



BURNOUT AMONG STAFF NURSES

Examining the causes, coping strategies and prevention.

A Literature Review

Ndawula Maria
Degree Thesis
Bachelor of Nursing
2012

DEGREE THESIS	
Arcada Department of Health and Social Work	
Degree Programme:	Nursing 2012
Identificationnumber:	15424
Author:	Ndawula Maria
Title:	Burnout among staff nurses. Examining the causes, coping strategies and prevention
Supervisor (Arcada):	Pamela Gray
Commissioned by:	Mengo hospital : School of nursing and midwifery
<p>Burnout occurs as a result of widening gap between the individual and demands of the job. Nursing is inevitably a demanding and stressful job in a complex organizational setting. Extra stressors like burnout have a severe impact on nurses' wellbeing, patient safety, and the health organization as a whole. The main aim and objective of this study is to examine the prevalence of burnout among staff nurses, explore the causes and what can be done to manage and prevent burnout among staff nurses. This study is a literature review of 14 articles. Two theoretical frameworks are used in this study which are the Job Demands-Resources Model and the Maslach theory on burnout. Results from this study indicate that burnout prevails among staff nurses working in different settings in different parts of the world. Occupational, organizational, psychographic, and socio-demographic factors in that order contribute to burnout among staff nurses. Causes of burnout are not only limited to individuals but also management and organizational factors .Occupational factors such as shift work, workload, role clarity and ambiguity are shown to be the leading cause of burnout among staff nurses. Results from this study also indicate that burnout is a manageable condition which can also be prevented. Good management and leadership, development of nurse practice environment, stress reduction interventions, good lifestyle choices, emotional intelligence, emotion and problem focused coping strategies are linked to high job satisfaction, less stress and therefore reduce the likelihood of burnout among nurses. In recommendation, nursing institutions and colleges should include stress management education in the curriculum due to the inevitably stressful nature of the nursing profession. More research about psychographic and socio-demographic variables and their role in causing burnout is also highly recommended.</p>	
Keywords:	Burnout, staff nurses, stress, causes, prevention, coping strategies
Number of pages:	48
Language:	English
Date of acceptance:	

Contents

1	INTRODUCTION	7
2	BACKGROUND.....	9
2.1	Burnout.....	10
2.2	Nursing and Burnout	11
2.3	Consequences of burnout among nurses	13
3	THEORETICAL FRAMEWORK.....	15
3.1	Jobs Demand-Resources model.....	15
3.2	The Maslach theory of burnout	17
4	AIMS AND RESEARCH QUESTIONS	20
5	METHODOLOGY	20
5.1	Data collection.....	20
5.2	Data analysis.....	24
5.3	Ethical considerations	25
6	RESULTS.....	26
6.1	Causes and risk factors of burnout among staff nurses	26
6.1.1	<i>Psychographic variables.</i>	27
6.1.2	<i>Organizational variables.</i>	28
6.1.3	<i>Occupational variables.</i>	28
6.1.4	<i>Social demographic variables.</i>	31
6.2	Intervention and coping strategies	31
6.2.1	<i>Nursing management, organization and leadership at all levels</i>	32
6.2.2	<i>Development of nurse practice environment</i>	33
6.2.3	<i>Stress reduction interventions: Retreats and team-building gateways</i>	35
6.2.4	<i>Lifestyle</i>	35
6.2.5	<i>Social networks and support outside work</i>	35
6.2.6	<i>Emotional intelligence and Self-awareness</i>	36

6.2.7	<i>Problem focused and emotion focused coping strategies.</i>	36
7	DISCUSSION	37
7.1	Relating findings to theoretical framework	38
8	CONCLUSION	40
8.1	Strengths, limitations and recommendations	41
9	REFERENCES	43
Appendix 1	MASLACH BURNOUT INVETORY (MBI)	50

Tables

Table 1: Factors considered for including and excluding criteria.....	22
Table 2: List of articles chosen for the literature review.....	23
Table 3: Causes of burnout among staff nurses.....	26
Table 4: Coping strategies for burnout.....	32
Table 5: Risk factors of burnout and counter measures.....	39

Figures

Figure 1: Illustration of the Job Demands-Resources model.....	17
Figure 2: The three dimensions of burnout.....	18
Figure 3: Data collection process.....	21

Diagrams

Diagram 1: The job demands resources model.....	16
---	----

Foreword

"It always seems impossible until it is done." - Nelson Mandela

This has been an incredible and wonderful journey for me. This process has not always been easy but hard work and dedication always pays off. I have learned so much throughout this process and enjoyed writing this thesis. I hope that readers find this work useful and enjoyable. I thank God for giving me the strength and wisdom to accomplish this work.

Special thanks and gratitude to my best friend and dear husband, Fred Zavuga who has been a strong support system throughout this process. Your love, encouragement, patience, and support have made this journey possible, fun, and pleasant for me.

1 INTRODUCTION

Nurses have tremendous responsibilities and deal with enormous challenges (Donley R, 2005). It is reported that nurses are more prone to developing stress than other health care professionals (Aiken et al, 2001). Burnout is unfortunately one of the challenges that many nurses in different parts of the world are facing today (Poghosyan et al 2010). In 2013, National Health Service (NHS) in England issued a report about nurses leaving the profession due to occupational stress and inability to provide nurse assessed good quality care .The Royal College of nursing revealed that in a survey carried out in 2013 involving 10,000 nurses, 62% of them contemplated resigning from their job the previous year citing stress. 61% cited hectic schedules as being a hindrance to providing good quality care and 83% felt an increase in workload which has seen 5000 nurses leaving the profession in a three year period (RCN 2013).

A multi-country, cross-sectional study conducted in 10 European countries involving 23,159 nurses working in surgical and medical wards reported high levels of burnout among nurses in different countries: 42 % England, 22% Finland, Belgium 25 %, Germany 30%, Poland 40%, Ireland 41%, Norway 24%, Spain 29%, Netherlands 10%, and Switzerland 15%. The intention to leave the profession was also higher among the nurses experiencing burnout (Heinen et al, 2013). An article published by CBC radio Canada reported 40% of nurses in Canada who took part in a study experienced burnout on a daily basis and 25% would not recommend relatives or loved ones to the hospital they work (CBC Radio-Canada 2013). In Michigan, 42% of nurses reported wanting to quit the nursing profession after one to 10 more years according to a 2013 survey by the Michigan Center for Nursing (National Nurses United 2015).

Burnout is a problem in nursing. These studies and others indicate the prevalence of burnout in the nursing profession. Burnout has a negative impact on the performance of an individual (Maslach et al 2001). For nurses, this is crucial information as this directly puts patients' wellbeing and lives in danger as well as going against the code of ethics for nurses. Some of the elements in this code require nurses to:

1. Advocate for health promotion and safety of patients
2. Develop own competence throughout their practice as well as being mindful of own health.
3. Active participation and contribution to nursing research and development
4. Collaborate with others in the health care team to promote health and safety of patients (International Council of Nurses 2015).

How can nurses experiencing burnout be able to actively participate in health promotion and provide good quality care? How can nurses who are struggling with emotional exhaustion and depersonalization be able to cater to the emotional wellbeing of others? These are all important questions that should be addressed.

According to the World Health Organization (WHO), India alone needs 2.4 million nurses. Caribbean nations have a nurse patient ratio of 1.25 nurses for 1000 people. There are 17 nurses for every 100 000 people in Malawi (WHO May 2010). On 25 of February 2015, Dr. Peter Carter, the General Secretary of the Royal college of nursing (RCN) in the UK addressed the issue of nursing shortage by stating that it is still indeed a very huge problem with patients waiting on trolleys for hours in order to receive treatment as well as nurses' poor working conditions(RCN 2015). More nurses in the world are needed and yet some are contemplating leaving the profession which will intensify the nursing shortage problem and put strain on the working nurses (Heinen et al, 2013). Should health organizations fix the detrimental challenges in nursing like burnout? Absolutely.

The main objective of writing this paper is to draw attention to the burnout problem among nurses, explore the causes and what can be done or currently being done to manage this problem. Another aim of this paper is to create awareness to nursing students about the problem of stress and burnout in the nursing profession and hopefully find the coping strategies useful in the future. This thesis paper is commissioned by Mengo hospital (also known as Namirembe hospital) under the department of School of nursing and midwifery in Kampala, Uganda. This hospital was founded in 1897 by Sir Albert Cook and is one of the oldest and largest hospitals in Uganda.

2 BACKGROUND

The Royal college of nursing defines Nursing as “...*the use of clinical judgment in the provision of care to enable people to improve, maintain or recover health, to cope with health problems, and to achieve the best quality of life, whatever their diseases or disability, until death*”. (Royal college of nursing 2003 and Kozier et al 2011 page 2)

The roles of the nurse today range from care giving (taking into account the physical, Cultural, spiritual, emotional and developmental aspects of the patient or client), Teacher(Providing patients and clients with knowledge that is beneficial to their well-being), Advocate (taking into consideration the patients’ rights and making lawful decisions on behalf of the patients when they are unable to do so), Communicator(the go between patients and their families, effective communication skills to support healing) , Decision maker and managers(Kozier et al, 2011).All these are very important roles which are dependent on each other in order to make the healing process successful. The nature of nursing work results into tremendous responsibilities and duties requiring various demands which makes the profession demanding and complex (Santos and Guirardello 2007)

Crucial attention has to be paid to modern nursing working structures and organizations as this is necessary to understand the dynamics within the complex nursing organization .Nursing has tremendously evolved through the years (still evolving) and modern nursing is highly organized and has more structure. The different models currently used in current nursing practice are: Primary nursing, Team nursing and Functional nursing (Kozier et al 2011 pg. 7). Primary nursing: Individual nurses allocated to individual patients. The nurse is assigned a patient and is therefore the primary caregiver of that particular patient or patients if more than one. Specialty knowledge is required when solely undertaking the role of primary caregiver. Functional Nursing: Leadership and management allocate tasks. The leader could be a ward manager or head nurse and is responsible to task allocation. The nurses assigned to a particular task are also required to have clinical skills in order to perform the task, however the manager is solely responsible for all decisions. Team Nursing: Considered to be the most common mode. Emphasis is put on team work. Involves

management and team leadership. A team leader allocates tasks to nurses, the ward manager therefore does not have sole responsibility and accountability for the care provided (Kozier et al 2011 pg. 8).

2.1 Burnout

Christina Maslach defines burnout as “*a multi-dimensional construct comprised of emotional exhaustion, depersonalization and diminished personal competence that occurs among those who do ‘people work’ of some kind*” (Maslach 1982 P.3). According to Maslach, burnout is a final reaction that manifests as a result of chronic stressors from the job characterized by three dimensions which are cynicism, inefficacy, and exhaustion (Maslach 1997). This implies that burnout is characterized by a number of factors not just one single symptom therefore a rough day at work or a bad day does not imply that the individual is suffering from burnout. Burnout will be inevitable when discrepancy occurs between the type of job performed and the type of person performing the job. The widening gap between the individual and demands from the job becomes too great eventually leading to burnout (Maslach and Leiter p.9: 1997).

Measurement and diagnosis of burnout

Determining if an individual is suffering from burnout is a first step towards acknowledging the problem and thereafter finding solutions. Currently there are some tools used to measure burnout such as the Maslach burnout inventory (MBI) created by Maslach and Jackson in 1983. Other subtypes of the MBI have emerged such as the Human services survey (MBI-HSS) which is designed specifically for health care and other occupations related to human services (Maslach and Jackson 1983).

Maslach burnout inventory is the instrument commonly used by occupational organizations in assessing and measuring the prevalence and risk of burnout in work places around the world. Most literature review articles listed in this study have used this assessment tool in measuring burnout among nurses. MBI is comprised of three sections with sections A and B comprising of 7 questions and section C 8 questions. Section A focuses on identifying the existence of burnout manifesting

as physical symptoms. A score of 17 and below signifies low level burnout, between 18 and 29 moderate burnout and a score of over 30 is high level burnout. Section B is characterized by negative feelings towards the job, colleagues and overall depersonalization attitude. This sections also measures the loss of empathy towards others e.g. nurse may withdraw and be less involved and show less empathy and sympathy to his or her patients. Score of 5 or less low level burnout, score of 6 to 11 moderate burnout and a score over 12 is high level burnout. Section C is the last section and is influenced by the first two sections. The individual is at a 'low point'. The situation becomes too great to bear which may result into failure to perform, not showing up to work, emotional distress which may lead to self-insufficient feelings. Score of 33 or less shows high level burnout, 34 to 39 moderate burnout and over 40 low levels of burnout (Maslach and Jackson 1983).

2.2 Nursing and Burnout

The issue of burnout and stress among nurses is familiar, nursing is inevitably a stressful profession (Grubb and Grosch 2012). The prevalence of burnout in nursing is a real issue and a real threat to the health care system. Several studies around the world in different continents have been carried out showing the high rates of burnout among nurses, more especially staff nurses working in hospitals. High levels of burnout among nurses are reported in Europe, Asia and North America. (Aiken et al., 2001, Poghosyan & Sloane, 2009)

According to Koivula et al, examination of the prevalence of burnout among nurses in Finland was done in two Finnish hospitals. 723 nurses took part in the study. Half of the nurses reported experiencing burnout job dissatisfaction and frustration. This study also found that nurses working in psychiatric wards, secondary level nurses and older nurses experienced higher burnout levels (Koivula et al, 2000).

In 2002, a research study was conducted in Greek hospitals to compare burnout levels in intensive care units, internal medicine wards and emergency hospitals. Five hospitals and 233 nurses participated in this study. Low levels of exhaustion were reported among nurses working in internal medicine and intensive care units, however high levels of exhaustion were reported among nurses

working in emergency units. The study also found that several environmental factors contributed to burnout among nurses (Adali& Priami 2002).

A cross sectional research study was conducted in 2008 among Iranian nurses working in public hospitals, majority of the participants were female. The study was conducted to measure the levels of burnout in different clinical settings which were surgical, internal medicine, psychiatry, and burn wards. The Maslach burnout inventory tool was used to measure burnout in this study. Results indicated high levels of burnout among psychiatric nurses compared to nurses in other units. Single nurses and those doing more night shifts experienced more burnout compared to those in a relationship and doing day shifts. High levels of depersonalization were reported among male nurses (Sahraian et al, 2008).

A research focusing on burnout and patient satisfaction was conducted in 2004 in the United States of America. The research design used was a cross sectional survey involving 820 nurses in 40 units. Results from this study indicated that high patient satisfaction was reported in units which were perceived by nurses to be adequately staffed with good working environments. The nurses working on these units also reported low levels of burnout compared to units that were understaffed. The study confirmed a connection between burnout and patient satisfaction (Vahey et al, 2004).

In 2010, a cross national investigation study was conducted across six countries: United States, Germany, Japan, United Kingdom, Canada, and New Zealand. The aim of this study was to investigate the relationship between burnout among nurses and its effect on nurse assessed quality of care across different countries. Study involved 53,846 nurses and the Maslach burnout inventory was used to measure the level of burnout using the three dimensions. Results indicated highest levels of burnout among nurses in Japan. Medium levels of nurse burnout were reported in United Kingdom, New Zealand, and Canada. Nurses in Germany had the lowest levels of burnout out of all the 6 countries. In addition, all the nurses in the 6 countries agreed that nurse assessed quality of care diminished as a result of burnout (Poghosyan et al 2010).

In Nigeria, a research study involving 270 nurses in an urban area hospital showed high levels of burnout among the nurses, more especially among older nurses. Issues like hierarchy, bullying, interpersonal working relationships between doctors and nurses, as well as working frequently in the night were all linked to burnout (Lasebikan and Oyetunde, 2012)

2.3 Consequences of burnout among nurses

According to Maslach et al, (2001) burnout is categorized under three dimensions which are emotional exhaustion, depersonalization, and efficacy. When one or two or all of these factors are experienced by nurses, overall job productivity diminishes. This has severe consequences on the nurses' wellbeing, patient safety, quality of life, as well as quality of care provided.

Burnout among nurses affects turnover. A survey was carried out among 667 Canadian nurses to determine whether burnout influenced their intention to leave the profession. It was found that some areas of the nurses' working lives contributed to burnout thereby causing them to contemplate leaving the profession. Turnover poses a serious threat to both patients and other nurses' wellbeing. Turnover would lead to unfavorable nurse-patient ratio which is linked to adverse outcomes such as high infection rates (Leiter & Maslach 2009).

A cross sectional analysis study carried out in the United States examined the relationship between nurse-patient ratio and patient mortality, nurse burnout and job dissatisfaction. Emotional exhaustion was prevalent as a result of understaffing. The study also found that there was a risk of high patient mortality as well as an increase in the chances of surgical patients dying within 30 days upon admission which linked this to nurse-patient ratios. (Aiken et al, 2002).

Burnout was linked to an increase in hospital acquired infections such as the urinary tract infection and surgical site infections according to a survey done in United States, involving 7076 nurses in 161 hospitals. These infections were linked to nurse burnout which occurred as a result of heavy workload e.g. heavy patients as well as taking care of many patients. In cases where burnout was low and staff was adequate, fewer infections occurred (Cimoitti et al 2012)

The emotional state of nurses is key factor in determining the quality of care that is provided. Emotional exhaustion, cynicism, and depersonalization that are associated with burnout affect patient safety and job performance as evidenced by a study carried among 263 nurses working in Taiwan. The study concluded by stating that emotional stability guarantees good problem solving techniques as well as managing stressful conditions (Teng et al, 2009).

A cross sectional survey design study involving 148 nurses working in a hospital setting mostly in intensive care , onsite clinics and medical –surgical units reported findings that patient safety was compromised among nurses experiencing burnout. Evidence gathered showed negligence to report medical errors or near misses which is required as an obligation as a patient safety procedure (Halbesleben et al 2008).

3 THEORETICAL FRAMEWORK

This study is underpinned by two theoretical frameworks which are: The Job Demands-Resources model and the Maslach theory on burnout. These two theories have been chosen due to high relevance to this study on connection to burnout. The first theory presented (Job demands- resources model) gives a good foundation about job demands and job resources and how these two factors determine the occurrence of occupational stress and burnout. The second theory (Maslach theory on burnout) is used in this study because it mainly focuses on occurrence of burnout among individuals doing ‘people work’ of some kind (Human services). The Maslach theory of burnout gives detailed information about what burnout is a cause of burnout and risk factors.

3.1 Jobs Demand-Resources model

The Job Demands-Resources model (The JD-R Model) was created by Professor Arnold Bakker and Evangelia Demerouti in 2006. The model was inspired from already existing models about the similar subject (Demand control model by Karasek in 1979 and the Effort Reward Imbalance model by Siegrist in 1996). Bakker and Demerouti argued that the already existing models were not applicable in all situations and occupations and had an element of simplicity in them. The Demand Control Model focused a lot on autonomy while the Effort Reward Imbalance model focused more on issues like salary. In reality, most work organizations and occupations are complex and previous research shows extreme lack of resources and high job demands which calls for tougher measures. Due to all these factors, Bakker and Demerouti decided to come up with a model that could cater to all people, organizations and occupations thereby supporting employees’ physical and emotional wellbeing which in turn produces better results at work (Bakker and Evangelia 2006, and Halbesleben and Buckley 2004).

The model is categorized by two major parts which are: The job demands and job resources. Job demands are the psychological, physical, and social organizations aspects of the job which range from pressures of the work, workload, time management issues, job uncertainty, and work conflicts. Job resources make up the physical or social structures of the organization that are put in

place to assist workers to perform better at their job which are but not limited to good leadership, management, safe working environment, working tools, good working relationships, employee education, new workers orientation and promotion possibilities. In this model, when the job demands are high and the job resources are low, it contributes to stress and burnout among employees. Whereas when Job resources are high and job demands are low, this can lead to positive results for example workers can become more engaged and motivated by their job (Bakker and Evangelia 2006). Below is (Diagram 1) which shows and illustrates the Jobs demands- Resources model:

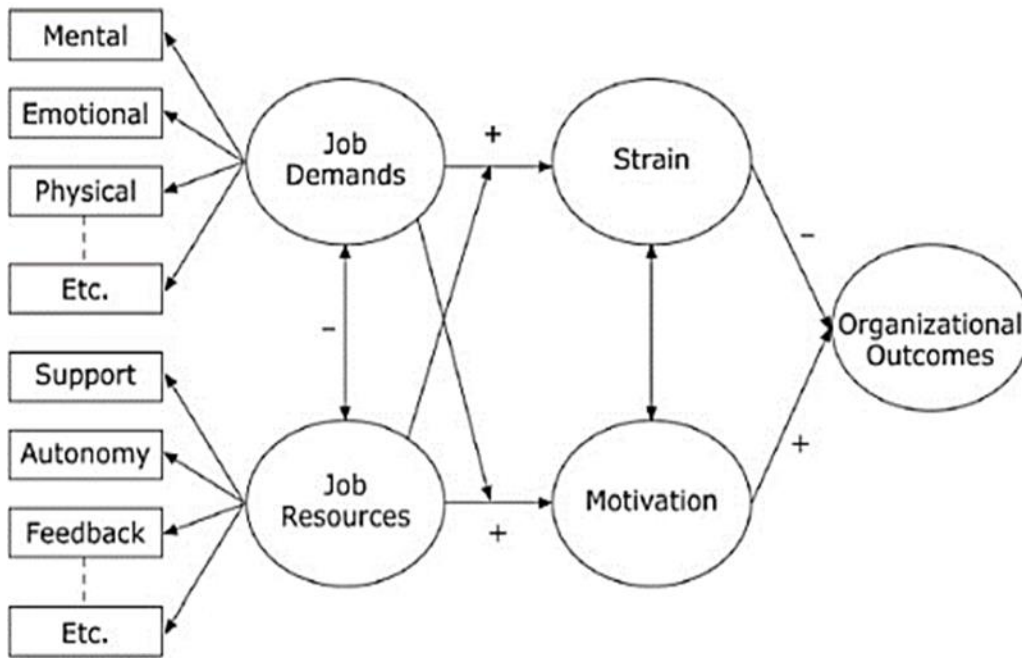


Diagram 1: Source: The Job demands-Resources model (Adapted from the SA Journal of Industrial Psychology 2011).

This model stresses the importance of creating a balance between job resources and job demands. These two factors rely on each other in order to create a successful working environment. Job resources may reverse negative impact of job strains for instance good supervision, leadership and relationship with a supervisor can help reduce strain from work insecurity or workload. Also when employees feel ‘heard’, understood, get rewards for good performance, positive feedback, all these aspects can influence the wellbeing of workers (Bakker and Evangelia 2006). Below is a simple illustration of the the Job demands-Resources model and points out the key spectis in (Figure 1):

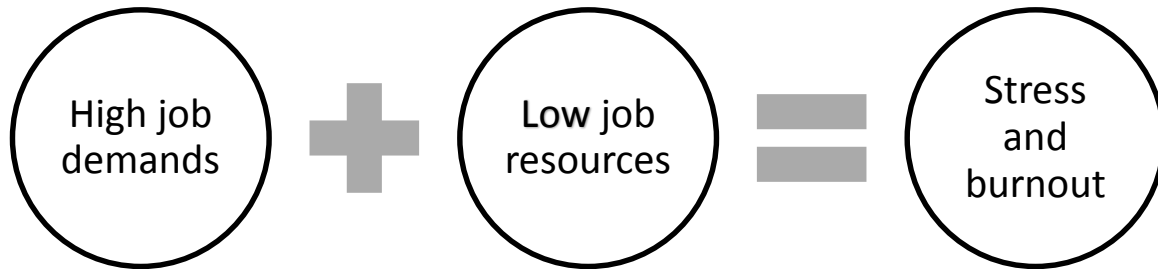


Figure 1: *High job demands plus low job resources leads to stress and eventually burnout.*

3.2 The Maslach theory of burnout

Maslach's initial research did not involve the formation of an already existing theory and focus on burnout, primary interest had been to study 'emotions' which then later led to interest in occupational burnout. The early studies and research on burnout focused more on "care giving" jobs where the individual providing care and the individual receiving care had a relationship. Later research has broadened to include other occupations aside from human service (Maslach 1993).

According to Maslach, burnout is as a result of a mismatch between the person doing the job and the job demands. For burnout not to occur, the person doing the job and the job demands have to match or be in 'sync'. According to this theory, burnout is comprised of three dimensions which are emotional exhaustion, Cynicism or Depersonalization and Inefficacy (Maslach et al, 2001). Emotional exhaustion is the most visible and easily noticeable among the three dimensions. Most people experiencing burnout easily pinpoint exhaustion. Characterized by emotional stress related symptoms such as moodiness, frustration, agitation which may later cause the inability to

cope with the emotional and physical aspects of the job. Emotional incompetence negatively influences physical competence. This causes individuals to act in a manner that is not in line with their work and sufferers are unable to cope with the demands of the job. The second dimension is Cynicism and depersonalization. Depersonalization makes people create some sort of distance and detachment from the job which is coupled with negative feelings. This often occurs when the individual is unable to deal with the demands of the job leading to disengaging from the work. Cynicism and depersonalization are mostly influenced by emotional exhaustion. Job dissatisfaction may occur in this dimension. People may also be viewed as objects other than human beings. The last dimension is inefficacy or reduced personal accomplishment. This dimension is more considered complex than emotional exhaustion and cynicism. An overall sense of incompetence and unworthiness is experienced at this stage after self-evaluation from the job performance. Personal accomplishments decline as a result of this. This theory also indicates that burnout has negative consequences such as job performance, turnover, and negative impact on colleagues which may result into conflict. Poor job performance may be seen as a result of continued work despite experiencing burnout (Maslach, et al 2001). Below is an illustration (Figure 2) of the three dimensions of burnout.

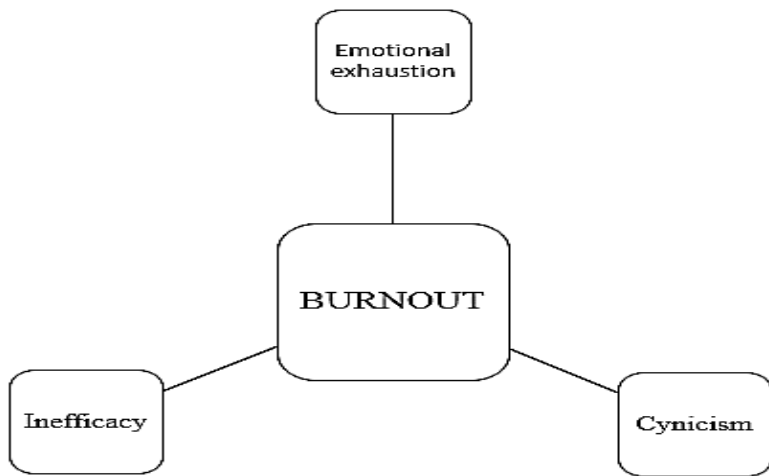


Figure 2: *Showing the three dimensions of burnout: Emotional exhaustion, inefficacy, and cynicism.*

The Maslach theory on burnout lists six risk factors that could cause a mismatch between the person and the job: Lack of Control, workload, reward, community, fairness, and values. Workload is as a result of too much to do. There has to be a balance between demands and the resources available to meet these demands. Time to finish the workload and availability of resources to enable the job demands are crucial. Lack of control may be influenced by lack of active involvement in the organization which causes individuals to feel less important or undervalued. Over time feelings of being 'trapped' may occur which causes stress levels to go up leading to burnout. Insufficient rewards such as lack of recognition and positive rewards. Positive rewards shape behavior and build motivation. Constant criticism leads to low morale and withdrawal. Breakdown of community, working organizations are viewed as a community. Dynamics are very important. It is important to establish a good relationship with workmates. Breakdown in community can lead to lack of support, no teamwork, unresolved conflicts, and workplace bullying. Absence of fairness, Justice and fairness are important aspects in working organizations. In case of lack of fairness or discrimination, cynicism may occur. Value conflicts, in some situations, values may be in conflict with the job. Going against one's values because of job demands can generate stress and feelings of cynicism (Maslach et al, 2001).

4 AIMS AND RESEARCH QUESTIONS

The main aim and purpose of this study is to draw attention to the burnout problem in nursing, explore the causes, risk factors of burnout and coping strategies. The study was guided by two questions:

1. What are the risk factors and causes of burnout among nurses?
2. What can be done to prevent burnout? (Coping strategies)

5 METHODOLOGY

The method of research chosen by the author is a Literature review. The term ‘Literature’ refers to a collection of academic scholarly writings which are but not limited to books, scientific articles, conference proceedings, and dissertations. Literature reviews make up a continuous evolving network of scholarly works that are interconnected .A good literature review is built and then expanded on already existing previous research and studies on a similar topic or area of interest, knowledge cannot be advanced without reviewing existing knowledge. According to Wilkinson 2000, the definition of a literature review comprises of six conceptions which are: List, survey, search, knowledge enhancer, a report and a supporting or directing tool (Wilkinson 2000, page 28 and Aveyard 2010).

5.1 Data collection

Relevance in connection with the topic and aim of the study was the main focus in searching for the articles. Through the new library guide page at Arcada University of applied sciences, access was gained to the academic databases: Academic Search Elite (EBSCO), Cinahl (EBSCO), The Cochrane Library, Nursing Collection 1 (OVID), PubMed, Sage and Science Direct. The first step involved a general article search conducted through all the databases using several keywords such as “burnout”, “nurses”, “stress”. EBSCO and Science Direct produced the most detailed and relevant results in accordance to search key words.

The second search phase was directed to only EBSCO and Science Direct and other databases were ruled out completely. The second search through EBSCO was conducted using keywords with different combinations which were interchanged accordingly (AND / OR / + *)”burnout nursing”, “causes “, “prevention”, “management”, “coping strategies”, which produced 2978 results. The search was thereafter refined based on year of publication, full text, academic journals and most relevant content which produced 1,272 results. More keywords were introduced together with “burnout” such as “causes”, “prevention” which narrowed the articles from EBSCO to 318. Using the Science Direct database, similar keywords and process were used, an advanced search from only journals gave 2,498 results of which were refined according to relevance and years (not more than 10 years)producing 111 articles. Figure 3 illustrates the data collection process:

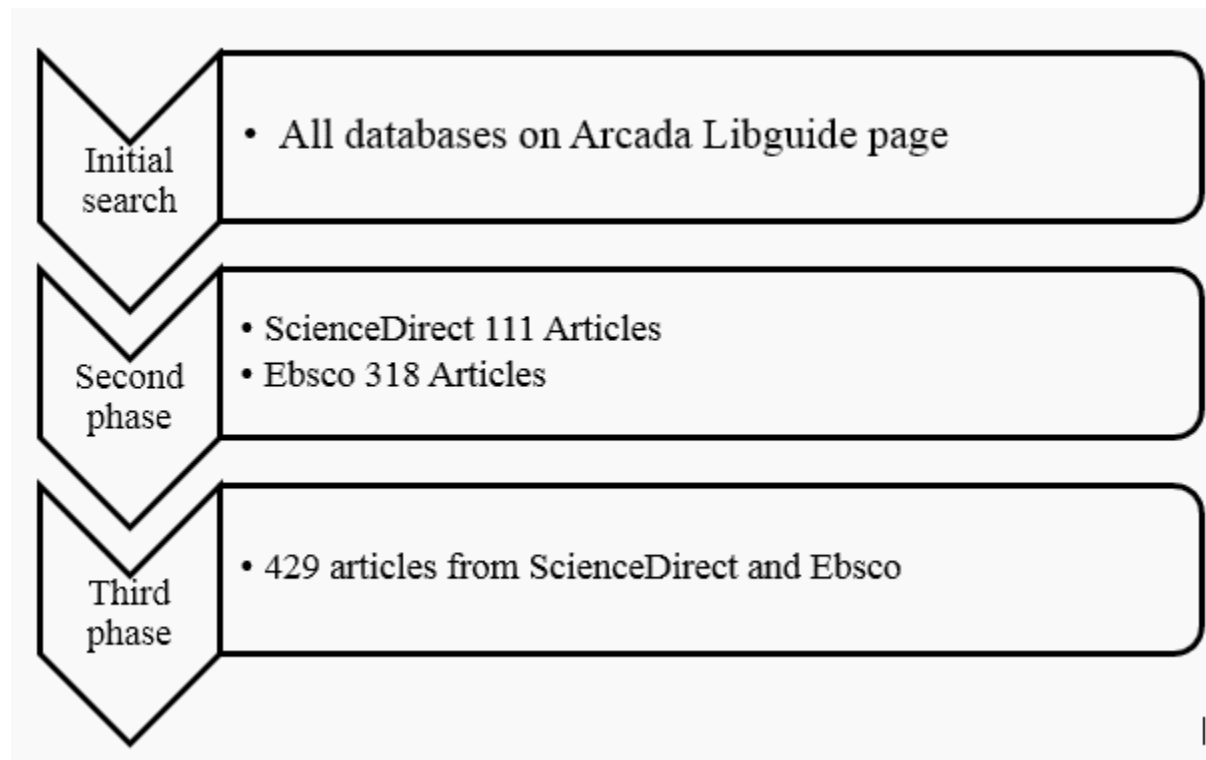


Figure 3. Data collection process: Initial search done in all databases, second search process done only in ebsco and ScienceDirect. The final 429 articles were got from only Ebsco and Science Direct.

EBSCO and Science Direct provided 429 articles. The author read the abstracts of 429 articles in relevance to the topic. Some of the articles were still generalized e.g. “burnout among health care workers” and were therefore eliminated. Furthermore, only articles from 2008 to 2015 were considered. The filtering and search process was done a few times following the same criteria in both EBSCO and Science Direct and only 14 articles were chosen for the literature review. Table (1), shows factors that were considered in the inclusion and exclusion criteria:

Table 1. Factors considered for the including and excluding criteria

Including criteria	Excluding criteria
1. Relevance to the topic ‘burnout in nursing’. Provided knowledge to the research question	1. Articles that did not have a nursing perspective were excluded e.g. ‘burnout’ in general.
2. All the articles had to be in the English language.	2. Articles in other languages were excluded
3. Only recent articles were considered from 2008 to 2015.	3. Articles before 2008 were excluded.
4.Full text	4.Short version articles were excluded
5.Free of charge	5. Research was not funded therefore articles requiring payment were excluded
6. From only Academic databases e.g. EBSCO, Science Direct, and PubMed.	6. Articles from the Internet or non-academic databases were excluded.

The following 14 articles were chosen due to high relevance to the subject, had components of all the key words, and were recent studies. The author read the articles several times to ensure that they were most suitable for the literature review in relation to the research questions. Ten articles were published within the last four years, one article this year and only three articles between 2008 and 2009. Eight articles were derived from EBSCO and six from Science Direct databases. Table 2 shows the list of articles chosen for the literature review:

Table 2: List of articles chosen for the literature review and used in the content analysis

Author	Article	Journal and Year
Article 1 Cañadas-De la Fuente et al.	Risk factors and prevalence of burnout syndrome in the nursing profession	2014. International Journal of Nursing Studies
Article 2 Van Bogaert et al.	The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care	2013. International Journal of Nursing Studies
Article 3 Joan F. Miller	Burnout and Its Impact on Good Work in Nursing	2011. Journal of Radiology Nursing
Article 4 Barbara Henry	Nursing Burnout Interventions: What Is Being Done	2014. Clinical Journal of Oncology Nursing
Article 5 Fearon and Nicol	Strategies to assist prevention of burnout in nursing staff.	2011. Nursing Standard
Article 6 Van Bogaert et al.	Hospital nurse practice environment, burnout, job outcomes and quality of care: test of a structural equation model	2009. Journal of Advanced Nursing;
Article 7 Vargas et al.	Which occupational risk factors are associated with burnout in nursing? A meta-analytic study	2014. International Journal of Clinical Health & Psychology
Article 8 Adriaenssens et al.	Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research	2015. International Journal of Nursing Studies.
Article 9 Redfern Jones	Manage workplace chaos by building your resilience	2012. Nursing Standard
Article 10 Wright Kerri.	Alleviating stress in the workplace: advice for nurses	2014. Nursing Standard
Article 11 Lim et al.	A qualitative analysis of stress, uplifts and coping in the personal and professional lives of Singaporean nurses	2011. Journal of Advanced Nursing
Article 12 Garrosa et al.	Role stress and personal resources in nursing: A cross-sectional study of burnout and engagement	2011. International Journal of Nursing Studies
Article 13 Kanai-Pak et al.	Poor work environments and nurse inexperience are associated with burnout, job dissatisfaction and quality deficits in Japanese hospitals.	2008. Journal of Clinical Nursing
Article 14 Günüs and Üstün	Turkish nurses' perspectives on a programme to reduce burnout	2009. International Nursing Review

5.2 Data analysis

The chosen method for analyzing data is inductive qualitative content analysis. Historically the use of content analysis was first recorded in Scandinavia, Sweden in the 18 century (Rosengren 1981) and from then on has been used widely by researchers around the world in different fields of study such as journalism and health care. This method was chosen because it is the most successful and commonly used in nursing studies in different areas such as gerontology and public health (Elo&Kyngäs 2008). In addition, when using content analysis, information can be gathered from a variety of areas as well as being unobtrusive (University of Twente 2015). Content analysis can be used both in a quantitative and qualitative way. When using content analysis, data is derived from sources such as books and articles and thereafter organized and interpreted in a reliable, understandable and trustworthy manner. Reitz (2004), defined content analysis as closely examining and analyzing explicit and implicit messages in a text and thereafter categorizing and assessing key factors and findings to create meaningful information that can be understood and presented to an audience.

In this study, data was analyzed using inductive content analysis as explained by Elo and Kyngäs. Elo & Kyngäs (2008), explained that the key factor in carrying out a successful content analysis entails for data to be ‘broken down’ in a systematic manner in order to explain the research. This was done in three phases which are Preparation, organization and reporting. During the preparation phase, data relevant to burnout among staff nurses was collected from academic databases mainly EBSCO and ScienceDirect. Organization phase involved understating the data, creating open codes, grouping, creating categories, headings and abstraction. Clear marks with colored pens and highlighters were used to mark important phrases for clear identification. Reporting phase involved giving an account of the results in an organized (categories and sub categories) and trustworthy manner in relation to the findings about what causes burnout among nurses and coping strategies or interventions (Elo&Kyngäs 2008).The findings were grouped into two major categories: Causes

and Coping strategies or prevention. From these major categories, sub-categories were formed. An example and illustration of this process is shown in the results chapter in table 3 and 4 respectively.

5.3 Ethical considerations

Prior to the thesis writing process, the Arcada guidelines about good scientific practices were carefully read and understood. Elements such as ethical carelessness, fabrication of data and lack of acknowledgement of other researchers' work was put into consideration (Good scientific practices Arcada).

Authorized access to official databases such as EBSCO and Science Direct from Arcada library to avoid illegitimate retrieval of data. The articles chosen for the literature review were carefully analyzed and examined in order to ensure that participants' identity such as names, contacts were withheld. The Belmont report (1979) outlines guidelines that should be followed when carrying out research among humans and offers three ethical principles which emphasize respecting people involved, beneficence and justice. All these were put into consideration by the author when reviewing the articles chosen for the study. Plagiarism was avoided as well as copy pasting and listing quotations without reference. Personal reflections and beliefs were listed only in the introduction, conclusion and discussion chapters thereby making sure that there was no bias (Resnik 2011).

6 RESULTS

In this chapter, findings from the literature review of the 14 articles is presented. Research questions one and two are answered in this chapter in form of categories and sub categories.

6.1 Causes and risk factors of burnout among staff nurses

The causes and risk factors linked to burnout among staff nurses are divided into four major categories: Category 1: Social demographic variables, category 2: Psychographic variables, category 3: Organizational variables and category 4: Occupational variables. Table 3 shows the major categories and sub- categories formulated from the findings.

Table 3: Showing categories of causes of burnout among staff nurses.

Category 1	Category 2	Category 3	Category 4
Personality traits and the five factor theory: Extraversion, Agreeableness, Conscientiousness Neuroticism	Nursing management at all unit levels. Lack of clinical supervision	Shiftwork Workload Decision latitude and autonomy	Findings show that both older and younger nurses can experience burnout

	Failure to provide resources	<p>Teamwork and nurse-physician relationships</p> <p>Role conflict and role ambiguity</p> <p>Inadequate staffing and resources</p> <p>Value and empowerment, recognition and positive feedback</p>	<p>Nurses in all parts of the world are prone to developing burnout therefore not limited to one demographic area.</p> <p>Role of experience</p> <p>Role of gender</p>
--	------------------------------	--	--

6.1.1 Psychographic variables.

The role of personality traits and the five factor theory. Out of the 5 factor theory personality traits, only four are linked to the possible causes of burnout. Extraversion, Agreeableness, Conscientiousness and Neuroticism. Extraversion is characterized by having good social skills, ability to effectively express oneself emotionally. Agreeableness comprises of trust and a variety of Pro-social behaviors such as having a good relationship with co-workers. Neuroticism is characterized by fear, jealousy, moodiness and loneliness. Conscientiousness is portrayed through display of high levels of organization, goal driven and paying attention to detail. Absence of extraversion, Conscientiousness and agreeableness are listed as causes of burnout together with the presence of neuroticism. (1, 8). A cross sectional study involving 508 nurses in Spain linked personality traits to burnout. Nurses who were optimistic and had a hardy personality were less likely to experience emotional exhaustion compared to nurses without these qualities (12). Similar studies in article 8 also link hardy personality to high levels of emotional exhaustion (8). Other Psychographic variables such as lifestyle, values and attitudes are not fully explored in the articles chosen for the study

6.1.2 Organizational variables.

Management at different levels. Nursing management is shown to have an effect on the development of stress and burnout among nurses (1). Management at the unit level may include head nurses, charge nurses and supervisors. Management at unit level involves supervision of daily activities, ensuring availability of resources, maintaining occupational safety standards, team building tasks etc. Lack of proper management at the unit level is linked to job dissatisfaction and emotional exhaustions. Lack of supervision leads to role ambiguity. Lack of resources e.g. adequate staffing leads to workload and role conflict. Poor management at unit level directly leads to stress and eventually burnout. Upper level management is usually involved in making colossal decisions regarding health care policies, salaries, shifts, nurse-patient ratios, patient safety measures etc. Nurses are directly affected as a result of these decisions and lack of involvement of nurses in making these decisions contributes to job dissatisfaction and decreases autonomy which in turn lead to stress and burnout. Support from organizations is necessary in nursing practice. (1, 2, 6, 8, 13)

6.1.3 Occupational variables.

Occupational variables play a major and significant role in the development of burnout among nurses compared to the other variables as shown below:

Shift work

Staff nurses are required to work different kinds of shifts throughout their career, much more so than other health care professionals. The type of shifts range from morning, evening and night shifts. This rotation in shift work causes instability and disruption in personal life. Most especially nurses with families find it hard to balance personal life and work when required to work unfavorable shifts leading to an increase in fatigue. This makes the job arduous leading to emotional exhaustion and cynicisms. (1, 12, 13, 14)

Workload

Workload is the amount of work that is expected to be performed at a given period exceeding the resources available to complete the task. Nurses have tremendous responsibilities. When the nurse-patient ratios are not favorable, nurses are faced with even greater responsibilities to meet the individual needs of patients assigned to them. The mounting pressure results into stress trying to accomplish these tasks. Workloads result into job dissatisfaction, cynicism, depersonalization and eventually burnout. Workload means nurses have to use time limits in order to get the job accomplished. Using time limits is shown to dehumanize patients and affects quality of care provided. (2, 3, 12, 14, 11, 8)

Decision latitude and autonomy

Nurses feel necessity for being involved in decision making processes involved in their work. Loss of control over work leads to an increase in stress levels among nurses. When organization or unit policies directly affecting nursing work are made without involving nurses', leads to feelings of lack of control and job dissatisfaction. Nurses' contribution to policy decisions concerning their work is shown to have positive effects such as involvement in scheduling as well as contribution to patient care. Autonomy is also an important aspect among staff nurses. Lack of freedom to conduct unrestricted decisions in relation to nurse's knowledge and practice consistency is shown to have negative effects on nurses. This is because it causes restrictions and the need to consult other sources over issues that nurses are well equipped and capable of resolving. (2, 8, 6, 10)

Teamwork and nurse physician relationships

Teamwork in the nursing profession comprises of fellow nurses, physicians, physical therapists and other health care providers all working together as a team to accomplish tasks. Effective and excellent teamwork is directly linked to job satisfaction and performance. Breakdown in teamwork contributes to stress and emotional exhaustion. Ineffective teamwork is characterized by lack of trust, interpersonal conflicts, bullying which all affect the performance of nurses. Lack of support at the job causes emotional exhaustion and job dissatisfaction eventually leading to burnout. Poor nurse-physician relationships contribute to stress and burnout among nurses. Nurses cited poor relationships with physicians as a contributing factor to stress. Ineffective communication and

dysfunctional relationships with doctors have negative impact on job performance, emotional well-being and patient outcomes. Dealing with physicians is part of the teamwork required in nursing practice whereby a break down leads to mounting frustration and stress. (2, 8, 6, 13)

Role conflict and role ambiguity

Nurses have different roles that they are expected to perform in their profession. What happens when the nurse is 'being pulled' in different directions at the same time? Role conflict occurs. For instance ethical challenges to intrapersonal role conflicts. Frustrations and inability to cope with ethical challenges contribute to stress and negative feelings about the job which if not managed effectively lead to burnout.

Role ambiguity is a situation that occurs when individuals are uncertain of what is expected of them at the job and whereby goals and roles are not clear. Nurses need to have clear goals, roles and equipped with knowledge in practice in order to effectively perform. Vagueness and lack of clarity contributes to frustration, poor job performance, job dissatisfaction which lead to stress. (3, 6, 1)

Inadequate staffing and resources

Inadequate staff and lack of resources contributes to stress and burnout among nurses. Lack of enough resources to effectively perform tasks hinders job performance and patient outcomes which have a negative impact on nurses' wellbeing both physically and mentally.

Understaffing is shown to cause stress and burnout among nurses over time because the job demands are higher than the resources available to effectively complete the tasks. Lack of adequate staff is shown to increase job dissatisfaction and emotional exhaustion as well as depersonalization. (6, 3, 8, 12, 13, 14)

Value and empowerment, recognition and positive feedback

Feelings of being undervalued, lack of recognition and positive feedback lead to demoralization and depersonalization among nurses. Lack of respect from coworkers, other health care providers, patients, clients and physicians contributes to stress among nurses. Nurses face various challenges

at the job on a daily basis such as physical and emotional abuse from patients e.g. from substance abusers, violent or dissatisfied patients. This makes nurses feel unappreciated and undervalued. Evidence indicates positive feedback and recognition leads to better performance by employees and increase in motivation, lack of this contributes to stress and emotional exhaustion. (14, 10, 11, 13)

6.1.4 Social demographic variables.

According to the results obtained from the literature review, the factor of age in relation to burnout is inconclusive due to the different findings from the articles. In a cross sectional study involving staff nurses conducted in several hospitals in Japan, younger nurses under the age of 30 reported much higher levels of burnout compared to older nurses (13) and burnout has been noticed more among younger workers(8). However other studies listed in article 8 found no correlation between age and depersonalization or emotional exhaustion (8). A qualitative study involving nurses in Singapore aged between 22-55 years of age indicates high levels of burnout among the nurses between those ages drawing to the conclusion that in this particular case, both young and older nurses experienced burnout (11). Some studies have reported a decrease in burnout among older nurses and others dispute this finding (1). Newly graduated nurses are also said to experience more burnout and intention to quite the profession than nurses who have been working for a longer period of time (3). The role of gender shows male nurse are more prone to depersonalization whereas female nurses experience more emotional exhaustion. (1, 8). Marital status, religion, social class, income, residence and other social demographic factors are not fully explored in the studies (1, 3, 8, 13, 11).

6.2 Intervention and coping strategies

Burnout has severe negative consequences on nurses and their job performance and is linked to high infection rates, high mortality, turnover and high costs (Cimoitti& Aiken et al 2012), therefore creating coping strategies and solutions to this problem is urgent and necessary. According to the

articles used in this study, burnout interventions are directed at nursing management, leadership, organizations and individual factors. Seven major categories are formed in relation to coping strategies and what can be done to prevent burnout among staff nurses after a literature review of the articles. Category 1: Nursing management and leadership, category 2: Development of nurse practice environment, category 3: stress reduction interventions, category 4: lifestyle, category 5: social networks and support, category 6: emotional intelligence and self-awareness and category 7: problem focused and emotion focused coping strategies. Table 4 shows the main categories formulated

Table 4: Coping strategies for burnout among staff nurses.

Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Category 7
Favorable policies.	Teamwork	Retreats	Healthy lifestyle	Strong social networks such as family and friends	Good emotion managing skills	Problem solving techniques such as time management, seeking advice, good organization skills
Effective leadership.	Nurse-physician relationships	Teambuilding getaways	Proper diet		self-awareness,	
Good working conditions	Autonomy decision latitude and empowerment		Exercise	Good working relationships with colleagues	Self-regulation,	
Clinical supervision	Nurse-patient ratios		After work activities	Building strong resilience	social skills,	Self-Reflection,
	Effective communication				empathy and motivation	Good analytical and critical thinking skills

6.2.1 Nursing management, organization and leadership at all levels

Nursing management at all unit levels has the responsibility in ensuring occupational health standards are met at the workplace. Nursing managers and organizations have the responsibility of examining the high demands placed upon nurses and provide resources to reduce or cope with these

demands. Management is responsible for making policies affecting the organization. Positive patient, nurse and organizational outcomes can be achieved through effective leadership that aims at focusing on administering supportive structures with the capability to provide innovations and improvements (2, 6, 10). Appropriate working conditions and settings such as adequate staffing need to be addressed to improve nurse-patient ratios and thereby reducing workload which is the leading cause of burnout among nurses. (1, 7). Good leadership and management has been shown to alleviate stress in the health care system (10). Management needs to have an understanding of the nurses' working conditions, be inclined to accept feedback as well as have the desire to act upon it e.g. through showing support. Management needs to involve nurses in decision making regarding their work to reduce feelings of being undervalued and unappreciated. Autonomy and decision latitude need to be put into consideration by management in nursing organizations (4, 11). Nursing management needs to consider clinical supervision as a key element in management of stress and burnout (5). Clinical supervision supports guidance and support for nurses which is incredibly needed when working under stressful conditions. As a result of clinical supervision, nurses may feel that they are being "listened to" and "heard" thereby reducing feelings of being undervalued. . (1, 2, 5, 6, 10, 11)

6.2.2 Development of nurse practice environment

Improving the practice environment of nurses reduces burnout, improves job satisfaction and quality of care. Bogaert & Kowalski 2009 state the importance of nursing management in establishing an effective nurse working practice environment that entices and retains nursing professionals as well as improving quality of patient care (6).

Nurse-physician relationships.

Improving the nurse-physician relationship is essential. Nurses and doctors need to work effectively together. Burnout and stress among nurses has been linked to poor nurse-physician relationships (2, 6). Negative physician behavior such as rudeness, dismissiveness and intimidation worsen relations between nurses and doctors. Traditional beliefs and ideologies such as nurses viewed as "handmaids" rather than competent collaborators or colleagues still exist among some physicians

which damages the working relationship. Effective communication, respect and teamwork are key factors in improving the relationship. (1, 3, 8, 13)

Autonomy, decision latitude and empowerment

Autonomy and empowerment has been shown to improve nurse performance at the job as well as quality of care and therefore emphasis on involving nurses in the decision making process is important (2,3,10) .Nurses benefit from having authority and control over their work when well equipped to deal with the tasks at hand. Own management of time and daily tasks as well as making own decisions e.g. when to take a break etc. contribute to job satisfaction and decrease stress. (4, 5, 10)

Teamwork and collaboration

In the nurse-practice environment, it is inevitable to avoid working together. Breakdown in teamwork and lack of support is cited as one of the causes of burnout among nurses. Good teamwork improves patient satisfaction, job satisfaction and quality of care. Negative effects of lack of teamwork are lack of trust, isolation, conflict, lack of accountability which all lead to stress and eventually burnout. Effective teamwork in the nurse practice environment promotes support, trust, assistance and job performance. (3, 9)

Nurse to patient ratios and workload

Research has shown that nurse to patient ratios have benefits for both patients and nurses. Proper staffing leads to less workload and prevents stress (3, 6). Henry 2014, proposes that workload can be managed through training and use of advanced technology. Self-care behaviors after work such as exercise may also be helpful in order to deal stress. Delegation and teamwork at the workplace ensures that the workload is evenly divided and manageable (4). Taking walks and snack breaks was also used by nurses in Singapore to manage stress as a result of workload (11).

6.2.3 Stress reduction interventions: Retreats and team-building gateways

Nurses usually work in a team that is meant to provide support to each other, collaborate and work together, encouraging team building exercises and support groups is recommended to deal with work stressors (3, 9). Getaways and team building retreats have been reported to reduce burnout among nurses. A retreat was organized for a team of 150 oncology nurses in the United States. The goal of the retreat was to promote social support, provide relaxation, and rebuild professional interest, self-reflection and taking care of oneself. This retreat had a positive effect of the oncology nurses because it led to personal growth, relaxation and reduction of stress (4)

A similar staff retreat was organized in southeastern United States focusing on building the strength of the team. Role clarity and cohesion were some of the topics discussed during the retreat. After the retreat, nurses showed a 25% increase in job satisfaction regarding their roles, management and leadership. This promoted leadership and teambuilding (4)

25 nurses working at a hospital in United States took part in an eight week programme focused on reducing stress. Both quantitative and qualitative data showed that the program had positive effects on the nurses' wellbeing and led to an improvement in work relationships, family relationships, relaxation and self-care (4).

6.2.4 Lifestyle

The importance of living a healthy lifestyle is emphasized as a key competent in reducing stress and burnout among nurses. Healthy diet, relaxation and exercise are found to be effective as positive lifestyle choices. After work activities such as changing clothes and exercising after work are thought to have a positive impact on nurses' wellbeing and good coping mechanisms for stress. (5)

6.2.5 Social networks and support outside work

Strong social networks in form of family, friends and workmates are linked to reduction of burnout among nurses (9). A qualitative research study conducted among nurses in Singapore shows their

ability to cope with work demands and stress through strong support from family members. Comfort from close loved ones and having someone outside work was thought to be helpful for the nurses. (11).

Building resilience is recommended for nurses as a way of managing stressful working conditions. Resilience refers to an individual's capability to overcome stressful conditions and building a strong resilience leading to determination and increase in energy. Jones, 2012 recommends coping strategies to nurses like belief in oneself, strong social networks, flexibility, problem solving skills and locus of control. Believing in oneself is linked to good performance among individuals through having high self-esteem. By being flexible, individuals are most likely to welcome, embrace and manage change (3, 9,11)

6.2.6 Emotional intelligence and Self-awareness

Emotional intelligence is advocated as a way of managing stress and burnout among nurses and is currently recognized by nursing theory. An emotionally intelligent nurse will have the capability to understand and manage own personal emotions as well as recognize, understand and influence the emotions of others (5). It is therefore vital to understand and learn how to manage personal emotions as they can influence others both negatively and positively. Emotional intelligence can be learned and acquired. Main elements of emotional intelligence are self- awareness, Self-regulation, social skills, empathy and motivation (10)

6.2.7 Problem focused and emotion focused coping strategies.

Nurses should aim at using positive coping strategies through problem-solving and emotion-solving techniques. Problem solving techniques such as time management, seeking advice, good organization skills and clinical supervision can be used when dealing with stressful conditions. Positive emotion focused coping techniques recommended are self-reflection, clinical supervision and therapies in form of counselling or cognitive behavioral therapy. Negative emotion focused coping such as hostility, avoidance, substance abuse all increases stress thus leading to burnout (5).

Redfern Jones 2012, also emphasizes the importance of developing problem solving skills through reflection, using analytical and critical thinking skills. Reflective learning allows individuals to learn from experience and develop exceptional approaches to situations (9)

7 DISCUSSION

Results indicate that occupational factors play an outstanding role in causing stress and eventually burnout among nurses followed by organizational factors. However, occupational factors like workload, shift work, nurse-practice environment are still influenced by nursing management. For example management usually decides how many nurses are needed for a particular unit, nature of work shifts etc. Nursing managers and organizations have the authority over these kind of decisions and therefore responsibility lies with them to make the necessary changes and provide appropriate resources. Psychographic and social-demographic factors do not play a significant role according to the results of the study. The myth that burnout “is complaining of a whining and unhappy person” can be dispelled. Burnout is often linked to shame and lack of acknowledgement. Individuals experiencing burnout may not be open to state their feelings due to a variety of reasons such as fear of being judged and the assumption that they are not capable of managing their work. Negative prejudices like these limit individuals from seeking help and speaking out thereby allowing the problem to escalate (Maslach & Leiter 2005). Maslach recommends that burnout interventions should not focus only on the individual but also the job circumstances (Maslach et al, 2012).

Burnout does not only affect work performance but also physical and mental health. Health problems such as sleep problems, cardiovascular illnesses, headaches and high blood pressure may occur as a result of burnout. (American Psychological Association 2015). Studies show that nurses take more sick leaves in a year nurses compared to other professions. (The Telegraph 2015). Burnout and work related stress cost the United States 300 billion dollars in 2002 due to turnover and absenteeism. In 2002, the European commission attributed 20 billion euros per year to work related stress. In Australia, a research study in 2008/2009 indicated that 5.3 billion was used annually to

cater to work related stress complications (European Agency for Safety and Health at Work, 2014). This shows burnout is also expensive and costly.

7.1 Relating findings to theoretical framework

The job demands-resources model is based on the assumption that occupational stress and burnout occur as a result of lack of balance between demands placed on an individual and the resources available to deal with these demands (Bakker & Demerouti 2006).

Basing on the findings from the literature review, some of the causes of burnout are linked to organizational factors with emphasis on nursing management and leadership. Failure of management and leadership to offer support, clinical supervision, job resources, involving nurses in decision making policies etc. causes job dissatisfaction, stress, emotional exhaustion and with time burnout. Occupational factors such as shift work, workload, decision latitude, role conflict and breakdown in teamwork have been found to be the leading cause of burnout among nurses. When nurses have no resources to deal with the emotional pressure of the work, workload, breakdown of teamwork and lack of autonomy, burnout occurs. These results show a strong connection and support of the job-demands resources model. The job demands and expectations to provide good quality care and promote patient safety are exceptionally high and yet there is lack of enough resources in form of adequate staff, staff support, clinical resources etc. to cope with these demands.

The four steps and principles of this model can be applied as a means to prevent or manage burnout among nurses through the following ways; Identification of job demands: Nursing management should identify the job demands that are most likely to cause stress and burnout such as working environment, workload, role clarity and poor working relationships. Addressing job demands: These job demands should be addressed and acknowledged. Nursing management should make sure that there is adequate staff, role clarity is clear, right people are assigned the right tasks. Emo-

tional support should be provided when needed to cope with stressors. Motivation of team members is also key. Identification of job resources: Job resources such as mentoring, clinical supervision, stress management classes, therapies, team building workshops and getaways, training possibilities, positive feedback. Promotion of job resources: Implementing and promoting these resources is the last step. Availability of these resources supports the working environment of the nurses, builds motivation and dedication to the job (Bakker & Demerouti 2006).

Relating findings to the Maslach theory on burnout

Burnout is a psychological condition which occurs as a result of employees' long term exposure to stressful working conditions with limited resources to cope with the stressors eventually leading to burnout. This theory also identifies six risk factors associated with burnout which are workload, lack of control, insufficient rewards, breakdown of community, absence of fairness and value conflicts. (Maslach, Schaufeli & Leiter, 2001).

According to the results from the study, the six factors play a major role in the cause of burnout among nurses therefore showing that this theoretical framework supports the findings from this study in regard to the causes of burnout among nurses. In addition, most the articles in this study reported the high prevalence of emotional exhaustion and cynicism among nurses experiencing burnout. This theory can be implemented in managing and preventing of burnout among nurses (Maslach & Leiter 2005). This can be done by identifying the risk factors and thereafter providing counter measures to the problems as shown in table 5.

Table 5. Identifying the six risk factors of burnout according to the Maslach theory of burnout and providing counter measures. (Henry 2014)

Risk factor	Impact	Intervention
Workload	Emotional exhaustion Dehumanization	Appropriate job and person match. Adequacy of staff Sustainable workload with recovery period and Refreshing.

		Taking breaks between works. Self-care after work.
Control	Job dissatisfaction and Professional efficacy.	Promotion of decision latitude and autonomy. Freedom to participate in Implementation of policies.
Reward and Recognition	Feelings of anger and Resentment.	Job security in terms of salary. Positive feedback.
Community	Depression, isolation, lack of support, loneliness	Supportive work community Team building meetings Encouraging interactions Promotion of good working rela- tionships
Fairness	Injustices, job dissatisfaction, stress, lack of respect	Clinical supervision Team and leadership Education Staff recognition
Value conflicts	Cynicism, stress , poor ethical conduct	Emotional support e.g. after trauma (violent patients, sexual harassment, ethical decisions) Promotion of good nurse Practice environment.

8 CONCLUSION

According to the findings from this study, burnout prevails among staff nurses. Health care organizations and management need to acknowledge the problem of work related stress and provide the much needed appropriate measures. Examining nurses' working conditions and ensuring availa-

bility of resources is likely to improve job satisfaction, decrease turnover and intent to leave. Shortage of nurses is still a problem worldwide. Nurses in developing countries are looking for opportunities in developed countries thus worsening the shortage of nurses in the countries they are departing from (Peterson 2004). Drawing attention to the challenges in nursing profession like burnout and making it a priority to find solutions to these challenges may retain nurses and also be one way of tackling the nursing shortage thus reducing workload which is found to be one of the leading causes of stress and eventually burnout. Favorable working conditions and a good nursing profession image may attract people to consider a career in nursing. Aside from free study grants, job opportunities etc. which are most likely to attract young people, what can be done to retain nurses, improve job satisfaction, patient safety, quality of health care and quality of life for both nurses and patients?

8.1 Strengths, limitations and recommendations

This study used articles for the literature review from studies about burnout among nurses conducted in several countries such as United Kingdom, United States, Singapore, Japan, Belgium, Finland etc. which gives the study a broader perspective from different areas. This also shows that burnout among nurses is not limited to specific countries or continents. Most of the articles used in the study are recent studies conducted at least within the last four years which is advantageous for this study. The issue of consistency is seen in this study because most of the articles had the same findings and results in relation to causes of burnout among nurses and coping measures. The chosen method of research, literature review has benefits that can be viewed as strengths to this study such as evaluation of the current research topic focusing on what has been written about burnout, find missing links in the previously done research and provide recommendations for further studies in the future.

On the downside, this study was not funded. The author came across several valuable books and articles relevant to the study that could be used but required payment and were therefore ruled out which was disadvantageous to the study, the study could have been better if the author had access

to the literature in question. In addition, some of the recommendations provided as coping strategies for the nurses may be costly and therefore discourage implementation thus making them unfeasible. This is also a small study (literature review) consisting of only 14 articles. The author would have preferred to do an extensive research using many more articles or combine the literature review with another qualitative research method involving contact with the nurses through for example in depth-interviews (Most of the articles used in the literature review are quantitative research studies). This would have allowed the author to yield rich data, get more information, explanations, reasoning and put into considerations the nurses' feelings towards burnout. This was not possible due to time limit, ethical permission procedures and protocols as well as the required amount of credits for the study.

As recommendation, research focusing on finding correlations and relationships between psychographic and social- demographic factors and burnout among nurses is highly advocated. In the articles used for the literature review, most studies had conflicting and inconclusive findings in relation to age, experience, marital status, personality traits and their role in causing burnout among staff nurses. The author also recommends that Nursing schools and Universities should include studies and courses about stress management in the nursing profession. These courses can be useful to future nurses as it is inevitable that nursing is a stressful job.

9 REFERENCES

Adali, E, and Priami, M. (2002): Burnout among nurses in intensive care units, internal Medicine wards, and emergency departments in Greek hospitals. *Nursing Web Journal*; 11, 1-19.

AikenLH, Clarke S, Sloane DM, Sochalski J and Silber JH, (2002): Hospital nurse staffing and patient mortality, nurse burnout and job dissatisfaction. Available at <http://jama.jamanetwork.com/article.aspx?articleid=195438> Last accessed 8th October 2015

Adriaenssens J, De Gucht and Maes S.(2015):Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *International Journal of Nursing Studies*; 52 (2), 649-661.

American Psychological Association.(2015): Burnout harms workers' physical health through many pathways. Available at <http://www.apa.org/monitor/jun06/burnout.aspx>. Last accessed 17th October 2015

Aveyard H . 2010: *Doing a Literature Review in Health and Social Care: A Practical Guide* (2nd Edition).

Bakker and Demerouti. (2006): The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*; 22(3)2007, 309-328.

Cimiotti JP, Aiken LH, Sloane DM and Wu ES.(2012): Nurse staffing, burnout, and health care-associated infection. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3509207/pdf/nihms387953.pdf> last accessed 15th September 2015

CBS Radio Canada. (2013): Nearly 25% of Canadian nurses wouldn't recommend their hospital. Available at <http://www.cbc.ca/news/health/nearly-25-of-canadian-nurses-wouldn-t-recommend-their-hospital-1.1304601>. Last accessed 15th October 2015.

Cañadas-De la Fuente GA, Vargas C, San Luis C, García I, Cañadas GR and De la Fuente EI. (2015): Risk factors and prevalence of burnout syndrome in the nursing profession. *International Journal of Nursing Studies*; 52 (1), 240-249.

Donley R. (2013) Challenges for Nursing in the 21st Century. Available at http://www.medscape.com/viewarticle/521379_8

Elo S and Kyngas H. (2008). The qualitative content analysis process, in: *Journal of advanced Nursing*, 62(1), 107-115

European Agency for Safety and Health at Work 2014. Calculating the cost of work-related stress and psychosocial risks. Available at https://osha.europa.eu/en/tools-and-publications/publications/literature_reviews/calculating-the-cost-of-work-related-stress-and-psychosocial-risks. Last accessed 10th November 2015.

Fearon C and Nicol M. (2011): Strategies to assist prevention of burnout in nursing staff. *Nursing Standard*; 26(14), 35-39.

Garrosa E, Moreno-Jiménez B, Rodríguez-Muñoz A and Rodríguez-Carvajal R.(2011): Role stress and personal resources in nursing: A cross-sectional study of burnout and engagement. *International Journal of Nursing Studies*.48 (4), 479–489.

Grubb PL and Grosch-JW. (2012): Alleviating job stress in nurses: approaches to reducing job stress in nurses. Available at <http://www.cdc.gov/niosh/nioshtic-2/20042107.html> Last accessed 8th November 2015

Günüşen N.P and Üstün B (2009): Turkish nurses' perspectives on a programme to reduce burnout. *International Nursing Review*; 56 (2) 237-242.

Halbesleben JR and Buckley MR. (2004): Burnout in organizational life. *Journal of management*; 30(6), 859-879.

Halbesleben JR, Wakefield BJ, Wakefield DS and Cooper LB. (2008): Nurse Burnout and Patient Safety Outcomes Nurse Safety Perception versus Reporting Behavior. *Western Journal of Nursing Research* (Impact Factor: 1.03). 30(5), 560-77.

Heinen MM, van Achterberg T, Schwendimann R, Zander B, Matthews A, Kózka M, Ensio A, Sjetne IS, Moreno Casbas T and Ball J, Schoonhoven L.(2013): Nurses' intention to leave their profession: A cross sectional observational study in 10 European countries. *International Journal of Nursing Studies*. 50 (2), 174-184.

Henry BJ. (2014): Nursing Burnout Interventions. What Is Being Done? *Clinical Journal of Oncology Nursing*; 18 (2), 211-214.

Journal of industrial psychology. SAJIP. (2011): The jobs demands resources model. Challenges for the future research. Available: <http://www.sajip.co.za/index.php/sajip/article/view/974/1038>. Accessed: 20.10.2015.

Sahraian A, Fazelzadeh A, Mehdizadeh AR and Toobae SH. (2008): Burnout in hospital nurses: a comparison of internal, surgery, psychiatry and burns wards. *International Nursing Review*; 55, 62–67

International council of nurses. (2015): The code of ethics for Nurses. Available at http://www.icn.ch/images/stories/documents/about/icncode_english.pdf Last accessed 26th November 2015.

Miller JF. (2011): Burnout and Its Impact on Good Work in Nursing. *Journal of Radiology Nursing*; 30 (4), 146–149

Kozier, Erb J, Berman A, Snyder S, Lake R and Harvey S. (2011): *Fundamentals of nursing; Concepts, process and practice*, second edition.

Koivula, Paunonen and Laippala. 2000: Burnout among nursing staff in two Finnish hospitals. *Journal of Nursing Management*; 8(3), 149–158

Kanai-Pak M, Aiken LH, Sloane DM and Poghosyan L. (2008): Poor work environments and nurse inexperience are associated with burnout, job dissatisfaction and quality deficits in Japanese hospitals. *Journal of Clinical Nursing*. 17 (24), 3324-3329.

Nurse to patient ratios impact burnout worldwide. (2012): *Australian Nursing Journal*. 19 (10), 19-19. 1/2p.

Redfern J. (2012): Manage workplace chaos by building your resilience. *Nursing Standard*; 27(3), 63-63.

Wright K. (2014): Alleviating stress in the workplace: advice for nurses. *Nursing Standard*; 28 (10), 37-42.

Lasebikan V and Oyetunde M. (2012): Burnout among Nurses in a Nigerian General Hospital: Prevalence and Associated Factors. Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3350958/pdf/ISRN.NURSING2012-402157.pdf> Last accessed 9th December 2015

Lim J, Hepworth J and Bogossian F. (2011): A qualitative analysis of stress, uplifts and coping in the personal and professional lives of Singaporean nurses. *Journal of Advanced Nursing*; 67 (5), 1022-1033.

Leiter MP and Maslach C. (2009): Nurse turnover: the mediating role of burnout. *Journal of Nursing Management*; 17(3), 331–339

Maslach C and Jackson S. (1983): The measurement of experienced burnout. Available at <http://onlinelibrary.wiley.com/doi/10.1002/job.4030020205/pdf> Last accessed 11th September 2015

Maslach C, Schaufeli WB and Leiter MP. (2001): Job burnout. *Annual Review of Psychology*; 52 (1), 397.

Maslach C and Jackson S. (1982): Burnout in organizational settings. *Applied social psychology annual*; 5

Maslach C & Leiter MP. (2005): REVERSING BURNOUT: How to rekindle your passion for your work. Available at [http://www.choixdecARRIERE.com/pdf/6573/Maslach_Leiter \(2005\).pdf](http://www.choixdecARRIERE.com/pdf/6573/Maslach_Leiter_(2005).pdf). Last accessed 24th November 2015.

Maslach C, Jackson S and Leiter MP. 2012: Making a significant difference with burnout interventions: Researcher and practitioner collaboration. *Journal of Organizational Behavior*; 33, 296–300

Maslach, Leiter. (1993.): Burnout as a developmental process: Consideration of models. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*. Washington, DC: Taylor & Francis.

National Nurses United. (2015): Beating the burnout: Nurses struggle with physical, mental and emotional exhaustion at work. Available at <http://www.nationalnursesunited.org/news/entry/beat-ing-the-burnout-nurses-struggle-with-physical-mental-and-emotional-exha/>. Last accessed 15th October 2015.

Poghosyan L, Clarke SP, Finlayson M and Aiken LH. (2010): Nurse Burnout and Quality of Care: Cross-National Investigation in Six Countries. *National Institutes of health*; 33(4), 288–298.

Peterson. (2004): The global impact of the nursing shortage. Available at http://www.nсна.org/Portals/0/Skins/NSNA/pdf/Imprint_Feb04_Peterson.pdf Last accessed 4th December 2015.

Resnik DB.(2011): What is Ethics in Research & Why is it Important? Available at <http://www.niehs.nih.gov/research/resources/bioethics/whatis/> Last accessed 27th November 2015.

Rosengren, K. E. (1981). *Advances in Scandinavia content analysis: An introduction*. In K. E. Rosengren (Ed.), *Advances in content analysis* (pp. 9-19). Beverly Hills, CA: Sage

Royal college of nursing RCN. (2003): *Defining nursing*, London: Royal College of nursing

Royal college of nursing. (2015): "Nursing shortage is very real". Available at <https://www.rcn.org.uk/newsevents/news/article/uk/nursing-shortage-is-very-real-rcn-tells-migration-advisory-committee> Last accessed 19th October 2015.

Santos LS and De Brito Guirardello E.(2007): Nurses' attention demands in the work setting. Available at http://www.scielo.br/scielo.php?script=sci_art-text&pid=S010411692007000100005&lng=en&nrm=iso&tlng=en Last accessed 12th September 2015

Teng CI, Chang SS and Hsu KH. (2009): Emotional stability of nurses: impact on patient safety. *Journal of Advanced Nursing*; 65(10), 2088–2096

The Telegraph 2015. New figures show soaring NHS stress leave, and 15 days sickness a year. Available at <http://www.telegraph.co.uk/news/health/news/11776802/New-figures-show-soaring-NHS-stress-leave-and-15-days-sickness-a-year.html>. Last accessed 29th October 2015.

University of Twente. (2015): Data collection methods. Available at <https://www.utwente.nl/igs/datalab/datacollection/methods/>. Last accessed: 25th January 2015.

Vahey DC, Aiken LH, Sloane DM, Clarke SP and Vargas D. (2004): Nurse Burnout and Patient Satisfaction. *National Institutes of health*; 42(2), II57–II66.

Van Bogaert P, Meulemans H, Clarke S, Vermeyen K and Van de Heyning P. (2009): Hospital nurse practice environment, burnout, job outcomes and quality of care: test of a structural equation model. *Journal of Advanced Nursing*; 65(10), 2175-2185.

Van Bogaert P, Kowalski C, Weeks SM, Van Heusden D and Clarke SP. (2013): The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care: A cross-sectional survey. *International Journal of Nursing Studies*; 50(12), 1667-1677.

Vargas C, Cañadas GA, Aguayo R, Fernández R and de la Fuente EI. (2014): Which occupational risk factors are associated with burnout in nursing? A meta-analytic study. *International Journal of Clinical Health & Psychology*.14 (1), 28-38.

World health organization. (2010): Bulletin of the World Health Organization: Wanted: 2.4 million nurses, and that's just in India. Available at <http://www.who.int/bulletin/volumes/88/5/10-020510/en/>. Last accessed 28th September 2015.

Wilkinson D. (2000): *Researcher's Toolkit: The Complete Guide to Practitioner Research*.

APPENDIX 1 MASLACH BURNOUT INVENTORY (MBI)

Questions	Never	A few times a year	Once a month	A few times per month	Once a week	A few times per week	Every day
Section A	0	1	2	3	4	5	6
I feel emotionally drained by my work							
Working with people all day long requires a great deal of effort.							
I feel like my work is breaking me down.							
I feel frustrated by my work.							
I feel I work too hard at my job.							
It stresses me too much to work in direct contact with people							
I feel like I'm at the end of my rope.							
Total Score section A							
Section B	Never 0	A few times a year 1	Once a month 2	A few times per month 3	Once a week 4	A few times per week	Everyday 6
I feel I look after certain patients/clients impersonally, as if they are objects.							
I feel tired when I get up in the Morning and have to face another day at work.							
I have the impression that my Patients/clients make me responsible for some of their problems.							
I am at the end of my patience at the end of my work day.							
I have become more insensitive to people since I've been working.							
I'm afraid that this job is making me uncaring							

Total score section B							
Section C	Never 0	A few times a year 1	Once a month 2	A few times per month 3	Once a week 4	A few times per week	Everyday 6
I accomplish many worthwhile things in this job.							
I feel full of energy.							
I am easily able to understand what my patients/clients feel.							
I look after my patients'/clients' Problems very effectively.							
In my work, I handle emotional Problems very calmly.							
Through my work, I feel that I have a positive influence on people.							
I am easily able to create a relaxed atmosphere with my patients/clients.							
I feel refreshed when I have been close to my patients/clients at work.							
Total score section C							