

A QUASI-EXPERIMENTAL PILOT STUDY TO ASSESS THE EFFECTIVENESS OF STRESS MANAGEMENT INTERVENTIONS ON JOB STRESS AND COPING STRATEGIES AMONG THE STAFF NURSES WORKING IN CRITICAL CARE UNITS OF SELECTED HOSPITAL AT DINDIGUL IN TAMILNADU

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ABSTRACT: Stress is defined as any event, whether internal or environmental, that exceeds the adaptive or resistance resources of individual or social systems. It is a process that involves organic and psychic changes with relevance to the cognitive system and how it interprets different stimuli. In dealing with stressful situations, coping strategies are employed in order for adverse events to be experienced more appropriately. **Methods:** The study used a quasi-experimental with one group pretest and posttest control group design. A total of 30 staff nurses were included as interventional group (n=15) and control group (n=15) through purposive sampling technique. Stress management intervention was given for 1 week and review for another 3 weeks. On the first week of data collection, following the pre-assessment, a detailed lecture was given on stress and coping strategies for seven consecutive days to the interventional group. Followed by this, first post test assessment was done on the seventh day to both the groups and reviewed for another 3 consecutive weeks and second posttest assessment was also done followingly to both the group. Data collection tools are (1) demographic variables, (2) Expanded nurses stress scale (3) Ways of Coping scale (4) Stress management intervention programme. **Result:** The overall mean difference between experimental group posttest-3 (79.33±18.73) and control group posttest -2 (163.53±10.15) group with mean difference was 84.2. The obtained 't' value was 15.35 with p=0.001 which was statistically highly significant difference between groups. The overall mean difference between experimental group posttest-3 (129.9±37.24) and control group posttest -3 (55.07±6.91) groups with mean difference was 74.87. The obtained 't' value was 7.65 with p=0.001 which was statistically highly significant difference between groups. The result shows that the obtained coefficient correlation value in the control 'r' =-0.233 and p=0.048 which was statistically significant. It seems that stress level decreased when their coping strategies increasing among staff nurses at 6th week after gave intervention. This study concluded that stress management intervention might be an effective intervention in reducing stress and improving coping strategies among the critical care unit nurses.

Key Words: Stress, stressful situations, coping strategies, staff nurses.

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INTRODUCTION**Background of the study:**

World Health Organization has considered stress as a global epidemic, which has recently observed to be associated with 90% of visits to physicians. Work-related stress is one of the most important workplace health risks for employees worldwide. Work-related stress results in substantial costs to employees and organizations, related to employee's absenteeism and turnover, decreased productivity, physical illness, poor quality of health care services, and increase risk of medical errors.

Nursing is one the stressful professions. The stressful factors in this job have affected nurses in a serious way. With this regard, Food and Drug Administration (FDA) after studying about health disorders in stressful jobs has declared that among 130 studied jobs, nurses in visiting doctor about their mental condition are at 27th place. Like patients, nurses experience stress too, and some of them cannot adopt themselves with the present stress. According to estimations in 1997 in USA, the average of absences because of intense stress is about 4 times more than other nonprofessional damages and professional disorders.

NEED FOR THE STUDY:

The critical issues of the nursing profession worldwide are job satisfaction and nurse retention. Job satisfaction and work stress linked very closely in health working settings Specific behaviors appear at workers such as distress and dissatisfaction behaviors that are requiring more attention to manage. so, the current study will enhance our understanding of the effect of work stress management on staff nurses job satisfaction that affect work behaviors of nurses which would ultimately be linked with the achievement of organizational goals. However, developing and implementing work stress management is challenging because certainly play a strategic tool to motivate the staff nurses to promote their potential growth and development. Therefore, having a stress management program could be directly related to a positive relationship with high job satisfaction and more job performance as well.

Apeksha Gulavani et al., (2014): Descriptive study design was used with explorative research approach; study sample was 100 nurses selected by convenient sampling technique. Majority of nurses reported there is frequent occurrence of stress associated with Uncertainty by concerning treatment(49%), Dealing with patient and families(48%), workload (59%), Conflict with doctors (49%), Death and dying (50%), Conflict with supervisors(52%). where as Inadequate emotional preparation (68%), Discrimination(48%) ,Conflict with peers (53%) as occasionally stress inducing causes as reported by nurses.

STATEMENT OF THE PROBLEM

A quasi experimental study to assess the effectiveness of stress management interventions on job stress and coping strategies among the staff nurses working in critical care units of selected hospital at dindigul in Tamilnadu.

REVIEW OF LITERATURE:

Bincy .R (2012).Conducted a pre experimental study among 30 critical care unit nurses working in Medical College Hospital in Kerala, India to assess the effects of stress management intervention such as job stress Awareness ,Assertive Training Time management ,and Progressive Relaxation technique on job stress the result showed that caring for patient ,general job requirement and work load were major sources of stress for the nurses .the management intervention were statistically effective in reduced from 60% to 20% during posttest .the stress management intervention were statistically effective in reducing the stress of nurses at $p < 0.0005$ Level

Rafaela Andolhe et al.,(2015)conducted cross-sectional study, in eight ICUs at a teaching hospital in the city of São Paulo, Brazil to investigate the job stress, coping among nursing staff and their association with biosocial factors and characteristics of work in Intensive Care Units (ICU).Data were collected by using the Scale of Occupational Stress, Scale of Occupational Coping ,Most professionals presented with moderate and severe stress levels and absenteeism ,escape ,avoidance were used as a coping strategy (74.47% and 79.93%, respectively). The study findings revealed that the proper stress management intervention will reduce the level of stress and increase the level of coping of the staff nurses

Khazae K. (2017) Conducted Quasi-experimental study with a control group, 40 nurses from the educational hospitals in Birjand who had completed a job stress questionnaire with a score of more than 100 were selected and randomly allocated to two groups. The intervention group underwent eight 2-hour sessions training of cognitive-behavioral stress management (one session per week), whereas the control group had no such training. Two months after the training, the two groups completed the hospital job stress questionnaire again. In the intervention group, the overall mean scores of stress and its dimensions significantly decreased after the intervention ($P < 0.05$). Study concluded that the significant decrease in the nurses' stress using cognitive-

behavioral stress management, this approach can be suggested to be taught to nurses in hospitals in order to decrease their stress and increase their coping level.

CONCEPTUAL FRAMEWORK:

The conceptual framework is based on Betty Neumann's health care system model. Betty Neumann's model focuses on stress and stress reduction is primarily concerned with the effect of stress on health. The present study was intended to find out effectiveness of stress management in reduction of occupational stress and develop the good coping strategies among staff nurses working in critical care units of selected Hospital

RESEARCH METHODOLOGY-

RESEARCH APPROACH:

Quantitative research approach was used.

RESEARCH DESIGN:

In this study, quasi experimental one group pretest & posttest design was used

SETTING OF THE STUDY:

The study will be conducted in selected hospitals at Dindigul. It will be selected for both experimental and control group.

SAMPLE:

Critical care unit staff nurse who are all full fill the inclusion criteria, are selected as a sample for this study.

SAMPLE SIZE:

15samples in experimental group and 15 samples in control group will be selected for this study.

SAMPLING TECHNIQUE

Non-probability – convenient sampling technique is used for this study.

DESCRIPTION OF THE TOOL:

PART – I

It consists of demographic variable such as age, sex, educational qualification, years of experience in critical care unit, marital status, history of medical illness, number of children, number of working hours, work shift, Job satisfaction, Income.

PART – II

The Expanded nursing stress scale will be used for the Instrument to target critical care nursing staff stress rather than general job stress.

Scoring and interpretation

5- Point Likert scale on stress

It is a self-administered one. The responses of the staff nurses were entered in appropriate columns of the respective statements fewer than five different response options scaled as Seldom-1, rare-2, sometimes-3, Often-4, Always-5.

The level of stress was interpreted as follows

- Mild stress : 0-25%
- Moderate stress : 26-50%
- Severe : 51- 75%
- Very severe stress : 76-100%

PART-III

Ways of coping scale: Ways of Coping (Folkman& Lazarus, 1985) scale is used by the investigator to measure the coping. The responses of the staff nurses were entered in appropriate columns of the respective statements. That assessed by 4-point Likert-scale response format has been used consistently across all studies. 0 = not used; 1 = used somewhat; 2 = used quite a bit, 3 = used a great deal. It is a 4-point Likert scale

The final scores were interpreted follows

- 0-25% -poor coping.
- 26-50% -moderate coping.
- 51- 75%-good coping.
- 76-100%-excellent coping

PART – IV**Stress management interventions****Aim of the programme**

To reduce the job stress level and promote the positive level of coping strategies for the critical care unit staff nurses.

FINDINGS OF THE STUDY:**EFFECTIVENESS OF STRESS MANAGEMENT INTERVENTION ON JOB STRESS AND COPING STRATEGIES AMONG THE STAFF NURSES WORKING IN CRITICAL CARE UNIT OF EXPERIMENTAL & CONTROL GROUP.****Comparison of the Pre-test, post-test1, post-test2 and post- test 3 of the level of job stress among the staff nurses working in critical care unit of experimental and control group**

The overall mean difference between experimental group posttest-3 (79.33±18.73) and control group posttest -3 (163.53±10.15) groups with mean difference was 84.2. The obtained 't' value was 15.35 with p=0.001 which was statistically Highly significant difference between experimental and control group., The mean posttest level of job stress will be significantly lower in experimental group than the mean posttest level of job stress in control group among the critical care unit staff nurses Therefore Our intervention shown effectiveness of our study in all post tests

Comparison of the Pre-test, post-test1, post-test2 and post- test 3 of the level of coping strategies among the staff nurses working in critical care unit of experimental and control group

The overall mean difference between experimental group posttest-3 (129.9±37.24) and control group posttest -3 (55.07±6.91) groups with mean difference was 74.87. The obtained 't' value was 7.65 with p=0.001 which was statistically highly significant difference between groups

The mean posttest level of coping strategies was significantly lower in experimental group than the mean posttest coping strategies in control group among the critical care unit staff nurses therefore our intervention shown effectiveness of our study in all posttests.

CORRELATION BETWEEN THE JOB STRESS AND COPING STRATEGIES AMONG THE STAFF NURSES WORKING IN CRITICAL CARE UNIT OF EXPERIMENTAL & CONTROL GROUP.

Overall interpretation reveals that negative correlation was found among post-1, post -2 and post -3 between level of job stress and level of coping strategies. It infers that stress level was decreased when their nurses coping strategies were increased. it might be due to intervention ,so our study shown effectiveness with helps of improvement correlation (p<0.05) , overall interpretation reveals that therefore negative correlation were not found among pre , post-1 ,post -2 and post -3 between level of job stress and level of coping strategies .it might be due to no intervention to control group.

CONCLUSION:

With a view to check the feasibility, practicability, relevance of the research and to plan for data analysis, the small scale study was executed among thirty critical care unit staff nurses the pilot study was carried out in two hospitals namely City hospital and JCB hospital. The total sample size was 30 in which 15 were interventional group and 15 were in control group. After obtaining letters seeking permission from the heads of the Hospital to conduct the pilot study and schedule was prepared for data collection. By using purposive sampling technique, all the 30 samples were included in the study. A brief introduction about the study was given to the staff nurses followed by the detailed explanation about the stress and its ill-effects followed by the coping strategies and purposes of the study and expectation from the subjects the overall findings revealed that majority of the sample had severe stress. A highly significant association was found between the pretest level of stress and coping with the demographic variables, thus this study result supporting the hypothesis. Hence the researcher emphasizes that stress management might be effective to reduce the job stress and improve the level of coping skills among the staff nurses to improve their physical and psychological health also they can provide good quality of health care services to the patients in critical care unit. This study concluded that stress management intervention might be an effective intervention in reducing stress and improving coping strategies among the critical care unit nurses, also this study findings support to further research studies to be carried out in finding out the effectiveness of the stress management programs with large sample. Findings can have important implications for nursing practice and research.

REFERENCES:

1. Cox T, Griffiths A: The nature and measurement of work stress: Theory and practice in N. Corlett and J. Wilson (eds.): Evaluation of human work: A practical ergonomics methodology, London, Taylor and Francis. 1994.
2. Lazarus R.S, Folkman S: Stress, Appraisal, and Coping. New York: Springer; 1984.
3. .Mosadeghrad AM. Occupational stress and turnover intention: implications for nursing management. International journal of health policy and management. 2013 Aug; 1(2):169.
4. Lambert VA, Lambert CE. Nurses' workplace stressors and coping strategies. Indian Journal of Palliative Care. 2008 Jan 1; 14(1):38.
5. Mark G, Smith AP. Occupational stress, job characteristics, coping, and the mental health of nurses. Br J Health Psychol. 2012; 17(3):505–21.
6. Al Hajjar B. Occupational stress among hospital nurses in Gaza-Palestine. University of Manchester. 2013.
7. Staff in a neonatal intensive care unit. Journal of Advanced Nursing. 2009;57 (2): 108111
8. 25 Kamal S., Al-Dhshan M., Abu-Salameh K., et al.: The effect of nurses' perceived Job related stressors on job satisfaction in Taif governmental hospitals in Kingdom of Saudi Arabia. Journal of American Science. 2012; 8 (3): 119-125
9. Li J. & Lambert VA. : Workplace stressors, coping, demographics and job satisfaction in Chinese intensive care nurses. Nurs Crit Care. 2008
10. Minseon Park, MD 2013 Evidence-based stress management: focusing on nonpharmacological procedure which reduce stress and promote health journal of Korean Med Association. 2013 Jun; 56(6):478-484.
11. Varvogli L, Darviri C. Stress management techniques: evidence-based procedures that reduce stress and promote health. Health Sci J 2011; 5:74–82.
12. Greenberg JS. In: Comprehensive stress management. 9th ed. Boston: McGraw-Hill; 2006.
13. C Light Irin and R Bincy. Effect of stress management interventions on job stress among nurses working in critical care units. Nursing Journal of India Nov-Dec2012; 103(6):269-
14. Tiwari S. A study to assess effectiveness of pamphlets on stress and coping strategies among the nurses at selected hospitals of Dehradun. International Journal of Health Science and Research. 2019; 9(12):117-123.
15. Hariatkhah J, Farajzadeh Z, Khazae K. The Effects of Cognitive-Behavioral Stress Management on Nurses' Job Stress. Iranian Journal of Nursing and Midwifery Research. 2017 Sep-Oct; 22(5):398-402. DOI: 10.4103/1735-9066.215683.