table 4, there was a statistically significant difference between the mean values of cause of stress for the male and female participants ($t(100) = -6.637, p < .05$). The results revealed that the mean for the female participants ($M=2.93$; $SD=.48$) was greater than the mean for male participants ($M=2.13$; $SD=.58$). Therefore, female participants were seemed to encounter significantly work related stress more than male participants. This finding is consistent with several studies. For instance, the Annuals of Biological Research (2012) revealed that female nurse employees compared with male employees had more stress. Other study by Bagley et.al (2011) and his colleagues showed that Women reported greater work related stress compared to men respondents. According to Shivacharan and kumar (2013) statistically significant difference was found between male and female nurses.

Besides, there was statistically significant difference between the mean value of work related stress for work place (Public institutions and Private institutions) ($t(100) = -2.749, p < .05$) (Table 4). The mean for the respondents from Public institutions ($M=2.61$; $SD=.57$) was less than the

mean for the respondents from Private institutions ($M=2.93$; $SD=.60$). Therefore, respondents from Private institutions seemed to encounter work related stress more than Public institutions. The study conducted in Norwegian & Erikson (2006) reported that there are obvious differences between the sectors with respect to the roles they are meant to fulfill, the types of patients they serve, and the characteristics of the organizational structures. Pongruengphant (2004) in contrast to this study nurses working in public hospitals generally reported more stress than private hospitals.

Table 4 also revealed that there was no statistically significant difference observed in educational status between the mean value of cause of stress for diploma ($M=2.78$; $SD=.57$) and degree ($M=2.68$; $SD=.65$) of participants ($t(100) = .783$, $p > .05$). These indicated that causes of stress were not likely due to different educational levels of participants. In support of this, Hosis et.al (2013) observed no statistical significant relationship of total mean of work stress in educational level of the nurses. In contrary to this lack of knowledge among nurses was identified as a main indicator of stress among nurses (Lexshimi 2007).

The result indicates that work related stress in terms of marital status indicated that no statistically significant difference was observed (Table 4). In support of this, a study conducted by Ramel et.al, (2003) revealed that there was no statistically significant difference in work related stressors in marital status. However, Parveen (2009) reported that work related stress was obviously greater in married nurses as compared to unmarried nurses. The higher level of work related stress among married nurses than unmarried are attributed to more roles and responsibilities assigned to them as a mother, wife and homemaker, as compared to unmarried nurses. Table 4: indicates that the observed difference in means is statistically significant $t(97) = -2.709$, $p < .05$. It can be concluded that there was significant difference between the mean value of stress for both participants from training institution of public and private university (college). Since the group statistics shown indicates that the mean value of respondents from private university (college) ($M=2.9$; $SD=.57$)

participants was greater than the mean of respondents institution from the public university (college) ($M=2.5$; $SD=.60$) participants. Therefore, private university (college) participants were able to encounter stress than public university (college) participants.

4.3.2. Analysis of variance on causes of stress on Age

Age distribution of the respondents was divided into five category (<25 group of age, 26-35 groups of age, 36-45 groups of age, 46-55 groups of age, > 55 groups) and analysis of variance was carried out.

Table 5: Results of Analysis of variance (ANOVA) on Age

Causes Mean	<i>Sum of Squares</i>	<i>F</i>	<i>P</i>
Between Groups	3.481	2.532	.045
Within Groups	33.349		
Total	36.830		

As it can seen from Table 5, statistically significant differences in causes of work related stress were observed among the five age groups(<25 groups of age, 26-35 groups of age, 36-45groups of age, 46-55 groups of age, >55 groups of age) ($F_{(4,99)}=2.532$, $p<.05$). Tukey post-hoc comparison of these categories a group of 26-35 age with ($M=2.6$, 95% CI [2.48, 2.83], $SD= .58$) was significantly differ from a group of 36-45 age with ($M=2.71$, 95% CI [2.47, 2.3], $SD=.64$), $p=.025$. Comparisons between the >55 age with ($M=2.92$, 95% CI [1.9, 3.94]: $SD=.64$) and other two groups (<25 groups of age and 46-55 groups of age) were not statistically significant at $p<.05$. All age categories were statistically significantly differ from each other.

A study conducted in Ghana by Atindanbila, Abasani and Anim (2012) indicated that there is a significant difference in work stress with regards to the age of the nurses. The higher the age of the nurse the more he or she is exposed to work stress. A report by Wilkins (2007) observed that work stress peaked at ages 35 to 54, with about 50% of health care providers in this age range reporting high work stress. A study by Letvak (2002) also reported that older nurses are more

likely to work in outpatient. However, results are mixed with respect to whether older nurses compared to younger nurses are more satisfied with nursing as a career (Hoffman & Scott, 2003).

4.3.3. Analysis of variance on causes on Nature of Employment

Nature of employment distribution of the respondents was divided into three category(permanent contract and part time) and statistical analyses carried out.

Table 6: Results of Analysis of variance (ANOVA) on Nature of Employment

Causes Squares	Sum of	F	P
Between Groups	1.367	1.907	.154
Within Groups	35.464		
Total	36.830		

Table 6 indicated that causes of work related stress were not statistically significant among the three groups (permanent, contract and part time) ($F_{(2, 99)} = 1.907$, $p > .05$). The mean score for part time employment ($M=2.9$: $SD=.73$), contract with ($M =2.9$: $SD=.53$) and for permanent nature of employment with ($M = 2.67$: $SD=.60$) did not differ from each other. This can be concluded as all nature of employment categories did not significantly differing from each other.

4.3.4. Analysis of variance on causes of stress on Work Experience

Years of work experience of the respondents were divided into three categories (< 5 years, 6-11years and > 11 years) and analysis of variance (ANOVA) was carried out.

Table 7: Results of Analysis of variance (ANOVA) on Work Experience

Causes of stress Mean	Sum of Squares	F	P
Between Groups	6.823	11.256	.000
Within Groups	30.007		
Total	36.830		

Table 7 reveals that there were statistically significant differences among the three category of year of work experience (< 5 years, 6-11years and > 11 years) ($F_{(2, 99)} = 11.256$, $p < .05$). Post-hoc

comparisons of the three groups of working experience indicate that there was statistically significant difference observed between respondents with work experiences of (>11 years with (M= 2.0:SD=.52),95% CI[1.76,2.42] and 6-11 year of work experience (M= 2.7:SD=.53), 95% CI[2.52,2.89]) and statistically significant difference between the respondents with >11 years of working experience and < 5 years of working experience (M=2.9:SD=.56), 95% CI[2.76,3.07]. Among those three category of work experiences, the respondents with work experience less than 5 years (M=2.9) encountered more work related stress as compared to other categories.

Studies conducted by Hussein et.al (2012) , Lexshimi et.al (2007) and Bejerkas and Bjork (2012) reported that nurses with less years of working experiences, experienced more stress compared to nurses with many years of working experience. However, other studies reported that senior nurses experienced a higher degree of stress than other ranks of nurses (Make, 2006).

Apart from this, it is believed that increased knowledge correlates with increased experiences and increased responsibility. This implies that the amount of work experience can result in a decreased level of stress.

4.4. Analysis of Demographic characteristics on Consequences of Work Related Stress

Sex, work place, educational status, marital status and training institutions distribution of the respondents were each categorized in two groups and independent means differences were carried out.

Table 8: Results of t- test analysis by demographic variables

	<i>N</i>	<i>Mean</i>	<i>t</i>	<i>df</i>	<i>p</i>
Sex					
Male	23	1.6	.273	100	.786
Female	79	1.6			
Work place					
Public institution	58	1.5	-1.524	100	.131
Private institution	44	1.6			
Educational status					
Diploma	65	1.5	-.939	100	.350
Degree	37	1.6			
Marital status					
Single	47	1.5	-.425	100	.672
Married	55	1.6			
Type of Training Institutions					
Public University/college	45	1.5	-1.314	97	.192
Private University/college	54	1.6			

As it can be observed from Table 8 there was no statistically significant difference between the mean value of consequence of stress for the male and female respondents ($t(100) = .273$, $p = >.05$). The result indicated that the mean for both male ($M = 1.61$; $SD = .22$) and female ($M = 1.60$; $SD = .23$) respondents did not significantly differ from each other. In support of this, ALnems et.al (2005) found no statistically significant differences observed between male and female respondents. Nevertheless, studies provided out that women may be disproportionately exposed to strain. A study by Gunkel et.al (2007) reported that women have greater exposure to strains than men.

Similarly, there was no difference between the mean score of consequence of stress for the respondents from public institution and respondents from private institution ($t(100) = -1.524, p = .131 > .05$) (Table 8). This is to mean that the mean for respondents from public institution ($M=1.57; SD=.21$) and for respondents from private institution ($M=1.64; SD=.29$) did not significantly differ from each other. In the same table, it was also observed there was no significant difference in mean score of respondents of different educational categories ($t(100) = -.939, p > .05$). Moreover, the result indicated that effects of stress in terms of marital status were not statistically significant for single and married respondents (Table 8). The result revealed that the respondents of single ($M= 1.59; SD=.26$) and married ($M= 1.61; SD=.24$) did not significantly differ from each other ($t(100) = -.425, p > .05$). In the same way, the findings also revealed the participants both who trained in private university/college and public university/college did not significantly differ from each other ($t(97) = -1.314, p = .192 > 0.05$).

4.4.1. Analysis of variance on consequences of stress on Age

Age distribution of the respondents was divided into five categories (< 25 years, 26 -35 years, 36-45 years, 46-55 years, > 55 years) and analyses of variance (ANOVA) was carried out.

Table 9: Results of analysis of variance (ANOVA) of strain on Age

Effects of stress Mean	<i>Sum of Squares</i>	<i>F</i>	<i>P</i>
Between Groups	.123	.461	.764
Within Groups	6.449		
Total	6.571		

The result indicates that effects of stress were not statistically significant among the five groups (< 25 years, 26 -35 years, 36-45 years, 46-55 years, > 55 years) ($F(4, 97) = .461, p > .05$). All age's category did not significantly differ from each other.

4.4.2. Analysis of variance on consequences on Nature of employment

Nature of employment distribution of the respondents was divided into three categories (permanent, part time and construct) and analyses of variance (ANOVA) carried out

Table 10: Results of ANOVA effects of stress on Nature of Employments

Effects of stress Mean	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>P</i>
Between Groups	.213	2	.106	655	.196
Within Groups	6.359	99	.064		
Total	6.571	101			

As can be seen from Table 10 the effects of stress was not statistically significant among the three employment categories (permanent, part time and construct) ($F_{(2, 99)} = 655, p > .05$). All nature of employment categories did not significantly differing from each other.

4.4.3 Analysis of variance of effects of stress on work experience

Work experience distribution of the respondents was divided into three categories (> 5 experience, 6-11experience and above 11 experience) and analyses of variance (ANOVA) was carried out.

Table 11: Results of (ANOVA) of effects of stress on Work Experience

Effects of stress mean	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>P</i>
Between Groups	.131	2	.066	1.009	.368
Within Groups	6.440	99	.065		
Total	6.571	101			

Table 11 shows that there was no statistically significant differences among the three work experience categories (> 5 experience, 6-11experience and above 11 experience) ($F_{(2, 99)} = 1.009, p > .05$). Three categories of work experiences in consequences of stress did not differ from each other.

4.5. Analysis of Demographic Characteristics on Coping Techniques of Stress.

Lazarus and Folkman (1984) noted that coping strategies include attempts at managing or altering a problem (problem focused coping) and regulating the emotional response to the problem (emotion-focused coping). Healy and McKay (2000) indicated that problem - solving and active coping strategies (e.g., trying to resolve the problem) were most commonly used by nurses, whereas seeking social support and self-control, an emotion-focused coping strategy, have been found to be the second and third most frequently reported coping styles used by the nurses, respectively. In this study coping techniques such as forcing themselves to wait for the right time to do something, learning themselves to live with it, getting a good night's sleep before going to work, keeping themselves busy to take their mind off the issue and using alcohol or drugs were the coping techniques reported frequently by nurses.

4.5.1. Analysis of t-test of demographic variable on coping techniques

This demographic variable namely, sex, work place, educational status, marital status and type of training institution were each categorized in to two groups and then independent means differences were used accordingly.

Table 12: Result of t- test analysis by demographic variables

	<i>N</i>	<i>Mean</i>	<i>t</i>	<i>df</i>	<i>p</i>
Sex	23	3.3	.273	100	.007
Male	79	2.8			
Female					
Work Place					
Public Institutions	58	3.1	3.706	100	.000
Private Institutions	44	2.5			
Educational level					
Diploma	65	2.7	-3.131	100	.002
Degree	37	3.2			
Marital Status					
Single	47	2.8	-.775	100	.440
Married	55	2.9			
Type of Training Institutions					
Public University (college)	45	3.2	2.727	97	.008
Private University (college)	54	2.7			

As it can be seen from Table 12 there was a statistically significant difference of means in sex. This is to mean that there was statistically significant difference between the mean score of coping techniques for the male and female participants ($t(100) = .273, p < .05$). The result of analysis indicates that the mean for male respondents ($M=3.34; SD=.94$) was found to be higher than the mean value than female respondents ($M = 2.80; SD=.79$). According to Umro (2013) nurses seemed to be resorting more to “confronting coping” while “escape avoidance” was the least coping strategy employed.

The analysis revealed that there was statistically significant difference between the mean score of coping techniques for respondents from public and private health institution ($t(100) = 3.706, p < .05$). The analysis also pointed out that the mean value for public health institutions ($M=3.18; SD=.84$) was higher than the mean score of respondents from private health institutions ($M = 2.6; SD=.74$). This can be because of their coping techniques are dependent on how stress symptoms and illness consequences are appraised and it emerged from a combined influence of factors differences along with illness, which include age, gender, and other demographic character and perceived impact on what the individual values (Folkman & Moskowitz, 2004)

As can be seen from Table 12 that statistically significant difference was observed in means of educational status ($t(100) = -3.131, p < .05$). This is to mean that there was statistically significant difference between the mean score of coping techniques for respondents in diploma and degree educational levels. This indicates that the mean for respondents with degree educational status ($M=3.26; SD=.23$) was slightly higher than the mean of respondents with diploma ($M = 2.73; SD=.26$). In relation to this, a higher level of education level for nurses may lead to increase confidence and an ability to discuss issues as equals with professional colleagues.

In the same table, coping techniques in terms of marital status was not statistically significant among the two groups (single and married) ($t(100) = -.775, p > .05$). The result revealed that the married respondents ($M= 2.99; SD=.85$) and single respondents ($M= 2.85; SD=.86$) did not differ

significantly from each other. In support of this, a study by Laal & Aliramaie (2010) confirmed that there was no significant difference between marital status and applying stress coping techniques. In the same way, the findings also revealed the participants both who trained in private university/college and public university/college was significantly differ from each other ($t(97) = 2.727, p = > 0.05$).

4.5.2. Analysis of variance on coping techniques on Age.

Age distribution of the respondents was divided into five category (age <25, 26-35 age, 36-45 age, 46-55 age, and >55 age) and analyses of variance (ANOVA) was carried out.

Table 13: Results of Analysis of variance (ANOVA) on Age

Coping	Sum of Squares	F	P
Between Groups	2.972	1.019	.402
Within Groups	70.757		
Total	73.729		

The result indicates that coping techniques in terms of age was not statistically significant among the five age groups (age <25, 26-35 age, 36-45 age, 46-55 age, and >55 age) ($F_{(4, 97)} = 1.019, p > .05$). Table 14 revealed that the respondents of all age categories did not significantly differ from each other.

4.5.3. Analysis of variance on coping techniques on Nature of Employment.

Nature of employment distribution of the respondents was divided into three categories (Permanent, contract and par time) and analysis of variance (ANOVA) was carried out.

Table 14: Results of ANOVA on Nature of Employments

Coping Mean	Sum of Squares	F	p
Between Groups	2.528	1.758	.178
Within Groups	71.201		
Total	73.729		

Table 14 indicated that the coping technique was not statistically significant difference among the three groups (Permanent, contract and par time) ($F_{(2, 99)} = 1.758, p > .05$). All nature of employment category did not significantly differing from each other.

4.5.4. Analysis of variance on coping techniques on Work Experience

Work experience distribution of the respondents was divided into three categories (<5 year of work experience, 6-11 year of work experience and >11 years of work experience) and statistical analyses of variance (ANOVA) was carried out.

Table 15: Results of Analysis of variance (ANOVA) on Work Experience

Coping Mean	<i>Sum of Squares</i>	<i>F</i>	<i>P</i>
Between Groups	18.958	17.133	.000
Within Groups	54.771		
Total	73.729		

As it can be seen from Table 15 statistically significant differences were observed in coping techniques among the three categories of work experience (<5 year of work experience, 6-11 year of work experience and >11 years of work experience) ($F_{(2,99)} = 17.133, p < .05$). Tukey post-hoc comparisons of the three categories of working experience indicated that there was statistically significant difference observed between respondents with work experience of >11 years with ($M = 3.77, 95\% \text{ CI } [2.37, 2.75]$) and <5 year of work experience ($M = 2.5, 95\% \text{ CI } [2.37, 2.75]$) and between >11 years of work experience ($M = 3.77, 95\% \text{ CI } [2.37, 2.75]$) and 6-11 year of work experience ($M = 3.2, 95\% \text{ CI } [2.9, 3.4]$). In support of this, Laal and Aliramaie (2010) also stated that as working experiences of nurse in their profession increases, the coping techniques they used were also increased in different way.

CHAPTER FIVE

CONCLUSION AND RECOMENDATION

5.1. Conclusion

It is known that, stress has become one of the human lives and normally accepted as every day speech of views ideas or information. Work related stress has been the most contributing factor to work dissatisfaction, high turnover and also high attrition among nurses. Nursing is by its nature, a stressful job because of exposure to a wide range stressful situation and conditions.

Hence, the main objective of this study is to examine causes, consequences and coping techniques of work related stress among nurses in Adama city. The findings of this study are believed to provide better understanding of the major causes and consequences as well as the coping techniques of work related stress of nurses in their work place.

For this purpose, subjects (nurses) were selected from public and private health institutions. Among these, 40 nurses were selected from private health institution and 68 nurses were from public health institutions. 108 nurses were the sample size of this study. The structured questionnaires were used as a data gathering instrument. This consists of demographic data, nursing stress scale and ways of coping checklist (WCCL). The analytical statistics include the independent t-test, analysis of variances (ANOVA) & Pearson correlation coefficient.

From the analysis, the findings show that the majority of respondents (77.5%) of respondents were female respondents. With regard to age distributions, 44.1% of respondents were 26-35 years old, 29.4% of respondents were 36-45 years old, 10% of respondents were <25 years old and 3.9% of respondents were >55 years old. This shows that the majority of respondents are young. Besides, 57% of the respondents were from public health institutions. The remaining percent were from private health institutions. Regarding to educational level, the result shows that the major of

respondent (63%) were diploma in educational status whereas 36.3% of the respondents were followed by degree in educational status. Moreover, 54.9% of the respondents had served for more than 5 years and followed by 33.3% of the respondents having 6-11 years work experience.

5.2. Demographic Variables on Causes of Stress

The findings pointed out that there was statistically significant gender difference in sources of stress. The mean score for the female respondents was greater than mean score of men respondents. The study revealed that an absence of physicians in a medical emergency was the higher causes of work related stress among female nurses. Concerning to the work place, there was statistically significant difference between respondents those who work in private and public institutions. Nurses who were working in private health institutions were more stressed than nurses who were working in public institutions.

Criticism by a physician and lack of support system available in the hospital were the most causes of work related stress among nurses. The findings indicated that those of respondents who were 44-55 age intervals were more stressed in absence of physicians when a patient dies. With regard to work experience, the results revealed that statistically significant mean differences were observed with the respondents that had more than five years. The Lack of social support system available in the hospital was frequently reported as a cause of work related stress among nurses.

5.3. Differences on consequences of stress.

Sex(male/female), Age, Work Place (public/private), Marital Status(single/married), Nature of Employment(temporary/contract/permanent, Educational status(diploma & degree), Training institutions (public/private university) and work experience (<5 year of work experience, 6-11 year of work experience and > 11 years of work experience) had no statistically significant mean difference in effects of stress. Two tailed T-test (independent sample test) was used to investigate the consequences of stress. However there were no significant statistical differences in consequences of stress in gender, work place, marital status, educational status and training institutions; hence they did not differ each other. In the same way one way ANOVA test was also

used to investigate the consequences of age, nature of employment and work experience. There were no statistically significant differences in each of this.

5.4. Differences on Coping Techniques of Stress

There was a statistically significant difference among work place (public and private health institutions). The result reported that nurses who are working in public health institutions are highly used work stress coping techniques than nurses in private health institutions. The respondents from public health institutions used emotional-focused coping techniques like "forcing themselves to wait for the right time to do something", "learning themselves to live with it" and "tried to keeping their feelings to themselves while the respondents from private health institution reported that "keeping themselves busy to take their mind off the issue" and also" professional help got from work".

On the other hand, there is statistically a significant difference on educational status (diploma & degree) of nurses. The respondents who had degree educational status were the most observed stress coping techniques than the respondents of diploma educational status. They used emotional-focused coping techniques like "Getting a good night's sleep before going to work", and "made a promise to themselves next time things would be different" and they also used problem focused coping techniques like "use alcohol or drugs", whereas respondents who had diploma educational status reported they used coping techniques such as: "keeping themselves busy to take their mind off the issue", "forcing themselves to wait for the right time to do something", "learning to live with it and they tried to keep their feelings to themselves".

Regarding to work experience, there is statistically significant differences between nurses year of work experience (< 5 years, 6-11 years and >11years). The results reported that, nurses who had worked more than eleven (11) years of work experience adopt highly both emotional-focused and problem-focused coping techniques. These emotional-focused coping techniques was "talking to someone about how they was feeling" , "while problem-focused coping techniques was "doing

what has to be done one step at a time", "making a plan of action and use alcohol or drugs in order to reduce stress".

5.5. RECOMENDATIONS

Most of our knowledge of causes of work related stress; particularly its antecedents and consequences have come from empirical research. More recently, work-related stress research has been integrated in to a wide psychological theoretical framework.

To ensure that efficient nursing care given to the patients, health sector staff, nurses and the hospital manager should help in reducing work related stress. Their working conditions need to be quickly improved by developing systems for effective two-way communication, providing psychological counseling and therapy for troubled nurses. In employing stress prevention method like, primary, secondary and tertiary prevention method of stress

All of the health institutions should employ stress management programs in this institutions .It should also give to consider implementing programmers' widely to cope or manage, even make a protection nurses from work related stress.

In-service training, workshops and seminars should be organized for nurses to update their knowledge and skills. They should be sent for courses on human behavior, interpersonal relation, stress management and its interventions. It is hoped that when nurses are given adequate knowledge or when their needs are adequately met many of them will experience less tension or stress at work. They will become less aggressive or hostile to the patients or their families. The patients will also receive better and adequate nursing care from them.

Focus should be given to on physical working conditions, social support, and function of organization, ways of dealing with emotional needs of patient and certainty treatment.

The manager should endeavor to increase the observational skills in order to detect increased stress causes and levels or signs among the nurses in the early stages.

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ANNEX: STUDY QUESTIONNAIRE

Instructions: - The purpose of this study is to assess the causes, consequences and coping techniques of work related stress among nurses in Adama City .This questionnaire is meant to secure relevant data to the study which is believed to come up with valuable recommendations for problems observed (if any). Therefore, your genuine support in responding to the raised questions has paramount importance for the attainment of the study's objectives. Furthermore, the secrecy of all the information that you will provide is confidential. Hence, I earnestly request you to fill the questionnaire carefully. Thank you in advance for your cooperation.

Annex I: Background Information

Please mark with a cross (×) next to the appropriate answer.

1. Age < 25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ > 55 ☐
2. Sex Male ☐ Female ☐
3. Work place Public Institution ☐ Private Institution ☐
3. Nature of employee Permanent ☐ Contract ☐ Part time ☐
5. Marital Status Single ☐ Married ☐
6. Work experience < 5 years ☐ 6 -11years ☐ >11 years ☐
7. Educational status Diploma ☐ Degree ☐
8. Training Institutions: Public University/college ☐ Private University/college ☐

Annex II: For each statement below indicates by means of a (×) how often in your present unit you have found the causes to be stressful situations or events at your work/job.

No	Statements	Extremely stressful	Frequently stressful	Occasionally stressful	Never stressful	I'm not sure
1	Performing procedures that patients experiencing as painful.					
2	Listening or talking to a patient about his /her approaching death.					
3	The death of a patient.					
4	The death of a patient with whom you developed a close relationship.					
5	Physician not being present when a patient dies.					
6	Watching a patient suffer					
7	Criticism by a physician.					
8	Conflict with physician					
9	Fear of making a mistake in treating a patient					
10	Disagreement concerning the treatment of a patient					
11	Making a decision concerning a patient when a physician is unavailable					
12	Feeling inadequately prepared to help with emotional needs of a patient's family					
13	Being asked a question by a patient for which I do not have a satisfactory answer					
14	Feeling inadequately prepared to help with the emotional					

	needs of a patient					
15	Lack of opportunity to talk openly with other unit personnel about problems in the unit					
16	Lack of opportunity to share experiences and feelings with other personnel in the unit					
17	Lack of support system available in the hospital					
18	Conflict with a supervisor					
19	Difficulty in working with a particular nurse outside the unit					
20	Criticism by a supervisor					
21	Difficulty in working with a particular nurse in the unit					
22	Inadequate information from a physician regarding the medical condition of a patient					
23	A physician not being present in a medical emergency					

Annex III: For each statement below indicates with an (x) how often you experienced each of the following to the work-related stress consequences.

No	Statement	Disagree	Neutral	Agree
24	Some nurses become ill and stay away from work.			
25	Some nurses become frustrated and they quit their job easily.			
26	Some nurses come to work but are not performing their duties.			
27	There is an increased rate of Absenteeism among nurses.			
28	There is high turnover.			
29	There are more error and accidents.			
30	The quality of service provided of patients deteriorates.			

31	There is an increase in patients' Complaints			
For each statement below indicates with an (x) how often you experienced each of the following to the work-related stress consequences.				
No	Statement	<i>Often</i>	<i>Sometimes</i>	<i>Never</i>
32	How often are people with whom you work regularly willing to listen to your work-related problem?			
33	How often is your immediate nursing supervisor willing to listen to your ideas or concerns?			
34	How often do you get help and support from your immediate nursing supervisor?			
35	How often are you consulted when decisions are made about how space is design and used?			
36	How often do you get help and support from your immediate nursing supervisor?			

37	Nurses loyalty towards the organization.			
38	It becomes difficult to attract and retain quality nursing staff.			
39	There is an increase in liability to legal claims.			

Annex IV: For each statement below indicate with an (x) how you use each of the following to coping (managing) techniques of stressful events in your work/job.

No	Statement	<i>Used all of the time</i>	<i>Used mostly</i>	<i>Used frequently Never used</i>	<i>Used Sometimes</i>
40	I do what has to be done, one step at a time.				
41	I make a plan of action				
42	I put aside other activities in order to concentrate on this.				
43	I force myself to wait for the right time to do something.				

44	Quitting my work (put an end).				
45	Getting a good night's sleep before going to work				
46	I Keep myself busy to take my mind off the issue				
47	I put my trust in God				
48	I learn to live with it				
49	I use alcohol or drugs.				
50	Talked to someone about how I was feeling				
51	I tried to keep my feelings to myself				
52	Criticized or lectured myself				
53	I made a promise to myself that things would be different next time				
54	I got professional help from work.				
55	I asked a relative or a friend I respected for advice				