A review of studies analyzing the impact of occupational stress among healthcare worker

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Abstract:
Stress is any action that places special physical or psychological demands upon a private, anything that will unbalance his individual equilibrium. There are various sources of stress including toxic work environment, negative work load, isolation, types of working hours, role ambiguity & role conflict, lack of autonomy, difficult relationship with coworkers, managerial bullying, harassment etc. Work related stress could also be a possible reason for concern in healthcare workers and is expounded to decreased job satisfaction, days off work, anxiety, depression, sleeplessness, medical errors and near misses. To match stress level levels in numerous groups of healthcare worker and identity causes of stress, we conducted a survey based study at a superb specialty public sector hospitals.

Key Words: Stress, Healthcare workers, work load, Public sector hospitals.

ABBREVIATIONS:
JSS – Job Stress Severity
JSF – Job Stress Frequency
JSX – Job Stress Index
JPS – Job Pressure Severity
JPF – Job Pressure Frequency
JPX – Job Pressure Index
LSS – Lack of Organizational Support Severity
LSF – Lack of Organizational Support Frequency
LSX – Lack of Organizational Support Index
ANM – Auxiliary Nurse Midwife
ASHA – Accredited Social Health Activist
AWWs – Anganwadi Workers

I. INTRODUCTION
Healthcare Worker is those people who work in the healthcare sector which includes physicians, nurses and medical staff. Occupational stress is one of the major concern in the healthcare workers which sometimes hampers the output as well as the effectiveness of the work and also well being of the healthcare workers. Occupational or workplace stress can be defined as the change in one’s physical or mental state in response to workplace that pose an upraised challenge or threat to that employee [1]. Occupational stress is a very common neurological problem which is related to confusion, disturbance, irritability, anger control issues, increased anxiety level and increased mental pressure. A certain amount of stress always help workers to provide enthusiasm, motivation, and sometimes empower also, but if this exposure of stress remain persistent or increasing for the long duration of period it may hamper the physical as well as mental determinants of health. This may also hinder the professional and personal life of the healthcare workers. Healthcare professional unable to give time to their personal relationship which shows challenges for them to maintain it. There are many chances and probabilities of risk factors or complications regarding cardiovascular system, respiratory system, disability, poor functioning of the organs and in the extreme cases it may sometimes result in death also. The main reason or causative factors associated with occupational stress is the high level demanding jobs requirements, inadequate staff, working atmosphere, expectations of high output, imbalance of personal and professional life, shortage of resources, conditions such as staff dealing in emergency department. J. Environ Public Health. 2018 published anticipated result comparing the workplace stress
among the different professional groups and anesthesiologist are the top professional going through the occupational stress and least among the residents.

Nurses and in patient department staff deal with high level of occupational stress comparably the administrative staff of the healthcare institutions.

In order to achieve balanced work environment, the occupational stress should be address, analyze, monitor, evaluate and prevent at every level of healthcare provisions. For decreasing occupational stress, it is necessary to prevent stress related disease which is indirectly enhancing the quality of healthcare workers. Sometimes, Stress and burnout affect the person very badly which may result in sick leaves and in worst cases changing the job also. Healthcare institutions should apply appropriate strategies and policies to prevent and decrease the occupational stress among the healthcare workers. Proper and well equipped infrastructure of the work place and environment play a crucial role in maintaining the healthy atmosphere. The reason for conducting this review article is extend the knowledge about the occupational stress among the healthcare professionals and their factors exaggerating the causes.

2. Causes of Stress:

There are many factors which results in job stress like various interaction of the worker and the environment of the work they perform their duties, gender, locations, etc. Job insecurity and low social support at work can also increase occupational stress. Occupational stress is majorly affected by psychological stressors.

2.1 Working conditions: It is suggested by the scientific evidence that certain working conditions are stressful to the most of the people where importance of individual differences can’t be ignored.

2.2 Work load: Workload can be stressful and serve as a stressor for many employees, which include (a)

Quantitative work load

(b) Qualitative Work load

(c) Under load.

2.3 Extending working hours: According to one of the estimation, more than 26% of men and more than 11% of women worked 50 hours per week or more which represents a considerable increase over the previous decades, especially for women.
2.4 **Position in the workplace:** Stress level is also affected by the person’s position or status in the workplace.

Stress of the workplace has a potential to affect all categories of employees.

2.5 **Financial factors:** Computer and communication revolutions have made companies more efficient and productive than even before but it caused putting more stress on employee by higher expectations.

Financial factors include

(a) Pressure from investors

(b) Lack of trade and professional union in the workplace

(c) Intercompany rivalries.

2.6 **Sexual harassment:** It is generally more likely experienced by women as compared to man at the workplace. It negatively affects worker’s physiology well-being.

2.7 **Workplace conflict and bullying:** Employees generally have to deal with the workplace stressor like interpersonal conflicts among people at work. Conflicts between workers are the indicator of the workplace harassment also.

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Fig. 1 Diagrammatic representation of the JSS and its subscales

Fig. 2 Work – related stress among government versus private healthcare workers
Overall the supportive workers were more frequently stressed as they reported significantly higher JSF, JSX, JPF, LSF, JPX and LSX. On the other hand, the professionals demonstrated significantly higher stress severity in JSS, JPS and LSS.

**Literature Review:**

In 2020, Binta Musa evaluates design for the study with the help of questionnaires, collect data from the participants. A total no. of sixty (60) staff out of 100 knows healthcare workers of general hospital katsena were sampled out and administered with questionnaire. The data was presented and analyzed which results highest level of stress among nurses (60%), physicians (30%) and least in other staff (10%).

In 2019, Jianwei Deng, Yilun Guo, Tengyang Ma, Tian Yang, XuTian, they collected 154 health worker's data from different hospital, they perform statistical descriptive analysis, correlation analysis, structural equation modeling and subgroup analysis to investigate the sample which concluded that among the physicians an assistant nurses comparably among the administration staff.

In 2017, Spoorthy Sagar, K S Ravish, T S Ranganath, Mohammad Tanveer Ahmad, perform a cross sectional study in which is a rural field practice area. Random sampling technique at multi stage was performed for the study. They choosed.5PHCs were randomly and healthcare workers (ANM, Health, ASHA workers and AWWs) were recruited by probability portion to sample size. 140 participants were interviewed using pretested semi structured questionnaire to collect socio demographic details and work details Professional life stress scale was used to evaluate stress. They used descriptive statistics and chi square test for the study. The result was 37.1%(52) had mild stress, 52.1%(73) were moderately stress and 10.7%(15) were several working hours, job dissatisfaction, clarification about work exceeding time duration, loss of interest at work were those factors associated with stress levels. They concluded that work related factors have been the main stressors and higher level, stress might hinder the performance of the work therefore addressing must.

In 2013, Shinya Ito, Shigeru Fujita, Kanako Seto, Takefumi kitazawa, kunichika, Matsumoto and Tomonori Hasegava conduct a method on the healthcare professionals (n=9137) in 20 hospitals in Japan perform BJSQ, brief job stress questionnaire to evaluate job stressor, stress response and social support which resulted in the accumulative health risk factors of the healthcare worker was 10% higher than the national average. The general medicine practitioner go through the stress of the overall pressure including quantitative and qualitative job overload, they had support from supervisors and coworkers and showed mild stress response. The nursing staff also felt the stress of the quantitative and qualitative job overload at the same level as the physicians, but they don’t have sufficient support from the supervisors and co-workers and showed high stress responses. The administrative workers didn’t have sufficient support from supervisors and coworkers but they experienced less stress as measured by the quantitative and qualitative job overload from physicians or nursing staff and showed moderate stress responses.

In November 2011, A.Boran, M.Shawaheen, Y.Khadew, Z.Amarin and V.Hill Rice in performing review a random sample of 101 physician specialists, 126 dentist, 52 general practitioners and 123 pharmacists in northern Jordan completed socio demographic questionnaire, the general health questions about job stress. Descriptive statistics and multivariate analysis were used to describe and compare participants and binary logistics. Questionnaires were used to identify factors associated with stress related health problems. Outcome of the method of the 402 healthcare
professionals among them 27% reported high level of stress. Risk was highest among the general practitioner (33%) and pharmacist (25%). The lowest stress among the administrative staff. The most frequent problem associated with stress was irritability, difficulty concentrating, headache and chronic back pain.

Discussion:

In the view of the escalating demands from health authorities as well as society alike for high quality and best services even in the midst of the increasing outbreaks and health concerns. Being a human being, Healthcare workers are the most vulnerable to the negative impact of job pressure which lead to compromise of patient’s care and results in diminished quality of life for both parties. In extreme cases, the main concern is the patient’s safety. Consequently, the healthy and well – being of members of the team of healthcare themselves should always be described to ensure the best outcome for the patients. According to preliminary study, occupational sector, category and job description draw influence on health care provider’s work – related stress. The general stress at work status for most of the providers was low to moderate, which indicates manageable situation. However, work stress could be made worse by the need to handle sporadic global outbreaks of highly infectious disease such as Nipah Encephalitis, Avian Influenza (H5N1), SARS and most recently corona which are spread in extreme rapidness due to the advances in air travel all over the world. Despite showing no significant differences, the work-related stress among government officers are relatively higher as compared to private sectors.

Conclusion:

After the study I conclude that among the healthcare workers physicians are on highest occupational stress and least among the administrative staff in healthcare workers. The physicians need to bring more in balance life. HealthCare institutions should concern about the stress and burnout enough preventive measures should be taken like person directed intervention that includes arranging skill training seminars, proper staff and healthcare workers, promote healthy environment activities and activities to cope up with stress, anxiety, stress and general symptoms. They should also adopt time management, meditation, physical activities and understand the healthcare workers hurdles and queries. This may help in reducing the occupational stress among the healthcare workers which helps in the improvement of the healthcare services.

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