ISSN 2063-5346



A STUDY ON OCCUPATIONAL STRESS LEVELS AMONG HEALTHCARE PROFESSIONALS IN A PUBLIC HEALTH SECTOR

S. Shirly¹, Dr. Ramaa Sethumadhavan², R.J.T. Nirmalraj³

Article History: Received: 19.04.2023	Revised: 02.05.2023	Accepted: 10.06.2023

Abstract

The health care industry is one of the world's largest and fastest-growing industries and forms an enormous part of a country's economy. Stress is the degree to which unmanageable pressures make individuals feel overwhelmed. The level of occupational stress differs from one healthcare professional to another based on age, gender, marital status, specialty, and position. Stress is the degree to which unmanageable pressures make individuals feel overwhelmed. It may be caused by workload, distribution of work, poor relationships with co-workers and supervisors and many more can affect job satisfaction and mental health. The burden of stress is not limited at individual level, but also affects the organizations productivity, the quality of care to the patients. The study aims to identify the existing stress levels among healthcare professionals and the factors influencing the healthcare professionals with the help of a structured questionnaire, using simple random sampling method and the statistical analysis is done using Percentage analysis, Weighted average, and Chi-square method. The findings of the study results show there is significant association of age and designation of the respondents with job-related stress factors which in turn become responsible for the existing stress levels among the healthcare professionals. It is recommended to the management to setup strategies to cope up with these stress factors.

Keywords: Occupational Stress, Healthcare Professionals, Stress Levels.

¹ Student 2nd Year MBA - Hospital Management, School of Management, The Sankara Nethralava Academy (Unit of Medical Research Foundation), Chennai.

² Senior Faculty- Management Studies, The Sankara Nethralaya Academy (Unit of Medical Research Foundation), Chennai.

³ Assistant Professor (Selection Grade), School of Management, Hindustan Institute of Technology and Science (Deemed to be University), Chennai.

¹ shirlys7182@gmail.com, ² docramaa@gmail.com,

³ rjtnirmal@hindustanuniv.ac.in

DOI: 10.48047/ecb/2023.12.si12.086

1. Introduction

Health is a combination of biological, psychological (thoughts, emotions, and behaviour), and social (socio-economical, socio-environmental, and cultural) factors. The process of working in health is a complex and dynamic phenomenon, constantly influenced by socioeconomic, political, and technological changes. These changes in the last decades have changed the working conditions, especially the demands, which have resulted in an increase inoccupational psychosocial risks.

The term "stress" was derived from the Latin word "stringere," meaning the experience of physical hardship, starvation, torture, and pain. Stress can be generally defined as an undue, inappropriate, or exaggerated response to a situation. Stress is always negative with attending adverse psychological and physiological changes leading to decreased productivity, disease and sometimes death. Its chronic form is termed 'Burnout.'

Stress is associated with a wide spectrum of health-related concerns including psychosocial and physical concerns. Stress at the workplace has gained much attention recently. It has been recognized as a global disease due to its negative impact on the physical,emotional, and psychological well-being of people in various occupational groups. When stresslevels at work exceed an individual's ability to cope over a prolonged period, it results in burnout.

Work-related stress is determined by work organization, work design and labour relations and occurs when the demands of the job do not match or exceed the capabilities, resources, or needs of the worker, or when the knowledge or abilities of an individual workeror group to cope are not matched with the expectations of the organizational culture of an enterprise. Work-related stress may lead to emotional disturbances, behavioural problems, and biochemical and neuro-hormonal changes, presenting added risks of mental or physical illness. On the contrary, when working conditions and human factors are in balance, work creates a feeling and self-confidence; of mastery increases motivation, working capacity and satisfaction; and improves health. Work stress also affects the quality of life including social relationships and family life. Many reports admit work stress induces absenteeism, turnover, reduced productivity, and feeble service.

Job stress is defined as the harmful physical and emotional responses which occurred when the requirements of the job do not match the capabilities, resources, or needs of the worker. Additionally, it has also been referred to as the non-specific negative response of the body to demand in the workplace. Job-related stress has been reported to have an important effect on the performance and effectiveness of workers. In particular, the job stress experienced by healthcare workers significantly affects the quality of medical services provided. Job stress is not necessarily considered a detrimental thing as in the early stages, jobstress can stimulate the body and enhance work performance. However, only when it is continuously stimulated and left unchecked that it would begin to affect a person's productivity, leading to possible unwanted consequences on a person's health. Even worse, job stress couldresult in burnout, a form of emotional and mental exhaustion, depersonalization, and a reduced sense of personal accomplishment.

2. Review of Literature

Job life is an important part of a person's daily life. There are many aspects of a job. A personmay be satisfied with one or more aspects of his/her job but at the same time may be unhappy with other things related to the job (Dola Saha, 2011). The concept of stress or job strain is highly relevant to the clinical workforce in health industry and if not properly understood by the management board, its adverse effect on patient outcomes, patient safety, and quality care will be enormous (Mercy O. Obasohan, 2014). Stress and emotional disturbances among doctors and nurses are relatively common, and seemingly, this is a worldwide problem. Recently studies have reported high levels of stress among health care professionals (Narayanan Sathiya, 2016; Shefalee Pai Vernekar, 2018). Healthcare professionals are prone to stress and workload pressures which have a negative impact on their psychological well-being(Grace, 2021).

Occupational stress can impair one's health and reduce the efficiency and productivity of work (Ravish K. S., 2017). Occupational stress among healthcare workers is an important concern due to its crucial contribution to attaining maximum job output and optimal quality of workinglife (Imilia, 2011). Workplace stress can influence healthcare professionals' physical and emotional well-being by curbing their efficiency and having a negative impact on their overall quality of life (Aristoteles Koinis, 2015). Work-related stress is a potential cause of concern inhealth care workers and is associated with decreased job satisfaction, days off work, anxiety, depression, sleeplessness, medical errors, and near misses. This study is carried to compare stress levels in different groups of health care worker and identify causes of stress (Arvind Kushal, 2018; Berhane Gebrekidan, 2018). Working hours, job satisfaction, clarity about work, amount of work exceeding stipulated time, loss of interest at work, not being rewarded and valued for their work are few of the factors that are found to be associated with stress levels (Ravish K. S., 2017). Years of experience, working department, and occupational positioner the significant correlated the factors which affect the level of job stress (A. Boran, 2011; Nawar Aqeel Alrashidi, 2022).

It is found that there is significant association between age, marital status, workload and educational background and stress levels among the respondents (Gezae Godifay, 2018; Stephen T. Odonkor, 2021). Also, inadequate staffing of workers leading to overloaded work and many other factors make them less motivated and experience work stress (Ravish K. S., 2017). The management of these healthcare institutions and their stakeholders must adopt strategies to help health workers cope with the stress they encounter (Stephen T. Odonkor, 2021). Proper rest and involvement into stress relieving activities like meditation and yoga, conducive working environment are the need of the hour for the burnt-out healthcare providers(Tanvir Kaur Sidhu, 2021).

3. Objectives

The objectives of the study are to identify the existing occupational stress levels among healthcare professionals. Also, to identify the factors affecting the stress levels among them. Thereby, would help the management to adopt strategies to cope up with these stress factors.

4. Research Methodology

The area of research focuses on the Occupation stress levels among healthcare professionals in the public health sector. The study was conducted from March 1st, 2023 to April 15th, 2023. The research design of this study is descriptive research and the survey was conducted among the healthcare professionals of the organization. The study is to identify the levels of Occupational Stress and the factors affecting them. Primary data was collected using aquestionnaire designed specifically to attain the objectives of the study. The survey was conducted for 85 healthcare professionals. The sampling Technique used in this study is Simple Random Sampling. Analysis of the data was performed using Microsoft Excel and SPSS software. The tools used to analyze the collected data are Percentage Analysis, Weighted average, and Chi-square Analysis.

5. Data Analysis and Results

Percentage Analysis on Demographic Data

A total of 85 healthcare professionals have responded to the survey, of which 58% were Female and 42% were Male. Details regarding the demographic data of the healthcare professionals are presented in **Table 1**.

Table 1: Demographic Characteristics of the	
Healthcare Professionals	

Variables	Categories	N=85	Percentage
Gender	Gender Male		42%
	Female		58%
	20-30		21%
Age	30-40	23	27%
	40-50	19	22%
	>50	25	29%
Marital	Single Married	16	19%
Status	Divorced/Separated/	62	73%
	Widowed	7	8%
Educational	Diploma	42	50%
Status	Degree Masters	19	22%
		24	28%
Job Status	Job Status Permanent employee Tenure-based employee		67%
			33%
	<5 years		14%
	5-10 years	19	22%
Years of	10-15 years	17	20%
Service	>15 years	37	44%
	Nurses Pharmacists		29%
	TechniciansDoctors	12	14%
Designation	Others	19	22%
		20	24%
		9	11%

Weighted Average Analysis on Stress Factors

Table 2 represents the variables related to Jobstress factors responsible for Occupational Stressamong healthcare professionals. After analyzing thedata, it can be noticed that most healthcare

professionals face stress due to lack of Recognition through non-monetary incentives (rewards forgood performance) and Appreciation through monetary benefits. **Chart 1** depicts the job stress factors contributing to occupational stress among healthcare professionals.

					VeryGood		WeightedAverage
Sl No.	Description	Poor	Fair	Good		Excellent	
1.	Physical environment	5	5	41	21	13	2.62
2.	Availability of resources	5	15	45	16	4	3.01
3.	Adequate Manpower	23	15	37	7	3	3.56
4.	Time of reporting towork	3	14	39	19	10	2.78
5.	Recognition through non-monetary incentives (rewards for	32	32	14	3	4	4.00
	good performance)						
6.	Managementsupport	19	16	42	5	3	3.51
7.	Appreciationthrough monetary benefits	30	27	20	6	2	3.91
8.	Permission forleave	7	12	41	21	4	2.96
9.	Leave benefits	12	3	30	31	9	2.74

Table 2: Weighted Average Analysis of Job Stress Factors Among Healthcare Professionals

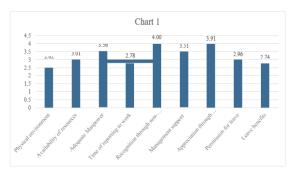


Table 3 represents the variables related to Workrelated factors responsible for Occupational Stress among healthcare professionals. After analyzing the data, it can be noticed that most of the healthcare professionals face stress due to Dissatisfaction in Distribution of workload. **Chart 2** depicts the workrelated stress factors contributing to occupational stress among healthcare professionals.



SI	Description	Highly	Dis Neutral Satisfied Highly Weighted					
No.		Dissatisfied	Satisfied			Satisfied	Average	
1.	Relationshipwith	3	2	29	36	15	2.32	
	supervisors/							
	sub-ordinates							
2.	Co- ordinationwith co-	0	3	21	45	16	2.13	
	workers							
3.	Working hours	0	5	13	55	12	2.13	
4.	Distribution of workload	2	14	33	32	4	2.74	
5.	Convenient shift timings	0	8	25	42	10	2.36	

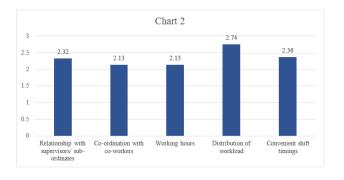
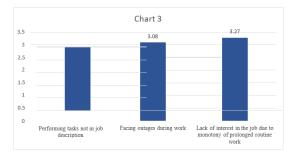


Table 4 represents the variables related to Other Stress factors responsible for Occupational Stress among healthcare professionals. After analyzing the data, it can be noticed that most healthcare professionals face stress due to lack of interest in the job due to the monotony of prolonged routine work. **Chart 3** depicts the Other Stress factors contributing to occupational stress among healthcare professionals.

Table 4: Weighted Average Analysis of other Stress Factors Among Healthcare Professionals

Sl No.	Description	Never	Rarely	Sometimes	Often	Always	Weighted Average
1.	Performingtasks not inthe job description	20	21	29	11	4	2.51

2.	Facing outages during work	3	17	43	14	8	3.08
3.	Lack of interest in the job due to the monotony of	7	15	30	14	19	3.27
	prolonged routine work						



Chi-Square Analysis

A chi-square test is a statistical test used to compare observed results with expected results. The purpose of this test is to determine if a difference between observed data and expected datais due to chance, or if it is due to a relationship between the variables you are studying.

This study tries to test the association between lack of interest in the job due to monotony of prolonged routine work and the age of the respondents. The Hypotheses are as follows:

(Ho): There is no significant association between lack of interest in the job due to monotony ofroutine work among the age group of respondents.

(H1): There is significant association between lack of interest in the job due to monotony ofroutine work among the age group of the respondents.

The following result is obtained:

Since the significant value is 0.00 which is less then p-value < 0.05, we accept the Alternate Hypothesis. So, there is high significant association between Lack of interest in the job due tomonotony of routine work among the age group of the respondents.

This study also tries to test the association between facing outages during work among the designation group of respondents. The Hypotheses are as follows:

(Ho): There is no significant association between facing outages during work among the designation group of respondents.

(H1): There is significant association between facing outages during work among the designation group of respondents.

The following result is obtained:

Since the significant value is 0.02 which is less then p-value < 0.05, we accept the Alternate

Eur. Chem. Bull. 2023,12(Special Issue 12), 1010-1016

Hypothesis. So, there is high significant association between facing outages during work among the designation group of respondents.

6. Conclusion

Occupational stress can impair one's health and reduce the efficiency and productivity of work. Healthcare professionals are the most vulnerable to stress among all occupational groups due to the nature of their work environment. This study demonstrates the occupational stress levels among healthcare professionals. It determines the levels of stress and associated factors among healthcare professionals in the organization. The study concludes that there is presence of job-related stress in areas such as inadequate manpower, availability of resources, recognition through monetary incentives (like rewards for good performances) and appreciation through monetary benefits among the healthcare professionals. Also. motivational programmes can beconducted to enhance the interest in the job for healthcare professionals and aim to reduce monotony of prolonged routine work among healthcare professionals. Hence, it is suggested that the management can adopt strategies in the abovementioned areas to help the healthcareprofessionals cope with the stress that they encounter in their job.

References

- [1] A. Boran, M. S. (2011). Work-related stress among health professionals in Northern Jordan. *Oxford Academic*.
- [2] Aristoteles Koinis. (2015). The impact of healthcare workers job environment on their mental-emotional health. Coping strategies: The case of a Local General Hospital. *PubMed Central*.
- [3] Arvind Kushal. (2018). Study of stress among health care professionals: A systemic review. *Research Gate*.
- [4] Berhane Gebrekidan. (2018). Workload determines workplace stress among health professionals working in Felege-Hiwot referral hospital, Bahir Dar, Northwest Ethiopia;Journal of Environmental and Public Health. *Journal of Environmental and Public Health*.
- [5] Dola Saha. (2011). Understanding job stress among healthcare staff. *Online Journal of Healthand Allied Sciences*.
- [6] Gezae Godifay. (2018). Work related stress among health care workers in Mekelle city administration public hospitals, North Ethiopia. *Journal of Health, Medicine, and Nursing.*
- [7] Grace, A. T. (2021). Stress, Workload and Psychological wellbeing among healthcare

professionals in Cameroon: A Quantitative Crosssectional study from a public health perspective. *Digitala Vetenskapliga Arkivet*.

- [8] Imilia. (2011). Work-related stress among healthcare providers of various sectors in PeninsularMalaysia. *Malaysian Journal of Psychaitry*.
- [9] Mercy O. Obasohan. (2014). Assessment of job stress among clinical health workers in three selected health-care industries in Lagos State, Nigeria. *Sabinet African Journal*.
- [10] Narayanan Sathiya. (2016). Perceived stress levels and its sources among doctors and nurses working in a tertiary care teaching hospital, Kancheepuram, Tamil Nadu. *National Journal of Community Medicine*.
- [11] Nawar Aqeel Alrashidi. (2022). Prevalence of workrelated stress and its associated factors among healthcare professionals at Jazan region, Saudi Arabia. *Journal of Pharmaceutical Negative Results*.
- [12] Ravish K. S. (2017). Professional stress levels among healthcare workers of Nelamangala: A cross sectional study. *International Journal of Community Medicine and Public Health*.
- [13] Shefalee Pai Vernekar. (2018). A study of workrelated stress among nurses in a Tertiary Care Hospital in Goa. *International Journal of Community Medicine and Public Health*.
- [14] Stephen T. Odonkor. (2021). Predictors of Stress and Associated factors among healthcare workers in Western Ghana. *Science Direct*.
- [15] Tanvir Kaur Sidhu. (2021). Stress among doctors: A Cross-Sectional study in a Tertiary Care Hospital, North India. Adesh University Journal of Medical Sciences & Research.