

KAP STUDY

JOB RELATED STRESS AND ITS VARIOUS SOURCES AMONG NURSES WORKING AT LIAQUAT UNIVERSITY HOSPITAL, JAMSHORO

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ABSTRACT

Background: Job related stress has been identified as global health issue which deters the health of nurses. The objective of the study is to determine the severity of job related stress and find out the various sources of job related stress among Nurses of Liaquat University Hospital, Jamshoro.

Methods: A cross-sectional study was performed at Liaquat University Hospital, Jamshoro from 1st July 2015 to 31st January 2016. Study was accomplished on 100 registered nurses. Nurses having valid Pakistan Nursing Council License were included in the study. Purposive non probability sampling method was used to approach the subjects. Structured questionnaire (HCJSSQ) February 2008 was used for data collection. Data analysis was done by using SPSS software version 21.

Results: Out of total 100 study participants, 90 (90%) were females and 10 (10%) were males with mean age of 32.29SD +7.025 years. Majority of nurses 40.64% reported moderate stress, 35.48% of nurse's responded severe stress and 16.32% of nurses had mild stress. Among the sources of stress, leading source of stress was workload 56%, facing problems in relations with subordinate medical staff as 51%, emotional distress of patients as 50% and 38% of staff are accountable for the value of the work of other staff level of stress.

Conclusion: The study concluded that majority of nurses had job related stress that may cause negative impact on organizational climate. Work load was recognized as the prominent source of causing job related stress among nurses.

Keywords: Nurses, Workload, Job related Stress.

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INTRODUCTION

Nursing profession has been recognized as stressful profession¹. Job related stress is important health problem among nurses in the modern world. It may reduce the gratification in life and can lead to hypertension, cardiac problems, reduce Immunity, contribute to substance abuse². Moreover, it has deleterious effect on mental and physical wellbeing³. It is evident by recent research that high workload, lack of supervision, and lack of support from higher authority are the main stressors among nurses⁴. Stress has severe consequences like frustration, high turnover and reduced productivity⁵. It is evident by current research that the stress can reduce the work capabilities and quality care⁶.

Stressed nurses are incapable to render their quality services to the patients⁷. It is established that attractive salary of nurses can reduce the stress level that decreases the absenteeism at workplace and increase the motivation⁸. Furthermore, another research revealed high level of stress that may cause job dissatisfaction, whereas the job satisfaction of nurses can be enhanced by three elements professional achievement, autonomy of communication and appreciation⁹. Conducive working environment and stress free employees play pivotal role for productivity of any organization¹⁰. However, conflicts and disappointments lead to leave the job that is responsible for nurse's shortage at hospitals¹¹. In addition, one of study related to relationship

between stress and self-efficacy revealed the low self-efficacy among nurses in stress which can be recovered by supervision, support, and induction of staff¹². Patient's relative's anger and aggressive behavior, safety hazards, lack of support by nursing administrators, lack of equipment are main factors of contribution of job related stress to nurses. Therefore, the objective of present study was to determine the severity of job related stress and its sources among nurses working at Liaquat University Hospital, Jamshoro.

METHODS

This cross sectional study was performed at Liaquat University Hospital, Jamshoro, Sindh for the period of seven months from 1st July 2015 to 31st January 2016. Calculated sample size was 100 nurses of both genders. Nurses licensed by Pakistan Nursing Council and having one year job experience were enrolled for the study. Nurses having less than one year clinical working experience were excluded from the study. Study participants were approached through purposive non probability sampling method.

Written consent was obtained from all subjects prior to data collection. The aim of the study was explained explicitly to the all participants. The participation of the subjects was voluntary. Secrecy of data was guaranteed.

Adapted and validated questionnaire "Hospital Consultants" Job Stress & Satisfaction Questionnaire (HCJSSQ)" was utilized as an instrument for the data collection. The first part of the questionnaire contained questions relating to demographic characteristics of the study participant (e.g., age, marital status, education level, and monthly income). The second part of the questionnaire comprised of sources of stress. The questionnaire comprised of 25 questions on sources of stress.

Data analysis: Data was entered and analyzed through SPSS version 21.0. Categorical variables like gender, marital status, level of education and various sources of job related stress were presented in frequency and percentages. Continuous variable like age was reported in Mean \pm SD.

RESULTS

In the present study, mean age of study participants was around 32.29 SD \pm 7.025 years. Out of total 100 subjects, 90 (90%) were females followed by 10 (10%) males. With respect to 100 participants, majority of nurses 57 (57%) were married while 40 (40%)

were unmarried. Likewise the larger number of the nurses 70 (70%) have graduated nursing diploma whereas 30 (30%) nurses had BSN Post RN degree. Majority of nurses were experienced. 31% nurses had service experience 1 to 10 years, 39% nurses supposedly having service experience 11 to 20 years and 30% have 21 to 30 years. Out of total 100 subjects, majority of 56 (56%) nurses reported to have severe level of stress. Whereas, 32 (32%) nurses had mild and likewise 32 (32%) suffered moderate level of job related stress (Table 1, Figure 1).

Table1: Descriptive Statistics of Study Participant (N = 100).

Variable	n	%
Age (Mean \pm SD)		32.29 \pm 7.025
Gender		
Male	10	10
Female	90	90
Marital Status		
Single	40	40
Married	57	57
Widow	03	03
Qualification		
Diploma in nursing	70	70
BSN Post RN	30	30
Working experience		
1 to 10 Years	31	31
11 to 20 Year	39	39
21 to 30	30	30
Level of Job Related Stress		
Mild Stress	12	12
Moderate Stress	32	32
Severe Stress	56	56

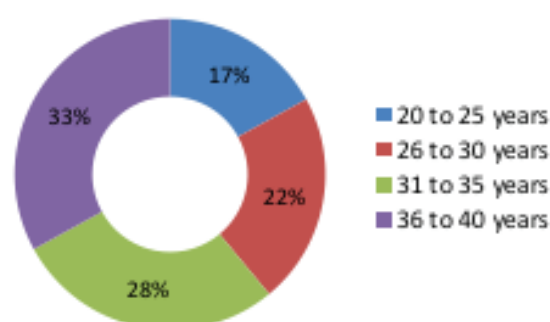


Figure 1: Age Distribution of Nurses (N = 100)

According to current study, larger number of 33% nurses belonged to age group of 36 years to 40 years and low number of nurses 17% were in age from 20 years to 25 years (Table 2).

Table 2: Distribution of age groups with severity of Job related stress (N = 100)

Age groups in years	Severity of stress				Total No: (%)
	0 (Not at all) Normal	1 (A little) Mild	2 (A bit) Moderate	3 (A lot) Severe	
20 to 25	4	3	6	4	17 (17%)
25 to 30	2	4	11	5	22 (22%)
30 to 35	1	5	10	12	28 (28%)
35 to 40	1	4	14	14	33 (33%)
Total	8	16	41	35	100

Approximately, 33(33%) study participants in age 35 to 40 years reported job related stress in form of 14(14%) and 14(14%) mild and moderate job related stress. However, very few nurses 01(1%) in group 30 to 40 years had no stress job related stress.

Similarly, a minority nurses 02(2%) in group 25 to 30 years had no stress job related stress. Furthermore, 16(16%) nurses had mild job related, 41(41%) reported moderate stress and 35(35%) stated severe stress (Table 3).

Table 3: Various Sources of Stress among Nurses (N = 100)

Stress variables	Rating scale			
	0	1	2	3
1. Being involved with the physical suffering of patients:	5%	41%	38%	16%
2. Encountering difficulties in relationships with junior medical staff:	4%	9%	36%	51%
3. Feeling you have insufficient input into the management	8%	12%	31%	49%
4. Disruption of your home life through spending long hours at work	2%	10%	60%	28%
5. Having inadequate facilities to do your job properly	5%	11%	53%	31%
6. Having to deal with distressed, angry or blaming relatives	8%	11%	60%	21%
7. Keeping up to date with current clinical and research practices	40%	9%	12%	39%
8. Having to take on more managerial responsibilities	5%	12%	36%	47%
9. Encountering difficulties in relationships with consultant colleagues	6%	12%	48%	34%
10. Feeling under pressure to meet deadly	7%	17%	42%	34%
11. Being responsible for the quality of the work of other staff	5%	7%	50%	38%
12. Being involved with the emotional distress of patients	7%	5%	38%	50%
13. Encountering difficulties in relationships with administrative staff	6%	10%	48%	36%
14. Having too great an overall volume of work	2%	10%	32%	56%
15. Feeling you is poorly paid for the job you do	7%	4%	51%	38%
16. Encountering difficulties in relationships with managers	5%	13%	45%	37%
17. Having conflicting demands on your time (e.g. patient care/management/College)	10%	13%	39%	38%
18. Having inadequate staff to do your job properly	11%	10%	36%	43%
19. Dealing with the threat of being sued for malpractice	11%	10%	35%	44%
20. Disruption of your home life as a result of taking paperwork home	5%	12%	47%	36%
21. Feeling that your accumulated skills and expertise are not being put to their best use	3%	12%	48%	37%
22. Disruption of your home life as a result of being on call	6%	32%	38%	24%
23. Having a conflict of responsibilities	7%	44%	33%	16%
24. Uncertainty over the future funding of your unit/institution	5%	41%	38%	16%
25. Being responsible for the welfare of other staff	9%	41%	22%	28%

Table 3 reveals various sources of stress among nurses. In the present study majority of 56 (56%) nurses reported to have increased workload at working place, yet 51(51%) nurses faced difficulties in relationships with junior medical staff. Furthermore, 50(50%) nurses had emotional distress. Approximately, 49% nurses felt about their insufficient input into the management. 47% reported having to take on more managerial responsibilities. Moreover, 44% nurses said dealing with the threat of being sued for malpractice.

DISCUSSION

In present study the mean age of staff nurses was 32.29 SD +7.025 years. Age ranged from 24 to 45 years. Ten (10%) were male nurses and 90 (90%) were female nurses making male to female ratio 1:9. A study from Iran by Tajvar AH et al.¹³ reported in their study the mean age 31.57 with SD \pm 5.86 years and ages of the nurses ranged from 23 to 45.15% was male nurse and 85% was female nurse making male to female ratio 1:8.5. Another local study conducted in Karachi, Pakistan on 70 female nurses by Khalid S. et al.¹⁴ reported that the mean age was 30.50 with SD+ 9.50 years. Age ranged from 23 to 40 years.

In the current study majority of the staff nurses belong to the older age groups 61% of staff nurses were above 30 years and 39% was below 30 years.

The study performed by Khalid S et al.¹⁴ revealed that 31 study participants were in the age group ranging between 25-29 years and moreover, 23 study subjects were in the age group ranging between 30-34 years and 16 respondents were in the age group ranged from 35 to 40 years. These results are also similar to another study conducted in Ireland¹⁵.

In the present study majority of staff nurses were experienced. 31% nurses have service experience 1 to 10 years, 39% staff nurses have service experience 11 to 20 years and 30% have 21 to 30 years. A study from African country Ghana by Dapaah et al.¹⁶ on 369 staff nurses reported in her study that 102 (27.6%) had work experience 1 to 15 years, 73 (19.8%) had work experience 16 to 25 years. Majority of respondents (124) representing 33.6% stated that they had work experience 26 and 35 years. Another 70 of the respondents representing 19% had worked 36 and 45 years. In local study by Khalid S et al.¹⁴ reported in here study that 75% of nurses have 15 to 20 years of service length, 21 % had 10 to 14 years of service length and only 4 % had 5 to 9 years' service length.

In my study during the response of questionnaire (HCJSSQ) out of total one hundred nurses maximum number 40.64% of nurses responded scale 2 "a bit" means moderate stress. Followed by scale 3 "a lot"

means severe stress 35.48% of nurses responded it. Than scale 1 "a little" means mild stress 16.32% of nurses responded it. In last 7, 56% of nurse's responded scale zero "not at all" means no stress. Results are comparable with a local study by Khalid S et al.¹⁴ reported in study that mild, moderate and severe depression was seen in 30%, 42.9% and 8.6% of nursing staff, respectively.

Results are comparable with a local study by Khalid S et al.¹⁴ disclosed in study that 30% nurses had mild stress level, 42.9% nurses had moderate level of stress and 8.6% nurses reported severe level of stress whereas another study from Iran by Kavari H et al.¹⁷, reported mild, moderate and severe symptoms of depressive illness in 73.1%, 21.5% and 5.4% of nursing staff respectively.

The current study identified the relationship of occupational stress with age of the working staff nurses. It was found that older age group staffs have highest frequency 61 (61%) belongs to above 30 years of age and majority of them were in severe or moderate stress level 26 (43%) nurses found in severe stage of stress and 24 (40%) nurses found in moderate level of stress. a local study by Khalid S et al.¹⁴ reported in their study that nurses of 25-29 years group had the highest frequency 44% of depression while nurses of 35-40 years age group suffered the highest severity 75% of depression.

Another study confirmed job demand and social environment as the causes of stress.¹⁵.

In our study 53% nurses were facing stress related as compared to job environment were as less than 50% reported in other studies¹⁸. Moustaka and Constantinidis identify lack of power, role ambiguity, and role conflict are the causes of stress in their study¹⁹. Another study conducted in China by Jiegen Y et al. reported lack of social support among senior staff is one of the reasons for having occupational stress²⁰. Therefore, it is suggested that the organization should feel a need to develop different programs on such as occupational health education and occupational training for their employees to cope with job needs and stress²¹.

CONCLUSION

The study concluded that majority of nurses had job related stress that can lead to negative impact on organizational climate. Among various sources of job related stress workload was found as a leading source that is responsible for causing job related stress among nurses.

REFERENCES

1. World Health Organization. Stress at the workplace 2015. Website: https://www.who.int/occupational_health/topics/

stressatwp/en/].

2. Bhatia N, Kishore J, Anand T and Jiloha R. Occupational stress amongst nurses from two tertiary care hospitals in Delhi. *Aust Med J* 2010; 3 (11): 731-38.
3. Koçoglu M. Cynicism as a mediator of relations between job stress and work alienation: a study from a developing country-Turkey. *Global Business Management Res* 2014; 6(1):24-36.
4. Khamisa N, Oldenburg B, Peltzer K, Ilic D. Work related stress, burnout, job satisfaction and general health of nurses. *Int J Environ Res Public Health* 2015; 12(1):652-66.
5. Dagget T, Molla A, Belachew T. Job related stress among nurses working in Jimma Zone Public Hospitals, South West Ethiopia: A Cross Sectional Study. *BMC Nursing* 2016; 15(1):15- 39.
6. Kemper K, Bulla S, Krueger D, Ott MJ, McCool JA, Gardiner P. Nurses' experiences, expectations, and preferences for mind-body practices to reduce stress. *BMC Complement Altern Med* 2011; 11(1):11-26.
7. Yada H, Abe H, Lu X, Wakizaki Y, Omori H, Matsuo H, Ishida Y, Katoh T. Job-related stress in psychiatric nurses in Japan caring for elderly patients with dementia. *Environ Health Prev Med* 2014; 19(6):436-43.
8. Naqvi SM, Khan MA, Kant AQ, Khan SN. Job stress and employees' productivity: case of Azad Kashmir public health sector. *IJCRB* 2013; 5(3):525-42.
9. Lu Y, Hu XM, Huang XL, Zhuang XD, Guo P, Feng LF, et al. Job satisfaction and associated factors among healthcare staff: A cross-sectional study in Guangdong Province, China. *BMJ Open* 2016; 6(7).
10. Aktharsha US, Selvamathi A. Job stress and job satisfaction: A study among nursing personnel in hospitals. *Int J Manag* 2015; 6(1):385-93.
11. Cheng CY, Tsai HM, Chang CH, Liou SR. New graduate nurses' clinical competence, clinical stress, and intention to leave: A longitudinal study in Taiwan. *Sci World J* 2014. <http://dx.doi.org/10.1155/2014/748389>.
12. Zaki R. Job Stress and Self-Efficacy among Psychiatric Nursing Working in Mental Health Hospitals at Cairo, Egypt. *J Nurs Educ Pract* 2016;7(20):103-13.
13. Tajvar AH, Saraji GN, Ghanbarnejad A, Omid L, Hosseini SSS, Abadi ASS. Occupational stress and mental health among nurses in a medical intensive care unit of a general hospital in Bandar Abbas. *Electronic Physician* 2015;7(3):1108-13.
14. Khalid S, Irfan U, Sheikh S, Faisal M. Frequency of stress and depression in female nurses working in a teaching hospital. *Kust Med J* 2010; 2(1): 10-14.
15. McCarthy VJ, Power S, Greiner BA. Perceived occupational stress in nurses working in Ireland. *Occup Med* 2010;60(8):604-10.
16. Kyraa DA. Causes of stress among nurses in the greater Accra region. *Int J Soc Sci Res* 2014; 3(8). 2307-227.
17. Kavari H, Helyani M, Dehghani V. A Study of Depression Prevalence in Nurses and its Effective Factors in Shiraz Namazi Hospital. *Rawal Med J* 2007; 32: 184-6.
18. Najimi A, Goudarzi AM, Sharifirad G. Causes of job stress in nurses: A cross-sectional study. *Iran J Nurs Midwifery Res* 2012; 17(4): 301-5.
19. Moustaka E, Constantinidis T. Sources and effects of Work-related stress in nursing. *J. Health Sci* 2010;4(4):210-16.
20. Yu J, Ren X, Wang Q, He L, Wang J, Jin Y, et al. The role of social support on occupational stress among hospital nurses. *Int J Clin Exp Med* 2014;7(9):3000-4.
21. Wu H, Chi TS, Chen L, Wang L, Jin YP. Occupational stress among hospital nurses: cross-sectional survey. *J Adv Nurs* 2010; 66(3):627-34.

