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A Study to Assess the Coping Mechanisms and Resilience Among Nurses Working in Selected Private Hospitals in Pune City

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Abstract

Background: "Nursing"- a demanding profession characterized by continuous exposure to various stressors and emotional demands. The healthcare environment, especially in urban settings, poses unique challenges that can affect nurses' mental health and job performance. Effective coping mechanisms and resilience are essential for nurses to manage workplace stress and prevent burnout. Recently, research has highlighted the importance of resilience and coping strategies in healthcare professionals' ability to handle occupational stress. Limited studies have focused specifically on nurses in private hospitals of Pune, making it essential to explore how coping mechanisms and resilience interact.

Aim: This exploratory study aim to assess coping mechanisms and resilience among nurses working in private hospitals in Pune City, and to explore their association.

Objectives: To assess the coping mechanisms and resilience among nurses, to determine the association between coping and resilience, to associate the findings with selected demographic variables.

Materials and methods: A non- experimental descriptive research study was conducted among 100 nurses from selected private hospitals in Pune city. Data were collected using the Brief COPE Inventory and the Connor-Davidson Resilience Scale (CD-RISC). Statistical analysis included descriptive statistics, t-tests, ANOVA, and Pearson's correlation to examine relationships between variables.

Findings: The mean coping score was 58.4 ± 8.6, and the mean resilience score was 67.3 ± 9.8. A positive correlation ($r = 0.52$, $p < 0.01$) was found between coping and resilience, indicating that nurses with better coping strategies tend to exhibit higher resilience. Further analysis showed that resilience scores were significantly higher among nurses with more than 5 years of experience ($p < 0.05$). However, no significant gender difference was observed in coping or resilience levels. **Conclusion:** Nurses working in private hospitals of Pune city demonstrate moderate to high level of coping and resilience, which are positively associated. The findings suggest that strengthening emotional support systems and implementing resilience training programs may further enhance nurse's psychological well-being, improve their ability to manage occupational stress, ultimately contributing to better patient care.

Keywords: BER, Channel Estimation, Compressive Sensing, Long-Range Dependencies, Root Mean Square Error, Vision Transformers (ViTs)

1. Introduction

Nursing is a high-stress profession that requires mental, physical, and emotional endurance. In private hospitals, nurses face unique challenges such as increased workload, shift duties, and limited rest periods.

Need For The Study

Coping mechanisms are behavioral and cognitive strategies used to manage stress, while resilience refers to the ability to bounce back from adversity. Understanding these aspects among nurses in Pune is essential for designing interventions to enhance their well-being. Gupta and Adhikari (2008), measured role stress among 89 nurses working in civil hospital in West Bengal, India. Data was collected using Organizational Role Stress (ORS). Inter-role distance, role expectation conflict and role overload were found to be highest factors resulting in stress experience among nurses. The respondents in the study reported either highly stressed or moderately stressed and impact of stress was seen on psychological and physiological functioning of nurses.Bhatia, Kishore, Anand and Jiloha (2010), conducted a cross- sectional study among 87 nurses working in two of the tertiary care teaching hospitals of Central Delhi. Occupational Stress Questionnaire was used which was modified to suit Indian settings and population and pre-tested. It was found that majority (87.4%) of nurses reported their job as stressful. Severe or extreme job stress was reported by 32.2% of nurses. The most stressful source of stress was time pressure and least was discrimination. Most of nurses resorted to positive coping strategies. Talking to people was reported as the most effective coping strategy at the workplace. No negative coping strategies such as smoking or drinking were reported by nurses in handling stress. No significant difference was found in job stress level among married and unmarried nurses but married nurses showed a tendency towards being more stressed than those who were unmarried. The workplace stress results in inability to efficiently handle stressful events among nurses in their personal lives.Sudhaker and Gomes (2010) conducted a study 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.

Eswari and Saravanan (2011), investigated stress level among women nurses working in various nursing homes in Coimbatore city, Tamil Nadu. The study findings revealed that 52% had moderate stress in the area of conflict with supervisor and torture by higher authorities. It was found that 48.2% had moderate stress related to lack of recognition, insufficient equipment and work overload. Moderate stress was reported by 40.6% of respondents towards fear of making mistakes and unpredictable scheduling. The study also found other areas of stress for women nurses. Sixteen problems were identified among which "conflict with team members" ranked first followed by others such as "insufficient training shift duties", "problems and lack of security at workplace". The study concluded that insufficient equipment and frequent change of work pattern do not affect women nurses to a great dealDevi, Kanjana, Kavitha and Devi (2012), conducted a study among nurses in various states of India such as Karnataka, Kerala, Tamil Nadu and Maharashtra. Multi-centric purposive technique was used with sample size of 100 nurses. The questionnaire for data collection consisted of self explanatory questions related to workplace aspects and interaction with relatives causing stress.

Vijay and Vazirani (2012) conducted a comparative study to assess stress and 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 everyday and dealing with patients with contagious disease. Spending time with the family was found to be main stress buster for nurses.

Roopalekha- Jathanna, Latha and Prabhu (2012), 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.

Katyal (2013), investigated burnout among 50 nurses working in government and 50 nurses from private hospitals in Chandigarh and Punjab, India. Four hospitals were randomly selected using lottery method out of which two were government and were two private hospitals. Maslach Burnout Inventory-Human Services Survey (MBI-HSS) was used to assess burnout among nurses. It was found that in government hospitals majority (52%) of nurses experience high level of emotional exhaustion, 44% of nurses experience moderate level of depersonalization and 62% of them experience low level of personal accomplishment. The study findings revealed that nurses working in government hospitals experienced higher level of burnout than the nurses working in the private hospitals. The researcher had attributed higher level of burnout among nurses in government hospitals to possible factors such as heavy workload, poor work environment, frequent night shifts and poor support from administration and superiors.

Jose and Bhat (2013) 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 and 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.

Joy, Ravindranath and Thomas (2013), explored the relationship between demographics and stress coping skill among 499 nurses using coping strategies inventory. Findings revealed that stress coping skills do not differ on basis of gender, age and marital status. It was found that use of stress coping skills was higher among government nurses and with experience of more than 15 years.

Kakade, Kakade, and Devi (2014), 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 abilitiesA study conducted by Divinakumar, Pookala and Das (2014), investigated perceived stress among 298 female nurses working in 30 different government hospitals in central India. Data was collected using Perceived Stress Scale (PSS-10). It was found that 48.32% of sample scored above 17 score PSS-10 which indicated high stress level. No significant difference was found between PSS-10 score and marital status and professional qualification. But significant difference was found between PSS-10 score and day and night duty nurses at the time of study. It can be concluded

from this study that nurses were highly stressed and shift duties plays role in experience of stress. Pawar (2014) 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.

Mohite, Shinde and Gulavani (2014), assessed job stress among nurses working at the tertiary care hospital in Karad city, Maharashtra. The 100 nurses were selected for the study using convenient sampling technique. The Expanded Nurses Stress Scale (ENSS) an expanded version of the Nursing Stress Scale (NSS) widely used measurement scale in nursing research across globe. The study also found that age, sex, years of experience and professional education had no association to stress. The study findings revealed frequent cause of stress among nurses were workload situations and supervisors. The study concluded that measures need to be taken to decrease work load and resolve conflict among nurse supervisors.Rawal and Pardeshi (2014), examined stress among 850 nurses working in selected public hospitals and private hospitals in Pune, Maharashtra. Findings revealed that interpersonal relationships issues such as conflicts with patients, doctors, and colleagues frequently leads undesirable personal stress in the working environment.

Saini, Kaur and Das (2014), conducted study among 73 nurses working in medical surgical units (ICU) at Nehru Hospital, Post-Graduate Institute of Medical Education and Research (PGIMER), Chandigarh. The data was collected using modified Work Stress Symptom Scale (WSSS) and Coping Checklist (CCL). The findings revealed that 51% of nurses experience high stress. The factors responsible for causation of stress were lack of goal clarity, role ambiguity, role conflict, poor interpersonal relations, workload, improper performance appraisal, lack of job autonomy and job challenge. The stress was low among nurses who were having good interpersonal relations and clarity of the goals on the job. The problem solving coping strategy was most frequently used by the nurses.

Research Objectives:

- To assess the coping mechanisms and resilience among nurses.
- To determine the association between coping and resilience.
- To associate the findings with selected demographic variables.

Research Methodology

- Research Approach: Quantitative Research
- Research Design: Non - Experimental Descriptive Research Design
- Population: Nurses
- Setting: Selected private hospitals in Pune City.
- Sample: 100 registered nurses with ≥6 months of experience.
- Sampling techniques: Non- Probability Purposive Sampling Technique

Sample Selection Criteria:

Inclusion:

- Nurses working in selected hospitals of Pune city.
- Both male and female nurses.
- Who can read and understand English or Hindi.

Exclusion Criteria:

- Working without educational qualifications.
- Newly joined

Results

SECTION I – Analysis of data related to demographic profile of nurses working in hospitals.

Majority (78%) are female, In experience (35%) have 2-5 years experience and equal number i.e (35%) have more than 5 years of experience, majority of the nursing staff i.e (40%) works in Medical and Surgical wards.

(n=100)

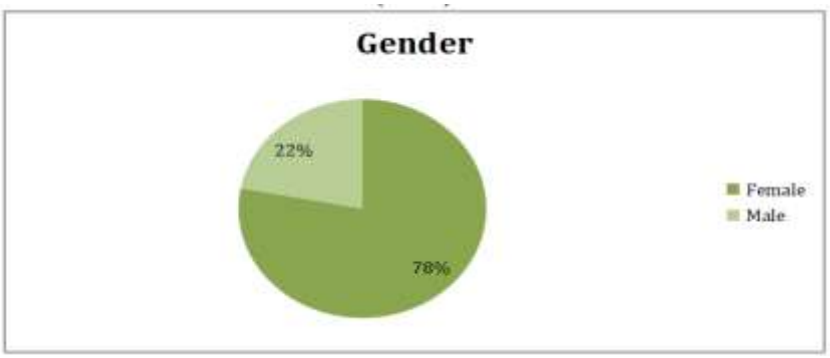

FIGURE No. 1

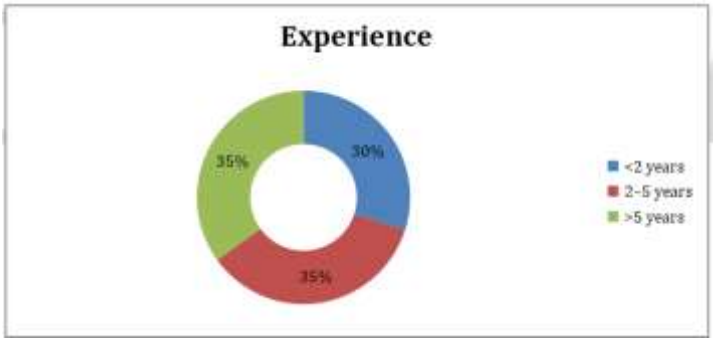

FIGURE No. 2

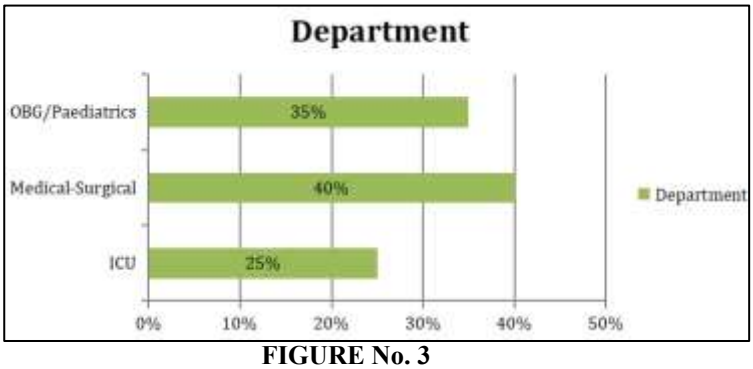

FIGURE No. 3

Table 1. Mean and SD of Coping and Resilience Scores (n=100)

Variable	Mean ± SD	Range
Coping Mechanisms	58.4 ± 8.6	42–75
Resilience	67.3 ± 9.8	45–85

Table 2. Comparison of Mean Scores by Demographic Variables (n=100)

Variable	Comparison	Mean Difference	p-value
Gender	Male vs Female (Coping)	1.5	0.28 (NS)
Experience	<2 yrs vs >5 yrs (Resilience)	5.2	0.04*
Department	Across 3 groups (Coping)	3.1	0.07 (NS)

**Signifcant at $p < 0.05$; NS = Not Significant*

Table 1. Correlation between Coping and ResilienceA moderate positive correlation ($r = 0.52$, $p < 0.01$) was observed between coping mechanisms and resilience levels among nurses.

Discussion

The study revealed moderate to high coping and resilience levels among nurses in Pune's private hospitals. A significant positive correlation indicates that effective coping strategies enhance resilience. These findings align with Connor & Davidson (2003) and McAllister & McKinnon (2009), who emphasized the interplay of adaptive

coping and resilience in healthcare professionals. Experience positively influenced resilience, suggesting that exposure to workplace stress may enhance adaptability over time.

Tools: Demographic Profile, Brief COPE Inventory (Carver, 1997), Connor-Davidson Resilience Scale (CD-RISC, 2003).

Data Analysis: SPSS v26 was used for descriptive and inferential analysis including t-tests, ANOVA, and Pearson's correlation.

Implications
For Practice: Encourage mentorship and peer-support programs.
For Education: Integrate resilience training into nursing curricula.
For Research: Future longitudinal studies can assess the long-term effects of resilience-building interventions.

Conclusion

Nurses in private hospitals of Pune demonstrate adequate coping and resilience, though enhancement programs are warranted. Regular stress management workshops, peer support, and resilience training could further improve psychological well-being and job satisfaction.

Author Contribution
AC, the Principal Investigator responsible for providing the overall direction and oversight of the study at all stages was fully engaged from project design to protocol development and obtaining ethical approvals, study conduct, data analyses and the dissemination of the study outcome.
TB, Supervisor and Co-Investigator, was responsible for technical direction, supervised and provided advice for all steps from project design to protocol development, and obtaining ethical approvals, study conduct, data analyses and the dissemination of the study outcome. Reviewed the final article

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No

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