STRESS MANAGEMENT AND COPING STRATEGIES AMONG NURSES

A Literature Review

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Abstract:

There is obvious need to have the safest working environments and the best quality of health care delivery to patients by nurses working in the hospitals. Effective stress management and coping strategies is one very important step towards this goal. This research aims to identify the major stressors for nurses and the most effective management and coping strategies as contained in literature. This involved excellent review of relevant articles in addition to deductive content analysis of the data generated. The Transactional Model of Stress and Coping by Lazarus and Folkman formed the theoretical framework for this study. In particular, the following research questions were invoked; 1. What are the major sources of stress for nurses working in healthcare institutions? 2. What combination of institutional management practices and individual coping strategies are most effective for nurses to manage their stress? Findings from this study show that combination of physical factors, administrative and organisational malfunction, psychological factors and interpersonal conflict are the major sources of stress for nurses working in the hospitals. On the other hand, the best management and coping strategies for nurses involves combination of personal coping skills, effective organisational plans and social support.

Keywords: Stress management, Coping strategies, Nurses, Health institutions, Efficient patient care, Quality nursing care
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1. INTRODUCTION

The need to have the safest working environments and the best quality of health care delivery to patients by nurses cannot be overemphasized. It is therefore imperative to identify factors that would promote these goals and to prevent other negative factors from impeding their achievement. Work stress has been identified as a key factor in service delivery in every organisation and in most field of work. How this work stress affects nurses in healthcare institutions, how they cope with it and the resultant effect of the coping strategies on their output forms the crux of this work.

It is a universally accepted fact that human nature is prone to wears and tears associated with daily activities. These manifest in the form of stress and strains as witnessed in everyday life. Nurses and other healthcare professionals are exposed on daily basis to different levels of stress and burnout arising from the demand of their jobs. According to Sexton et al. (2009), nurses are exposed to intense stressors arising from the demand of their jobs. These stress factors could be poor staffing, high workload, communication breakdown, death and sometimes pressures arising from medication errors. They argue that nursing is part of the medical profession with the high demand for high stake decisions and high-level responsibilities. There is also the factor of emotions and supportive care for dying patients and the pain of death. The profession also exposes nurses to unplanned but unavoidable long working hours, lots of paper work and other social vices like physical abuse from either the patients or their families. Healthcare workers especially nurses are prone to these stress inducing factors seen in Medical care and as such are candidates for deep scrutiny because of the implication of their actions and inactions on the general wellbeing of patients.
This research aims to find out the most common and significant sources of stress for nurses and the available management and coping strategies that could be applied in managing stress situations. This is in an effort to help with improving the effectiveness of nurses working in the hospitals. The nurses could benefit from the findings of this research by learning the easiest and effective ways of creating stress free working environment for themselves and for the benefit of their patients. Hospital management and nurse managers could also adapt effective measures in stress management among their workers.

This work has been commissioned by the Loviisa city in Finland as an effort at creating the most conducive and efficient working environment for nurses and healthcare workers in the city.
2. BACKGROUND

Stress having been identified as a flash point in the performance of healthcare workers needs to be managed for efficient health care delivery. The coping strategies and management practices put in place in the hospitals as well as in any other working environment and the efficiency of those practices forms the core of this research

2.1. Stress and its sources

The World Health Organisation (WHO 1948) defined healthy jobs as the one where the work pressure is equivalent to the abilities and inherent capacity of an employee to manage the effect of the pressure and this implies having control of their work and working environment and getting enough support and encouragement from the people they consider important. The people who matter in the context of this research are the employers, the bosses and supervisors, colleagues, the patients as well as the family members of both the nurses and the patients. Though pressure is unavoidably present in everyday working life, the source and form of the pressure could define how different persons perceive it. Work pressure is seen to be positive or acceptable when the worker sees it as a source of motivation rather than a stressor. In this case, the worker is willing to learn and work depending on his inherent characteristics and available resources.

On the other hand, if the pressure is perceived to be excessive or otherwise unmanageable it leads to stress. The World Health Organisation (WHO 1948) defined work stress as, “the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope. According to (WHO 1948) stress is seen in almost every work environment but the negative aspect of it is made prominent when workers consider the support they get
from their supervisors and colleagues as inadequate or when they have little or no control over the work process.

In the work by Lazarus (1966), “Stress arises when individuals perceive that they cannot adequately cope with the demands being made on them or with threats to their well-being.” When the pressures arising from the demand of the job is overbearing and when it tend to weigh down on the employee either physically, mentally or emotionally, one can say that he is stressed.

“Work-related stress can be caused by poor work organisation which could mean the design of the jobs and work systems, and the way they are managed. According to Leka et al. (2003), work related stress could also be as a result of poor institutional management, poor work environment or working condition as well as lack of support from other members of the team. Research findings (Leka et al. 2003; Stoica & Buicu 2010) have shown that the most stressful types of work are those in which the demand of the job does not match the capacity and capabilities of the employee. Stress also occurs where there are too much restrictions and little or no opportunity to make choices and where the amount of external support is low. When these factors are provided for, employees are less likely to experience work related stress.

In the work of Brun (2006) presented at WHO workshop on “Work related stress” it is estimated that the cost of stress for Europe in terms of sick days is in the tune of 20 billion euros, 2.9 billion for Economics cost and 6.6 billion for human cost in 1999 alone. This huge sum are lost to improper management of stress or in many cases unidentified or ignored stress triggers leading to poor output or outright non productivity due to sickness.
There are several known sources of stress for both young and older people. These sources are sometimes acting in isolation or in combination with other stressors to weigh down on individuals at either work or elsewhere. According to Zuccolo (2013), stressors are categorized into physical or psychological sources. These are further classified into environmental, social, physiological and cognitive-emotional stressors. Physical stressors impact on our five senses and these may include factors like noise, pollution and weather. Other types of physical stressors are changes arising from physiological changes like puberty, menopause, adolescent and aging among others. Social stressors include psychological stressors arising mostly from the demand of daily living like at work or relationships. Finally, the cognitive-emotional is the type arising from our thoughts as a response to change in our environment.

The major sources of stresses for nurses as contained in literature (Sharma et al. 2008; Lockley et al. 2007; Embriaco et al. 2007) includes, workload, working hours, work environment, interpersonal relationship, . Lack of staff and high turnover, having too much work to do (overload), having to assume unpleasant tasks, discriminations and latent favours, incapacity to close with the job at home, consequences of made mistakes, pursue the career to damage of the familiar life, bringing the work at home, inadequate supervision of the superiors, feeling isolated among others.

According to the Leka et al. (2003), the sources of work stress can be categorized into work content and work context. Work content includes job content, workload, working hours and participation/control. Work context may include factors like career development, job status and titles as well as pay and allowances. How satisfied an employee is with a particular working condition, how secured he feels about the job could all constitute stress sources. Other sources as captured in the work of Leka et al. (2003) are, un-
clear or conflicting roles in the organization, poor interpersonal relationships with either supervisors or poor relationships with colleagues, poor organizational culture like poor communication, poor leadership or lack of behavioural rule and unclear organizational objectives and strategies as well as conflicting work-life balance. Lockley et al. (2007) agreeing with Fielden & Peckar (1999) concluded also that extended duration of work shifts significantly increase fatigue and impair performance.

Stress can be experienced in an organization due to so many factors such as ineffective communication, working hours, and workload between staff members. In health care units, studies have shown that “ineffective communication contributes to physician and nurse stress, lack of job satisfaction, expressing feelings, understanding information and emotional burnout that can also contribute to increased psychological distress” (Fallowfield 1995). Communication barrier could make it difficult to interact with people who are not from the same culture and do not speak the same language. It has been noted to interfere with interpersonal relations and teamwork (Bolderston et al. 2008). (Koff & McGowan, 1999; Awe, 2014) also assert that the impacts of language barrier not only affect health care quality, but also increase the cost of health care provided.

Fielden & Peckar (1999) concluded in their work that the number of hours worked is directly related to the level of stress experienced by workers. They further asserted that though this is the case, the number of hours workers chose to do is positively related to the quality of social support available to them. Our everyday experiences support the fact that the longer the hours we put to work, the higher the level of stress we experience. This is due to the fact that energy is required and is expended doing both physical and mental works and the exhaustion of the energy invariably leads to wearing out of
tissues and the consequent stress that arises. However, Fielden & Peckar (1999) appreciates that junior doctors are more prone to using social support as a means of coping with stress than the senior doctors. The more acceptable social support as captured is the hospital environment. They also argued that despite having access to higher level of effective social support, the younger group of doctors are still more likely to be stressed than the older and more experienced doctors. This assertion further exposes the fact that stress is linked to age and experience as well as the working environment.

Age and ageing cannot be separated from stress and how to cope with it. This is because age comes with exposure and experience on the positive note but also comes with wearing out which could be a major source of stress (Burns et al. 2002). According to Burns et al. (2002), being inseparable from the functions of appraising and responding to stress, the brain is an ultimate mediator of stress-related mortality, through hormonal changes that lead to proximate pathologies like hypertension, glucose intolerance, cardiovascular disease and immunological impairment. The Medicine online (www.medicineonline.com 2015), further agrees that as people age, their ability to achieve relaxation response or recovery from stressful situations becomes more difficult. These ailments or impairments as highlighted above are usually associated with the aged, which in turn are thus susceptible to stress, and burnout with its consequences. On the other hand, learning to cope with stress or managing stressful situations are directly linked to how much and how long we have been exposed to such situation, which is subjective to time and age. It is a common knowledge that the aged and more experienced workers are better managers of workplace stress. The younger ones can also be seen to be more resilient and have more power and energy to endure stress. The question then is what kind of stress is available and how best can such stress be managed.
The combination of these factors constitute the whole of what can be termed major sources of work stress as found in nursing as well as in other working environments.

2.2. Stress Management and Coping strategies

There are many known and traditional means of managing everyday stress. These could be in form of physical exercise, emotional and psychological therapies, change in work approach, medications among others. The choice of management procedure adopted is usually subjective to the source and nature of the stress and the resources available to the individual under stress (Cohen 1984). It is believed that the best management practice for stress is learning healthy coping strategies. The first step to effective stress management is to understand oneself better and to appreciate what constitute stress and how one reacts to stressful situations. To cope according to the Online Dictionary is “to face and deal with responsibilities, problems, or difficulties, especially successfully or in a calm or adequate manner” (Dictionary.com 2015). In the nursing context, to manage the demand arising from the strenuous nature of the job and still render quality health and nursing services to patient could be seen as effective coping. Most literatures that worked on stress and coping tried to link the coping strategies to the type and sources of the stressor. In the case of Lockley et al. (2007), there is need to establish safe hour work limit for nurses in order to prevent the high rate of fatigue related medical errors and injuries. In other words, to be able to manage the stress arising from long working hours, there is need for management action on limiting the amount of hours done by nurses. The kind of shifts and the duration of shifts can be controlled by a combined effort of the nurse managers and the nurses working in the hospitals. Fielden & Peckar (1999) agreed that stress is associated to the number of hours done by hospital doctors but added that the availability of social support helped to reduce the negative effect of
the stress on their performance. Consequently, social support was identified as an effective coping strategy for junior doctors as against senior doctors. In the work of Sharma et al. (2008), Nurses are believed to have lower level of burnout than surgeons and they agreed that this is as a result of better working practice, the type of responsibilities and the management structure. By this, a better-organized management structure and organized individual working practice are seen as effective way of managing or coping with work stress. (Embriaco et al. 2007) is in agreement with (Heaney & Price 1995) that coping resources such as social support or working group is an effective coping strategy for stress. Other preventive strategies include effective communication strategies during end of life care, prevention of management conflicts (Embriaco et al. 2007) and perceived control (Heaney & Price 1995).

2.3. Quality and Effective care

For care to be effective, it has to meet the World Health Organisation standard of “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO 1948). The quality of care available to patients is a product of the quality of the healthcare professionals offering the healthcare services. This is in support of the popular theory of garbage in garbage out. The quality of the personnel on the other hand is a reflection of the quality of training he received, the tools available to him and the environment in which he is delivering the services (Heaney & Price 1995). To measure how effective a particular coping strategy is in the management of stressful situation among nurses, the quality of care the patients receive comes to play. Lockley et al. (2007) concluded that fatigue arising from stress impairs performance, cause medical errors and injuries. Medication errors according to Cheragi et al. (2013) has been made by 64.55% of nurses and one major cause of it is the number of patients been
cared for by a nurse (work overload). The wrong dosing and other nurses errors are some of the health threatening mistakes that lead to poor patient care with the consequent mortalities, length of hospital stay and the related cost (Cheragi et al. 2013). It therefore implies that coping strategies outlined will be aiming to eliminate stress in Nurses to allow for positive result oriented care.
3. **THEORITICAL FRAMEWORK**

The theoretical framework used for this study is the Transactional Model of Stress and Coping by Lazarus and Folkman (1984). The Transactional Model of Stress and Coping is a framework for evaluating the processes of coping with stressful events. The Model is useful for health education, health promotion and disease prevention according to Glanz et al. (2008). Nurses are usually faced with enormous responsibility and demand for care, intense emotional pressure surrounding death and dying, prolonged and exhausting working hours. (Sexton et al. 2009) and as such, studying how they are affected by stress should take into consideration both their physical as well as psychological responses. Emphasis should be laid on how stress affects their behaviour and output as it relates to the quality of care they are capable of rendering.

3.1. **Assumptions of the Theory**

According to Lazarus & Cohen (1977), stressors are demands made by both internal and external environments that upset the balance of an individual, thus affecting both physical and psychological well-being and requiring action to restore balance. The Model of stress they proposed was based on the consideration that stress is a transactional phenomenon which is dependent on the meaning the perceiver gives the stressor or stimulus. In other words, the person under stress firstly appraises the situation and gives it a meaning, thereafter; he considers the resources at his disposal for the management of the situation. The resources according to Lazarus & Cohen (1977) could be social or cultural.

Generally speaking, when one is faced with environmental impacts both from within and outside the body, the natural instinct is to evaluate the source of the impact. What-
ever meaning we give to what is influencing us determines the reaction to it. The appraisal given to such impact could be either positive or negative. It could be interpreted to mean danger or potential threat or it could be seen as something necessary. According to Cohen (1984), the appraisal could be in two folds- primary and secondary. Primary appraisal is a person’s judgment about the significance of an event as stressful, positive, controllable, challenging or irrelevant, while a secondary appraisal is an assessment of peoples coping resources and options.

In summary, the theory seeks to answer questions bothering on sources of work stress for nurses working in the hospitals, the nature of the stress they are exposed to, their individual reactions and the management and coping strategies available as well as possible implication for the different form of stress nurses are exposed to.

**Table 1.** A summary of the core assumptions of Transactional model of Stress and Coping (Source: (Glanz et al. 2008))

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
</tr>
</thead>
</table>
4. AIMS OF THE STUDY AND RESEARCH QUESTIONS

The aim of this research is to examine the literature to investigate the major stressors or sources of stress for nurses, and the best combination of coping strategies and management practices that are found to be effective for nurses.

This research seeks to answer the following questions based on the theories above.

1. What are the major sources of stress for nurses working in healthcare institutions?
2. What combination of institutional management practices and individual coping strategies are most effective for nurses to manage their stress?
5. METHODOLOGY

The method used is literature review while deductive content analysis was used for data analysis. The author has in this research made an effort to describe, summarize, evaluate and clarify literatures that are relevant for this study. According to the University of Australia library guide, in writing literature review, the reviewer aims to pass to the readers the knowledge and ideas previously established on a specific topic. He also tries to identify what strengths and weaknesses there are on the established knowledge.

The literature review must be defined by a guiding concept like research objective, the problem or issue been discussed or an argumentative thesis. Based on this knowledge, the author critically analysed selected literatures that are relevant to the subject under study, extracting the important information therein and highlight our areas of dissent. Recommendations are made based on what is known and what should be known.

5.1. Data collection

Relevant articles were accessed from EBSCO, Academia, MEDLINE, and Research Gate through Arcada Nelli portal. Other general databases like Google and Yahoo were also accessed for materials relevant to the work.

For the used databases, the specific search method possible with each of them was applied. The research keywords used include “Stress management”, “Coping strategies”, “Nurses”, “Health Institutions”, “Efficient patient care”, “Quality Nursing care”. These were applied at different times as the need arose and as including and excluding criteria aimed at narrowing down the scope of search. Boolean operators like “and” and “or” were used to connect the Keywords as was required in every stage of the search.
**Table 2.** Summary of the search result and hits.

<table>
<thead>
<tr>
<th>Data Base</th>
<th>Keywords Combination</th>
<th>Hit</th>
<th>Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academia.edu</td>
<td>Specific Author Name search</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Research Gate</td>
<td>Stress management</td>
<td>10000+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress management (and) Nurses</td>
<td>1000+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress management + Coping strategies + Nurses</td>
<td>50+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress management+ Coping strategies + Nurses + Efficient Patient Care</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>EBSCO</td>
<td>Stress management (and) Coping strategies for Nurses</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>MEDLINE</td>
<td>Stress and Stress Management</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>

There were so many articles available on the subject “stress”, hence the author was faced with the task of narrowing the search results to the most relevant articles. Therefore, certain including and excluding criteria were set out to sieve the important articles from the numerous non-relevant ones.

The including criteria include:

1. The data base must be an academic data base with peer reviewed and scientific articles
2. The publication date must not be older than 2000
3. Publication must be in English
4. The volume/pages of the article should not be more than 20 pages
5. The abstract must be rich in information and relevant to subject of study.
6. Article must be free and accessible

Excluding criteria include the following:

1. All articles from questionable sources were eliminated.
2. No very old articles and non-scientific articles were used.
3. Publications in any languages other than English were not used.
4. Very voluminous articles were not considered.
5. Articles with poor and biased abstract were eliminated.
6. All paid Articles or Articles needing extra permission were abandoned.

Having applied these criteria, there were over 50 articles at the disposal of the researcher from which the most relevant, rich and scientific articles were selected. The selection process also took into consideration the Geographical spread of the publishers. Also considered was the type of research the article was reporting. Though both qualitative and quantitative articles were selected, more of the quantitatively analyzed articles were used. The reason for this is to avail us the opportunity of a firsthand access to the real life result of surveys conducted on the topic. Few articles older than 10 years were used as a guide on how works on stress and stress management have evolved over the years. These factors helped to eliminate six more articles from the 16 selected earlier.

Table 3. List of articles for content analysis

<table>
<thead>
<tr>
<th>S/No</th>
<th>Author &amp; Year</th>
<th>Title</th>
<th>Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>(Edwards et al. 2003)</td>
<td>A systematic review of the effectiveness of stress-management interventions for mental health professionals</td>
<td>To systemically review the current evidence for the effectiveness of stress-management interventions for those working within the mental health field</td>
</tr>
<tr>
<td>No.</td>
<td>Author(s) and Year</td>
<td>Title</td>
<td>Abstract</td>
</tr>
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</tr>
<tr>
<td>3.</td>
<td>Emilia &amp; Hassim 2007</td>
<td>Work Related stress and coping: A survey of Medical and Surgical Nurses in a Malaysian Teaching Hospital</td>
<td>A cross-sectional study on work-related stressors among nurses in a public teaching hospital had also attempted to explore functions of coping strategies in determining stress.</td>
</tr>
<tr>
<td>4.</td>
<td>Stordeur et al. 2001</td>
<td>Leadership Organizational Stress and Emotional Exhaustion among Hospital Nursing Staff</td>
<td>Examined the effect of work stressors and head nurses' transactional and transformational leadership on the levels of emotional exhaustion experienced among their staff.</td>
</tr>
<tr>
<td>5.</td>
<td>Healy &amp; McKay 2000</td>
<td>Nursing Stress: The effects of coping strategies and Job satisfaction in a sample of Australian Nurses</td>
<td>This paper examined relationships between nursing work related stressors and coping strategies, and their impact upon nurses' levels of job satisfaction and mood disturbances.</td>
</tr>
<tr>
<td>6.</td>
<td>Pino &amp; Rossini 2012</td>
<td>Perceived Organizational stressors and Interpersonal Relationships as predictors of Job satisfaction and Wellbeing among Hospital Nurses</td>
<td>To examine: a) the most relevant sources of workplace pressure for nurses; b) gender and age differences in occupational stressors; c) which combination of sources of stress, ways of coping, Type A style and locus of control was the best predictor of job satisfaction and both physical and mental health.</td>
</tr>
<tr>
<td>7.</td>
<td>Hanna &amp; Mona 2014</td>
<td>Psychosocial Work Environment, stress factors and Individual characteristics among Nursing staff in Psychiatric In-patient Care</td>
<td>To investigate perceptions of the psychosocial work environment among nursing staff in psychiatric in-patient care and how individual characteristics—Mastery, Moral Sensitivity, Perceived Stress, and Stress of Conscience—are related to different aspects of the psychosocial work environment.</td>
</tr>
</tbody>
</table>
8. (Hendel et al. 2000) Strategies used by Hospital Nurses to cope with a national crisis: A managers perspective Investigates the anxiety level and coping strategies used by Nurses during a National state of emergency

9. (Laranjeira 2012) The Effects of perceived stress and ways of coping in a sample of Portuguese health Workers The goal of the study is to clarify the association between perceived stress in work and the types of coping strategies used by Portuguese nurses

10. (Koinis et al. 2015) The Impact of Healthcare Workers Work Environment on Their Mental-Emotional Health. Coping Strategies. The Case of a Local General Hospital To investigate the impact that work environment in a local public general hospital can have on the health workers' mental-emotional health and find strategies in order to cope with negative consequences.

5.2. Data Analysis

This research as earlier stated is analyzed using deductive content analysis. According to Elo & Kyngäs (2008), deductive content analysis is the best form of analysis when the structure of the research is based on previous knowledge. It is also useful if the general aim was to test a previous theory in a different situation or to compare categories at different time periods. For this work, the main basis is on previous knowledge and on the author’s effort to see how the stress has affected nurses over the years and in different geographical setting and spread.

The deductive method of data analysis is usually used in nursing because of its numerous advantages. According to Mayring (2000), it fits the material into a model of communication. It helps to determine what part of communication inferences should be made based on the communicators experiences or opinion as well as to the situation of text production, socio-cultural background as well as the how the message affects the
subject. The model gives a clear sense of direction on how to proceed with the review as in this case.

The rule of analysis for this method is simplified; materials are analyzed systematically, following rules of procedure, devising the material into content analytical units (Mayring 2000). In other words, using the deductive method of analysis allows a step-by-step analysis of the material following a standard procedure already set for it.

The third factor in this method of analysis is categorization of the work otherwise called, feedback loops. This is the aspects of text interpretation in which the research questions are put into categories, which guides the process of analysis of the articles. In addition, the criterion for reliability and validity is thorough and simplified with ease of understanding. According to Mayring (2000), the procedure is comprehensible inter subjectively and when compared with other studies in the sense of triangulation, helps to check for reliability.

Deductive approach to data analysis as opposed to the inductive method can be seen as the reversal of the later. First, a social theory as we have in this work is selected and then tested to ascertain its implications with data. It involves moving from the generally known levels to specific levels. “A deductive approach to research is the one that people typically associate with scientific investigation. The researcher studies what others have done, reads existing theories of whatever phenomenon he or she is studying, and then tests hypotheses that emerge from those theories” (Blackstone 2012). This underscores the need to use deductive method in the data analysis of this work considering that the work falls into the category described above.
For the purpose of this research, the author identified the part of communication in the articles under review, to make inference. The specific inferences were made based on the questions the research is seeking to answer. To answer the questions through deductions made from the articles, articles were numbered 1-10, individual articles were read thoroughly, and the author’s thoughts and opinions as it relates to the research questions were extracted and documented. The deductions or answers from each article is then compared with the other articles bearing in mind the socio-cultural, language content and individual differences of the authors. The articles were then categorized based on the similarities and differences in their answers to the research questions. The categorization then provided themes that try to collate similar answers and responses. The comparison of the answers with the other articles helped to check the reliability of the message every other article is trying to communicate.

Table 4. Summary of deductive analysis of the reviewed articles based on the research questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>General themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q 1: Major Stressors for Nurses</td>
<td>1. Administrative and Organisational stressors</td>
</tr>
<tr>
<td></td>
<td>2. Physical stressors</td>
</tr>
<tr>
<td></td>
<td>3. Psychological and Emotional stressors</td>
</tr>
<tr>
<td></td>
<td>4. Interpersonal conflict and Role ambiguity</td>
</tr>
<tr>
<td></td>
<td>5. Miscellaneous stressors</td>
</tr>
</tbody>
</table>
Q2: Coping & Management techniques

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Personal coping strategies and Techniques</td>
</tr>
<tr>
<td>2.</td>
<td>Organisational management plans and stress coping techniques</td>
</tr>
<tr>
<td>3.</td>
<td>Social Support</td>
</tr>
<tr>
<td>4.</td>
<td>Miscellaneous management and coping strategies</td>
</tr>
</tbody>
</table>

Detailed table of deductions from specific articles can be found at the index page of this document.

5.3. Ethical Considerations

The importance of ethical considerations in any scientific writing cannot be over emphasized. According to Carver et al. (2011), it involves strict adherence to set down rules and ethical guidelines for all scientific research and writing. They further emphasised the need for every scientific article to be devoid of plagiarism or any form of duplication of another person’s work without due reference or acknowledgement of the person. The author having understood this important need tried to comply with all ethical standard set for writing thesis work. Arcada university of Applied science “thesis guide,” was strictly followed in the course of this research.

The author sort for and got the approval for the research topic from the responsible teacher/supervisor at Arcada. The materials used for this research were sourced through legal and acceptable means for doing so. They were obtained from official academic database, which the author was authorized to access. All articles used were free to access and the author did not access prohibited articles. References were made for every
citation copied or captured from another person’s work. All data used were evidence based and no unauthorized personal data of authors was revealed in this work. Genuine effort was made by the author to present the work in his own language and thoughts. All accomplished work of others were given due recognition.
6. RESULTS

For ease of understanding and in accordance with the method of analysis used, the result and findings of this research is based on the research questions.

6.1. Major Sources of stress for Nurses

It was found that sources of stress for nurses could be Administrative or organisational in nature. Stressors could also be from physical sources or psychological and emotional point of view. Interpersonal conflict and role ambiguity among nurses is also a critical source of stress for Nurses.

Several articles (1, 2, 4, 6, 7) claimed that Administration and Organisational concerns is a major source of stress for nurses. These concerns are usually in the form of lack of administrative support for nurses, poor leadership qualities of nurse managers, inadequacy of role authority among other defective leadership roles that nurses are exposed to at their units or departments.

Almost all the articles claim that physical factors are the major and most reported sources of stress for nurses. The physical factors identified in the reviewed works include heavy workload and turnover (1, 3, 5, 6) External demands (7), high job demand (9), stressful nature of the nursing profession (10), environmental factors in the work area like temperature, noise, lightening, ventilation (2) and threat to survival (8). These physical factors act in isolation and in combination with other factors to cause stress for nurses. The other dimension to causes of stress for nurses is psychological and/or emotional. These are sources relating to internal conflicts affecting the mental and emotional status of the nurses. The articles concluded that professional self-doubt (1), death and
dying (3, 5, 9) stress of conscience (7), Concern for children and elderly (9) are psychological and emotional situations that cause stress for nurses.

Interpersonal conflict and role ambiguity is another major stressor found in the articles reviewed. These are reported in the form of client related disputes or issues and homework conflict (1), Interpersonal and intergroup conflict and lack of concern (3, 2) poor relationship with groups and between groups and lack of cohesion (2). Other forms are role ambiguity, role factor or role conflict (2, 4, 7, 8), conflict with physicians, poor relationship with people or low supportive relationship (5, 6, 9) and poor patient interaction. (10)

Other miscellaneous sources of stress as captured in the articles are nature of the job, the type of shift, position in the organisation, feeling of inequality, high personal expectation, demanding ethical issues etc. How these stress factors affect individual nurses or the group is believed to be dependent on factors like the individual characteristics, social and cultural settings as well as the immediately working environment of the nurses.

6.2. Coping strategies and Management practices

For the purpose of this work, coping strategies refers to the individual approach, skills and techniques applied by nurses to manage stressful situation while management practices are intended to mean all the organisational and leadership efforts and rules set to manage stress among nurses. The organisation in the context of this research is the healthcare institutions or departments that manage or control the workings of nurses in the wards or units.
Many of the articles reviewed agree that personal coping strategies like, fitness and relaxation techniques (1, 6), self-controlling, planful and organized problem solving and recognizing limitations (5, 8, 9, 10) are effective stress coping strategies for nurses. Other personal strategies are mental and behavioural disengagement and escape/avoidance or emotion focused coping (2, 3, 5, 10). The escape/avoidance strategy is considered not very effective and could be maladaptive (Emilia & Hassim 2007).

Organisational management plans which include Organisational interventions like effective supervision, leadership training and workshops, charismatic and inspirational leadership with idealized influence (1, 2, 4, 5, 7, 8, 9) are considered the most effective stress management strategy for nurses. The application of this is a function of the organisational heads and superiors through effective interpersonal communication (6, 7, 8). Other articles claim that positive feedback and stress management evaluation (6, 7, 8) are also effective means of managing stress in nurses. Developing clear professional roles (7, 8), improved organisational climate example, meeting staff needs (8) and risk assessment and management techniques (9) are other effective strategies.

Another singular most important coping strategy or management practice is social support. Most of the articles (1, 5, 8, 9, 10) believe that seeking social support either by the individual nurses or by the organisation on behalf of the nurses is one indisputable and effective way of managing stress among nurses. These management practices and coping strategies are used interchangeably and in combination with other miscellaneous coping strategies for the effective and long lasting management of stress in nurses. Some of the miscellaneous coping strategies captured in the articles are coping through learning, reduced working time, interest outside work and good home life.
7. DISCUSSION

7.1. Discussion of Findings

The transactional model of stress used for this study outlined what constitutes stressors, the coping resources and the possible outcome of the interventions. From the findings in the articles reviewed, the most reported source of stress for nurses is a combination of physical factors. Most prominent among the physical factors is turnover and workload. Up to 90% of the articles reviewed share the same view on the effect of workload on the stress level experienced by nurses. Other factors like staffing level, working hours, types of shift, age and gender of the nurses, financial resources, job demand, climatic factors like noise, lightening etc constitute what the author refers to as physical stressors. These findings agree with both older works done on stress (Heaney & Price 1995; Petermann et al. 1995; Fielden & Peckar 1999) and newer works (Lockley et al. 2007; Embriaco et al. 2007). Though the choice of words or language may differ, these factors have been the major source of human stress over the years. They are all directly and indirectly affecting and influencing the outcome of the other. For instance, high job demand is a product of how much time that a particular job requires. The time required could also be dependent on the number of nurses working at a given time, which in turn determines whether a nurse would be doing usually long and difficult shift combination. Generally, the working environment of nurses is reflection of how all these physical factors play out on the Nurse.

How the immediate physical environment affects the nurse determines largely, the quality of care he/she is capable and willing to offer patients under his/her care.
Administrative and organisational stressor is a combination of all the stressors arising from administrative or leadership lapses or malfunction. It could be as result of incompetence, neglect, bad policies or a combination of all. Findings show that these groups of stressors are one of the major sources of stress for nurses. In many of the articles reviewed, most of the nurses attributed their stress to disorganized working environment, tense atmosphere, poorly planned shifts, inadequate motivation, poor training, role ambiguity or undefined roles, lack of social support among others. An ideal working environment is the one devoid of tension, where roles are clearly defined, where nurses work in an organized manner under an excellent supervision and where there is no discrimination. Lack of any or all of these triggers discomfort or lack of confidence and the consequent stressful working environment that nurses experience.

Professional self-doubt, the fear of death and dying, threat to survival, uncertainties about the kind of treatment nurses expect at their units are some of the psychological factors that constitute source of stress for nurses. How these factors affect nurses and the ability to manage them is dependent so much on individual traits. Some nurses are stable enough not to be influenced by dying or death of their patients. Others are so emotionally unstable and could easily be stressed by factors like that. The combination of all the inner stress factors, those that affect the mood of the nurses and those factors bothering on the emotion of the nurses are psychological sources of stress. Psychological stress factors unlike the physical factors are not usually visible and could be a potential time bomb against the health of both the patient as well as the nurse herself.

Interpersonal conflict has been reported in many stress and conflict studies as a singular source of stress that is found in every work group. This is usually due to the difference in individual understanding and approach to life and work. Pino & Rossini (2012)
agrees that relationships with people is one of the most meaningful and consistent predictor of distress in nurses, as suggested from lower job satisfaction and both physical and mental state of health. Both home/work conflict, conflict between nurses and conflict with doctors are major threats to performance of nurses in the hospital. Conflict could arise due to poor leadership, role ambiguity or role conflict, misunderstanding, discrimination among others. Improper or poorly managed conflict could lead to high level of stress among nurses. It could also lead to apathy and lack of interest and consequent loss of staff.

Findings of this study show that nurses’ response to coping strategies is mostly on the positive side. For the purpose of clarity and easy understanding, the efforts captured in the reviewed articles were grouped into three main categories namely: personal/individual coping strategies, Organisational management and Social support. All personal efforts made by nurses geared towards managing a stressful situation or preventing stress is considered coping strategies while all the plans and actions put in place by managers and the hospital management to help nurses cope with stress is considered management practices. All the articles tend to agree that social support is a universally accepted way of coping and managing stress in nurses. The finding is also in agreement with similar works by (Sharma et al. 2008) and (Heaney & Price 1995).

The most common and generally acceptable way of coping include fitness and relaxation, planful problem solving and efficient time management. Recognising ones limitation is a central point in coping with stress. By appreciating their limitations, nurses would set goals that are achievable; they would refuse inconvenient shifts and working environment, work less hours and hence, reduce the chances of work overload and con-
sequent stress. Emotional stability through stable relationship and effective communication is another very effective way of coping with stress. Nurses should learn to seek good social support on their own and take the advantage of those provide by their superiors. Identifying with the right group of workers and colleague, mutual respect for colleagues and superiors alike is also an effective coping strategy.

The study found quality leadership, effective/adequate staff training, leadership training and support, provision of clear professional roles and goals among other good managerial practices as the most effective management strategy for nurses’ stress. Organisations and hospitals should provide the most conducive physical and psychological environment for the optimum performance of nurses at work. Quality and regular Education and training should be provided for nurses and provision should be made for their career development. The climate of care should be a friendly one devoid of frictions and discrimination. There should be quality supervision and support for the younger and new nurses to help with their stress coping. The organisation should develop a stress response-feedback mechanism to ascertain the effectiveness of the coping strategy available to nurses in their unit.

7.2. Relationship with the Theoretical Framework

The theory of Transactional model of Stress and coping as discussed earlier, has three introductory and most important components: Primary appraisal, secondary appraisal and coping efforts. The primary appraisal seeks to identify the significance of a stressor; the secondary appraisal evaluates the capacity of the stressed person to manage the effects of the stressor on him. The effort or strategy he employs to manage the stressful situation is the third component called the “coping effort”. The rest of the components
provides the insight on the pattern of reaction or coping strategies and the possible outcome of the strategies used.

The results of this research tend to agree with this pattern of stress and stress management. Most of the articles reviewed specifically identified what factors could be responsible for nurses’ stress (primary appraisal), the answers provided were specific to the nurse as a professional who works under certain specific condition. As such, the possible available stress management resources (secondary appraisal) were sort for within the confines of what is obtainable in nursing. The coping efforts possible are also seen with the lens of a nurse being human and working in a hospital or healthcare setting. The research also provided answers on the effectiveness or otherwise of the strategies used hence, one can conclude that the theoretical framework guided the author in efficiently answering the research questions from the articles selected.
8. CONCLUSION AND CRITICAL REVIEW

8.1. Conclusion

In conclusion, a combination of physical factors, Administrative and Organisational malfunction, psychological factors and Interpersonal conflict are the major sources of stress for nurses working in the hospitals. These factors work in isolation and in combination with other factors to cause graded level of stress for nurses. The effect of the stress on the nurses is dependent on the nurses’ individual traits and other environmental factors. The combination of personal coping skills, effective organisational plans and social support is the best and effective way of managing and/or coping with stress in nurses.

8.2. Critical Review

There were limitation to this study and the author wishes to state that despite these limitations, frantic effort was made towards getting the best acceptable result. Stress is a very broad field with over ten thousand publication on the subject. For a Literature review on such topic, reviewing only ten articles cannot be said to be adequate. The author having considering this chose articles from wide geographical spread. This is to give a universal representation of opinion on the subject.

The articles selected were free; no paid articles that could contain different opinion on the subject were used. Similarly, there were few research questions due to the scope of the work, and these questions were structured in a particular way that suits the immediate study. The author feels that the questions could be structured in a thousand different ways, which could give different answers.

Only academic and peer reviewed articles were used, this could have possibly limited the outcome since there are thousands of articles on the topic which fell outside this categorization. The author’s strength is the availability of enough resources for the study and the quality of supervision and guide for the research.

8.3. Recommendation

Based on the findings of this research, the author recommends that:

1. Healthcare institutions and management should as a matter of urgency, adapt stress evaluation and coping models specific for their units. This will help in assessing nurses’ stress at work and the best and most effective way of managing it in order to promote healthy working environment.

2. Nurses should develop personal strategies that are specific to their nature of stress through constant education and research.

3. For the most effective stress management, there should be collaboration between the nurses’ managers and the nurses through effective communication and education.

More research could be done on specific stressors and their pathogenesis to be able to develop individual stressor management or possible treatment of stress.
REFERENCES


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1762.


WHO. 1948. Summary report on proceedings, minutes and final acts of the International Health Conference held in New York from 19 June to 22 July 1946.

## APPENDICES

Table of deductive content analysis

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Q2: Coping & Management techniques

- Poor leadership and Organisational climate
- Role ambiguity
- Internal and External demands
- Stress of conscience

Article 8
- Threat to survival
- Concern for Children and Elderly
- Role and Schedule change

Article 9
- Patient death and dying
- Emergency situations
- Low supportive relationship
- High job demand
- Uncooperative Patients and families

Article 10
- Work environment- anxiety and tensions
- Lack of social support
- Individual characteristics
- Stressful nature of the profession
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<td>Charismatic and inspirational leadership</td>
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<td>Idealized influence</td>
<td>Planful problem solving</td>
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<td>Proper awareness of personal abilities</td>
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tional climate
-Satisfying staff needs.

Article 9
-Self controlling, planful problem solving and seeking social support
-Application of risk assessment and risk management techniques
-Change of managerial leadership styles
-Understanding theoretical research concerning human stress responses

Article 10
-Emotion centered coping strategies-wishful thinking, Gods help
-Problem solving and positive approach
-Seeking for social support