

Workload as A Cause of Occupational Stress Among Registered Staff Nurses

Ghulam Abbas Panhwar¹, Pir Bux Jokhio², Humaira Wagan³, Husun Banu Channar⁴

Abstract

Objective: To evaluate the sources of occupational stress related to workload among registered staff nurses.

Methods: A cross-sectional study was conducted among 100 staff nurses. "Hospital consultants, job stress & satisfaction questionnaire (HCJSSQ)" was applied for data collection purpose. The questionnaire was formulated by an appropriate selection of questions and validated by 5 experts (one general administrator, two physicians, one nursing superintendent, and one human resource manager). The study was carried out during February-July 2016. The questionnaire consisted of 08 questions on sources of stress related to workload.

Results: All the invited nurses agreed to participate. The mean age of the selected sample was 32.29 years and SD \pm 7.025. The analysis of the data revealed that 'having an inadequate staff to do the job' was the biggest stressor followed by 'being on on-call and 'providing patient care within multidisciplinary teams as 2nd and 3rd stressors. 'Feeling under pressure to meet deadlines', 'too great magnitude of overall work', 'having inadequate equipment to do job properly', 'disturbance of home life due to long hours duty' and 'being unable to cure patients' were identified as 4th, 5th, 6th, 7th, and 8th number stressors respectively.

Conclusion: Nurses are facing various types of stressors, which may affect organizational culture and a factor for low-quality care for patients as well as the individual wellbeing of a staff nurse. These stressors should be handled carefully on a priority basis by proper workload management, availability of facilities, good pay scale, reward system, initiate occupational health education or support to continue education.

Keywords: Workload, occupational stress, nurses.

IRB: Approved by Liaquat University of Medical and Health Sciences. Dated: 19th November 2016. DOC#LUMHS/CE/PG/-1560-63.

Citation: Panhwar GA, Jokhio PB, Wagan H, Channar HB. Workload as A Cause of Occupational Stress Among Registered Staff Nurses [Online]. *Annals of ASH & KMDC* 2019;24:.

(ASH & KMDC 24(3):160;2019)

Introduction

Stress is a type of reaction resulted due to a demand that is difficult to cope with and ultimately requires extra energy that is not available to the stressed individual. Nurses working in hospitals are

^{1,3}Benazir Institute of Nursing,

Shaheed Mohtarma Benazir Bhutto Medical College

²Begum Bilquis Sultana Institute of Nursing,

Peoples University of Medical and Health Sciences

⁴Peoples School of Nursing,

Liaquat University of Medical and Health Sciences

Correspondence: Dr. Pir Bux Jokhio

Begum Bilquis Sultana Institute of Nursing

Peoples University of Medical and Health Sciences

Email: pjokyo@pumhs.edu.pk

Date of Submission: 30th April 2019

Date of Acceptance: 18th October 2019

not immune to those stressors. There are various reasons for feeling insecurity such as doctors' poor attitude, work environment, managerial issues, postings and busy departments (ICUs) and too much work¹. The workload is a precursor that converts occupational stress from a single word to symbol and a leading problem for health professionals all over the world. It can reduce happiness in life, increase blood pressure, intensify heart problem, low immunity, may be involved in drug addiction and disturb the overall status of mental and physical health². The definition of occupational stress in nursing is the physical & emotional responses that happen because of inadequate work

or disturbing factors in the environment³. Research showed workload as a factor that affects staff nurses' work capabilities negatively. Staff nurses faced a lot of work stress that is related to the individual, surroundings, environmental and management factors⁴. Generally, the profession "Nursing" is characterized by job stress due to job demands. The profession nursing is a very noble and appreciable profession but at the same level, it is also a very stressful job². In spite of that occupational stress cited as an important health issue^{5,6,7}. Menzies was the first who evaluate the work-related stress in nursing⁸. Four sources of anxiety in nursing have identified by the World Health Organization (WHO): client care, a power of decision-making, taking responsibility, as a change agent. From the mid-1980s, nurses' work-related stress is being researched because it is implicating negativity on health care cost, continuously⁹. If a frequency of stress persistently increases, it can change the physical health status leading to chronic stress, in spite of those who can cope with the short-term stress process¹⁰. The burning issue is related to job stress, among nurses invited to all concerned authorities of administrative or management sites in the healthcare setup. With the help of good management skills, these stressor issues can be resolved in a very positive manner¹¹.

Above discussion reveals, that work-related stress is a major reason that staff nurses fail to discharge their duties with their full potential. That is the reason that workload related stress phenomenon must be given priority. Researching this area is essentially warranted to search for reasons behind workload and find solutions so that nurses can discharge their professional duties with full potential and responsibility. This is the way that this research has been conceptualized. This research study was done to evaluate the source of work stress and frequency of stress and for recommendations to decrease the level of work-related stress in staff nurses of Liaquat University Hospital Jamshoro.

Subjects and Methods

A cross-sectional study was conducted among 100 staff nurses working in a tertiary care hospital, Hyderabad/Jamshoro Sindh. The sample size was calculated by keeping the confidence level at 95%, confidence interval 05%¹². The study period was February - July in 2016. Amanda Ramirez et al, 2008, Hospital Consultants' Job Stress & Satisfaction Questionnaire (HCJSSQ) was administrated to collect data. The questionnaire was formulated by an appropriate selection of questions & validated by 5 experts (one General Administrator, two physicians, one Nursing Superintendent, and one Human Resource manager). The questionnaire consisted of 08 questions on sources of workload related stressors. Inclusion criteria for this study was a registered staff nurse, with valid Pakistan Nursing Council registration card, having at least two years of experiences of direct nursing care in this hospital, whereas the excluding criteria included a registered nurse working on a contract basis since last one year and a nurses who remained on leave for last month. After taking permission from hospital administration & the staff nurses working in different wards who fulfilled the inclusion criteria, the nurses were invited for study participation.

There were 08 statements related to the nature of workload sources and participants were asked to rate each statement according to the statement on the interval type scale of 0 (not at all), 1 (a little), 2 (quite a bit), 3 (a lot), (as they have experienced it) and later these questionnaires were collected by the investigator. The data from the duly filled questionnaires were tabulated and analysed using the SPSS (version 16) for frequencies and percentages as descriptive data. These data were calculated and portrayed in tables and figures.

Results

During our six months (February-July 2016) study period, total one hundred (n=100) staff nurses were invited and all agreed to participate in this study turning the response rate at 100%. The mean age of participants was 32.29 years; median as 30

Table 1. Frequencies and percentages of each descriptive statement related to workload source

S#	Item (Causes of stress related to workload)	Responses			
		0 (Not at all) Normal	1 (A little) Mild	2 (A bit) Moderate	3 (A lot) Severe
1	Disruption of your home life through spending long hours at work	06 (10%)	07 (11%)	13 (21%)	37 (58%)
2	Having inadequate equipment to do your job properly	05 (08%)	06 (10%)	15 (24%)	37 (58%)
3	Feeling under pressure to meet deadlines	03 (05%)	04 (07%)	17 (27%)	39 (61%)
4	Having too great an overall volume of work	01 (02%)	07 (11%)	21 (33%)	34 (54%)
5	Having inadequate staff to do your job properly	01 (02%)	01 (02%)	25 (40%)	36 (57%)
6	Disruption of your home life as a result of being on call	02 (03%)	02 (03%)	30 (48%)	29 (46%)
7	Providing patient care within multi-disciplinary teams	02 (03%)	03 (05%)	33 (52%)	25 (40%)
8	Being unable to cure patients	07 (11%)	09 (14%)	19 (30%)	28 (45%)
		16 (33%)	39 (63%)	173 (275)	265(419)

and SD + 7.025 years. The minimum age was 24 years while the maximum age was 45 years. Ten participants of the study sample (10%) were male nurse and 90 (90%) female, making male to female ratio 1:9.

The prime source of stress was found as workload. Among the study sample, 63 (63%) participants responded that they had felt occupational stress due to workload. The analysis of the data revealed that the 'having an inadequate staff to do the job' was the biggest stressor as 25 (40%) and 36 (57%) respondents termed it as the moderate and severe cause of the stress. On the statement 'on call as a reason for home life disturbance resulting in job stress' received second most stress factor as 30 (48%) and 29 (46%) respondents had moderate and severe stress. 'Providing patient care within multidisciplinary teams' was the third stressor that affected 33 (52%) and 25 (40%) respondents moderately and severely respectively. Feeling under pressure to meet deadlines, too great magnitude of overall work, having inadequate equipment to do job properly, disturbance of home life due to long hours duty and being unable to cure patients, were termed as fourth, fifth, sixth, seventh and eighth number stressors respectively, as the data had revealed (Table. 1).

Discussion

It has been observed that a sufficient workload, management policy, adequate delegation of authority along with responsibility, recognition of efforts along with ongoing training, stress and time management will go a long way in managing stress in this profession¹³. The results of this study provide evidence that occupational stress is common among registered nurse. According to the results of our study, it was revealed that 'having an inadequate staff to do the job' was the biggest problem and source of workload related stress source. In other words, it is once again confirmed that staff shortage is the universal phenomena of today's world. Nurses are one of the victims of workload stress due to staff shortage. The findings of the study are well supported by a study¹⁴ conducted in Ethiopia. The study¹⁴ revealed that due to staff shortage, nurses have to work over an extended period (more than 50 hrs/week). Moreover, night shifts are also a cause of workload related stress among staff nurses. In another study¹⁵, it was identified that work-related pressure among staff nurses is the main reason of their exhaustion and burn out. If managers and policy makers do not head to resolve the issue of burnout, it will aggravate already existing staff shortage problem, leading to a decline in

patients' quality care provision. "Being on call in an emergency that disturbs family life" was termed as the second most important cause of the workload related stress. The findings of our study are well supported by study¹⁴ that terms 'to be on call in an emergency' as another cause of the stress. Study¹⁴ reveals that 68.2% of staff nurses are stressed due to their home disturbance when they were called for unscheduled duty hours.

The third important source of workload related stress was identified as 'providing patients' care in a multidisciplinary team'. One of the reasons behind stress due to this issue is poor communication between different members of the team. The results of the study are well supported by a study¹ conducted in an Indian tertiary hospital in 2008. The afore mentioned study¹ revealed that poor communication between a nurse-physician was at the heart of the issue. Moreover, nurses became more stressed when physicians used abusive language against them. It was lobbied that interpersonal communication issues must be resolved to mitigate the negative effects of conflicts on patients' care. In the context of patients' direct care, there was another aspect identified in a study¹⁶ conducted in India. The study revealed that nurses became stressed if a patient died during their direct care. Death of a patient created feelings of anxiety and uncomfortableness among them as some of the nurses blamed themselves for not providing optimal care to the one who died during their care.

There were other reasons related to workload stressor such as 'feeling under pressure to meet deadlines, magnitude of overall work', having inadequate equipment to do job properly, disturbance of home life due to long duty hours and being unable to cure patients, were termed as fourth, fifth, sixth, seventh and eighth number stressors respectively, as the data had exposed. Feeling under pressure to meet deadlines, the magnitude of overall work and disturbance of home life due to long duty hours are discussed in the context of workload. Remaining two important variables of 'being unable to cure patients' and 'having inadequate equipment to do the

job properly' are worth being mentioned. "Being unable to cure patients" is also one way or other way related to poor staffing and limited resources problems. The findings of the study are well supported by a study¹⁷ that clarifies that workload is a major contributor towards the decline in quality care issue. Therefore, this issue must be solved on priority bases. They argued that one cannot expect the continuity of quality care provision if an organization is understaffed or have limited resources/ instruments to deal with the issue of quality care provision. Therefore, the workload issue may not be taken for granted. This issue must be solved on priority bases as patients safety is always upheld high in terms of outcomes and safety measures. In a study² conducted in the Kingdom of Saudi Arabia, occupational stress was mainly associated with the nature of nurses' jobs. For example, nurses became stressed once patients did not respond to treatments when patients were terminally ill and nurses felt immensely pressured for their communication on the issue of poor prognosis. It was assumed as the most difficult time to break the bad news as it was closely connected to nurses' development of moral distress. The study³ conducted among psychiatric nurses at a major governmental psychiatric hospital in KSA also revealed that 61% of the studied population (psychiatric nurses) was a victim of occupational stress on a moderate level. The study³ had measured the severity level of stress among only 4% of the studied population that is in the contract of our study. Our study has verified that 56% of the study population had severe stress. The difference is notable as the nurses working in KSA may have strong mental capabilities to cope with occupational stresses. From the results of our study, we have concluded that our sample lacked coping strategies and it is time that management should arrange counselling session for grieved nurses as they can develop coping skills to successfully deal with the issue of occupational stress.

Conclusion

It has been observed that a sufficient workload, management policy, adequate delegation of authority along with responsibility, recognition of efforts along with ongoing training, stress and time management will go a long way in managing stress in this personnel.

The factors why nurses of the Liaquat University Hospital Hyderabad/Jamshoro, Pakistan are into the fulfilment of basic human needs, self-esteem, and safety and security needs. These issues are similar to the reasons why the nurses are in stress. The developed countries continue to attract nurses from less developed countries as they fulfil the needs identified by the nurses as important. This opportunity has serious implications for nursing practice and the health care needs of the source countries.

The unhealthy workplace itself can be a cause of stress. Stress management training and counselling services can be helpful to individuals. Excessive workload, low pay scale, shortage of staff and involvement in emotional distress of patients are the prime source of stress, therefore it was highly recommended to the concerned authorities to focus on these issues and resolve it as per the organizations need. In this regard, job satisfaction and proper workload management plays a vital role to decrease the fluency of stress. The researchers of the present study recommend further researches to be conducted at other public and private hospitals in Pakistan.

This research study is a welcoming step towards understanding the reasons for job stress among staff nurses and has explored the factors that contribute to an elevation in nurses' occupational stress. It suggests how to resolve these issues and mitigate occupational stress. The administration of the hospital is advised to take a remedial and positive step in this direction. The results are helpful for nurse job planners.

Conflict of Interest

The authors of the study do not have any conflict of interest with findings of authors of previous studies.

References

1. Sharma P, Davey A, Davey S, Shukla A, Shrivastava K, Bansal R. Occupational stress among staff nurses: Controlling the risk to health [Online]. *Indian J Occup Environ Med*;18:52-6. Available from: <http://www.ijoem.com/article.asp?issn=0973-2284;year=2014;volume=18;issue=2;page=52;epage=56;aulast=Sharma>. Accessed on: 30th September 2019. [DOI: 10.4103/0019-5278.146890]
2. Saleh AM, Saleh MM, Abu Ruz ME. The impact of stress on job satisfaction for nurses in King Fahad Specialist Hospital-Dammam-KSA [Online]. *Journal of American Science* 2013;9:371-7. Available from: http://www.academia.edu/download/32444990/060_16628am0903_371_377.pdf. Accessed on: 30th September 2019.
3. Najimi A, Goudarzi AM, Sharifirad G. Causes of job stress in nurses: A cross-sectional study. *Iran J Nurs Midwifery res* 2012;17:301-5.
4. Adib-Hajbaghery M, Khamechian M, Alavi NM. Nurses' perception of occupational stress and its influencing factors: A qualitative study. *Iran J Nurs Midwifery res* 2012;17:352.
5. Jennings BM. Turbulence. In: Hughes R, editor. *Advances in patient safety and quality: An evidence-based handbook for nurses*. Rockville, MD:AHRQ;2007:2193-202.
6. Chang EC, Tugade MM, Asakawa K. Stress and coping among Asian Americans: Lazarus and Folkman's model and beyond. In: Wong PTP & Wong LCJ editors. *International and Cultural Psychology Series. Handbook of multicultural perspectives on stress and coping*. Dallas, TX, US: Spring Publications;2006:439-455. [DOI: http://dx.doi.org/10.1007/0-387-26238-5_19].
7. Schmidt DR, Dantas RA, Marziale MH, Laus AM. Occupational stress among nursing staff in surgical settings. *Texto & Contexto-Enfermagem* 2009;18:330-7. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-863X2016000100063. Accessed on: 30th September 2019. [DOI: <http://dx.doi.org/10.1590/S0104-07072009000200017>]
8. McCarthy VJ, Power S, Greiner BA. Perceived occupational stress in nurses working in Ireland. *Occup Med (Lond)*2010;60:604-10. [DOI: <https://doi.org/10.1093/occmed/kqq148>].

9. Sakineh G, Farkhondeh S, Fereshteh DR. Sources of occupational stress and coping strategies among nurses who work in Admission and Emergency Departments of Hospitals related to Shiraz University of Medical Sciences [Online]. Iran J Nurs Midwifery Res 2011;16:41-6. Available from: <http://www.ijoem.com/article.asp?issn=0973-2284;year=2014;volume=18;issue=2;spage=52;epage=56;aulast=Sharma>. Accessed on: 30th September 2019. [DOI: 10.4103/0019-5278.146890].
10. Beh LS, Loo LH. Job stress and coping mechanisms among nursing staff in public health services [Online]. International Journal of Academic Research in Business and Social Sciences 2012;2:131-76. Available from: <http://hrmars.com/admin/pics/912.pdf>. Accessed on: 30th September 2019.
11. McEwen BS. Central effects of stress hormones in health and disease: Understanding the protective and damaging effects of stress and stress mediators. Eur J Pharmacol 2008;583:174-85. [DOI: 10.1016/j.ejphar.2007.11.071].
12. Sample Size Calculator [Online]. The Survey system. Available from: <https://www.surveysystem.com/sscalc.htm>. Accessed on: 30th September 2019.
13. Badil B, Shah H, Ali SA. and Siddiqui A. Occupational Stress among Nurses of Tertiary Care Hospitals in Karachi Pakistan [Online]. J Dow Uni Health Sci 2016;10:96-100. Available from: <https://pdfs.semanticscholar.org/4253/5566968c2f207b81db4697a549365e9cbda5.pdf>. Accessed on: 30th September 2019.
14. Birhanu M, Gebrekidan B, Tesefa G, Tareke M. Workload Determines Workplace Stress among Health Professionals Working in Felege-Hiwot Referral Hospital, Bahir Dar, Northwest Ethiopia [Online]. J Environ Public Health 2018;2018. Available from: <https://www.hindawi.com/journals/jep/2018/6286010/>. Accessed on: 30th September 2019. [DOI: <https://doi.org/10.1155/2018/6286010>].
15. Portoghese I, Galletta M, Coppola RC, Finco G, Campagna M. Burnout and workload among health care workers: the moderating role of job control [Online]. Saf Health Work 2014;5:152-7. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2093791114000419>. Accessed on: 30th September 2019. [DOI: 10.1016/j.shaw.2014.05.004].
16. Vernekar SP, Shah H. A study of work-related stress among nurses in a tertiary care hospital in Goa [Online]. Int J Community Med Public Health 2018;5:657-61. Available from: <https://www.ijcmph.com/index.php/ijcmph/article/view/2351>. Accessed on: 30th September 2019. [DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20180246>].
17. MacPhee M, Dahinten V, Havaei F. The impact of heavy perceived nurse workloads on patient and nurse outcomes [Online]. Adm Sci 2017;7:7. Available from: <https://www.mdpi.com/2076-3387/7/1/7>. Accessed on: 30th September. [DOI: <https://doi.org/10.3390/admsci7010007>].