

Occupational Stress among Nurses in a Public Medical College Hospital

Shila Rani Das¹, Chinmay Biswas², Sharmina Afrin³

Abstract

Background: Now a days, there is increased demand and progress in the nursing profession. Along with these stress among the nurses has also increased. **Objective:** Purpose of the study was to assess the extent of perceived occupational stress and its association with work-related and non-work related causes among nurses. **Materials and method:** This Cross-sectional study was carried out among 197 nurses of Shaheed Suhrawardy Medical College hospital (ShSMCH), Dhaka, Bangladesh, from the period of 1st July 2015 to 30th June 2016. Sampling method was simple random sampling. Data was collected by face to face interview with the help of semi-structured questionnaire and finally all data were analyzed using SPSS software version 21. **Results:** It was found that 69% nurses were between the age of 21 to 39 years, 94.9% were female, 68% were married, 79.2% were Muslim, 84.3% had diploma, family income of 91.4% were equal to more than 40,000 Tk. and 95.5% used to do clinical work. Only 5.1% found to experience high stress. Statistically significant difference was found between sex, occupational stress and religion, educational status, and type of work ($p < 0.05$). Few nurses suffered from high stress but high level of stress were more in male, non Muslim, post graduate nurse and those who were engaged in administrative work. **Conclusion:** Nurse Managers should take appropriate actions to decrease stress helping their nurses to work efficiently and effectively.

Keywords: Nurses; occupational stress; ENSS; public hospital

Delta Med Col J. Jul 2018;6(2): 86 – 89

Introduction

Nursing is generally perceived as a demanding profession. Along with the increased demand and progress in the nursing profession, stress among the nurses has also increased. Nursing profession follows a holistic approach, taking into account the person in totality in his or her environment.¹

Stress is experienced when demands made on us outweigh our resources. Stress is the common phenomena being experienced by almost all individuals and it is viewed as a real threat to the physiological and psychological response producing mental tension or physiological

1. Associate Professor, Dept. of Community Medicine, Z H Sikder Women's Medical College, Dhaka, Bangladesh.
2. Consultant, Dept. of Dermatology and Venereology, Dhamrai Upazila Health Complex, Dhamrai, Dhaka, Bangladesh.
3. Professor & Head, Dept. of Community Medicine, Delta Medical College, Dhaka, Bangladesh.

Correspondence: Dr. Shila Rani Das. e-mail: dr.shila@yahoo.com

reactions leading to illness and which increases the demands for adjustment upon the individual.² WHO defines occupational stress as “it is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope”.³ Workplace stress can impact on employee productivity through increased absenteeism and presenteeism.⁴ Occupational stress is considered a challenge for the employers because high level stress results in low productivity.⁵

Materials and method

This was a cross sectional study with the aim to assess the extent of perceived occupational stress and its association with work-related and non-work related causes among nurses in a public medical college hospital, Shaheed Suhrawardy Medical College hospital (ShSMCH), Dhaka, Bangladesh. The study period was from 1st July 2015 to 30th June 2016. Sampling method was simple random sampling. Sample size was 197. Data were collected by face to face interview and tools was questionnaire which had two parts related to work and non- work related variables, Expanded Nursing Stress Scale (ENSS) Questionnaire. Data analysis was done using version 21 of SPSS software. Descriptive statistics (frequency, mean, SD, percentages and ranges) was done. Relationship between two categorical variables was assessed by Chi-square (χ^2) test and quantitative variables by unpaired t test. $p < 0.05$ was taken as lowest level of significance.

Results

Out of total 197 subjects, about 69% were in the age group of 21 to 39 years and their mean age was 35.95 ± 8.01 years. Majority (94.9%) was female and 68% were married. About 79% were Muslim,

84.3% had diploma, 11.2% had B.Sc in nursing and 4.5% had post graduate degree. Mean monthly family income was 46751.269 ± 4557.35 Tk, where 91.4% had income of more than and equal to 40,000 Tk. and 8.6% had less than 40,000 Tk. (Table I). About (95.5%) respondents used to do clinical work and 4.1% did administrative work. About 62% took training. About 57% worked equal to and more than 10 years. Maximum (52.8%) worked in day shift and 30.5% and 16.8% in evening and night shift respectively (Table II). There was significant association between occupational stress level and gender (Table III). Occupation stress was more prevalent in Muslims, post graduate nurse, and administrative worker (Table IV). Majority (94.6%) had low stress and 5.1% had high stress.

Table I: Distribution of respondents by non work related variables (N=197)

Variables	Frequency	Percentage (%)
Age range (in years)		
21-39	136	69
40-58	61	31
Mean±SD		35.95±8.01
Gender		
Male	10	5.1
Female	187	94.9
Religion		
Muslim	156	79.2
Non Muslim	41	20.8
Educational status		
B. Sc in nursing	22	11.2
Diploma	166	84.3
Post graduate	9	4.5
Family income per month (in Taka)		
<40,000	17	8.6
≥ 40,000	180	91.4
Mean±SD		46751.26±4557.35

Table II: Information regarding work related variables (N=197)

Variables	Frequency	Percentage (%)
Administrative	8	4.1
Clinical	189	95.9
Year of experience		
<10 years	83	43
≥10 years	114	57
Shift of work		
Day shift	104	32.8
Evening shift	60	30.5
Night shift	33	16.8
Training		
Yes	122	61.9
No	75	38.1

Table III: Comparison of occupational stress score between male and female (N=197)

Gender	Stress score Mean \pm SD	p value
Female (n=187)	52.68 \pm 9.94	.03
Male (n=10)	64.7 \pm 15.35	

Table IV: Association between occupational stress and work and non work related variables (N=197)

Variables	Stress level		Chi-square-value	p value
	Low stress	High stress		
Religion				
Muslim	151(96.8%)	5(3.2%)	5.446	0.02
Non-Muslim	36(87.8%)	9 (12.2%)		
Educational Status				
Diploma	161(97.6%)	4(2.4%)	14.606	.001
B.Sc in nursing	21(87.5%)	3(12.5%)		
Postgraduate	5(62.5%)	3(37.5%)		
Job pattern				
Administrative	5(62.5%)	3(37.5%)	18.193	.000
Clinical	182(96.3%)	7(3.7%)		

Discussion

In this study majority of the subjects were in the age group of 21 to 40 years. It is not similar to the study conducted in India where 22.1% were younger than 30 years, majority were aged between 30-40 years, and 18.3% were of more than 40 years.⁶ Most of the subjects (94.60%) were female which was similar to other study where they found 93% female.⁷ Among the nurses 68% were married which was differs (80.4%) to the study conducted in India.⁸ Majority had diploma in nursing, followed by B.Sc in nursing and post graduate degree which was not similar with the study of Jordan.⁷ This difference is so much admissible because of difference in socio cultural pattern and practice between two countries. Family income of majority subjects was more than 40,000 Tk which was not similar to the study previously done in Bangladesh, where 74.8% had monthly income of more than 40,000 Tk.⁹ Most of them (57%) had more than 10 years of experience in service which was not similar to the study done in India where 44% had more than

10 years of experience and 56% had less than 10 years of experience.¹⁰ In this study only 5.1% were found to have high stress and 94.6% had low stress. But in another study which was held in India, 42% had high stress and 48% low stress.¹¹ Statistically significant difference was also found between female and male. This was similar to the study done in Saudi Arabia where the effect of gender on perceived job related stress was investigated.¹² High stress (12.2%) was found among the Muslims and significant association was found between occupational stress and religion. Stress was more in postgraduate nurses and there was significant association between occupational stress and educational status. However, Shivaprasad found no significant association between education, administrative work, type of work and occupational stress in his study.¹⁰

Prevalence of low level of stress was seen among the majority of the nurses and least number of nurses suffered from high level of stress. No significant association was found between occupational stress level and work related and non-work related variables as causes of stress except gender, religion, educational status, and type of jobs. But careful nursing interventions will be needed to decrease nurses' stressors; these will help nurses to perform their jobs safely and competently especially those who suffer from stress.

References

1. Gulavani A, Shinde M. Occupational Stress and Job Satisfaction among Nurses. *IJSR*. 2014;3(4):733-40.
2. Yadav N, Kiran UV. Occupational Stress among Security Guards. *Journal for Studies in Management and Planning*. 2015;1(7):21-31.
3. www.who.int [Internet]. Occupational Health. Stress at Work Place [cited 2018 July 26]. Available from: http://www.who.int/occupational_health/topics/stresatwp/en.

4. Yong M, Nasterlack M, Pluto RP, Lang S, Oberlinner C. Occupational Stress Perception and Its Potential Impact on Work Ability. *Work*. 2013;46(3):347-54.
5. De Frank R, Cooper C. Worksite Stress Management Interventions: Their Effectiveness and Conceptualisation. *Journal of Managerial Psychology*. 1987;2(1):4-10.
6. Saleh AM, Saleh MM, AbuRuz ME. The Impact of Stress on Job Satisfaction for Nurses in King Fahad Specialist Hospital-Dammam-KSA. *Journal of American Science*. 2013;(3):371-77.
7. Bhatia N, Kishore J, Anand T, Jiloha RC. Occupational Stress amongst Nurses from Two Tertiary Care Hospitals in Delhi. *Australasian Medical Journal*, 2010;3(11):731-38.
8. Megrath A, Reid N, Boore J. Occupational Stress in Nursing. *International Journal of Nursing Studies*. 2003;40:555-65.
9. Nabirye RC, Brown KC, Pryor ER, Maples EH. Occupational Stress Job Satisfaction and Job Performance among Hospital Nurses in Kampala Uganda. *J Nurs Manag*. 2011;19(6):760-68.
10. Shivaprasad AH. Work Related Stress of Nurses. *Journal of Psychiatry Nursing*. 2013;2(2):53-58.
11. Mohite N, Shinde M, Gulavani A. Occupational Stress among Nurses Working at Selected Tertiary Care Hospitals. *IJSR*. 2014;3(6): 999-1005.
12. Kamal SM, Al-Dhsham M, Abu-Salameh KA, Abuadas FH, Hassan MM. 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):119-25.