Stress: How is it Affecting Service Delivery and Health of Nurses? A Qualitative Study from Pokhara Metropolitan, Nepal

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ABSTRACT

Introduction: Stress among health care professionals is harmful because of adverse psychological and physiological changes, which lead to decrease productivity. Stress acts as a barrier in providing quality health care. This study aimed to explore the experienced causes of stress, its effects and coping strategies among nurses.

Methods: In-depth interview was conducted among nurses working in different hospitals of the Pokhara metropolitan, Nepal. The nurses were selected purposively to make the sample diverse in terms of age, marital status, job types, and work experiences. Data was collected after taking informed consent, explaining the purpose and objectives of the study, and maintaining confidentiality. Data saturation was gained with fifteen interviews. Data analysis was done by adopting the Conventional Qualitative Content Analysis technique and summative analysis process.

Results: Three domains were identified from the study – causes of stress, effects of stress, and coping strategies for stress. The causes of stress were workload, lack of proper logistics, insufficient staffs, undesirable relation among colleagues, patient's condition, patient's relatives, and visitors, being blamed for other's mistakes, senior's behaviors, workplace violence, work-shift, patient's death, and sufferings, job positions, work-life balance, health condition, job dissatisfaction, dignity and social status, family problems and lack of experience. The effects of stress experienced by the nurses were medication errors, delay of services, loss of concentration in work, degradation of the hospital's goodwill, headache, insomnia, frustration and depression, lethargy, and loss of appetite. Nurses adopted listening to music, playing games, surfing the internet, watching television, doing household chores, sharing events and incidents, calm down, and crying as the coping strategies for the stress they experienced.

Conclusion: Due to several stress factors and their effects, the performance of nurses in a hospital setting was challenging. It was affecting the physical, mental, and social aspects of nurses' life. However, they adopted coping strategies to help themselves in reducing the level of stress. An environment must be created by family members, organization, management team, nation, concerned authority, and possible stakeholders so that the nurses will be able to work with total concentration, devotion, and commitment.

Keywords: Nepal, Nurse, Health service delivery, Stress

INTRODUCTION

Stress is a global human response that results from the perception of an intense or traumatic experience, which has enormous influences on one's physical health, psychological, and behavioral aspects. When the job requirements do not match the capabilities, resources, or needs of the employees, job stress is likely to occur, which is harmful physically and emotionally. Both the employees and employers may go through stress that might result in professional ineffectiveness. Stress in medical practice and health care has always been a top issue. In health care professionals, including nurses, stress is constantly unfavorable with attending adverse changes, including psychological and physiological, leading to diminished productivity and disease. It acts as an obstacle to providing

quality care, partly because medical service requires taking care of other people's lives, and errors could be costly and sometimes irreversible.² Job stress is even more critical in the healthcare industry due to the everyday problems of inadequate staffing, high public expectations, lengthy work hours, exposure to contagious diseases and hazardous substances, and the constant encounters with death and sufferings.³ Stress disrupts the nursing care and the family and personal life of the nurse.⁴ So, the medical service providers are expected to be in a perfect state of mind devoid of morbid worries and anxieties.²

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Job-related stress among working people is abundantly increasing around the world. W.H.O. referred to stress at the workplace as the 'Worldwide Epidemic' as it has become an integral part of everyday life. In the U.S.A., approximately 25% of the working population becomes a victim of work-related stress.5 A study from critical care areas of Tertiary care Teaching Hospital, Nepal showed that 56% of participants had moderate stress followed by mild stress (34%), severe stress (6%), and very few, i.e., 4% had no stress in their job setting. The participants rated some factors: the lack of opportunity to discuss problems with peers, inadequate emotional preparation, being sexually harassed, and experiencing discrimination because of ethnicity and gender as minor stressors. While other factors: the shortage of staff, being blamed for anything that goes wrong, not enough equipment supplies or not functioning well, physicians not being present in a medical emergency, patient's family making unreasonable demands, lack of support from nursing administration, etc. were rated as major stressors.6 A study on health workers from Nigeria disclosed that 92.8% of health workers experienced stressed at work, and the response for headache/ migraine (76.3%), poor concentration(11.6%), loss of work interest(10.1%) was found.7 In the U.K. total of 342 nurses committed suicide in six years, i.e.,1992 to 1998, a rate of 11 per 100,0008. This study aimed to explore the experienced cause of stress, its effects, and coping strategies adopted by them to combat stress.

METHODS

In 2016, a qualitative exploratory design was used to explore the stress experienced by nurses working in hospitals of Pokhara Metropolitan City of Nepal. The purposive sampling technique was used to consider variations for age group, marital status, working experiences, type of hospital, and working wards. An interview guideline consisting of open-ended and probing questions was developed to interview the participants. Interviews stopped with 15 participants after data saturation. The average time of the interview was 55 minutes, 45 minutes being the shortest and 60 minutes being the longest. The interview length was more where probing was required until the information relevant to our objectives was obtained. The facial expressions and tone of voice were also taken into consideration.

After an extensive review of related literature, the interview guideline was prepared under the guidance of supervisor. The principal researcher collected the data and processed it to analyze and interpret it. The interview was translated and transcribed into English. The transcripts were reviewed by listening to audio recording and reading through the transcripts simultaneously to check for the accuracy and consistency of translations. The interviews were analyzed by using Conventional Qualitative Content Analysis (CQCA) and the summative analysis process. During coding, each transcript was reviewed several times, and the data were reduced to codes. The codes were then sorted into one group to organize the information to make it easier for analysis. The content was reduced to create a meaningful text that still reflected the original view, and the codes that were found to be conceptually similar in meaning were grouped in sub-categories. The findings of each case were carefully reviewed and summarized. The conclusion was drawn based on the summary of each issue. Interpretation of the findings to provide possible and plausible explanations was then performed.

Ethical approval was taken from the Institutional Review Committee (I.R.C) of Pokhara University. Similarly, prior permission was taken from hospitals for data collection. Both verbal and written consent was taken from the respondent after explaining the purpose and objective of the study. A private location was chosen for maintaining privacy and confidentiality of the participants.

RESULTS

The findings obtained from in-depth interviews were organized into two broad sections. The first section describes the characteristics of individuals, and the second section describes the experience of stress, including its causes and effects.

Characteristics of the Study Participants

The age range of the participants was from 20 to 45 years. Two third of them (10 participants) were married, and the rest (5 participants) were found to be unmarried. The number of family members of participants was from 3 to 8, and the working experiences of nurses ranged from 6 months to 17 years. They were from different wards of public and private hospitals. Nurses were working either as temporary or permanent staff of hospitals. (Table 1)

Table 1: Characteristics of Participants

Participants' identity no.	Age	Marital status	No. of family members	Hospital type	Current working ward	Working experience
1	27	Married	5	Public	Maternity	5 yrs.
2	22	Unmarried	6	Private	Operation theatre	2 yrs.
3	24	Married	5	Private	Emergency	4 yrs.
4	20	Unmarried	3	Private	Emergency	1 yr.
5	20	Unmarried	6	Private	Pediatric+Gyne	2 yrs.
6	22	Unmarried	4	Private	Post-operative	7 months
7	30	Married	5	Private	Surgery	8 yrs.
8	26	Married	8	Private	Medical	4 yrs.
9	24	Married	5	Public	Medical	4 yrs.
10	22	Married	6	Public	Medical	2 yrs.
11	45	Married	4	Public	Geriatric+Psychiatric	17 yrs.
12	29	Married	6	Public	Geriatric+Psychiatric	6 yrs.
13	25	Married	3	Public	Surgery	6 yrs.
14	25	Married	7	Public	N.C.U.	5 yrs.
15	20	Unmarried	4	Public	Ortho	6 months

Three domains were identified as causes, effects, and coping strategies. Causes and effects included two categories, each with further sub-categories. Coping strategies adopted by them comprised three categories along with additional sub-categories. (Table 2)

Table 2: Major Findings on Experience of Stress

Domain	Category	Sub-category	
Causes	Organizational Factors	Workloads Lack of proper logistics Insufficient staff Undesirable relation with colleagues The patient's condition Patient's relatives and visitors Being blamed for other's mistakes Senior's behaviors and activities Workplace violence Work shifts Patient's deaths and sufferings Job position	
	Personal and social factors	Work-life balance Health condition Job dissatisfaction Dignity and social status Family problems Lack of experience	

Effects	Effect on organization	Medication errors Delay of services Loss of concentration in work Degradation of the hospital's goodwill
	Effect on individual health	Loss of appetite Lethargy Frustration and Depression
Coping	Keeping self- busy	Hearing music Playing games Surfing the internet Watching Television Doing household chores
strategies	Sharing with others	Sharing events and incidents
	Rest	Stay calm Sitting and crying

Causes of stress: The nurses believed that the heavy workload was more annoying than anything else, and that is why they could not enjoy a good time with their families. They felt the shortage of logistics more particularly during emergency, blockade, and earthquake, which was a risk to patient's life. The nurses working in the emergency ward perceived more mental pressure due to the forced overtime as they had to deal with many patients with limited staff. Such mental exhaustion created a non-cooperative environment that led to the deterioration of the relationship among them. Also, they felt more

stress working with patients having heart disease, kidney disease, cancer, diabetes, etc., as they were not sure that the outcomes would be positive. They often needed to go out of their comfort zones, such as forcing and sometimes even scolding them, while dealing with geriatrics, pediatrics, alcoholic, and psychiatric patients. The aggressive nature of visitors who criticize their work for no reason makes them feel that people never realize their dedication and commitment; instead, they were fault finding.

".... The relatives and visitors put pressure for us to do the things faster, but they never understood that we always performed our task to the greatest of our capacity...." (p3, married nurse)

Nurses are blamed several times for other's mistakes and were scolded for other's faults, carelessness, and ignorance. The way seniors tried to show superiority and even scolded for minor errors instead of guiding for improvement, and further encouragement was unacceptable and was a factor for de-motivation. Nurses experienced verbal abuse for no reason from visitors and seniors as well. One of the reasons to regret upon choosing this profession was having to work during the nighttime. Being a lady, they are frightened to travel at night, especially for handling their duty as unexpected, and offensive things might happen. The nurses are mentally disturbed by the extended healing period and untimely and unexpected deaths of those patients to whom they became emotionally attached, which ultimately would be the reason for poor service delivery. The in-charge nurses experienced more stress than other staff nurses as they had additional duties and responsibilities, including planning and management. Married nurses were facing more problems balancing their lives than unmarried nurses. The reason was that because they had more responsibilities and tasks over their family members and had to be within the territory of their family norms, rules, and cultures. For minor illnesses and injuries, nurses were facing difficulties as they did not get leave because of tight and pre-determined work schedules and were compelled to attend to their duties.

- ".... I overheard a conversation between my father-in-law and a neighbor that he did not want his daughter-in-law to be a nurse..." (p3, married nurse)
- ".... Even though my daughter was suffering from a high fever, I was compelled to come to the duty, leaving my daughter with my husband. Males usually do not know how to care for a child. I was always thinking about my child during duty time. I could not concentrate on my duty...." (p13, having a baby girl)
- ".... The hospital rotations were already prepared, and one

day suddenly, I had a viral fever. I requested my friends to exchange my duty, but they too had their problems. I was compelled to perform my duty despite my illness..." (p1, working in a maternity ward)

For nurses with less work experience, lack of preparedness for dealing with events was a crucial stressful factor as they lacked confidence and skills to deal with different types of cases. The remunerations, rewards, and payments did not match nurses' commitment, devotion, and efforts. Society always looked down on nurses and never recognized their hardships, deeds, and struggles. A sort of discouragement has arisen because of a lack of respect, dignity, and trust. Working in a hospital when there was a problem at home or when the home environment was not expected, as usual, led to a loss of concentration in work and more chances of making mistakes.

Effect of stress: Effect of stress describes the changes brought in because of pressure, affecting the organization and individual health. Occupational accidents such as overdose and under-dose of medicines were some of the effects. At the time of stress, nurses lost their interest to interact, counsel, and deal with the patient, and delay of care occurred, and this service was not effective. The core group to be affected when nurses made mistakes due to the lack of concentration in their work were the patients. They even forgot to take care of hospital equipment, instruments, and materials. Sometimes, they experienced spilling of medicines, making mistakes during waste disposal, and forgetting to fill the investigation forms. The work performance and quality of service would be degraded, and the goodwill, name, and fame of the hospital will fade away when complaints arise from people over service delivery.

- ".... Once I was told to give medicine to the patient. I gave overdose as my mind was diverted from the normal condition. The patient vomited instantly because of overdose, and his health was affected...." (p9, working in the medical ward)
- ".... I feel a sort of nervousness and do not like to talk and cope with others..." (p4, an unmarried nurse with one year of work experience)

A nurse reported the effect differently, ".... I suffered from diarrhea when there was mental pressure...." (p5, working in a private hospital)

Headache was the most common reaction to job stress, followed by insomnia. The nurses rarely got time to relax, and that is why they frequently experienced a headache. They got sleeping disturbances because they were not able to chase away the stressful event from their minds.

The other effects on individual health were loss of appetite and lethargy. Frustrations and depressions were also the mental and psychological problems that led them to act unusual. While working in a stressful environment, they even hurt themselves by pricking with needles and felt irritated due to heavy mental pressures and tortures.

Coping Strategies: Nurses adopted different activities to keep themselves busy based on comfort and situation. They found listening to music, playing indoor and outdoor games, watching television, films, movies, surfing the internet, engaging in household chores, and going through the newspapers to be helpful in stress management. They were able to keep stressors away by having adventures and entertainment. An ample time spent together with close and supportive people and sharing about the events, moments, and incidents helped them relieve mental pressures.

".... Sharing about the event with my husband and children and having a talk with them makes me feel comfortable..." (p11, the married nurse having children)

".... After crying alone and taking rest, I feel easier and more comfortable..." (p4, working in the emergency ward)

Nurses believed that when they did not share the things with other people, the same event or stressor creating torture will hit their minds repeatedly. After being bored due to the monotonous job, they took a rest in a peaceful environment to chase away the stress. Some even shared that after crying, rolling tears would take away all their worries and tensions.

DISCUSSION

This paper aims to explain the stress experienced by nurses working in different hospitals. Stress experiences have been placed into three domains: "causes", "effects", and "coping strategies". The first domain had two categories which had several sub-categories. Beyond workplace stress, nurses also suffered from work-home balance.9 Excessive workloads and bitter workplace events added the intensity of the stress. 10 The other factors contributing to stress were deficiency of logistics and human resource^{7,} 8, undesirable relationships with co-workers11, relatives, seniors, and visitors.¹² The severe condition of patients also stressed them as the treatment and outcomes would be uncertain, the pain, sufferings, and deaths of the patients.¹³ The other stressors were workplace violence, work shifts, and job position. For a woman with dual commitment, stress also originated from home for several reasons: prolonged duty hours, especially night duty, inability to look after their children, and carrying out family responsibilities, etc. A study from Pakistan¹⁴

showed that marital status and no. of children were not a matter of stress. This variation might be because they have more understanding and supportive family members than the family members of our participants. Job dissatisfaction was associated with insufficient provision of care and breakdown of communication between patients and staff.8 lack of dignity and recognition was responsible for demotivation and discouragement. 1 Second domain included the effects of stress as experienced by nurses. Occupational accidents, overdose, and underdose of medicines, loss of interest in work, reduced concentration to provide quality of care, delay during service delivery were the effects to the organization due to stressed nurses^{1, 7,} which showed the misuse of drugs and poor service delivery. Various physical and psychological disturbances: headache, insomnia, loss of appetite, dizziness, tiredness, cuts, and injuries on themselves, nausea, lethargy, frustrations, and depressions^{5,16,} irritation, etc., significantly hampered during service and quality of care. 1, 8, 17-19 The third domain included coping strategies, which comprised mechanisms adopted by nurses to divert themselves from a stressful situation by keeping themselves busy such as playing games, listening to music, watching films, movies, going through the papers, etc. They also shared the things with others, including family members and friends they found supportive to feel lighter. Few participants also took a rest and sat alone for a while to cope with the situation. 1,17 Individual coping styles act as a vital protective mediator of the risk of becoming a victim of stress, and social support increased the likelihood of dealing with a severe event.²⁰

CONCLUSION

Stress in working environment was responsible for the loss of concentration in work, diminished interest, increased occupational accidents, and poor performance, ultimately leading to reduced ability to provide quality health care services. Nurses faced health problems such as headache, insomnia, loss of appetite, lethargy, frustration, and depression due to stress whose outcome was reduced power and will to work well, ultimately leading to diminished individual efficiency and performance. Nurses adopted coping strategies such as keeping themselves busy, sharing with others, and taking rest to distance the stressor. Attention must be paid towards proper management of the organization, including planning, recruitment, and procurement so that they will be able to work with total concentration, devotion, and commitment. The hospital management team must establish a special counseling team to talk with those people who are uncooperative and challenging to deal with. The problems and issues of nursing staff need to be addressed at the national planning and policy level by ensuring timely availability of resources and providing a sound working environment. More studies regarding stress for nurses need to be conducted and explored in the Nepalese context.

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CONFLICT OF INTEREST

Authors have no conflict of interest in this research work.

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