Job Stress and Presenteeism Among Nurses in Tertiary Level Hospitals, the Islamic Republic of Pakistan

ความเครียดในงานและการขาดประสิทธิภาพขณะทำงานของพยาบาลในโรงพยาบาลตติยภูมิสาธารณรัฐอิสลามปากีสถาน

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บทคัดย่อ

การขาดประสิทธิภาพขณะทำงานของพยาบาลหมายถึงการตัดสินใจไปทำงานในขณะที่เจ็บป่วยเป็นประเด็นสำคัญสำหรับผู้บริหารการพยาบาลที่ต้องให้ความสำคัญ การศึกษาเชิงพรรณนาหาความสัมพันธ์ครั้งนี้มีวัตถุประสงค์เพื่อศึกษาระดับความเครียดในงานและการขาดประสิทธิภาพขณะทำงานตามการรับรู้ของพยาบาล และศึกษาความสัมพันธ์ระหว่างความเครียดในงานและการขาดประสิทธิภาพขณะทำงานโดยรวมของพยาบาลในโรงพยาบาลตติยภูมิ สาธารณรัฐอิสลามปากีสถาน กลุ่มตัวอย่างเป็นพยาบาลจำนวน 282 คนที่ทำงานใน 3 โรงพยาบาลตติยภูมิสาธารณรัฐอิสลามปากีสถาน เก็บรวบรวมข้อมูลระหว่างเดือนกุมภาพันธ์ ถึงเดือน มีนาคม พ.ศ. 2559 เครื่องมือที่ใช้ในการวิจัยประกอบด้วยแบบวัดความเครียดของพยาบาล (ENSS) และแบบวัดการขาดประสิทธิภาพขณะทำงานของสแตนฟอร์ด (SPS-6) แบบวัดความเครียดของพยาบาลและแบบวัดการขาดประสิทธิภาพขณะทำงานของสแตนฟอร์ดผ่านการตรวจหาความตรงเชิงเนื้อหาโดยผู้พัฒนาเครื่องมือ ค่าสัมประสิทธิ์ความเที่ยงของเครื่องมือทั้งสองฉบับเท่ากับ 0.08 วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนาและสัมประสิทธิ์สหสัมพันธ์แบบสเปียร์แมน

ผลการวิจัยพบว่า

1. คะแนนเฉลี่ยของความเครียดในงานโดยรวมและองค์ประกอบของความเครียดในงาน 9 องค์ประกอบตามการรับรู้ของพยาบาลอยู่ในระดับปานกลาง

2. คะแนนเฉลี่ยของการขาดประสิทธิภาพขณะทำงานโดยรวมและองค์ประกอบของประสิทธิภาพในการทำงาน 2 องค์ประกอบตามการรับรู้ของพยาบาลอยู่ในระดับสูง

3. ความเครียดในงานโดยรวมไม่มีความสัมพันธ์กับการขาดประสิทธิภาพขณะทำงานโดยรวมของพยาบาล

ผลการศึกษาครั้งนี้จะเป็นข้อมูลพื้นฐานสำหรับผู้บริหารโรงพยาบาลและผู้บริหารทางการพยาบาลในการออกแบบกลยุทธ์เพื่อจะลดความเครียดในงาน และจัดการการขาดประสิทธิภาพขณะทำงานของพยาบาลในโรงพยาบาลตติยภูมิ สาธารณรัฐอิสลามปากีสถาน

คำสำคัญ: Job stress, Presenteeism, Nurse, Tertiary care hospital, Pakistan

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Abstract

Presenteeism among nurses is the designation to attend work while sick, and is a vital issue for nurse administrators to focus. This descriptive correlational study aimed to explore the level of job stress and presenteeism as perceived by nurses, and to explore the relationship between overall job stress and overall presenteeism among nurses in tertiary care hospitals, the Islamic Republic of Pakistan. The subjects were 282 nurses working in three tertiary care hospitals in the Islamic Republic of Pakistan. Data collection was carried out from February to March, 2016. The research instruments included the Expanded Nursing Stress Scale (ENSS) and the Stanford Presenteeism Scale-6 (SPS-6). The ENSS and the SPS-6 were confirmed for validity by the developers. The reliability coefficients of the ENSS and SPS-6 were 0.80. Descriptive statistics and Spearman's rank-order correlation coefficient were used to analyze the data.

The results of this study showed as follows:

1. The mean score of overall job stress and the nine dimensions of job stress as perceived by nurses were at a moderate level.

2. The mean score of overall presenteeism and the two dimensions of presenteeism included completing work and avoiding distraction as perceived by nurses were at a high level.

3. There was no relationship between overall job stress and overall presenteeism among the nurses.

The results of this study provide baseline information for hospital and nursing administrators in order to design strategies to reduce job stress and to manage presenteeism among nurses in tertiary care hospitals in the Islamic Republic of Pakistan.

Keywords: Job stress, presenteeism, nurse, tertiary care hospital, Pakistan

Background and Significance

In the 21st century, due to technological advancement, socio-cultural development and globalization, the modern world has recognized patterns which have caused changes in people's bio-psychosocial behavior, quality of life (Jodas & Hadadd, 2009), and general well-being (Umann, Guido & Grazziano, 2012). The unusual circumstances of the healthcare work atmosphere greatly affect the behaviors involved in the decision-making process for job attendance (Primo, Pine, & Sakurai, 2007). Demands of attendance can take on diverse forms—presenteeism and absenteeism. Presenteeism is the worker experiences, due to some health problem, when a worker either decides to go to work while sick or to take sick leave (Aronsson & Gustafsson, 2005). Recent studies suggest that when employees show higher presenteeism at their work stations, it is

an indication of better performance in that organization in comparison with absenteeism (Mandiracioglu, Bolukbas, Demirel, & Gumeli, 2015; Hafner, Stolk, Saunders, Krapels, & Baruch, 2015).

A review of relevant literature shows that the costs of sickness-related absenteeism and sickness-related presenteeism have been assessed. Health-related work losses due to sickness absence were estimated to cost US employers more than 260 billion USD each year (Mattke, Balakrishnan, Bergamo & Newberry, 2007; Disease Management Association of America [DMAA], 2009). Conversely, studies from the USA reported that sickness presenteeism has resulted in expenditures of over 150 billion USD per annum (Hemp, 2004). These studies and data clearly indicate that costs due to sickness absence are much higher compared to the presenteeism.

Presenteeism is defined as an active employee engagement in work with a focus on cognitive, emotional, and behavioral engagement during work (Koopman, Pelletier, Murray, Sharda, Berger, et al. (2002). According to Koopman, et al. (2002) presenteeism consists of two dimensions: (1) completing work, which refers to the amount of work accomplished despite some sort of presenteeism effect (work focus); and (2) avoiding distraction, which denotes the ability to concentrate in the process of doing work despite some sort of presenteeism effect (psychological focus).

Empirical literature has shown that several factors have association with presenteeism, such as unhealthy lifestyles; illnesses; allergies and asthma; poor work-life (Econtech, 2011); burnout (Demerouti, Blanc, Bakker, Schaufeli, & Hox, 2009); occupational stress; work impairment; perceived productivity (Kwon & Kim, 2010; Benefits Canada, 2015); and job stress (Elstad & Vabo, 2008; Econtech, 2011). The significance of management of job stress (JS) is documented in literature that neglecting this problem may result in negative consequences for organizations as well as workers including nurses, such as reduced productivity, loss of working hours, arousal of diseases, and occupational accidents (Moustaka, Åleni, Constantinidis, & Theodoros 2010); absenteeism, turnover, and diminished job satisfaction (Alves, 2005); and low morale and burnout (Sutherland & Cooper, 1990).

Among the above factors, job stress was most prominent, justifying its selection by the researcher. However, previous studies on the relationship between JS and presenteeism have yielded varied results. For example, in a recent study in the USA, Yang, Shen, Yu-Ming, Zhu, Liu, et al. (2016) found that JS has a significantly direct positive relationship with presenteeism ($\beta = 0.30$, $p < 0.001$). Conversely, Koopman, et al. (2002) found that presenteeism negatively correlated with JS among employees. Finally, in a joint study in Australia and the UK, Wan, Downey, and Stough, (2014) found JS was not significantly related to presenteeism among employees. The results of these studies show that observed relationships between presenteeism and JS were inconsistent. Therefore, in order to confirm the association between these two variables, more research studies are needed.

Job stress in general and stress in particular is the psychological and emotional state that is

internally represented as part of a stressful transaction (Lazarus & Folkman, 1984). Using the theory of Lazarus & Folkman (1984) of psychological stress and coping by incorporating the stress process, French, Lenton, Walters, and Eyles (2000) developed the Extended Nursing Stress Scale (ENSS) to measure job stress among nurses. The ENSS consists of nine job stressors: (1) death and dying, (2) conflict with physicians, (3) inadequate emotional preparation, (4) problems relating to peers, (5) problems relating to supervisors, (6) work load, (7) uncertainty concerning treatment, (8) patients and their families, and (9) discrimination.

The Islamic Republic of Pakistan is a sovereign country located in the South Asia with a population exceeding 199 million people as the sixth most populous country in the world (US and World Population Clock, 2015). The healthcare system in Pakistan has both public and private health facilities, including government or public and private hospitals. Tertiary Care Hospitals (TCHs) provide tertiary care services (Meghani, Sehar, & Punjani, 2014) - that includes Out Patient Department; Wards; Neuro and Heart Surgery; Rehabilitation Centre; Dentistry; Ear, Nose, and Throat; Ophthalmology; Neurology; and Cardiology (National Management Consultants (2006). According to Gul (2008), nursing in Pakistan comprises three cadres: general nursing, midwifery, and public health nursing. Here, the majority of nurses graduate with three-year diploma of general nursing. All three cadres of nursing personnel are controlled by the Pakistan Nursing Council. Nurses perform both direct nursing care and non-nursing care in tertiary care hospitals as described by Pakistan Nursing Council (1999). Nurses in Pakistan are facing high workload, problems with supervisors, and non-conducive work environment (Khan, Hafizullah, Gul, Rehman, Ali, et al. 2012; Bahalkani, Kumar, Lakho, Mahar, Mazhar, et al. 2011). Thus, most of them have health problems but they still have to come to work. Literature confirms that some of such factors are likely to produce job stress among the nurses (Clegg, 2001). Being unhealthy but still on duty or presenteeism may reduce work productivity (Mandiracioglu, et al. 2015).

Objectives

The objectives of this study were to examine levels of job stress and presenteeism, and to explore the relationship between them among nurses in three tertiary care hospitals in the Islamic Republic of Pakistan.

Conceptual Framework

The concept of job stress was based on Lazarus and Folkman's theory of psychological stress and coping (1984). Using this theory by incorporating the stress process, Gray-Toft & Anderson (1981) and French, et al. (2000) identified nine job stressors in nursing:(1) Death and Dying, (2) Conflict with Physicians, (3) Inadequate Emotional Preparation, (4) Problems Relating to Peers, (5) Problems Relating to Supervisors, (6) Work Load, (7) Uncertainty Concerning Treatment, (8) Patients and their Families, and (9) Discrimination. Nurses who perceive low job stress will be active and engage in their work, which will result in better performance (Elstad & Vabo, 2008). In addition, higher levels of job stress increase presenteeism.

The concept of presenteeism, based on Koopman, et al. (2002), is an active employee engagement in work with a focus on cognitive, emotional, and behavioral engagement during work. Presenteeism consists of two components: completing work and avoiding distraction. The relationship between job stress and presenteeism was tested in this study.

Methodology

A descriptive correlational research design was used to examine the levels of job stress and presenteeism and identify the relationship between them among nurses in three tertiary care hospitals in the Islamic Republic of Pakistan.

Population and Sample

The target population of this study was 805 nurses that possessed either a diploma, bachelor's or master's degree in nursing in three tertiary care hospitals in the Islamic Republic of Pakistan. The Yamane formula (1973) was used to calculate the sample size, which was 267. Considering the likelihood of losing some subjects, 20% of the sample size (53) was added into the sample (Burns, & Grove, 2011). Therefore, the final sample size was 320 nurses. Proportional random sampling was used to select nurses from the nurses' name list in each department of three hospitals. The total of 297 questionnaires were returned. Of these, 282 (93%) questionnaires were completed for analysis.

Research Instruments

The research instrument used in this study was a set of questionnaires which included the following:

1. The Demographic Data Form was designed to collect the study participants' information including age, gender, marital status, level of nursing education, years of work experience, and basic payment per month.

2. The Stanford Presenteeism Scale (SPS-6) consists of six items with two dimensions. The two dimensions were as follows: 1) completing work and 2) avoiding distraction. Each dimension consists of three items. Each item was placed on a five-point Likert scale from 1 (strongly disagree with the statement) to 5 (strongly agree with the statement) for participants' responses. Three of the items in the dimension of avoiding distraction were scored reversely.

3. The Extended Nursing Stress Scale (ENSS) consists of 57 items. Responses were rated by using a 5-point Likert scale from 1 (doesn't apply) to 5 (extremely stressful). The nine dimensions included the following: 1) death and dying, 2) conflict with physicians, 3) inadequate emotional preparation, 4) problems relating to peers, 5) problems relating to supervisors, 6) workload, 7) uncertainty concerning treatment, 8) patients and their families, and 9) discrimination.

Validity and Reliability of the instrument

With permission from the authors, the researcher used the ENSS and SPS-6 without any modification; therefore, the researcher did not test for validity prior to the study. Twenty nurses from Jinnah Postgraduate Medical Centre were invited to test the internal consistency reliability of the two instruments. A Cronbach's alpha of 0.80 was obtained for both the ENSS and SPS-6.

Data Collection Procedures

Self-administered questionnaires were used to collect data from February to March

2016 at the three tertiary care hospitals, the Islamic Republic of Pakistan. Simple random sampling was used to select the sample from the name list of nurses who work for more than one year each department. After taking consent, the instruments were distributed to the nurses by the research coordinators. Then the research coordinators collected all the returned questionnaires in sealed envelopes and submitted them to the researcher every two weeks. The data were cleaned and checked by the researcher prior to entering into the computer for analysis.

Data Analysis Procedures

Statistical software was used to analyze the descriptive and inferential statistics in this study. Demographic data, level of JS, and presenteeism were analyzed using descriptive analysis frequency, percentage, mean, and standard deviation. Spearman's rank-order correlations coefficient was used to examine the relationship between overall job stress and overall presenteeism because the mean scores of both variables were not normally distributed. In relation to the relationship between the two variables, r = < 0.3 was considered as a weak relationship; r = 0.3 to 0.5 was considered a moderate relationship; and r = > 0.5 was regarded as a strong relationship (Burns & Grove, 2005).

Ethical considerations

Prior to data collection, the research proposal was approved by the graduate school, Chiang Mai University, and Research Ethics Committee of the Faculty of Nursing, Chiang Mai University, Thailand. In Pakistan, permission was obtained from each tertiary care hospital's Chief Executive Officers and their respective ethics committees. All participants were informed about the purpose and benefits of the study before data collection. They were informed that participation in the study was voluntary, so they could refuse to participate or withdraw anytime. Lastly, the participants who agreed to participate in the study were asked to sign a written consent.

Results

The age of the nurses ranged from 21 to 59 years. The highest age group was 31 – 40 years (43.98%). A majority of the nurses were female (70.92%), and more than half of them (72.35%) were married. More than half of the nurses held a diploma (52.12%), and 52.83% of the nurses had between 1 to 10 years' work experience. Furthermore, most of the nurses came from the Jinnah Postgraduate Medical Centre (47.87%). Although the nurses came from six different departments, about 28.36% of the nurses were working at the medical department.

The nurses perceived their job stress at a moderate level. All the nine dimensions of JS—work load, uncertainty concerning treatment, patients and their families, death and dying, problems relating to supervisors, problems relating to peers, conflict with physicians, discrimination, and inadequate emotional preparation—were also at moderate level (Table 1).

Table 1 Mean, Standard Deviation and Level of Each Dimension of Job Stress as Perceived by the Nurses (n = 282)

Job Stress	Mean	SD	Level
Overall Job Stress	151.82	24.57	Moderate
Work Load	24.66	5.35	Moderate
Uncertainty Concerning Treatment	23.79	5.39	Moderate
Patients and their Families	21.22	4.60	Moderate
Death and Dying	19.14	4.76	Moderate
Problems Relating to Supervisors	18.54	4.64	Moderate
Problems Relating to Peers	15.10	3.87	Moderate
Conflict with Physicians	13.02	3.14	Moderate
Discrimination	8.63	3.12	Moderate
Inadequate Emotional Preparation	7.69	2.60	Moderate

Nurses perceived presenteeism for overall and two dimensions at high level (Table 2).

Table 2 Mean, Standard Deviation and the Level of Overall and Each Dimension of Presenteeism as Perceived by the Nurses (n = 282)

Presenteeism	Mean	SD	Level
Overall Presenteeism	19.15	3.79	High
Completing work	9.71	3.32	High
Avoiding distraction	9.44	3.17	High

There was no statistically significant relationship between overall JS and overall presenteeism (Table 3).

Table 3 Relationship between Overall Level of Job Stress and Overall Presenteeism as Perceived by Study Nurses (n = 282)

Job Stress	Overall Presenteeism	
	r_s	p
Overall Job Stress	0.08	0.15

Discussion

1. The perception of job stress (JS): The results of this study show that the overall mean of job stress as perceived by the study nurses was at a moderate level (= 151.82, SD 24.57) (Table 1). This finding was consistent with the results of a previous study conducted by Leung-Chun (2013) in a tertiary care hospital in Hong Kong that used a similar instrument and found a moderate level of JS. In this study, the mean JS dimensions scores ranged from 24.66 to 7.69. This study also showed that all dimensions of JS were at a moderate level (Table 2). There are many reasons which may contribute to the moderate level of JS as perceived by nurses in TCHs of Pakistan, particularly, the workload caused by shortages of nurses. The existing nurse-patient ratio in the general wards in Pakistan is approximately 1:50 despite the fact that the Pakistan Nursing Council has recommended 1:10. As per a government report in the health department, Pakistan lacks 60,000 nurses (Khuwaja, 2013). In this study, a majority of nurses perceived too many required non-nursing tasks, such as clerical work. This can be explained that these are additional responsibilities which can further increase pressure to fulfill ward/unit tasks. Stress related to their job detracts from the quality of nurses' working lives, contributes to some forms of physical illness, and may increase minor psychiatric morbidity (Golbasi, Kelleci & Dogan, 2008).

2. The perception of presenteeism: The results of this study showed that the overall presenteeism as perceived by the study nurses in the tertiary care hospitals in the Islamic Republic of Pakistan was at high level **(** = 19.15, SD 3.79**) (**Table 2**).** The level of this result is consisent with previous studies by Yang, Yao, Hong-yan, Jian-bo, & Song (2012) in China; Brborovic, Brborovic, Brumen, Pavlekovic & Mustajbegovic (2014) in Croatia; Mandiracioglu, et al. (2015) in Turkey; and Koopman, et al. (2002) in the USA. As for the higher scores on presenteeism, it may show active engagement for a shorter duration of being ill and performing duty. Conversely, there is much likelihood to have a negative influence among nurses in the long run, in case such a trend was to remain continuously. From an employee perspective, presenteeism is vital in that it might worsen current medical illnesses, lessen the quality of working life, and lead to impressions of ineffectiveness at work due to reduced productivity (Johns, 2010). The results show that most of the nurses were actively engaged in performing their tasks instead of being concerned about their vital individual health problems. This result could be explained by the idea that nurses remain actively engaged to support society in Pakistan. According to Anis-ul-haq & Sohail (1997), different sources of social support were found among nurses in Pakistan. Social support is precursor to engagement (presenteeism) among workers (Schaufeli & Bakker, 2004). Another possible explanation is the nature of nurses in Pakistan have high responsibility to patients, so they come to work even though they do not feel well.

3. The relationship between JS and Presenteeism: There was no significant relationship between overall JS and overall presenteeism ($r = 0.08$, $p < 0.15$) (Table 3). The results of this study were consistent with the

findings of a joint study in Australia and the UK by Wan, Downey & Stough (2014), which found no significant relationship between presenteeism and job stress. The results of this indicate that although the nurses are facing job stress, they still go to work. Jobs stress was at a moderate level; this means that they can cope with job stress and there is a high likelihood that job stress has no impact on presenteeism. In other words, even if they get sick/stressed, they still go to work. One possible reason can be the possible rules and regulations for seeking leave—either nurses are sick or have urgent matters such as attending the funeral of close relative. Nurses in Pakistan can avail twenty-five days of casual leave (on emergency grounds) which is paid. In addition, they can apply for sick leave depending upon the severity of the illness and a medical doctor's opinion to take rest during such an illness. Hence, in the case that a nurse feels sickness and they still come to work, their productivity may decrease.

Conclusions and Implications

The results of this study will provide considerations for both nurses and hospital administrators in order to manage presenteeism. In addition, strategies need to be developed to recruit more nurses and ancillary/support staff, such as nurse aids in order to reduce non-nursing task work performances by nurses conferring to the stresses of the work setting. Nursing superintendents should foster a conducive work environment for nurses with their working hours and should improve approaches to decrease work load by reducing non-nursing tasks. Policy guidelines to save patients and nurses should be formulated and proposed to hospital directors and higher policy makers to reduce job stress and prevent presenteeism.

Recommendations

Future research can be valuable to explore job stress for nurses in different levels of hospitals which have different environments and supporting systems. Secondly, no significant relationship was found between job stress and presenteeism; thus, the relationship between other variables that may relate to presenteeism need to be explored. Monitor the situation or changes after implementation of policy guidelines regarding job stress and presenteeism.

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