

Stress Factors of Health Care Environment: Concern for Health Care Workers

Tarafdar MA

Occupational stress has been a long-standing concern of the health care industry. Occupational stress and workplace health have become issues of great concern over the last decade, both internationally and nationally. The management of job-related stress among health-care workers is critical for the improvement of healthcare services. Stress is a pervasive and insidious part of everyday life and in the work environment.¹

Lazarus and Folkman, 1984; Taylor, 1991 cited by Baron (1992:443) define stress as response to events that disrupt, or threaten to disrupt our physical or psychological functioning". In relation to the definition of stress given above, Kortum-Margot cited in the GOHNET Newsletter Issue No 2 of 2001/2002 described work stress as existing in three categories namely:

- The engineering approach; this approach views work stress as an aversive or noxious characteristic of the work environment.
- Physiological approach; which explains work stress as a physiological response to a threatening or damaging environment.
- Person-environment interaction approach; this approach views work stress as the dynamic interaction between the individual and his/her work environment.²

According to the American Psychological Association (APA), stress can be categorized as acute, episodic acute, and chronic.

Acute Stress

Acute stress is the most common form of stress and is short term. It is described as a reaction to an immediate threat, commonly referred to as the fight or flight response. Common causes of acute stress include noise, danger, crowding, or isolation.

Episodic Acute Stress

Episodic acute stress is prevalent among those individuals whose lives are constantly chaotic and demanding. These individuals are always in a rush and tend to take on too many tasks at one time. Individuals who worry a lot are also prone to episodic acute stress.

Chronic Stress

Chronic stress is defined as a type of stress that occurs over a long period of time from either internal or external stressors.⁴ Common causes of chronic stress include financial problems, death of a loved one, long-term relationship issues, or having a demanding job or work schedule.^{3,4}

It was found that stress factors and coping methods differ based on occupation, sex, and business life time. Considering that services in health sector should be carried out with the least error possible, it is obvious that personnel satisfaction has a key role. Therefore, there is an urgent need for effective studies about individual and corporate stress management are needed in Health Corporation for the reduction of stress factors.⁵

Since they provide service to intensively stressed individuals and also the staff encounters with stressful situations very often, the field of health care is considered as a work environment a lot more stressful than the other work environments. While providing the service, health care staff, they see a lot of patients and patient relatives with many different levels of health problems. These situations threatening an individual's health and causing stress due to uncertainty and obscurity affect the health care staff as well as the patient.⁶

Stress, like depression, is a universal experience. Both are generally self-limiting and may even prove to be beneficial in terms of personal growth (Cherniss,1980). In some circumstances, however, stress and depression may become excessive and morbid, and lead to considerable disability. The association of stress with physical and psychological disorders has aroused much controversy over the years, but the particular subject of 'burnout' has received comparatively little attention in Britain, for instance. In the USA, job stress and burnout syndrome (BOSS) have stirred up great interest, as demonstrated by articles by Jones and Cherniss (1980).⁷

As health care workers face a wide range of psychosocial stressors, they are at a high risk of developing burnout syndrome, which in turn may affect hospital outcomes such as the quality and safety of provided care. The purpose of the present study was to investigate the moderating effect of job control on the relationship between workload and burnout.

Stress in the workplace is globally considered a risk factor for workers' health and safety. More specifically, the health care sector is a constantly changing environment, and the working conditions in hospitals are increasingly becoming

Correspondence to:

Prof. Dr. Monowar Ahmad Tarafdar
Professor, Department of Community Medicine
Z H Sikder Women's Medical College, Dhaka
Email: babala 762@yahoo.com

demanding and stressful. According to the World Health Organization (WHO), “a healthy workplace is one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of all workers and the sustainability of workplace”⁸.

Healthcare workers are at high risk for developing occupational mental health complaints due to frequent exposure to risk factors such as high work demands, low work control and high emotional demands⁹.

According to the International Labour Organisation, almost 10% of work place accidents are related to stress hence the ability to effectively manage stress can help maintain organization harmony (International Labour Organization-ILO, 2013). In the hospital most of the employee stress is caused by work overload, boring/repetitive duties, inadequate resources, physical environment (i.e. lighting, space, temperature, disruption etc), psychological working environment (i.e. verbal abuse, inappropriate behaviours), working long hours-forgoing lunch breaks and annual leave, people management issues, inadequate allocation of work, new technology, etc¹⁰.

Several studies focusing on the health care sector have shown that health care professionals are exposed to a variety of severe occupational stressors, such as time pressure, low social support at work, a high workload, uncertainty concerning patient treatment, and predisposition to emotional responses due to exposure to suffering and dying patients^{11,12}.

Job stress in employees in hospitals has been recognized as a key issue in the workplace. In a study in Japan, characteristics of job stress in the medical profession, especially in doctors and nurses, and the effectiveness of stress management are overviewed. The important points in stress management in hospitals are summarized as follows: 1) improvement of work environment, 2) assurance of participation and autonomy, 3) education or training to reduce job stress (ex. coping behavior, self-care, relaxation), 4) career development, 5) total support among medical professions. Some reports have demonstrated that the establishment of constant meetings is an effective method of reducing job stress and improving mental health in the medical profession, but few prospective intervention studies have been carried out. Further research is necessary to evaluate the effectiveness of stress reduction and to develop effective intervention programs for medical professions in hospitals¹³.

Work-related stress can occur specifically when a conflict arise from the job demands of the employees and the employees themselves; and if not handled properly, the stress can become distress. Occupational stress among health workers has been a matter of much scientific inquiry in literature in the past decades. High level of stress at work is a major factor to both physical and psychological health^{14,15}.

Between both the government-based and private-based sectors, no significant difference was found in terms of stress severity, frequency and index by lua PI and Imilia I in the year 2011. Closer examination of the mean rank however indicated that the government healthcare providers were generally experiencing more occupational stress than those in the private sector in the majority of job stress dimensions.¹⁶

Occupational Stress of Healthcare workers may be associated with the following types of reactions:

- Psychological (irritability, job dissatisfaction, depression)
- Behavioral (sleep problems, absenteeism)
- Physical (headache, upset stomach, changes in blood pressure)¹⁷

Usually, the effects of stress can be categorized as: Mental, physical, behavioral, and cognitive. Among the poor signs of WRS are the poor physical and mental health of the organization employees, poor attendance and less commitment to work, less productivity, distress and irritability and lastly the organization becomes less likely to be successful in a competitive market with poor image to stakeholders^{18,19}.

In a study conducted among the health workers by Seung-Joo Namet al in Korea used the short form of the KOSS, (Korean occupational stress scale), which is composed of seven subscales pertaining to job stress with a total of 24 items: (1) job demand (four items); (2) insufficient job control (four items); (3) interpersonal conflict (three items); (4) job insecurity (two items); (5) organizational system (four items); (6) lack of reward (three items); and (7) occupational climate. The total stress score was calculated by summing the scores of each subscale and by using a formula outlined by the developers. A higher score indicates more severe or a higher level of stress. The mean stress level of health-care providers was found relatively lower than that found in Korean workers of other occupations. The most distinguishable stress characteristic for health workers was their significantly high stress score on the job demand subscale. For doctors, the high score on the job demand subscale can be attributed to the high technical demands of advanced procedures. Emergencies that may occur during routine work in the outpatient department can be another source of stress²⁰.

Work stress is of great concern to managers, employees and other stakeholders in organisations. It is a complex phenomenon and has a multitude of definitions in a variety of theoretical models. According to Lazarus and Folkman's cognitive theory of stress and coping, work stress was defined as the interaction between the individual and the environment. This theory suggested that when demands from the environment exceed the available resources, the result was either stress or coping, depending on the individual's appraisal of the stressors. Karasek's

demand-control model assumed that psychological strain resulted from the joint effects of work demands and the degree of decision-making freedom available to workers facing the demands.²¹

Limited resources and a shortage of skilled health workers created very tight bottlenecks in the provision of services, which led to many community health workers experiencing work-related stress and low work motivation, in addition to receiving low salaries and having restricted opportunities for promotion.^{22,23}

In China based on the population and human resource planning ratios, there was an approximate shortfall of 30% in the number of general practitioners.²⁴ The recent reforms have also expanded the scope of public health services and increased workload without equivalent increases in staffing levels.^{25,26}

It was found in Jordan that the prevalence of self-reported stress among Jordanian health care professionals was high but not unlike that found in the west. Demanding patients, being female and working long hours were associated with greater stress. This suggests that effective stress management, including education in stress management skills, is required by health professionals in all cultures to protect them against job stress and its negative health and performance consequences.²⁷

Most researchers who study occupational stress characterize job strain as a condition in which high demands are placed on the worker in combination with low control over how the job is done, which is additionally moderated by low workplace support. Additionally, job strain is believed to be the result of an imbalance between high effort and low reward. These factors are likely impacted by emerging or underappreciated sociological factors that affect stress levels, such as changing economic or institutional conditions. However, little is known about these sources of strain occurring in home health aides or how they might be reduced.²⁸

Efforts to prevent work-related health problems usually target employees who already show a certain degree of impairment of health or work functioning. With a Workers' Health Surveillance (WHS) program it can be focussed more on early detection of impaired health to prevent a loss in work functioning. To be able to plan a job-specific WHS properly, knowledge about the number of workers that could be expected to be target for interventions should be known.²⁹

Stress management studies has shown that the stress experience in the healthcare environment negatively impacts healthcare professionals and commonly leads to so many health related problems particularly to decreased quality of life, physical and mental ill health, and poor organizational performance. Healthcare professionals need support in addressing the numerous stressors inherent in their work and it is suggested that stress management interventions should be aimed at preventing or reducing

stress among healthcare professionals.³⁰

Success in managing and preventing stress will depend on the culture in the organization. Stress should be seen as helpful information to guide action, not as weakness in individuals. A culture of openness and understanding, rather than of blame and criticism, is essential. Building this type of culture requires active leadership and role models from the top of the organization, the development and implementation of a stress policy throughout the organization, and systems to identify problems early and to review and improve the strategies developed to address them.³¹

References

1. Leka S, Griffiths A, Cox T. Systematic Problem Approaches for Employers, Managers and Trade Union Representatives (Protecting Workers' Health Series No. 3) Geneva: World Health Organization; 2003. Work Organization and Stress.
2. Shupikai Zebon, Godfrey Mutara. Prevalence of Work Related Stress among Health Practitioners at Chinhoyi Provincial Hospital, Journal of Biology, Agriculture and Healthcare Vol.4, No.21, 2014
3. Stress: The different kinds of stress. American Psychological Association website. <http://www.apa.org/helpcenter/stress-kinds.aspx>. Accessed February 11, 2010.
4. Stress Patient Education. MD Consult website. <http://www.mdconsult.com/das/patient/body/183591010-3/953060367/10041/9440.html>. Accessed February 5, 2010.
5. Kismet Boyaci, Funda Sensoy, Kerime Derya Beydag, Mithat Kiyak. Stress and stress management in health institutions; Social and Behavioral Sciences 152 (2014) 470-475
6. Jennifer LeClaire, Stress-management tips for healthcare workers. AllHealthcare.com. Available from: URL: <http://allhealthcare.monster.com/benefits/articles/2486-stress-management-tips-for-healthcare-workers?P3>
7. Cherniss, C. (1980). *Staff Burnout: Job Stress in the Human Services*. Beverley Hills: Sage. 4th Edition. London, Routledge.
8. Burton J. World Health Organization; 2010. World Health Organization healthy workplace framework and model: background and supporting literature and practices; p. 3.
9. Bültmann U, Kant IJ, Van den Brandt PA, Kasl SV (2002) Psychosocial work characteristics as risk factors for the onset of fatigue and psychological distress: prospective results from the Maastricht Cohort Study. *Psychol Med* 32: 333-345.

10. Somaz, W. H., & Tulgan, B. (2003). *Performance Under Pressure: Managing Stress in the Workplace*. Canada. HRD Press Inc, 7-8.
11. McVicar A. Workplace stress in nursing: a literature review. *J Adv Nurs*. 2003;44:633–642. [PubMed]
12. Marine A., Ruotsalainen J.H., Serra C., Verbeek J.H. Preventing occupational stress in healthcare workers. *Cochrane Database of Syst Rev*. 2006;4 Art. No. CD002892. [PubMed]
13. Miki A, Stress management in hospitals. *Sangyo Eiseigaku Zasshi*, 2002 Nov;44(6):219-23.
14. Ivancevich JM, Matteson MT. *Organizational Behavior and Management*. 6th ed. Boston, Mass: McGraw-Hill; 2002.
15. Verhaeghe R, Vlerick P, De Backer G, Van Maele G, Gemmel P. Recurrent changes in the work environment, job resources and distress among nurses: A comparative cross-sectional survey. *Int J Nurs Stud*. 2008;45:382–92. [PubMed]
16. Lua PL & Imilia I, Work-Related Stress Among Healthcare Providers of Various Sectors in Peninsular Malaysia, Centre for Clinical and Quality of Life Studies (CCQoLS), Faculty of Medicine and Health Sciences, Universiti Sultan Zainal Abidin (UniSZA), Kuala Terengganu, Malaysia.
17. Occupational Hazards in Hospitals,
18. Al-Yousuf M, Akerele TM, Al-Mazrou YY. Organization of the Saudi health system. *East Mediterr Health J*. 2002;8:645-53. [PubMed]
19. World Health Organization. *The World Health Report 2000: health Systems: Improving Performance*. Geneva: World Health Organization; 2000. p. 5.
20. Seung-Joo Namet al, Job Stress and Job Satisfaction among Health-Care Workers of Endoscopy Units in Korea; *Clin Endosc*. 2016 May; 49(3): 266-272.
21. Li Li et al, Work stress, work motivation and their effects on job satisfaction in community health workers: a cross-sectional survey in China. Available from: URL: <https://bmjopen.bmj.com/content/4/6/e004897>
22. Zhou W, Dong YM, Lin XZ, et al. Community health service capacity in China: a survey in three municipalities. *J Eval Clin Pract* 2013;19:167–17.
23. Li L, Zhou H, Yao GF, et al. Analysis on working motivation of community health workers in Harbin, China. *Medicine and Society [in Chinese]* 2013;7:40–3.
24. State Commission Office for Public Sector Reform. Notice on issuing the instruction opinions on organization structure and staffing of Urban Community Health Service. Beijing, China, 2006. Available from: URL: http://www.gov.cn/zwgg/2006-09/04/content_377067.htm
25. MOH (Ministry of Health of China). *Chinese health statistics in 2010*. Peking Union Medical College Press, 2010.
26. MOH (Ministry of Health of China). *Chinese health statistics in 2012*. Peking Union Medical College Press, 2012.
27. Firth-Cozens J, Payne R., *Stress in Health Professionals: Psychological and Organizational Causes and Interventions*, 2000. London, John Wiley & Sons, Chichester, 1999, pp. xviii+264. 0-471-99876-1 (paper), 0-471-99875-2 (cloth).
28. Zoeckler J M, Occupational stress and health among home health care workers, dissertation, Syracuse University, 2012, Submitted in partial fulfillment of the requirement for the Doctor of Philosophy in Social Science, Syracuse University, May 2017.
29. Blekemolen JRM, Hulshof CTJ and Sluiter JK, The Prevalence of Work-Related Stress Complaints among Healthcare Workers for the Disabled Participating in a Workers Health Surveillance Program. *Occup Med Health Aff* 2016, Vol4(6): 256
30. Odigie A, Stress management for healthcare professionals, Degree thesis, Human ageing and elderly services, 2016. Arcada University of Applied Sciences, Helsinki, Uusimaa, Finland. Available from: URL: <http://www.theseus.fi/bitstream/handle/10024/112859/STRESS+MANAGEMENT+THESIS+19.5.2016+test.pdf;jsessionid=508BA2D700B3990F32E6B5BFFAC92A6F?sequence=1>
31. Michie S, *Causes and management of stress at work*, Royal Free and University College Medical School, Pond Street, London NW3 2QG, UK.