



ORIGINAL RESEARCH ARTICLE

STRESS AMONG HOSPITALIZED PATIENTS AT TEACHING HOSPITAL, CHITWAN

Sumita Lama¹, Srijana Ghimire^{2,*}

¹Chitwan Medical College Teaching Hospital, Bharatpur Chitwan

²School of Nursing, Chitwan Medical College, Bharatpur Chitwan

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**Correspondence to: Srijana Ghimire, School of Nursing, Chitwan Medical College, Bharatpur-5, Chitwan.*

Email: srijananuepane95@gmail.com

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ABSTRACT

Background: Stress is defined as “the non- specific physiologic response of the body to any demand made upon it. Stress is a state produced by a change in the environment that is perceived as a challenging, threatening or damaging to a person’s dynamic balance or equilibrium. This study tries to find out the stress among the hospitalized patients.

Methods: A descriptive, cross sectional study design was used to find out the stress among the hospitalized patients of Chitwan Medical College Teaching Hospital, Chitwan. Purposive sampling technique was used. Structured interview schedule was used to collect the data. The data was edited, coded and analyzed using statistical package of social sciences (SPSS) version 16.0. Descriptive and inferential statistics was used to analyze the data.

Results: Out of 84 respondents, 52.4% respondents were female. Findings of the study revealed that more than half of the respondents 57.1% had high stress. So this study showed that the patients had high level of stress during hospitalization. The result also showed that there was statistically significant association between level of stress and sex of the respondents ($p=0.002$), educational status ($p=0.002$), place of residence ($p=0.01$), sufficiency of family income (0.02), previous experience of hospitalization ($p=0.03$). The major stressors identified in this study were economic stressors, stressors related to family role, disease condition. The minor causing stressors were stressors related to professional behaviors of health personnel and hospital related stressors.

Conclusions: Stress reduction activities such as counseling, warm environment should be provided for the patients to enhance the quality of life by reducing stress.

INTRODUCTION

Stress is one of the unpleasant situations which have effects on various aspects of peoples’ lives. These unpleasant effects may be mentally or physically impaired even more and can aggravate their health status.¹ Stress is a state produced by a change in the environment that is perceived as a challenging, threatening, or damaging to a person’s dynamic balance or equilibrium. The person may feel unable to meet the new demands of the new situation. The change or stimulus that evokes this state is stressor. The nature of the stressor is variable; an event that may be stressful for one person may not be stressful for other.²

Study conducted by Latha et al. has reported lack of financial resources, factors related to the hospital environment as the stressors related to hospitalization. These factors may related to the interaction with different health professionals and the ability to bear such stressful condition and eventually acts as barrier for effective treatment outcomes.⁴ Overcrowded beds and equipment in wards can be sources of stress to patients.⁵ Before operation, least information about disease and prognosis, financial factors, uncooperative nursing staffs and fear of losing parts of the body also create stress during hospitalization.⁷

It is certain that the response to stress depends on

the importance, severity and duration of stressful factors. If the number and intensity of these factors increase physical and mental balance is disturbed and illness may develop.⁶ About 72.9% patients were under stress due to hospitalization. Among them (76.5%) were female patients and patients from urban (77.6%) area were in more stress. The major factors for stressors found that fear of losing body part or function, which were undergoing operation and not knowing the future outcome of treatment. The new environment of the hospital can act as a potential source of stress.⁷ There was different causes of stress experiences by hospitalized patients such as 47.0 % patients experienced mild stress due to lack of information regarding hospital, 29.0 % were experienced moderate stress due to separation from family members, 24.0 % experienced severe stress due to low socio economic status.⁸ A study concluded by Marosti & Dantas has reported that young females were more stressful among who were not under psychotherapeutic drugs within 24 hours.

Hospitalized patients face new stress situation due to change of his environment from home to hospital. Major perceived stress factors include admission for surgery, death of the patient roommate and limitation of freedom, difficulty to meet doctors when wanted, no explanation about treatment or examination, no explanation about nursing care procedures.^{7,9} Only few researches have been carried out in hospitalized patients so this study tried to find out stress among hospitalized patients in our contest. Hospitalized patients experience different type of stressors. The main aim of the study was to identify different stressors during hospitalization and the level of stress among hospitalization patients during hospitalization.

METHODS

A descriptive cross-sectional research design was used to find out the stress among the hospitalized patients at least 24 hours and above in different departments of medicine at Chitwan Medical College, Chitwan by using non probability, purposive sampling technique. Study sample was 84. Data were collected from June to July 2018 by using pre-tested structured interview schedule. Each interview was taken for about 20-30 minutes. Prior to data collection, ethical approval was obtained from Chitwan Medical College institutional review committee. Prior to data collection verbal consent was also obtained from each respondent. The collected data was checked, reviewed and organized daily for its

accuracy, completeness and consistency. The data was entered in IBM SPSS version 16.0. Descriptive statistics such as frequency, percentage, mean and standard deviation was used for the socio-demographic and knowledge related items and inferential statistics (χ^2 test) was used to find out the association between variables.

RESULTS

One third (33.3%) respondents were up to 30 years of age group with mean age and standard deviation of the respondents were 41.399 ± 15.17 years, minimum 18 years and maximum age was 70 years, 52.4% respondents were female, (78.6%) of the respondents were married. Among married, 83.3 % were living with family members, (75.0%) belongs to Nuclear family and two thirds of the respondents 75.0% were from urban area (Table 1).

Table 1: Socio-demographic Characteristics of Respondents n=84

Variables	Frequency (Percent)
Age in group	
≤30	28 (33.3)
31-40	18 (21.4)
41-50	13 (15.5)
51-60	13 (15.5)
≥60	12 (14.3)
<i>Mean age±SD=41.39±15.17 years, min=18, max=70</i>	
Sex	
Male	40 (47.6)
Female	44 (52.4)
Ethnicity	
Brahmin	24 (28.6)
Chhetri	13 (15.5)
Dalit	19 (22.6)
Janajati	28 (33.3)
Marital status	
Married	66 (78.6)
Unmarried	18 (21.4)
If married, living status	
Signally	4 (6.7)
With family members	62 (93.3)
Type of family	
Nuclear	63 (75)
Joint	21 (25)
Place of residence	
Urban	63 (75)
Rural	21 (25)

More than two third (67.9%) of respondents were literate, one third of the respondents (33.3%) were engaged in household works and (64.3%) had sufficient family income. Regarding chronic illness, 52.4% respondents had chronic illness such as diabetes, hypertension etc., (64.3%) respondents experience hospitalization and (77.4 %) respondents stay in hospital 2-6 days currently. Minimum hospitalization day 2 and maximum days was 11 (Table 2).

Table 2: Socio-demographic and Illness related information of respondents n=84

Variables	Frequency (Percent)
Educational status	
Literate	57 (67.9)
Illiterate	27 (32.1)
Occupation	
Household works	28 (33.3)
Service	18 (21.4)
Agriculture	24 (28.6)
Business	14 (16.7)
Sufficiency of family income	
Yes	54 (64.3)
No	30 (35.7)
Chronic illness	
Yes	44 (52.4)
No	40 (47.6)
Experience of hospitalization	
Yes	54 (64.3)
No	30 (35.7)
Length of hospitalization	
2-6 days	65 (77.4)
7-11 days	19 (22.6)

Domain related to economic stressors scored higher mean (3.64) with mean percentage 72.8% followed by stressors related to family members (3.56) with mean percentage 71.2%. Likewise stressors related to disease condition (3.44), mean percentage 68.8%. Respondents scored lower in professional behaviors of health personnel (2.34) with mean percentage 46.8% (Table 3).

More than half 57.1% respondents had high level of stress whereas 42.9% respondents had low level of stress. There was significant association between level of stress and sex ($p=0.002$) which shows that female (72.2%) had high stress during hospitalization than male respondents. Other variable also significant association between level of stress and educational status ($p=0.004$), residence of respondents ($p=0.01$) which shows that respondents living in urban area had high stress than living in rural area, sufficiency of income ($p=0.02$) which shows that who do not have sufficiency of income had high stress than who have sufficiency in income. Likewise, there was significant association between level of stress and previous experience of hospitalization ($p=0.03$) which shows that who had no previous experience of hospitalization had high stress than who had previous experience of hospitalization (Table 4).

There was no significant association between levels of stress during hospitalization with other selected variables i.e. age ($p=0.22$), marital status ($p=0.49$), living status ($p=0.17$), occupation ($p=0.81$), Type of family ($p=1.00$), chronic illness ($p=0.06$) and duration of hospitalization ($p=0.32$).

Table 3: Respondents' mean score of stress on different domains

n=84

Domain	Mean±SD	Percent of Mean Score
Hospital related stressors	2.86±0.08	57.2
Economic stressors	3.64±0.06	72.8
Stressors related to disease condition	3.44±0.10	68.8
Stressors related to ward environment	3.07±0.09	61.4
Stressors related to professional behaviors of health personnel	2.34±0.07	46.8
Stressors related to family member	3.56±1.18	71.2
Stressors regarding changes in the appearances	2.96±1.33	59.2
Total score	3.12±0.42	62.5

Table 4: Association between Levels of Stress of the Respondents with Selected Variables n=84

Variables	Level of stress		p-value
	Low (%)	High (%)	
Sex			
Male	24(60.0)	16(40.0)	0.002
Female	12(27.3)	32(72.2)	
Educational status			
Literate	18(31.6)	39(68.4)	0.002
Illiterate	18(66.7)	9(33.3)	
Place of residence			
Urban	22(34.9)	41(65.1)	0.01
Rural	14(66.7)	7(33.3)	
Sufficiency of income			
Yes	28(51.9)	26(48.1)	0.02
No	8(26.7)	22 (73.3)	
Previous experience of hospitalization			
Yes	25(53.2)	22(46.8)	0.03
No	11(29.7)	26(70.3)	

Significance level at <0.05 where p-value is computed from chi square test

DISCUSSION

More than half of respondents 57.1% had high level of stress which is inconsistency in the study conducted by Chhari and Mehta (2016)⁷ which showed that 28.2% were in high level of stress. The reason behind this may be due to different setting, limited population and difference in nursing care that might affect the stress level among patients. Significant association between level of stress and sex ($p=0.002$) which was consistent with the findings of the study conducted by Chhari and Mehta (2016)⁷ where females are more stressful than males. The reason may be females are more concerned of looking after family and children, and fear of isolation by their family members due to presence of chronic illness, lack of privacy etc.

Educational status was also significant association with level of stress ($p=0.002$) which was consistent with the findings of the study conducted by Boey and Boey (2016)¹⁰ where literate people had high level of stress. This may be due to educated people are more conscious about their health and treatment mechanism. So they are more worried about their health and reports more mental reactions. There is also significant association between Level

of Stress and place of residence ($p=0.01$) which was consistent with the findings of the study conducted by Boey and Boey (2016)¹⁰ where urban people have high level of stress. The higher anxiety and depression associated with urban people may partly account for higher hospital stress.

There is also significant association between Level of Stress and sufficiency of income ($p=0.02$) which shows that people with low income have high level of stress. The reason may be patients have high expenditure in medications, investigations etc. There might be also loss of income and people cannot afford high expenditure.

There is also significant association between level of stress and previous experience of hospitalization ($p=0.03$) which was consistent with the findings of the study conducted by Boey and Boey (2016)¹⁰. The reason behind this may be first time inpatients may find hospitalization unfamiliar and uncertainty.

The study is limited to only Medicine department of Chitwan Medical College Teaching Hospital.

CONCLUSIONS

More than half of the patients were stressful due to hospitalization. The major stressors were economic stressors, followed by stressors related to family members and stress related to disease condition. The minor causing stressors related to professional behaviors of health personal and hospital related stressors. There is significant association between level of stress and gender, educational status, place of residence, sufficiency of family income and previous experience of hospitalization. This study identifying more stressful experiences for the patient during hospitalization may help nurses to improve nursing cares. In the hospital setup, nurses should help the patients to reduce the stress with clarifying the doubts regarding their condition or anything that will remove the stress.

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