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STRESS MANAGEMENT AMONG EMERGENCY NURSES: KNOWING THE PROBLEM-SOLVING MECHANISM IN MAYO HOSPITAL, LAHORE, PAKISTAN

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ABSTRACT

Background: Stress at work is regarded as a major problem for nurses since it can lead to an increase in their psychological issues and emotional suffering. It can also negatively impact health care services, particularly in emergency rooms.

Objective: The purpose of this study was to assess how problem-solving techniques affected emergency nurses' levels of work-related stress at Mayo Hospital in Lahore.

Materials and Methods: The quasi-experimental study that employed the pre-test, post-test 1, and post-test 2 on two groups (control and study). The purposive sample approach on a total sample of sixty nurses employed in emergency departments between March 1, 2023, and August 1, 2023. Emergency nurses who used the problem-solving techniques completed three sessions. Work Stress Scale assessments and a questionnaire were used to gather data.

Results: The job stress in the experimental groups was reduced by the educational program from (2.13) in the pre-test to (1.58) in the post-test 2. According to the study's findings, at post-tests 1 and 2, the mean stress level dropped from a moderately low level.

Conclusion: The study found that ER nurses' stress levels can be lowered by using problem-solving techniques.

Keywords: Stress Management, Emergency Nurses, Problem-Solving Mechanism

INTRODUCTION

It can be quite difficult to work as a nurse in an Emergency Department. Stress can negatively impact one's physical and emotional well-being, which can lead to issues at work. Over time, this affects the business's productivity. High levels of occupational stress are bad for employees as a whole as well as for patient safety and an organization's bottom line (Moeini et al., 2011). According to Hamilton et al. (2016), employees who are exposed to these occupational stressors for an extended period may develop melancholy, anxiety, musculoskeletal discomfort, exhaustion, sleep disruptions, and cardiovascular disorders.

According to Higazee et al. (2018), nurses operate in environments with high physical and emotional demands, as well as dealing with pain, suffering, and death. They also face heavy workdays, a staffing shortage, poor pay, a high degree of responsibility, and a never-ending need for technological and scientific advancements. Low-stress tolerance is one of the factors that can negatively impact an individual's health by causing biopsychosocial problems. In an organization, it can lead to high staff turnover, increased absenteeism, and sick days from occupational diseases. These factors can also negatively impact the quality of care given, which in turn affects patient safety (Silveira et al., 2020).

Chronic stress has detrimental impacts, whereas encouraging workplace well-being has the opposite effect, supporting advancements at the individual and organizational levels. Stress by itself cannot cause disease, but severe and continuous stress can cause physical and mental health problems, such as heart disease, melancholy, and psychological breakdown (Faremi et al., 2019). A procedure based on a certain set of abilities and an attitude that issues may be addressed, or at least improved, are both necessary for problem-solving. There are four unique steps in the problem-solving process. You should walk clients through the entire problem-solving process step-by-step for the majority of them, but you might only use portions of it for others. The four steps are listed below (Josefowitz & David Myran, 2017). The following can be used to summarize problem-solving strategies: recognize the issue, establish reasonable goals, and come up with fresh ideas. This process, which is frequently referred to as brainstorming, involves weighing the pros and cons of several options before selecting one to attempt. After implementing a solution, you should assess its effects and determine if the issue has been resolved or if further work needs to be done (Ramezanli et al., 2015).

Research Objective
The purpose of this study was to assess how problem-solving techniques affected emergency nurses' levels of work-related stress at Mayo Hospital in Lahore.

MATERIALS AND METHODS
With a purposive sample and a quasi-experimental design, a total of 60 nurses who work in the emergency units are the participants, and the program is being implemented with permission from local agreement with the hospital administration. The study's control groups and target sample of nurses employed in these departments provided the data for the study. Emergency department nurses are the inclusion criteria. Both male and female nurses with at least a year of experience working in the emergency room. Nurses with less than a year of experience in an emergency room as well as nurses who decline to participate in the study are excluded. The pre-test, post-test 1, and post-test 2 were administered to the sample, which was split into two groups (30 control and 30 study), between the dates of 1st March 2023 and 1st August 2023. A study group that used the problem-solving skills program for a week was given three sessions.

The instrument was used and adjusted for this study. It is divided into two sections: the first includes seven items that measure the demographic characteristics of nurses. The other is the stress scale associated with work. Three levels of stress (stressful = 1, occasionally stressful = 2, and extremely stressful = 3) were assigned to each of the 26 items on the Likert scale. To calculate the grade of job-related stress, the total score of the scale was divided into three groups, mild, which represents the amount of stress experienced by nurses, moderate, which represents the range of 44–61, and severe, which represents the range of 62–78.

Descriptive statistics (frequency, percentage, mean, and standard deviation) were used to examine the data. For the tests, a significance level of less than 0.05 was established. SPSS software (version 23; SPSS Inc., Chicago, Illinois) was utilized for data analysis.

RESULTS

Table 1. Background Characteristics of the Respondents

Characteristics		Study group		Control group	
		f	%	f	%
Age (year)	20 – 29	12	40	17	56.7
	30 – 39	9	30	5	16.7
	40 – 49	8	26.7	5	16.7
	50 ≤	1	3.3	3	10
	M±SD	33.9 ± 9.3		23.4 ± 10.4	
Gender	Male	14	46.7	12	40.0
	Female	16	53.3	18	60.0
Nursing qualification	Diploma in Nursing	13	43.3	18	60.0
	Bachelor in Nursing	11	36.7	9	30.0
	Master in Nursing	6	20.0	3	10.0
Marital status	Single	12	40.0	5	16.7
	Married	15	50.0	25	83.3
	Widowed	3	10.0	0	0
Shift duty	Day	19	63.3	17	56.7
	Night	5	16.7	2	6.7
	Both	6	20.0	11	36.7
Years of experience in nursing	≤ 5	12	40.0	16	53.4
	6 – 10	6	20.0	4	13.3
	11 – 15	4	13.3	1	3.3
	16 – 20	5	16.7	4	13.3
	21 ≤	3	10.0	5	16.7
	M±SD	9.9 ± 7.8		10.4 ± 10.3	
Years of experience in emergency	1 – 3	22	73.3	18	60.0
	4 – 6	6	20.0	6	20.0
	7 ≤	2	6.7	6	20.0
	M±SD	2.9 ± 1.8		4.2 ± 4.1	

Table 2. Changing the stress level resulting from the time management strategies program at three times

List	Job-related Stress	Study Group (N=30)						Control Group (N=30)					
		Pre-test		Post-test I		Post-test II		Pre-test		Post-test I		Post-test II	
		M.S	Ass.	M.S	Ass.	M.S	Ass.	M.S	Ass.	M.S	Ass.	M.S	Ass.
Workload		2.15	Mo	1.62	Mi	1.57	Mi	2.14	Mo	2.20	Mo	2.19	Mo
Conflict		1.96	Mo	1.48	Mi	1.48	Mi	1.98	Mo	2.08	Mo	2.17	Mo
Lack of support		1.88	Mo	1.5	Mi	1.52	Mi	2.06	Mo	2.24	Mo	2.25	Mo
Uncertainty regarding patient treatment		2.08	Mo	1.46	Mi	1.54	Mi	2.17	Mo	2.19	Mo	2.3	Mo
Dealing with death & dying		2.38	Se	1.5	Mi	1.58	Mi	2.34	Se	2.29	Mo	2.27	Mo
Organizational decisions		2.25	Mo	1.63	Mi	1.60	Mi	2.04	Mo	2.17	Mo	2.26	Mo
Inadequate preparation		2.16	Mo	1.56	Mi	1.53	Mi	2.06	Mo	2.21	Mo	2.23	Mo
Sexual harassment		2.20	Mo	1.83	Mo	1.83	Mi	2.30	Mo	2.37	Se	2.27	Mo
Total		2.13	Mo	1.56	Mi	1.58	Mi	2.13	Mo	2.22	Mo	2.25	Mo

DISCUSSION

Table 1's descriptive analysis reveals that the study group's average age of the nurses is 33.9±9.3 years, while the control group's average age is 23.4±10.4 years. Notably, the study and control groups most frequently refer to patients between the ages of 20 and 29 (40%) and 56.7%, respectively. Gender refers to 53.3% of the study group and 60% of the control group are female nurses. In terms of nursing qualifications, the study group's nurses include of 43.3 percent diploma in nursing and 36.7% of those with bachelor's degrees, whereas the study group's nurses comprised of 60% of respondents had a diploma in nursing and 30% of those with bachelor's degrees. The greatest reported percentage, 83.3% of the control group and 50% of the study group are married, according to the term "marital status." In terms of shift work, the majority of nurses in both groups—63.3% of the study group and 56.7% of the control group—are employed during the day. In terms of years of nursing experience, 40% of the study group and 53.4% of the control group reported having less than five years of experience. While 73.3% of the study group and 60% of the control group reported having one or more years of experience in the emergency room, a year of experience there represents one to three years.

The results for nurses in the study group and control group indicate that they experienced a moderate level of stress during the pre-test period across all domains, except dealing with death and dying, as indicated by table (2), which displays the mean scores for job-related stress domains. Additionally, the mean score of job stress decreased from (2.13) in the pretest to (1.58) posttest 2 in the experimental groups. During post-tests 1 and 2, the nurses in the experimental group showed a decline to a mild level in all domains, except for sexual harassment, which remained moderate. These results attest to the effectiveness of the stress management program for emergency nurses in lowering this kind of occupational stress. Conversely, the nurses in the control group exhibit a moderate degree of stress in every area. Except sexual harassment, where they display severe levels, all domains indicate moderate levels on the first post-test. In all domains, they also exhibit moderate levels during the second post-test.

It is generally accepted that a normal reflex of stress is not equally and constant throughout the time depending on the nature of the stressor, which may sometimes be in a high level and sometimes may be decreased depending on the job situation. These fluctuated levels between moderate and severe among the control group (that does not receive the stress management program) during the three times (pre-test and the two post-tests) of some items mentioned in the table (2). The results of the current study are partly consistent with those of Hersch et al. (2016), who note that the more stressful subscale was associated with concerns about death and dying, conflicts with physicians, and workload. This finding conflicts with that of Samar M. Kamal et al. (2012), who reported that contact with patients and their families was the most stressful subscale in their study (Samar M. Kamal et al., 2012).

CONCLUSION

The study's findings, the researcher concluded, showed that nurses' stress levels can be lowered by using problem-solving techniques. This study may contribute to funding the adoption of this health promotion strategy in addition to the nurses by collaborating with other medical professionals or other hospital nurses in the emergency departments. In order to lower the stress level among emergency nurses and perhaps apply the findings to other nursing specialties in healthcare facilities, the study suggests conducting additional research on stress management based on a large number of nurses in other teaching hospitals in Punjab, Pakistan.

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