

# WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH

SJIF Impact Factor: 5.464

ISSN: 2457-0400 Volume: 4. Issue: 3. Page N. 60-66 Year: 2020

Review Article <u>www.wjahr.com</u>

# **BURNOUT SYMPTOMS AMONG NURSES: LITERATURE REVIEW**

Annu\*1, Dr. Poonam Sharma2 and Jyotsna Jacob3

<sup>1</sup>M.Sc. (Psychiatric Nursing), Amity College of Nursing, Amity University, Haryana.
<sup>2</sup>Associate Professor, Amity College of Nursing, Amity University, Haryana.
<sup>3</sup>Assistant Professor, Amity College of Nursing, Amity University, Haryana.

Received date: 11 March 2020 Revised date: 01 April 2020 Accepted date: 22 April 2020

\*Corresponding author: Annu

M.Sc. (Psychiatric Nursing), Amity College of Nursing, Amity University, Haryana.

# **ABSTRACT**

The concept of stress in the workplace is of great importance in health care. Among health care professionals especially nurses are generally considered a high risk group regarding work stress and burnout. Burnout is a psychological term for the negative response to chronic job-related emotional stress. In other words, burnout results from people giving too much of their time, energy and effort on the job over a long period of time without adequate time to recover physically or emotionally. When an individual attempts to minimize the negative feelings arising from a negative event, this is considered as coping process. Worldwide, health professionals and the hospital authorities have become concerned about the concept of 'burnout' and have tried to solve this problem.

**KEYWORDS:** Burnout Symptoms, Coping Strategies, Nurses.

# INTRODUCTION

- Job stress is defined by the National Institute for Occupational Safety and Health Administration (NIOSH) as 'the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker'.
- The term "burnout" was firstly used by the American psychologist, Herbert Freudenberger. Burnout is included in the 11<sup>th</sup> revision of the international classification of disease (ICD-11) as an occupational phenomenon. It is not classified as a medical condition. According to ICD-11, Burnout is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: Feelings of energy depletion or exhaustion, Increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and Reduced professional efficacy
- The prevalence of burnout among physicians ranges from 25% to 60% and occurs at a level sufficient to affect personal or professional performance. Among nurses/midwives, 15%-85% have reported burnout. The prevalence varies by medical specialty and working conditions. When comparing nurses to physicians or other healthcare workers, nurses consistently reported higher levels of burnout.

• When an individual attempts to minimize the negative feelings arising from a negative event, this is considered as coping process. Coping is usually of two types, emotion focused and problem focused. The problem focused coping is external, in which an individual attempts to manage or change the problem causing the stress. Whereas in emotion focused activities, coping attempts to alleviate emotional stress, which may be internally directed.

# RESEARCH METHODOLOGY

The conceptual framework used for the study was based on Betty Neuman Model. A quantitative and descriptive survey research design was used with purposive sampling technique. Total one hundred (100) staff nurses were selected for the research study conducted in Hospital, Haryana. Tool were consisting of structured rating scale to assess level of perceived burnout symptoms among staff nurses and structured rating scale to assess the coping strategies to prevent or deal with burnout symptoms among staff nurses.

### REVIEW OF LITERATURE

The review of literature for the present study has been organized under two following headings:

• Review of literature related to burnout syndrome among staff nurses

**Annu** *et al.* Page **61** of **66** 

 Review of literature related to coping strategies adopted by staff nurses

# Literatures related to burnout syndrome among staff nurses

**A.** A descriptive and correlational study was conducted to investigate burnout levels of nurses working in a neonatal intensive care unit (NICU) and the effects of burnout on their quality of life. The researcher performed this study in the northern region of Turkey in 2010. The study population initially consisted of 85 NICU nurses. The entire population of NICUs were used in this study, rather than taking a sample group. However, five nurses were excluded as they did not wish to participate and were on annual leave. Therefore, the sample represented 94% of the NICU nurse population at the two hospitals. The researcher obtained data using a questionnaire to demographic and occupational uncover the characteristics of the nurses, and conducted face to face interviews via the Maslach Burnout Inventory (MBI) and the World Health Organization Quality of Life- BREF (WHOQOL-BREF). Results revealed that the score means of emotional exhaustion, depersonalization and personal accomplishment were 14.90+ 5.53, 3.87+ 2.77 and 11.43+\_4.63, respectively. The results showed the nurses had burnout at moderate levels with regard to emotional exhaustion and personal accomplishment, low levels of depersonalization. In addition, the study showed a significant negative relationship in many sub-scales of the burnout and quality of life scale. The study found that, as burnout level increased, the quality of life of the nurses decreased. It suggested that several measures must be taken to prevent burnout in nurses.

B. A cross sectional study was conducted to assess occupational stress amongst nurses from two tertiary care hospitals in Delhi. A hospital based cross sectional study was carried out on 87 randomly selected staff nurses working in two tertiary care teaching hospitals of Central Delhi. Data was collected using pre-tested and selfadministered questionnaire. Socio demographic profile, stressors in daily life, stressors at workstation and total stress level was also assessed. 87.4% of nurses from the sample reported occupational stress. The prevalence of occupational stress amongst nurses was 87.4%. 'Time Pressure' was found to be the most stressful whereas 'Discrimination' was the least stressful of the given possible sources of stress in everyday life. Other highly stressful sources were: handling various issues of life simultaneously with occupation such as caring for own children/parents, own work situation and personal responsibilities. 'High level of skill requirement of the job' was the most important stressor and 'helpfulness' of supervisors/senior sisters' was the least significant stressor directly related to nursing profession. Other significant work related stressors were: the fact that their jobs required them to learn new things and that they had to attend to, too many patients at the same time. High prevalence of stress was found amongst nurses, and

suggests the need for stress reduction programmes targeting specific important stressors.

C. A research study conducted to determine whether there are any internal psychological factors relevant to burnout in psychiatric nurses in India. We recruited 101 psychiatric nurses scoring less than two in general health questionnaire, version 12 (GHQ-12) from two psychiatric hospitals after obtaining informed consent. All subjects filled up a sociodemographic data sheet along with global adjustment scale, emotional maturity scale, PGI general well-being scale, locus of control scale, and Copenhagen burnout inventory (CBI). Results were age, duration of total period of nursing, prior military training, locus of control, sense of general wellbeing, adjustment capabilities, and emotional maturity had significant relation with burnout. Of them, emotional maturity was the most significant protective factors against burnout along with adjustment capabilities, sense of physical well-being, and military training in decreasing significance. Together they explained 41% variation in total burnout score which is significant at < 0.001 level. An internal locus of control was inversely correlated with burnout, but failed to predict it in regression analysis. Emotional maturity, adjustability, sense of general physical well-being as well as prior military training significantly predicted lower burnout. Of them, emotional maturity was the most important predictor. Internal locus of control was also correlated with lower burnout.

D. A cross sectional study was conducted to find out the level and different sources of workplace stress among nursing staff. The cross sectional study was carried out among 70 female staff nurses working in different departments during 2012. Stratified random sampling technique was adopted to include nurses working in various departments of hospital. Out of total, majority (66%) were serving as full time whereas 34% were working on contract basis. The mean working hours in a week were 54.12+\_6.35 hrs. on the scale of mental wellbeing, the mean score for state of mind, Resilience and confidence level were 16.33+\_4.17, 15.12+\_3.12 and 8.86+\_3.55. These scores were more than their corresponding standard scores; 20.67, 17.66 and 10.37 respectively. Similarly the mean score for physical symptoms and energy level were 9.68+\_2.12 and 10.45+\_3.65. the standard score on these subscales are 14.95 for both the categories. Mean score of the sample were almost very less as compared to standard values. On the scale for sources of pressure, the mean score on 21.15 + 5.25workload was and on responsibility the mean score was 16.31+ 3.67. The mean scores of participants on all these items were more than the standard scores. The findings indicate that the nursing staff at this workplace has a high index of stress. Majority of it generates from the administrative disorganization rather than from the personal or the monitory factors.

Annu *et al*. Page **62** of **66** 

- **E.** A descriptive cross-sectional study was conducted to examine the level of burnout among nurses and its association with socio-demographic variables. The study was conducted among 200 nurses working in a selected tertiary care hospital at Nellore, A.P. Burnout was evaluated by the Oldenburg Burnout Inventory. The result of the study concludes that majority of the nurses 108 (54%) have reported moderate level of burnout and 92 (46%) reported severe level of burnout. 52 (26%) nurses felt tired because of work, 92 (46%) talked about their work in a negative way, work pressure is reported to high in 113 (56.6%), work was found to be a positive challenge among 112 (56%), 66 (33%) reported work drains them emotionally, 78 (39%) reported that they become disconnected with this type of work, work makes them sickened reported by 64 (32%), 153 (76.5%) engage in doing more and more work. A statistically significant association is seen between the sociodemographic variables and years of experience and type of coping method at p<0.05 level. The study has provided an insight that majority of the nurses have burnout. Early identification and intervention at the right time may minimize the impact of burnout and assure a life.
- F. A descriptive, cross sectional study was conducted to determine the level of burnout among nurses working in ICU and emergency department in a selected referral hospital of Kigali. A quantitative approach was adopted. Sixty nurses were involved in the study and they were selected using a total population sampling strategy. A self-administered questionnaire and Maslach Burnout Inventory Human Service Survey were used to collect data. Results were found high level of burnout among 61.7% of the participants under study. High workload and intention to leave were associated with burnout (p<0.05). Burnout was measured by high Emotional Exhaustion (EE) 29 (48.3%), high Depersonalization (DP) 15 (25%) and low Personal Accomplishment (PA) 30 (50%). The high level of burnout identified among ICU and emergency department nurses is mainly associated with high workload and intention to leave the work within the next 12 months.
- G. A study was conducted to examined the level of stress among nurses working in intensive care units of the hospitals in Navi-Mumbai, Maharashtra, India. The descriptive survey design was adopted for the study in order to identify level of stress and its association to selected demographics. The stress level was identified using modified version of Expanded Nursing Stress Scale. The results of the study showed that 42% of nurses were severely stressed, 34% had moderate stress, 14% had mild stress and 10% had very severe stress. The very severe stress level was highest (30%) in the area of patient and families followed by problems related to supervisors (22%). A significant relationship was found between the level of stress and demographic variables such as age, years of experience and educational qualification.

- H. A cross sectional and correlational study was conducted to assess the level of burnout among Jordanian nurses and to investigate the influence of leader empowering behaviours (LEBs) on nurses feelings of burnout in an endeavour to improve nursing work outcomes. Leader empowering behaviours scale and the Maslach Burnout Inventory (MBI) were employed to collect data from 407 registered nurses, recruited from 11 hospitals in Jordan. The Jordian nurses exhibited high levels burnout as demonstrated by their high scores for Emotional Exhaustion (EE) and Depersonalization (DP) and moderate scores for Personal Accomplishment (PA). Factors related to work conditions, nurses demographic traits, and LEBs were significantly correlated with the burnout categories. A stepwise regression modelexposed 4 factors predicted EE: hospital type, nurse work shift, providing autonomy, and fostering participation in decision, gender, fostering participation in decision making, and department type were responsible for 5.9% of the DP variance, whereas facilitating goal attainment and nursing experience accounted for 8.3% of the PA variance. This study highlights the importance of the role of nurse leaders in improving work conditions and empowering and motivating nurses to decrease nurses feelings of burnout, reduce turnover rates, and improve the quality of nursing care.
- I. A quantitative, descriptive study was conducted to investigate factors associated with burnout syndrome, to determine its prevalence and establish the levels of burnout amongst Intensive Care Unit nurses working in the 3 major hospitals in Gaborone, Botswana. A selfadministered questionnaire was used to collect data from 40 respondents/nurses who met the inclusion criteria. Levels of burnout were assessed using the English version of the Maslach Burnout Inventory-Human Services Survey. Results revealed that burnout exists at low levels in these three Gaborone hospitals. Emotional exhaustion had an average score of depersonalization had an average of 1.53 and a variance of 1.52 and personal accomplishment had an average of 4.49, a variance of 1.01. Factors that can lead to burnout were highly prevalent. This translates to need for emotional and physical support systems, improving individual and organizational strategies in relation to recruitment and identifying training needs in prevention of factors leading to burnout in the Intensive Care Unit environments.
- **J.** A cross sectional, observational study was conduct to determine the extent and causes of occupational stress among nurses at Bhabha Atomic Research Centre Hospital. Ninety-seven staff nurses without any preexisting psychiatric illness were evaluated for occupational stress using the expanded nursing stress scale. The extent of somatization was measured using the patient health questionnaire-15, in a cross sectional study. Results were an internal consistency of 0.945 was noted using cronbach's alpha. 51.5% nurses experienced

**Annu** *et al.* Page **63** of **66** 

mild, 34% experienced moderate, and 2.10% experienced severe stress. Conflicts with supervisors, patients, and their families and workload were the main causes of occupational stress while discrimination was the least affected domain. Nurses with 6-10 years of experience had maximum stress. The stress levels correlated with the extent of somatic complaints. Occupational stress is prevalent in nurses. It may be higher in nurses with lesser experience and it can be associated with somatic complaints.

- **K.** A descriptive, cross sectional study identified the occurrences of burnout and some associated factors among nurses working in various departments at Indira Gandhi College, Shimla, and Himachal Pradesh, India which is a tertiary care health centre in the state. A total of 257 nurses screened in the hospital out of which 81 completed the study. Eighty-one nurses answered a selfadministered questionnaire (sociodemographic aspects, working conditions, and Maslach Burnout Inventory). Mean scores were compared using ANNOVA test. Student T-test was applied to compare mean scores between the groups. All the participants were females (100%), with up to five years' experience. High levels of emotional stress (45.7%) and depersonalization (24.7) were identified, as well as low professional fulfilment (6.2%), and 8.6% presented burnout. The following factors were associated: high levels of emotional stress and always perform tasks very quickly (p=0.04) and receiving a salary incompatible to the effort employed (p=0.02) and often perform tasks very quickly (p=0.008). for 19.0%, at least two of the three dimensions pointed to high propensity to the syndrome. However, on a long term basis, persisting in stressful work conditions enhances emotional exhaustion, depersonalization and feelings of low fulfilment at work.
- L. A cross sectional study was conducted to find the level and factors of burnout among emergency healthcare workers in India. This cross-sectional, questionnairebased study assessed burnout of the doctors, nurses, and paramedics working in an emergency department of a busy tertiary care teaching institute. Association of demographic variables and factors influencing burnout was explored. Results were low level of emotional exhaustion, moderate level in depersonalization, and moderate level in the lack of personal accomplishment was reported by participants. Children and partner were found to be protective factors. Working hours, duration and status (permanent/contractual) of service influenced burnout. Knowing the level of burnout and their determinants can help in formulating measures of improving the work environment. A healthy workforce ensures high quality of healthcare and patient satisfaction.

# Literature related to coping strategies adopted by staff nurses.

**A.** A study was conducted among 60 nurses working in multispecialty in Mangalore, using convenient sampling

technique. The objective was to determine the occupational stress and coping strategies used by nurses to overcome workplace stress. The tools used were Job Stress Index and Coping Checklist. Different coping strategies were used by nurses such as discussion with spouse, problem solving and engaging themselves in hobbies like reading, music etc. the results showed strong negative correlation between job stress and use of coping strategies by nurses.

- **B.** A comparative study was conducted to assess an stress busters among nurses using a questionnaire developed by the researcher. It was found that low salary, job security, interpersonal skills and improper behaviour of relatives and friends were main stressors for the nurses working in private hospitals. The government hospital nurses encounter stressors such as number of working hours, frequent change in shifts; poor quality of infrastructure, the number of patient handled every day and dealing with patients with contagious disease. Spending time with the family was found to be main stress buster for nurses.
- C. A study was conducted to examined stress and coping abilities of 329 nurses working in the super speciality hospital in Kerala, India. Descriptive survey design was used. The data was collected using Expanded Nursing Stress Scale (ENSS) and Brief Cope (Carver 1997). The most frequently stressful areas rated by respondents were 'patients and their family' and 'workload', whereas 'inadequate emotional preparation' and 'discrimination' rated as least stressful situations. Further analysis revealed that nurses work in operation theatres and emergency units experience high level of stress in the area of conflicts with other care professionals. Nurses working in ICU's experience high level of stress in area of feeling inadequately prepared to help with the emotional needs of a patient or patient's family. The results indicated use of adaptive positive appraisal strategies being frequently used by nurses.
- **D.** A research study was carried out a study to determined level of stress and coping among 104 nurses in Udupi and Mangalore district, Karnataka. The setting of the study was selected Medical colleges and government hospitals. Nursing Stress Scale (NSS) and Ways of coping questionnaire was used to measure stress and coping respectively. The results revealed majority of samples experienced low stress followed by moderate and high stress. Sub areas of stress were death & dying and workload whereas lack of staff support was least stressful. Positive reappraisal followed by "seeking social support" was found to be most frequently used coping and "accepting responsibility" was found to be least used. It was found that nurses with diploma qualification, married and working in intensive care units experienced higher stress.
- **E.** A quantitative study was conducted to find out stress coping mechanisms and burnout presence among nurses

Annu *et al*. Page **64** of **66** 

practicing in Latvia. The instruments which used for data collection: demographic questionnaire, R.S. Lazarus and S. Folkman's, the ways of coping scale and Maslach Burnout Inventory. The ways of coping scale completed by 484 nurses working in healthcare institutions in different regions of Latvia in the age range from 21 to 66 years. The highest values have: planful problem-solving, self-controlling and positive reappraisal, accepting responsibility and seeking social support; while the lowest values can be seen in two scales- confrontive coping and escape/avoidance. The prevailing ways of coping stress in the sample are planful problem solving, self-controlling and positive reappraisal. Maslach burned out inventory which was completed by 587 practicing nurses. Age range of respondents was from 22 to 68 years. Descriptive statistical parameters for Maslach Burnout Inventory by subscales: mean for Emotional Exhaustion subscale-22.75 (SD=10.75), Depersonalization subscale was 7.52 (SD=5.30) and for rank of Personal achievement subscale- 34.57 (SD=8.22).

- **F.** A descriptive study was conducted to examined the factors responsible workplace stress and coping abilities of nurses caring for the patients in intensive care units. A descriptive exploratory survey design was used with sample size of 100 using non-probability purposive sampling method. The sample consisted of nurses working in two hospitals under private trust in Maharashtra, India. The tools used for data collection were stress rating scale and coping questionnaire. The study showed that majority (59%) had good coping abilities and 41% of nurses had average coping abilities. There was no impact of demographic variables of nurses on their stress or coping abilities. It revealed that there was no significant association between the level of stress and coping abilities.
- **G.** A cross sectional, descriptive study was conducted to explore the coping strategies used by nurses working in intensive care units of hospitals affiliated to Jahrom University of Medical Sciences. It composed of 107 nurses working in the intensive care units of hospitals. Sampling was based on the simple random method. Data was collected using a two part questionnaire: demographic characteristics, and Jallowice standard coping questionnaire. The results showed that in case of problem focused coping strategies, 43% of the participants were poor, 40.2% were moderate, and 16.8% were satisfactory in their application of the strategies. In the case of emotion focused coping strategies, 33.6% of the participants were poor, 25.2% were moderate, and 41% were satisfactory in their application of the strategies. Nurses working in intensive care units employ problem focused coping strategies at poor and moderate levels, while their application of emotion focused coping strategies is satisfactory. In view of the inevitability of certain stressful factors in nursing and the necessity of reducing the mental and behavioural consequences of stress, it is essential that authorities at health

organizations take measures to improve nurses professional quality by teaching them effective coping techniques.

**H.** A study was conducted to investigate the stress and coping among married staff nurses using purposive sampling technique. The tools used for data collected were developed by the researcher. The stress score was highest in the professional area and overall stress score was moderate. The coping strategies used by the nurses included planful problem solving, confrontive coping, self-control, and seeking social support. Other ways included escape/avoidance and accepting responsibility, confrontive coping. The least coping strategy used by the nurses in the area of escape avoidance. Study findings revealed significant negative relationship between stress and coping strategies. No association was found between perceived stress level and coping strategies with the demographics of the nurses.

### **SUMMARY**

Workplace plays an important vital role in everyone's life. It may also cause stress to an employee. Exhaustion can occur due to chronic job stress. Health care professionals are at high risk for burnout especially in highly stressful conditions. Burnout is more prevalent among staff nurses who are working in high dependency wards. It can also lead to further more complication. Due to excessive stress staff nurses lose their ability to cope with that and it also affects their personal and professional life.

In this regards burnout is associated with feelings of hopelessness, difficulty in dealing with work and not able to provide quality of care to patients. Every staff nurses have their own coping level to deal with the stress. Some staff nurses use positive coping strategies and some of them use negative coping strategies. According to person it differs but positive and healthy coping strategies should be used to deal with burnout symptoms that will lead to a positive well-being. Then staff nurses are able to provide quality of care to the patients.

The present study was evaluator in nature. It is survey and quantitative type of approach. The main purpose of the study was to assess the burnout symptoms and coping strategies among staff nurses.

# DISCUSSION

The literature was reviewed to understand about the concept of burnout symptoms and coping strategies and help the researcher to identify significant findings who worked in area of highly dependence units for burnout symptoms and coping strategies. The researcher referred the empirical studies for better understanding in literature. Sources of information were including books, journals, dissertation, thesis, internet and online databases.

**Annu** *et al.* Page **65** of **66** 

Best and Kahn (1992), states that review of literature helps the researcher in many ways. It assists to assess what is already known, what is still unknown and untested, justified the need for replication, throw some light in the feasibility of the study and problems that are encountered.

# **Study Limitations**

The study was confined to a small no. of staff nurses (100) participating in the study. The study was confined to Emergency, OT, ICU, CCU. This limits the generalization of the findings.

### CONCLUSIONS

Very few studies have been documented on burnout symptoms and coping strategies among nurses in India. Workplace stress and coping has been researched on a large scale and easy to get published data about it but the findings may not be relevant to nurses. International hospital settings and provision of health services are different from those in India. It is also not appropriate to use results of previous international studies to explain burnout symptoms and coping strategies among nurses.

#### ACKNOWLEDGEMENT

The researcher student is highly thankful to her research Guide Dr. Poonam Sharma and research co-guide Ms. Jyotsna Jacob for timely guidance and constant support throughout the research study and special thanks to all the staff nurses who have cooperated and participated in this study.

Source of Funding: - The researcher student declares that no funds were received from anyone.

Ethical Clearance: - The clearance was taken from the hospital ethical committee.

# REFERENCES

- 1. Vati Jogindra. Nursing Management and Administration. 1<sup>st</sup> edition. Jaypee Brothers Medical Publishers (P) Ltd, 532-533-534.
- Wilson Nicolau Fernandes, Dr. R. Nirmala. Workplace stress and coping strategies among Indian nurses: Literature Review. Asian Journal of Education and Research, 2017; 7(3): 449-454.
- 3. Thorsen VC, Tharp AL, Meguid T. High rates of burnout among maternal health staff at a referral hospital in Malawi: A cross-sectional study. BMC Nurs, 2011; 10: 9.
- Burn-out an "occupational phenomenon": International Classification of Diseases [Internet]. 2019 {cited 2020 jan}. Available from: https://www.who.int/mental\_health/evidence/burn-out/en/.
- 5. Stamm BH. The Concise ProQOL Manual {internet}. Pocatello. ID: PrroQOL.org, 2010. {cited 2012 Sep 27}. 78 p. available from:

- http://www.proqol.org/uploads/ProQOL\_Concise\_2 ndEd\_12-2010.pdf.
- 6. McManus IC, Winder BC, Gordon D. the causal links between stress and burnout in a longitudinal study of UK doctors. Lancet, 2002; 359: 2089-90. doi: 10.1016/S0140-6736(02)08915-8.
- 7. Yashika Negi, Rajni Bagga. Burnout among Nursing Professional in Tertiary Care Hospitals of Delhi. Journal of Health Management, 17(2): 163-177.
- 8. ATS Public Health information series. American thoracic society [Internet]. Am J Crit Care Med. 2016 {cited 2020 Jan}; vol. 194: p1-p2. available from: https://www.thoracic.org.
- 9. Mohammad Mehdi Salaree, Armin Zareiyan, Abbas Ebadi and Mohammad Salaree. Coping strategies used by Iranian Nurses to deal with Burnout: a qualitative research, 2014 Aug 15; 6(6): 1916-9736.
- 10. Chuang C, Tseng P, Lin C, Lin K, Chen Y. Burnout in the intensive care unit professionals. Medicine (Baltimore), 2016; 95(50): 1-12.
- 11. Zhang X, Huang D, Guan P. Job burnout among critical care nurses from 14 adult intensive care units in northeastern China: a cross-sectional survey. BMJ, 2014; 4: 1-8.
- 12. Harkin M, Melby V. Compairing burnout in emergency nurses and medical nurses. Clin Nurs Stud, 2014; 2(3): 152-63.
- 13. Vicki Hess. The Nurse Managers Guide to Hiring, Firing and Recruiting. 1st ed. Indianapolis: Sigma Theta Tau International, 2010.
- 14. Michael P Leiter, Christina Maslach. Nurse Turnover: the mediating role of burnout. Journal of Nursing Management, 2009; (17): 331-339.
- Marie Cecile Poncet et al. Burnout syndrome in critical care nursing staff. American journal of respiratory critical care medicine, 2007; 175: 698-704.
- 16. Aynur Aytekin, Sema Kuguoglu, Fatma Yilmaz. Burnout levels I neonatal intensive care nurses and its effects on their quality of life. Australian Journal of Advanced Nursing, 31(2).
- 17. Bhatia N, Kishore J, Anand T, Jiloha RC. Occupational Stress amongst Nurses of Two Tertiary Care Hospitals in Delhi. AMJ, 2010; 3(11): 731-738.
- 18. Chakraborty R, Chatterjee A, Chaudhary S. Internal predictors of burnout in psychiatric nurses: An Indian study. Ind Psychiatry J., 2012; 21: 119-24.
- 19. Adiba Siddiqui, Abhishek Singh, Anu Bhardwaj, Rakesh Arya, Anil Sharma. A cross sectional study on workplace stress among nursing staff at a tertiary care teaching hospital in Haryana. Research and Reviews: A Journal of Medicine, 2013; 19-22. ISSN: 2249-8648.
- 20. Ms. Rajeswari H., Dr. B. Sreelekha. Burnout Among Nurses. International Journal of Scientific Research, 2015Aug; 4(8): 2277-8179.
- 21. Cishahayo EU et al. Int J Res Med Sci., 2017 Dec; 5 (12): 5121-5128.

Annu et al. Page 66 of 66

22. Rola H. Mudallal, Wafa'a M. Othman, and Nahid F. Al Hassan. Nurses' Burnout: The Influence of Leader Empowering Behaviors, Work Conditions, and Demographic Traits. The Journal of Healh Care Oganization, 2017; 54: 1-10.

- 23. Buhle Mushonga, Virgininia Dube-Mawerewere. Factors that contribute to burnout syndrome among critical care nurses in Intensive Care Units, Botswana. Int J of Nursing Sci., 2017; 7(4): 91-95.
- Chaudhari AP, Mazumdar K, Motwani YM, Ramdas D. A profile of occupational stress in nurses. Ann Indian Psychiatry, 2018; 2: 109-14.
- Sharma RC et al. Int J Res Med Sci., 2018 Dec; 6 (12): 3959-3963.
- 26. Atanu Baruah et al. degree and factors of burnout among emergency healthcare workers I India. Int J Sci Res (Ahemedabad). 2019 April; 8(4): 41-45.
- 27. Liana Deklava et al. / Procedia- Social and Behavioural Sciences, 2014; 159: 261-267.
- Somayeh Ramezanli, Afifeh Rahmanian Koshkaki, Malihe Talebizadeh, Zohreh Badiyepeymaie Jahromi, Marzieh Kargar Jahromi. Int. J. Curr. Microbiol. App. Sci., 2015; 4(4): 157-163.
- 29. Chaudhary Roy S S. Text book of Nursing Research. First Edition. Kumar Publishing House: New, 2010; 30.
- Polit and Hungler. Essentials of Nursing Research Methods Appraisal and Utilization. 4<sup>th</sup> ed. Philadelphia: Lippincott Publications, 1997; 451: 289-300.
- 31. Polit D.F, Beck TC. Nursing Research-Generating & Assessing Evidence for Nursing Practice. 8<sup>th</sup> Edition. Wolter Klumer (India) Pvt. Ltd: New Delhi, 2011; 339: 340.
- 32. Sharma Suresh K. Nursing Research & Statistics. 3<sup>rd</sup> edition.ELSEVIER New Delhi, 163: 251-269.
- 33. Burns N, Groove S.K. The Practice of Nursing Research. 3<sup>rd</sup> Edition. W.B. Saunders Company, 1997; 34.
- 34. Indrayan A. Basic Methods of Medical Research. 3<sup>rd</sup> Edition. AITBS Publishers: India, 2013; 370-390.
- 35. Best, J.N. & Kahn, J. V. Research in education. New Delhi: Prentice hall publications, 1992.