Impact of Work-Related Stress on Japanese Medical Professionals' Psychological Well-Being

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Abstract

Purpose: The purpose of this study was to examine the effect of occupational stress caused by job stress factors, working relationships and physical working conditions on the psychological well-being of medical professionals in hospitals in Japan.

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low-cost technique as compared to field research, as the main cost is involved in executive’s time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Results: The results revealed that there exist conceptual and contextual gaps relating to the study on effect of occupational stress caused by job stress factors, working relationships and physical working conditions on the psychological well-being of medical professionals in hospitals in Japan. Preliminary empirical review reveals that, only relationships with colleagues differ significantly based on the professional cadre of the respondents ($p < 0.05$) and insignificant relationship between job stress factors and psychological well-being ($r = 0.058$, $p > 0.05$).

Unique Contribution to Theory, Practice and Policy: The job demand – control model and the job demands - resources model may be used to categorize the key work design factors which may relate to stress-related health issues. The results of this research will form the basis for further research to aid academicians and practitioners with knowledge on the relevance of establishing appropriate stress and health management system.

Keywords: Effects of Stress, Medical Professionals, Occupational Stress, Psychological Well-Being, Stress Factors.
INTRODUCTION

Occupational stress refers to the adverse reaction people have to excessive pressures that can lead to physical and/or emotional ill health (Rees, 2022). It has two major dimensions, namely, physiological stress and psychological stress (Ismail, Yao & Yunus, 2019). While physiological stress is caused by various stressful triggers at the workplace which cause reactions to the body such as headaches, migraines, abdominal pains, fatigue, heart palpitation, sleep disturbance as well as changes in eating, drinking, sleeping and smoking habits, psychological stress is as an emotional reaction to factors in the workplace that cause anxiety, depression, burnout, hostility, anger, irritability and frustration among others.

Occupational stress is the adverse reaction people have to excessive pressures or other demands placed on them. ‘It is a very imprecise term and it can be explained in terms of its three related concepts, which are anxiety, conflict, and frustration (Segal, 2021). Occupational stress is not an illness in itself, but if it is prolonged or particularly intense it can lead to physical and/or mental ill health (Rees, 2022). Psychological ill-health are those aspects of the design, organization and management of work that have the potential to cause physical, psychological or social harm (Cox & Griffiths, 2015). Gough & McGregor (2017) defined well-being as ‘what people are rationally able to do and to be, and what they have actually been able to do and to be’. Stress is encountered both at work and outside it and that some people cope well and others less well with the same stressors depending on their personalities and circumstances (Maslach, Leiter & Schaufeli, 1996).

Stressors at home can affect those encountered at work and vice versa. Although employees experience pressure in the workplace, this is not the same as stress since a certain amount of pressure is stimulating and gives satisfaction. However, problems arise when the pressure is too great, goes on for too long or comes from too many directions at once. This leads people to feel that they are losing control, which can lead to stress. It is accepted that individuals who suffer occupational stress over an extended period are more vulnerable to developing physical and psychological health problems. Within the medical profession, occupational stress is considered to be widely present and problematic (Happel, Pinikahama, Martin, 2015).

Stress is a multi-dimensional concept and may be defined based on language and organizational perspectives. In terms of language, it is originally derived from the Latin word that is stringere, which refers to draw tight, to describe hardships and/or affliction (Cartwright & Cooper, 2017). It often occurs when individuals’ physical and emotional well-being does not match or they cannot handle their job demands, constraints and/or opportunities (Leka, Cox, Ivanov & Kortum, 2015; Ugoji, 2015; Ugoji & Isele, 2019. There are two major types of stress: eustress (good stress) and distress (bad stress) (Fevre, Matheny & Kolt, 2015; Sullivan & Bhagat, 2022). Eustress defines individuals who have experienced moderate and low stress levels and distress is frequently defines individuals who have experienced high stress level. Individuals who experience eustress will be able to meet job demands and this may help them to increase positive work life (e.g., satisfaction and positive moral values). Conversely, individuals who experience distress will not able to fulfil job demands and this may motivate them to decrease quality of work life (e.g., dissatisfaction and negative moral values) (Fevre et al., 2015; Leka et al., 2020; Millward, 2015; Newell, 2022).
Consequently, occupational stress impacts the health and psychological well-being of workers which affects their attitude to work, leads to high absenteeism, poor morale, high staff turnover, reduced efficiency and declining job performance (Brandy and Cox, 2022; Elliott & Daley, 2022). The issue of occupational stress has attracted the attention of organizational behaviorists due to the fact that various problems that employees face emanate from work place experiences (Akintayo, 2022). Extensive research has shown that medical personnel are the most vulnerable to stress in the workplace which would be attributed to the nature of their work that is widely acknowledged to be stressful, dangerous, and emotionally demanding (Jones, Janman, Payne, and Rick, 2017; Adu, 2015).

The diseases affect mainly town dwellers or workers. Examples of the Physical and psychological diseases associated with stress according to Dondo (2016) are, autism, a condition in which a stressed person may start regressing and do things below his expected behaviour, for example he may develop poor communication abilities. The person may prefer loneliness or withdrawn from others. Schizophrenia is another psychological disorder associated with loss of contact with reality resulting into poor reception, emotional deviation, motor abnormalities and lack of concentration in work or business. Psychosomatic conditions, which refer to physical symptoms, which affect a person include headache, backache, general aches and pain whose causes are not generally easily diagnosed. Others are anorexia nervosa (loss of appetite and weight), bulimia, a condition where the stressed person vomits after eating and other common diseases that include hypertension, high blood pressure, restlessness and heart attack. There are several factors that may influence psychological wellbeing of workers exposed to particular hazards (Allen, 2017). For people who are closely involved with patients, their well-being is critical because of the influence they may have on the health of the patients. They are also themselves at risk of psychological stress because of their emotional involvement with the patients (WHO Guidelines for Counselling about HIV Infection and Disease, 2020). Medical professionals who deal with patients or those with terminal diseases on a day-to-day basis often suffer psychological distress. Emotional involvement with the patient and the frustration at the lack of effective therapy or equipment can place medical workers at risk of depression, withdrawal and, in extreme cases, suicidal tendencies.

Cox and Griffiths (2015) asserted that psychological ill-health are those aspects of the design, organization and management of work that have the potential to cause physical, psychological or social harm. This co-relates significantly with life events and daily activities such as financial situation, job performance, family conflict, schooling, death and other events. Sullivan, (2015) suggests that although the incidence of accidents is higher within medical officers, their potential to exhibit extreme levels of aggressive and disturbed behaviours are arguably greater. Medical professionals are often assumed to be at greater risk of occupational stress due to their constant exposure to disturbing social issues, and dealing with clients with extreme challenging behaviours, severe personality disorders, and enduring mental health problems (Thorpe, Righthand, & Kubick, 2021; Bowers, 2015).

Studies have shown that the presence of non-occupational stress and occupational stress create strain in workers, and these influence their morale and psychological well-being negatively (Lester & Brower, 2021; Perdine, Bill & Clement, 2017). When the working environment is perceived to be conducive, there is less stress while psychological well-being is greatly enhanced (Dunhem,
In the United Kingdom, occupational stress is one of the greatest occupational health problems and is estimated to cost organizations four billion pounds annually in associated sickness and absentee costs (Gray, 2020). According to Decker and Webb, (2015) and Felton and Cole (2020) stressful work life were related to receiving psychiatric care, and that in the United Kingdom, the sum of incapacity for men suffering from psychoneurotic and personality disorder, nervousness, migraine headaches, and smoking accounted for 22.8 million work days lost.

Statement of the Problem

The employees working in occupations where they are expected to deal with the problems of others, especially health care, and law enforcers may suffer more stress than people do in other professions (Finn & Tomz, 2018). This implies that medical employees are constantly exposed to stress and if not handled effectively, can be destructive both for them in terms of the quality of their work and their physical and mental state and for the organization where they work (Maslach, 2015). Majority of studies have been published on occupational stress (Doan et al, 2015) among different cadres of medical professionals in various categories of public hospitals in Japan. In addition, various studies have been carried out to determine the effect of occupational stress on various work attitudes such as job satisfaction, organizational commitment and turnover intentions of nurses while limited studies investigating the effect of occupational stress on psychological well-being (Seaward, 2015; Newell, 2022; World Health Organization, 2015). This study fills these gaps by examining the effect of occupational stress on employee psychological well-being in health care centers within Japan. Therefore, the purpose of this study is to investigate the effect of occupational stress on the psychological well-being of medical professionals in Japan.

Theoretical Review

The Job Demand – Control Model

The Job Demand – Control Model (JDC) is currently the most influential model in the workplace and has dominated the field of occupational stress research for more than two decades (Karasek, 2019; Kompier, 2015; Leka, Hassard & Yanagida, 2015). The JDC model postulates that job strain (a component of occupational stress) results from the interaction between psychological job demands and job control. Psychological demands refer to workload, mainly in terms of time pressure and role conflict (Karasek 2018). Job control refers to the worker’s ability to control their work activities, through an ability to make decisions about their job and ability to utilize their skills on the job. According to the JDC model, job strain results from pairing combination of high psychological demands with low job control. According to Leka, Jain & World Health Organization (2020), occupational stress increases when employees experience high demands such as role overload and yet have minimal control over their work environment.

The JDC model was later modified to include social support and was renamed the Job Demand–Control–Support (JDCS) model (Johnson & Hall, 2018; Karasek & Theorell, 2020). The JDCS model is based on the assumption that social support can moderate the negative impact of job strain on workers’ physical and mental health. The model argues that workers who are exposed to job strain with minimal workplace support are most likely to experience poor physical and mental health (Van Der Doef & Maes, 2019).
The Job Demands - Resources Model

The Job Demands-Resources Model (JD-R) categorizes psychosocial factors into the global categories of job demands and job resources which may influence illness and organizational commitment (Bakker & Demerouti, 2017). The model incorporates many working possible conditions, and focuses on both negative and positive indicators of employee well-being. The JD-R model (Demerouti et al., 2021) can be applied to a wide range of occupations, and can be used to improve employee well-being and performance.

The Job Demands Resource Model assumes that every occupation has its specific risk factors associated with occupational stress that can be classified into two categories: job demand and job resources, thus constituting a model that may be expanded and applied to various occupational settings, irrespective of the particular demands and resources involved (Bakker & Demerouti, 2017; Demerouti, Bakker, Nachreiner & Schaufeli, 2021).

Job demands are the physical, psychological, social, or organizational aspects of the job that require prolonged physical and psychological exertion and are associated with certain psychological effects. These include workload, unfavourable physical work environment, and emotionally challenging relations with clients. Job demands are not necessarily negative but they may turn into occupational stress if those demands require high effort from the employee (Meijman and Muller, 2018). Job resources, on the other hand, refer to the physical, psychological, social or organizational aspects of the job that are operative in achieving work goals, reducing job demands and the associated physical and psychological ill-health. Resources, therefore, are not only necessary to deal with job demands, but they are also important in their own right.

Several models in the occupational health literature agree that occupational stress is a result of a disorder in the balance between the demands employees are exposed to and the resources they have at their disposal. For example, according to job demand control model (Karasek, 2019, 2018), occupational stress is particularly caused by a mixture of high job demands such as work overload, time pressure, and low job control. Therefore, one assertion in the job demand control model is that employees who discretion in deciding for themselves how to meet their job demands do not experience occupational stress such as, job related concerns, and ill-health. (Karasek, 2019).

Empirical Review

Evanoff, Strickland, Dale, Hayibor, Page, Duncan and Gray (2020) conducted a study on work-related personal factors associated with mental well-being during the COVID-19 response. The response to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic has created an unprecedented disruption in work conditions. The study described the mental health and well-being of workers both with and without clinical exposure to patients with coronavirus disease (COVID-19). The aim of this study was to measure the prevalence of stress, anxiety, depression, work exhaustion, burnout, and decreased well-being among faculty and staff at a university and academic medical center during the SARS-CoV-2 pandemic and describe work-related and personal factors associated with their mental health and well-being. All faculty, staff, and postdoctoral fellows of a university, including its medical school, were invited in April 2020 to complete an online questionnaire measuring stress, anxiety, depression, work exhaustion, burnout, and decreased well-being. The study examined associations between these outcomes and
factors including work in high-risk clinical settings and family/home stressors. The findings suggested that the pandemic has had negative effects on the mental health and well-being of both clinical and nonclinical employees. Mitigating exposure to COVID-19 and increasing supervisor support are modifiable risk factors that may protect mental health and well-being for all workers.

Yang, Suh, Lee & Son (2018) investigated work-life balance and psychosocial well-being of South Korean workers. It is challenging to balance work and life, and little attention has been paid to the work-life balance and psychosocial well-being of South Koreans. The study assessed the association between work-life balance and psychosocial well-being among paid Korean workers. This study was based on data from the fourth Korean Working Conditions Survey. The study evaluated only paid workers, which constituted 30,649 of the total of 50,007 subjects surveyed. Poor work-life balance was defined based on the goodness of fit between working hours and social commitments. Well-being was measured using the World Health Organization WHO-5 index. Poisson regression with robust variances was used to calculate the estimated prevalence ratios (PRs) with confidence intervals. The study revealed that Work–life balance was associated with psychosocial well-being after adjusting for both work-related and individual characteristics.

Aiello & Tesi (2017) investigated psychological well-being and work engagement among Italian social workers. The work-related well-being of social workers has become a central concern in international psychosocial literature. The majority of studies have focused on the negative outcomes of social work (for example, work-related stress, burnout, job dissatisfaction) and only a few studies have considered the positive work-related health outcomes. In an attempt to address this gap, the aim of this study was to investigate the role of both psychological well-being (PWB) from a eudaimonic paradigm (that is, person’s optimal functioning) and job resources in promoting social workers’ work engagement (WE). Following the job demands-resources model and the conservation of resources theory, authors hypothesized that job resources mediate the relationship between PWB and WE. The study sample was composed of 140 social workers provided with a paper-and-pencil questionnaire. Structural equation models and mediational analyses were applied and confirmed that job resources fully mediate the association between PWB and WE. PWB acts as a personal resource that endorses perception, identification, and even promotion of job resources. Job resources, in turn, were associated with WE.

Soh, Zarola, Palaiou & Furnham (2016) carried out a research study on work-related well-being. This study aimed to investigate the different dimensions of well-being (namely, work engagement, job satisfaction, and psychological stress) and possible predictors such as personality and perceived organizational support. A cross-sectional survey design was used, with a sample of 490 ambulance personnel in the United Kingdom. Significant correlations were found between the dimensions of job satisfaction, engagement, and stress. The results also supported a hierarchical model with job satisfaction, stress, and engagement loading onto one higher order factor of work well-being. Emotional stability and perceived organizational support were identified as significant predictors of well-being. The findings suggest the importance of measuring the work-related well-being of ambulance personnel holistically and present perceived organizational support as a possible area for interventions to improve well-being.
METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low-cost technique as compared to field research, as the main cost is involved in executive’s time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

RESULTS

The results were grouped into various research gap categories namely as conceptual, contextual, and geographical.

Conceptual Gaps

Studies by Evanoff, Strickland, Dale, Hayibor, Page, Duncan & Gray (2020), Yang, Suh, Lee & Son (2018), Aiello & Tesi (2017), Soh, Zarola, Palaiou & Furnham (2016) had a conceptual framework gap. The impacts of occupational stress caused by job stress factors, working relationships and physical working conditions on the psychological well-being of medical professionals in hospitals in Japan were not established by any of the research cited. The research did not provide a clear breakdown of the impacts of occupational stress. Because of this, the current work aims to fill in these conceptual gaps.

Contextual and Geographical Gap

Studies by Evanoff, Strickland, Dale, Hayibor, Page, Duncan & Gray (2020), Yang, Suh, Lee & Son (2018), Aiello & Tesi (2017), Soh, Zarola, Palaiou & Furnham (2016) had geographical gap because they weren't actually done in Japan. This suggests that the findings may not be applicable in Japan due to the fact that the methods employed in each country vary. This study was undertaken with the intention of filling that void.

CONCLUSION AND RECOMMENDATIONS

The findings and recommendations of the study shall be applied to other health facilities which are also susceptible to occupational stress, in order to expand and modernize facilities to cope with the growing workload. It will also form the basis for further research to aid academicians and practitioners with knowledge on the relevance of establishing appropriate stress and health management system in the country to help improve employee well-being and how to manage present and prevailing future implications of Human Resource Management towards the realization of enterprise goals.

The findings of this study will also enable employees to understand and cope with the unreasonable demands and expectations of patients and their relatives and also, toxic relations with colleagues. In order to reduce the effect of stress on employee psychological well-being, it is recommended that stress management programs should include the proactive identification of stressors as well as the evaluation of these stressors in terms of severity and impact. Standardized and validated measuring instruments should be used and the exercise should be performed frequently. Early identification of stress risks can provide for the proactive management of risk groups, customized
interventions (versus generic interventions), and more effective stress risk control. Managing stress and burnout in the work place could further promote health and well-being and productivity among employees.

The job demand – control model and the job demands - resources model may be used to categorize the key work design factors which may relate to stress-related health issues.
REFERENCES


