

Nurses Support in Reducing Working Stress Among Medical Doctors in Public Hospitals: Conceptualizing Job Demands-Resources Model

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Abstract

The last two decades of research in social and health psychology have established the cohesive of nurses support to promote good mental health and physical health among medical doctors. Although it is commonly assumed that nurses support positively predicts the good health status of medical doctors, the literature are still lacking in focusing the roles of nurses towards medical doctors in hospitals. This conceptual paper suggests how nurses support are associated with reducing prolonged stress among medical doctors in public hospitals which include to determine their health status due to lack of access to supportive workplace. The Job Demands-Resources Model and Conservation of Resource (COR) Theory serve as the foundation in developing the proposed research model. Job burnout is proposed as a mediator in the above-mentioned relationship.

Keywords: nurses support, prolonged stress, mental health, physical health, medical doctors, public hospitals

1. Introduction

In the eleventh Eleventh Malaysia Plan 2016-2020, one of the important strategies proposed is improving system delivery for better health outcomes aligned with previous Tenth Malaysia Plan 2011-2015 to continuously upgrade the healthcare infrastrurtuce, enhance the capacity of healthcare personnel, and promote healthy lifesty (EPU, 2015; MNHA, 2016). However, inadequate access to quality of healthcare, the burden of diseases, pressure on healthcare delivery and low support from the stakeholders in healthcare delivery pose a challenge to the healthcare system in Malaysia. Due to reformation changes in the industry such as economic constraints, heavier patient demands, higher workload among healthcare professional especially for doctors, and higher standard to provide medical care (McManus, Keeling, & Paice, 2004; Siu, Yuen, & Cheung, 2012) were a major constraint and should be addressed by all parties in terms of looking future requirements, retention plans with benefits or retention packages, more training opportunities and networking (Medical Development Division, 2016). Medical doctors are also facing several challenges such as the inability to communicate freely with patients, lack of ability to control over their work environment, physical exhaustion, excessive calls, shift duties and unhealthy sleep patterns (Schweitzer, 1994; Siu et al., 2012). In addition, the human resources for health (HRH) needs to enhance further development of human capital in order to ensure sufficient supply of competence and skilled healthcare personnel (World Health Organization,

2014). Therefore, it is suggested by the former Director-General of Health, Tan Sri Dato' Seri Haji Mohd Ismail Merican that medical doctors should be healthy both mentally and physically as they are the operating core and also known as the "gatekeepers" of healthcare organizations and need to be fit in order to perform well in their roles to their patients (Chen, Tan, & Li, 2013; Merican, 2010; Uncu, Bayram, & Bilgel, 2006). Hence, medical doctors need a full support within their networks of organization from different levels such as top management, supervisors, peers, and subordinate.

In this study, subordinate support is referring to nurses support needed by the medical doctors. Doctor-nurse relationship often provides effective workplace networks to adding value the needs of patients to take care of, receiving adequate information, resources and trust as well as to gain mutual respect among them. Malaysian healthcare plays a vital role in the well-being of the nations including the society, organizations, and individual level. Healthcare employees specifically medical doctors act as frontliners as they have direct contact with patients. They are constantly exposed many occupational stressors such as time pressure, work overload, lack of social support at work. These occupational stressors are linked to job burnout which can influence their health status, mental health and physical health that will directly impact their job performance.

Due to numbers of patients seeking for treatment and shortage of medical doctors attached at public hospitals (Shacklock, Brunetto, & Farr-Wharton, 2012) resulted in greater work burden which affecting a greater risk of experiencing burnout, mental illnesses as well as their physical complaints (Brooks, Gerada, & Chalder, 2017). This thereby determine how much medical doctors need support from nurses not only to maintain the quality life of medical doctors' well-being but also the quality of care that they provide for their patients. The purpose of this paper is to review the literature and subsequently propose a model linking nurses support and health status via the mediating effect of job burnout.

2. Literature Review

Conceptualizing Health Status

Following Ware (1981), health status is merely measuring the individual health status related to mental health and physical health. Mental health refers to the state of mind, including basic intellectual functions such as memory and feelings. While, physical health refers to physiologic and physical status of the body. Oxford Dictionary (2010) defines health as clearly emphasize the soundness of the body which includes mental health and physical health components. Health also refers as the person being completely functioning and freedom from any diseases Oxford English Dictionary (1961). Most definitions found in the literature has greatly used subjective well-being as a proxy to health status (Zheng, Zhu, Zhao, & Zhang, 2015). Numerous studies use "well-being" referred to the psychological or physiological or the integration from other aspects of health such as life satisfaction, job satisfaction and happiness (Diener, Suh, Lucas, & Smith, 1999; Warr, 2012). Thus, it is important to conceptualize the understanding of well-being in the context of health status. Mental health is defined as an absence of mental illnesses such as depression and anxiety that are often lead to a characteristic stress response involving chronic arousal and impaired function (Lovibond & Lovibond, 1995) while physical health is defined in which the individuals focus on the bodily manifestation of distress that leads to somatic complaints (Hung, Weng, Su, & Liu, 2006). Several studies suggest that researchers should adopt a broader view by focusing on mental health and physical health as both categories are increasingly important at the workplace and in clinical settings (Danna & Griffin, 1999; Page & Vella-Brodrick, 2009). Mental health and physical health potentially

effect both employees and organizations in negative ways. Employees' health at the workplace is crucial due to the fact the employees spend about one-third of their waking hours at work and they usually would not leave their job behind even when they leave the work station (Conrad, 1988; Danna & Griffin, 1999). The experience of overlapping between work and non-work has become a common issue with the understanding that an employee's work and personal life are no longer defined as separate entities but rather they are interrelated and interconnected areas. Hence, work-related stress combined with nonwork-related stress lead to detrimental physical and mental problems because of the excessive demands due to burnout experienced by the employees (Danna & Griffin, 1999).

Predictors of Health Status

Nurses Support

Medical doctors in hospitals need social support not only from good supervisor and peer support, but it is also from the subordinate (Graen & Uhl-Bien, 1995). Medical doctors are not working alone and they rather collaborate and interact with other members of the healthcare team in order to provide healthcare service to the patients. The finding is consistent with one study by Tourangeau, Hall, Doran and Petch (2006) were supporting each other in this stressful environment covered for 13.34 percent of the variance. Hence, plenty of studies enlightened nurses' support as of the important categories of social support in the healthcare industry (Graen & Uhl-Bien, 1995; ten Brummelhuis, Oosterwaal, & Bakker, 2012). Doctors-nurses establish a special exchange relationship where doctors develop and shape nurses' attitude and behavior over time with various conditions since nurses function as assistants to medical doctors (Hassan & Chandaran, 2005). In other words, nurses are the compliant role to doctors and this role was supported in the hierarchal division of healthcare system whereby nurses are also being trained in schools of nursing attached to hospitals (Karen, 2000). In the healthcare context, subordinate support refers to the support given by the nurses to medical doctors to ensure the smooth of delivering service to the patients by providing opportunity, information, communication, collaboration, support and resources embedded in the work environment (Karen, 2000; Manojlovich, 2005; Manojlovich & DeCicco, 2007; Miller, 2001). Besides, nurses role is recognized as an integral component in the provision of quality healthcare (Amarneh, Abu Al-Rub & Abu Al-Rub, 2010; Brunetto, Wharton & Shacklock, 2011). Hence nurses' support is important to help medical doctors perform their jobs such as they must care for unstable patients, do daily routine accurately, respond with risky emergency and work with sophisticated (De Rijk, Le Blanc, & Schaufeli, 1998).

Job Burnout

The occurrence of job burnout results from job-related factors and lack of conducive workplace in various professions such as medical doctors, nurses, policeman, teachers, social workers, mental health workers and psychologist (Constable & Russell, 1986; Maslach & Jackson, 1981, 1984). Till today, job burnout among healthcare professionals has been recognized as a serious phenomenon particularly relevant to caregiving and human service occupations which are interpersonally stressful and emotionally demanding such as for nurses and physicians within a series number of cultures and countries such as USA, Canada, UK, Netherlands, Japan, Brazil, Germany, France, Italy, Spain, Portugal, Serbia, Romania and Greece (Alexandra-Karamanova et al., 2016; Llorens, Bakker, Schaufeli, & Salanova, 2006; Lloyd et al., 2002; Ogundipe,

Olagunju, Lasebikan, & Coker, 2014). Job burnout may, in turn, become an extreme case of chronic disease due to prolonged occupational stress which in turn, may affect the individual's mental health and physical health (Arigoni, Bovier, & Sappino, 2010; Ju, Lan, Li, Feng, & You, 2015; Maslach, Schaufeli, & Leiter, 2001). Job burnout syndrome may result in mental disorders such as alcohol abuse, anxiety, depression, posttraumatic stress disorder, and even suicidal attempts. In addition, job burnout may have serious psychosomatic consequences including headaches, hypertension, cardiopulmonary diseases, musculoskeletal disorders, gastritis, stomach ulcers, insomnia and dizziness (Arrogante & Zaldivar, 2017; Constable & Russell, 1986; Maslach et al., 2001). The effect of job burnout is not only on the individual's mental health and physical health but, job burnout may also indirectly affect the individual's work outcomes such as greater number of medical errors, reduced quality of care, and lower patient satisfaction (Arrogante & Zaldivar, 2017).

Nurses' Support and Health Status (Mental Health and Physical Health)

In the healthcare context, subordinate support refers to the support given by the nurses to medical doctors to ensure the smooth of delivering service to the patients by providing opportunity, information, communication, collaboration, support and resources embedded in the work environment (Karen, 2000; Manojlovich, 2005; Manojlovich & DeCicco, 2007; Miller, 2001). According to General Medical Practice (GMC), medical doctors are allowed to delegate medical care to nurses if they are certain with the nurses' competencies to undertake the tasks (Dowling et al., 1996). It has been proven that nurses and medical doctors together make up the largest component of healthcare providers (Keenan, Cooke, & Hillis, 1998). Besides, nurses' role is recognized as an integral component in the provision of quality healthcare (Amarneh et al., 2010; Brunetto et al., 2011). Hence nurses' support is important to help medical doctors perform their jobs such as they must care for unstable patients, do daily routine accurately, respond with risky emergency and work with sophisticated technology (De Rijk, Le Blanc, & Schaufeli, 1998). On the other hand, patients' mental and physical health outcomes are important as a predictor to the quality of healthcare. Hence, medical doctors and nurses should cooperate for instance they communicate daily and confront with complex issues to ensure the satisfaction of patients. A study among Jordanian nurses reported that medical doctors received greater social support from nurses in terms of lower conflict issues between them. Thus, it can be concluded that nurses' social support play vital role to enhance coping and the well-being of doctors which increases their work productivity and reduce stress-related problems (Abu Al-Rub, 2006). Moreover, there are evidence suggests that nurses' support towards doctors significantly related to the mortality rates of the medical doctors which indirectly affecting their health status especially mental health and physical health (Amarneh et al., 2010; Cobb, 1976; Manojlovich & DeCicco, 2007; Miller, 2001). Subordinate support in clinical practice especially from nurses is important even though the interaction is complex in order to share professional opinions and knowledge regards to patient care (Karen, 2000). Thus, the following proposition is proposed:

Proposition 1: Subordinate support will be negatively related to health status (mental health and physical health)

Nurses' Support and Job Burnout

Support from subordinate such as nurses appears to be extremely influencing the level of medical doctors' wellbeing especially in reducing burnout risk (Li, Ruan, & Yuan, 2015; Rodwell, Noblet, Demir, & Steane, 2009). Previous studies have fostered debate on subordinate satisfaction due to the levels of support received by them (Tourangeau et al., 2006; Turban & Jones, 1986). The supports that they received comes from the other employees' task expectation of what they should perform for their jobs. Failure of following the expectations leads to dissatisfaction at the workplace that could expose the individual job burnout in the long run. Following the concept of subordinate support by Tourangeau et al. (2006), nurses are considered as the subordinate to the doctors. Thus result found that subordinate satisfaction resulted from from the relationship between subordinate support and job burnout. The finding suggests that medical doctors need subordinate support to ensure they can perform well especially when patients seek treatment at the hospitals (Tepper, Moss, & Duffy, 2011). With regard to work outcomes, several studies (Li et al., 2015; Rodwell et al., 2009; ten Brummelhuis et al., 2012; Tourangeau et al., 2006) have reported the beneficial effect of subordinate support in reducing employee's job burnout. According to Shacklock et al. (2012), doctors need nurses most of the time as they help doctors in treating and managing patients. Hence, nurses should be provided with information, resources, and support related to the patient needs especially dealing with complicated circumstances. Besides that, nurses are also influencing the doctors' decisions depending on the nurses' contributions in terms of the level of information provided, resources gained and amount of support they received (Svensson, 1996). Moreover, employees with good support with a subordinate are more likely to result in the sense of belonging in the team as well as the working place thus it helps the employees to boost their work performance (Suazo, Turnley, & Mai-Dalton, 2008). Issues stated above are very important as it affect the health of the medical doctors especially preventing them from job burnout. Therefore, subordinate support seems an important aspect affecting the levels of medical doctors' job burnout. Thus, the following proposition is proposed:

Proposition 2: Subordinate support will be negatively related to job burnout

Job Burnout Influencing Health Status (Mental Health and Physical Health)

In a recent study by Bianchi, Mayor, Schonfeld, and Laurent (2018), job burnout was found to be positively related to depressive symptoms and the correlation was to found is strong ($r=0.82$). In addition, empirical evidence shows that burnout is strongly associated with mental health and physical health (Melamed et al., 2016). A study conducted by Arrogante and Zaldivar (2017) indicates that there is a negative relationship between job burnout and mental health. Their results showed that all three dimensions of job burnout were negatively associated with mental health. The analysis showed that emotional exhaustion and depersonalization were negatively associated with mental health while personal accomplishment was positively related to mental health. The effects of mental health problem lead to depression where the individual is likely to experience the feeling of helplessness, hopelessness, and meaninglessness (Schaufeli & Buunk, 1996). On the other contrary, emotional exhaustion was negatively associated with physical health (Arrogante & Zaldivar, 2017). Grunfeld et al. (2000) found about half of the healthcare

professional employees experienced high levels of emotional exhaustion. Based on the result of the study (Grinfeld et al., 2000), it can be surmised that job burnout is more likely to be associated with mental health and physical health problem (Aasland, Oloff, Falkum, Schweder, & Ursin, 1997; Felton, 1998). As medical doctors are overloaded with patients' demands under constant pressure and work-related stress, medical doctors are more likely to suffer from job burnout. Job burnout occurs when medical doctors excessively deplete their energy, become emotionally drained and suffer from chronic fatigue, all of which, affecting their health in the form of anxiety, depression, headaches, sleep disturbances and myocardial infarction (Spickard et al., 2002). The above-mentioned studies aligned with previous findings where the effect of job burnout also linked to physical health complaints (Schaufeli & Buunk, 1996). Thus, the following proposition is proposed:

*Proposition 3: Job Burnout will be negatively related to health status
(mental health and physical health)*

The Role of Job Burnout as a Mediator in the Nurses' Support-Health Status Relationships

The needs for social support among supervisor, peer as well as subordinate support are well documented and established in the literature. Social support protects employees from workplace stressors that can result in poor mental health and physical health (Beehr, Bowling, & Bennett, 2010). A cross-sectional study revealed that lack of social support at the workplace, be it supervisor support, peer support, and subordinate support typically expose them to higher level of stress such as increased cortisol level that leads to poor health such as hypocortisolism (Karb, Elliott, Dowd, & Morenoff, 2012). In other words, employees exposed to severe stress suffer higher levels of fatigue, pain, and stress sensitivity and thus, lead to long term chronic disease such as tumors or cancer (Karb et al., 2012). In addition, subordinate support such as nurses supports was significantly associated with the doctors' health outcomes such reducing the levels of job strains or negative health outcome such as job burnout (Miller, 2001; O'Driscoll & Beehr, 1994). Besides that, employees need to maintain a good relationship with subordinate as the implication will not only affect the behavior of the subordinate and vice versa (Law, Wong, Wang, & Wang, 2000; McMahan, Hoffman, & McGee, 1994) but as well as it helps to reduce the levels of medical error due to the fact that medical doctors receive minimum nurses support at the workplace (Karen, 2000; Manojlovich & DeCicco, 2007). The study suggests that doctors and nurses should support each other not only by helping each other but also by collaborating and communicating especially for patients that need critical care such as Intensive Care Units (ICU). The findings showed that doctors who received a high level of subordinate support resulted in positive organizational outcomes as well as reduced the patient mortality rate. The results indicated that doctors need subordinates' support clarity in order to treat patients with high-quality care thus in return lowering the levels of chronic stress such as psychological strain among the doctors who handle patients daily (Miller, 2001). As such, it is posited that:

Proposition 4: Job burnout will mediate the relationship between subordinate support and health status (mental health and physical health)

3. Conceptual Framework

Based on the preceding review of the literature and consistent with the significant role of nurses support on mental health and physical health, the proposed framework is depicted in Figure 1. Nurses support is viewed as an independent variable that have a direct effect on health status. Besides, nurses support may also indirectly affect health status via the mediating role of job burnout. This study utilizes a combination of two (2) underlying theories which are the Job Demands-Resources Model (JD-R) by Demerouti et al. (2001) and Xanthopoulou et al. (2013) and the Conservation of Resources (COR) Theory by Hobfoll (1989) to govern the proposed research framework. The imbalance between demands and resources leads to stress that defined the concept of demands exceeding more than limited resources and therefore leads to prolonged stress namely, job burnout. The first assumption of Job Demands-Resources (JD-R) model is that the model is flexible to be used in all work environments or job characteristics by using two different categories, job demands and job resources (Bakker & Demerouti, 2014). Job demands refer to the aspects of a job that requires sustained effort, therefore associated with certain psychological and physiological costs. Job resources have been identified as mechanism to buffer the impact of job demands on strains such as job burnout and combined with job demands, indirectly improves health outcomes (Bakker, Demerouti, & Euwena, 2005). From the preceding, this study will be using JD-R model (Demerouti, Bakker, Nachreiner, et al., 2001) and Conservation of Resource (COR) theory (Hobfoll, 1989) to examine the relationships between job-related factors (job demands and job resources) and job burnout in predicting the health status of medical doctors (Bakker, Demerouti, Verbeke, Demeroutti, & Verbeke, 2004). Previous studies have shown that JD-R model has steadily predicted job burnout (Bakker et al., 2005; Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001) and the effect on mental health and physical health (Bakker, 2011; Bakker & Demerouti, 2014; Demerouti & Bakker, 2011). When the JD-R model (Demerouti, Bakker, Nachreiner, et al., 2001) is being used in the study, the COR theory explained that possessing strong resources to preserve further resource development and secured. Maintaining resources that available will help to gain more resources and when the threat occurs, they will use the energy of resources by buffering the impact of loss on the limited resources. Forinstance, social support is needed for every employee namely, supervisor support, peer support, and subordinate support (Chen, Westman, & Eden, 2009; Hobfoll, Freedy, Lane, & Geller, 1990). Several studies have shown that COR theory is the appropriate theory that best explained on the prevalence of job burnout (De Cuyper, Makikangas, Kinnunen, Mauno, & Witte, 2012; Neveu, 2007; Westman, Hobfoll, Chen, Davidson, & Laski, 2005; Wright & Hobfoll, 2004) and the impact on employees' health status (Alvaro et al., 2010; Grandey & Cropanzo, 1999; Hobfoll, 1989; Hobfoll et al., 1990; Wright & Hobfoll, 2004).

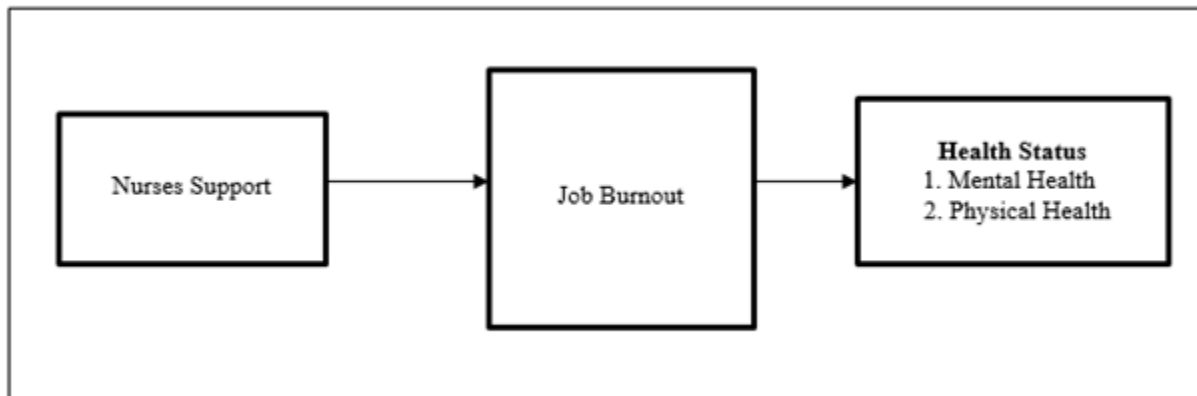


Figure 1: Proposed Conceptual Framework

4. Conclusion

The Malaysian healthcare industry's shortage of medical doctors and increasing number of patients seeking for treatment at public clinics and hospitals resulted in greater work burden for the medical doctors who have experienced high level of emotional distress (Razak, Yunus & Nasuridin, 2011) due to pressure increasing in work overload and lack support from supervisors, colleagues, and subordinates lead to a tensional working environment which exaggerates the pressure of their health status among medical doctors (Chen et al., 2013). Social support at workplace is vital to reduce the burden of mentally and physically exhausted. Hence, nurses support buffering medical doctors' stress at the workplace. Nurses support predicts good well-being among medical doctors. This paper emphasize the need of nurses support to buffer the chronic stress and improve medical doctors' health status, mental health and physical health. On the basis of the aforementioned evidence it seems fair to suggest that there is a need to enhance the quality of healthcare professionals particularly medical doctors in the public healthcare sector in order to provide quality services to patients. They are also known as the "gatekeepers" of healthcare organizations and need to be fit in order to perform competently and provide quality services to their patients (Chen et al., 2013; Uncu et al., 2006). Hence, it is believed that this further work is required to understand the importance of nurses support towards reducing job burnout that will effect the medical doctors' well being in the workplace.

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