



Stressors and impacts on nurses' job performance: A case study at one general public hospital, Jambi, Indonesia

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ABSTRACT: *The purpose of this study was to examine stressors, stress level, and the impacts on nurses' job performance at one general public hospital in Jambi, Indonesia. A questionnaire was used as a research instrument to sixty nurses. The data were analyzed statistically by using the SPSS software program. The findings of the study indicated that the major sources of stress or stressors were role conflicts, unclear roles or workload, relationships with supervisors, and relationships with co-workers. Participants also experienced physical stress and psychological stress. This study indicated that every nurse might experience a different kind of stress and what causes stress for one nurse might be of little concern to another. The results of this study provide information for stakeholders at hospital to provide nurses with a variety of programs for reducing the stressors and the level of stress during and after their working hours. Implications for practice are also discussed.*

Keywords – Hospital, Job Performance, Nurse, Stressors, Stress

I. INTRODUCTION

Over the past few decades, stress has become one of the most important issues, particularly for countries undergoing social, political, and economic changes. Lazarus (2006) argued, "Stress has become a household word, and we are flooded with messages about how it can be prevented, eliminated, managed, or just lived with" (p. 27), suggesting that stress has become the sphere for everyone, companies, and governments. Although, there are various concepts of stress and not all groups and individuals undergo stress in the same way, the term is defined as the force, pressure, tension, anxiety, conflict, frustration, emotional disturbance, trauma, alienation, and anomie (Lazarus & Folkman, 1984; Lazarus, 2006) in which a person is confronted with and attempts to prevent or manage it. According to Lu (1999), stress influences not only the life of individuals in terms of physical and mental issues, but also the life of companies, organizations, and governments that will hold financial consequences. Also, Lazarus and Folkman (1984) argued that the consequences of an imbalance between organizational demands and individual competences or resources will contribute to work stress.

A number of previous studies on the job or occupational stress have indicated that the occupational or job stress is related to the health, job demands, relationships, safety, or social support of individuals and has certain consequences for the well-being of individuals and organizations (Rees, 1995; Rees & Redfern, 2000; Antoniou, Davidson, & Cooper, 2003; AbuAlRub, 2004; Vakola & Nikolaou, 2005). Additionally, previous research on nurses' stress at their workplace has indicated that nurses have experienced occupational stress and are confronted with a variety of stressors (Bogossian & Ahern, 2010; Zeytinoglu, Denton, Davies, Baumann, Blythe, & Boos, 2006; Shen, Cheng, Tsai, Lee, & Guo, 2005; Evans, 2002; Bennett, Lowe, Matthews, Dourali, & Tattersall, 2001; Lim & Yuen, 1998; Tyler & Cushway, 1992; Coffey, Skipper, & Jung, 1988; Dewe, 1985; Numerof & Abrams, 1984). For example, Bogossian and Ahern (2010) found that Australian nurses experienced stressors such as work overload, role conflicts and experiences of aggression at their workplace while Shen, Cheng, Tsai, Lee, and Guo (2005) who surveyed 518 nurses at five state-owned psychiatric hospitals in Taiwan found that stress was related to young age, marital status, high psychological demand, low workplace support, and threat of assault at work.

The issues of job or occupational stress and its consequences for both individuals and organizations are also relevant for organizations in Indonesia, particularly for public organizations (e.g. hospital). Indonesia is Southeast Asia's largest country with a population of over 231,271,522 million people, the world's largest Muslim country, and a lower middle-income economy (World Bank, 2011). However, although some previous

research on nurses' stress has been done (Bogossian& Ahern, 2010; Zeytinoglu, Denton, Davies, Baumann, Blythe, & Boos, 2006; Shen, Cheng, Tsai, Lee, &Guo, 2005; Evans , 2002; Bennett, Lowe, Matthews, Dourali, &Tattersall, 2001; Lim & Yuen, 1998; Tyler &Cushway, 1992; Coffey, Skipper, & Jung, 1988; Dewe, 1985; Numerof& Abrams, 1984) and the findings of these studies might offer some useful insight on job or occupational stress, research on occupational stress is not well documented for nurses in hospitals in Indonesia. Hence, this study was an attempt to fill a gap in the occupational stress literature and to fill the lack of literature and information on Indonesian nurses' stress at hospital. The purpose of this study was to examine stressors, stress level, and the impacts on nurses' job performance at one general public hospital in Jambi, Indonesia. To achieve the purpose of the study, the following research questions guided this study:

1. How are the stressors and levels of stress faced by nurses at one general public hospital in Jambi, Indonesia?
2. How are stressors, stress level, and the impacts on nurses' job performance at one general public hospital in Jambi, Indonesia?

Additionally, this study tested the null hypothesis to address the research question: there is no significant relationship among the stressors, levels of stress, and nurses' job performance at one general public hospital in Jambi, Indonesia.

II. LITERATURE REVIEW

So much interest has been devoted to stress nowadays as it has serious consequences for both individuals and organizations. Lazarus (2006) argued, "Stress has become a household word, and we are flooded with messages about how it can be prevented, eliminated, managed, or just lived with" (p. 27). A number of concepts of stress have been proposed. For example, the term is defined as the force, pressure, tension, anxiety, conflict, frustration, emotional disturbance, trauma, alienation, and anomie (Lazarus &Folkman, 1984; Lazarus, 2006). Additionally, Lazarus (2006) said that stress is related to an unwelcome response or reaction that people have in response to demanding pressures or other types of demands placed upon them. In other words, stress and its consequences contribute to a reduction in the health status of individuals, and may include physical, psychological and social aspects as a result of a variety of difficulties or problems (stressors) which can be from inside or outside. However, one thing that should be remembered that the degree of stress experienced by every individual is not the same as every individual has a different way to manage his or her stress. The degree of stress can range from low to mild or to high. Additionally, an individual may face stressors (source of difficulties) from many to few as a result of varying experiences (Lazarus &Folkman, 1984; Lazarus, 2006).

Of the existing studies investigating nurses' stress, (Bogossian& Ahern, 2010; Zeytinoglu, Denton, Davies, Baumann, Blythe, & Boos, 2006; Shen, Cheng, Tsai, Lee, &Guo, 2005; Evans , 2002; Bennett, Lowe, Matthews, Dourali, &Tattersall, 2001; Lim & Yuen, 1998; Tyler &Cushway, 1992; Coffey, Skipper, & Jung, 1988; Dewe, 1985; Numerof& Abrams, 1984), most of these studies have identified that nurses, regardless of their countries, are confronted with a variety of difficulties (stressors). For example, Bogossian and Ahern (2010) who examined factors contributing to stress in Australian nurses reported that stressors or the sources of stress were work overload, role conflicts, and experiences of aggression. Also, Zeytinoglu, et al. (2006) who surveyed 1396 nurses in Canada on the effects of job preference, unpaid overtime, importance of earnings, and stress in retaining nurses in their employing hospitals and in the profession found that stress is an ongoing concern for retaining nurses in their hospitals and within the profession because of those variables.

Additionally, in a 2005 survey on occupational stress involving 518 Nurses in Psychiatric Institutions in Taiwan, Shen, et al. (2005) reported that perceived occupational stress was related to some factors, including young age, widowed/divorced/separated marital status, high psychological demand, low workplace support, and threat of assault at work. The authors concluded that nurses in psychiatric institutions in Taiwan are under significant stress associated with work factors. Another survey research investigating the effect of job-related stress on job performance among hospital nurses and the effect of social support from coworkers on the stress-performance relationship was done by AbuAlRub (2004) who reported that perceived social support from coworkers enhanced the level of reported job performance and decreased the level of reported job stress. Further research on nurses was done by Evans (2002) who examined 38 district nurses' perception of occupational stress in Yorkshire reported that the most stressful aspects of work were work overload; climate of change;

nursing patients with complex care needs; lack of teamwork with other departments, and family responsibilities (home/work interface).

Also, Bennett, et al. (2001) who surveyed 106 nurses found that the negative mood states or stress was related to lack of management support, job overspill, having to make decisions under time pressure, and lack of recognition by the organization. Another interesting study regarding nurses was from Lim and Yuen (1998) who examined nurses in Singapore found that demands from patients/relatives and perceived job image were significantly associated with intention to quit, the demands from doctors were not significantly related to nurses' intention to quit from the job. Additionally, Dewe (1985) who surveyed 2500 general and obstetric nurses in New Zealand revealed that there were five potential sources of stress, including work overload, difficulties relating to other staff, the difficulties involved in nursing the critically ill, and concerns over the treatment of patients, and dealing with difficulty or helplessly ill patients.

In summary, this literature review on occupational stress faced by nurses around the globe has provided readers with more information on potential sources of stress that nurses have faced in hospital, which may consequently influence their job performance, well-being, and organizations. Nonetheless, until now, not much has been published about occupational stress faced by Indonesian nurses. It is not well-documented for nurses in hospitals in Indonesia, which leads to the rationale for doing this study focusing on Indonesian nurses.

III. METHODS

3.1 Research site and participants

The purpose of this study was to examine stressors, stress level, and the impacts on nurses' job performance at one general public hospital in Jambi, Indonesia. This study was conducted at a general public hospital in Jambi Province, Indonesia. The participants of this study were 60 nurses. All the 60 participants were female. The age ranged from 25 to 55 years. In terms of work experience, 30 participants had less than 1 year to 5 years of working experience, 15 had working experience of between 6 and 10 years, and 15 participants have worked for 11 years and above. All participants held an educational background in nursing (e.g. diploma degree). The 60 participants were recruited through a variety of networking sources and permission from the authorities was also acquired.

3.2 Data collection and analysis

This study used a survey questionnaire in order to examine the stressors, levels of stress, and nurses' job performance at one general public hospital in Jambi, Indonesia. The survey questionnaires were personally administered to each participant at the research site from January to November 2010. The questionnaire consists of two sets of questions. The first set of questions asks what nurses think on the major sources of stress or stressors (role conflicts, unclear role or workload, relationships with supervisors, and relationships with co-workers). The second set of questions asks what nurses think on the levels of stress (physical stress and psychological stress) and job performance (quantity, quality, and timeliness).

The data were analyzed statistically by the SPSS software program. A five-item Likert scale ranging from Strongly Agree (4); Agree (3); Not Sure (scored as 2.5); Disagree (2); and Strongly Disagree (1) was used to measure the stressors, levels of stress, and nurses' job performance at one general hospital in Jambi, Indonesia.

IV. RESULTS

Previous studies (e.g. Bogossian & Ahern, 2010; Zeytinoglu, Denton, Davies, Baumann, Blythe, & Boos, 2006; Shen, Cheng, Tsai, Lee, & Guo, 2005; Evans, 2002; Bennett, Lowe, Matthews, Dourali, & Tattersall, 2001; Lim & Yuen, 1998; Tyler & Cushway, 1992) have revealed that nurses, irrespective of their countries, are challenged with a variety of difficulties (stressors), which will influence their job performance at their organizations. The purpose of this study was to examine stressors, stress level, and the impacts on nurses' job performance at one general public hospital in Jambi, Indonesia, which will be discussed below.

The analysis data of the first set of questions examining on what nurses think on the major sources of stress or stressors indicated that the major sources of stress or stressors were role conflicts, unclear roles or workload, relationships with supervisors, and relationships with co-workers. In terms of role conflicts (there was

inappropriateness between jobs assigned and participants' backgrounds), 72 % of participants strongly agreed and the rest of participants just agreed that role conflicts were the source of stress. Furthermore, when asked whether unclear roles or workload were the sources of stress, 76,8% of participants strongly agreed and 23, 2 % of participants were unsure that it was the case. Additionally, to a question on whether the unclear expectation of the job was the source of stress, 75, 8 % of participants agreed and 24, 2 % of participants strongly agreed that it was the case.

One of the interesting things from the data analysis was that the relationships between supervisors and nurses were the sources of stress at work. 59 % of participants strongly agreed and 32 % of participants agreed that there was power distance and limited access to their supervisors, which discouraged their job performance because they could not discuss their problems at work. When nurses were asked whether they perceived that relationships (e.g. lack of support, lack of harmony, and lack of communication) were one of the stressors, 56, 6% strongly believed that this was the case and 43, 4 % of them also agreed with the statement.

The results of data analysis on the second set of questions focusing what nurses reflected the levels of stress (physical stress and psychological stress) indicated that in terms of physical stress (dry mouth and difficulty swallowing, headaches, respirational problems, and high blood pressure) , participants reported that the level of physical stress varied among participants. 68, 6% of participants reported that although the level was low, they experienced dry mouth and difficulty swallowing due to their job pressure or tension while the rest of participants reported that they had a high level of physical stress related to dry mouth and difficulty swallowing. For headaches, 65, 5 % of participants strongly perceived that the level was high due to their job pressure while 34, 5 % of participants reported that it was low. Additionally, when asked whether they experienced respirational problems due to their job stress, 50 % of participants strongly agreed, 25% agreed, and 25% were unsure with the statement. Another interesting finding from this study indicated that 37, 9% of participants strongly agreed that their experienced high blood pressure, 40 % agreed, and 20, 1% were unsure that they experienced high blood pressure.

Additionally, in terms of psychological stress (tension or uneasiness, nervousness, becoming easily agitated, and feeling bad about yourself or low self-confidence, and feeling bored with their job), 58 % of participants strongly agreed that they had psychological stress related to tension or uneasiness, but the level was not high. Additionally, 55% of participants strongly agreed that they suffered nervousness from their work although the level was low.

Furthermore, the data analysis indicated that when participants were asked whether they became easily agitated due to their occupational stress, 69, 2% of them agreed, but they said the level was medium. Another important psychological stress that participants reported that due to their occupational stress, 74% of participants agreed that they had bad feeling about yourself or low self-confidence though the level was not high. Also, when the question of feeling bored with your job was asked, 63, 3 % of participants strongly agreed that it was the case, but when asked if the level was high, medium, or low, 63, 3 % of participants said that it was low, but 36, 7 % said the level was high.

The results of the data analysis on the job performance aspects (quantity, quality, and on time or timeliness) indicated that in terms of quantity, when asked whether they fulfilled the standards required by their job or organization, 53, 4 % of participants agreed that they were able to meet the standards set by their supervisors or organizations although the level was high. For the quality of their job performance, two categories were asked. First one was related to their level of carefulness in performing their job, 68% of participants strongly agreed that their level of carefulness was high in doing their job, and 32 % of participants agreed that their level of carefulness was medium. The second one was related to the level of participants' well-orderedness in performing their job, 67 % of participants strongly agreed that their level was high while 33 % of participants reported that their level of well-orderedness was low. Another interesting result from the data analysis of the job performance related to "timeliness or on time" in doing their tasks or responsibilities, when asked if participants finished their task on time, 70% of participants strongly agreed that their timelines in doing their job was high, suggesting that they could finish their task based the time allocation set by their supervisors or organization. Additionally, correlation analysis showed that the relationship of the stressors, levels of stress, and nurses' job performance at one general public hospital in Jambi, Indonesia was significant, which can be seen in the following table.

Table 1. Relationship of the stressors, levels of stress, and nurses' job performance

No.	Variables	Stressors	Stress Level	Performance
1	Stressor	1.0000		
2	Stress level	0.5875	1.0000	
3	Performance	-0.6432	-0.6431	1.0000

As shown in Table 1, relationships of the stressors, levels of stress, and nurses' job performance at one general public hospital in Jambi, Indonesia was significant as indicated by their correlation coefficient, particularly, the correlation coefficient between stressors and level of stress was $r = 0.5875$. Additionally, the correlation coefficient between stressors and nurses' job performance was $r = -0.6432$ and the correlation coefficient between level of stress and nurses' job performance was $r = -0.6431$. The positive correlation coefficient indicates that two variables have a direct relationship while the negative correlation coefficient indicates the two variables have an inverse relationship.

In addition, the results of regression analysis on the impacts of stressors on the levels of stress and nurses' job performance were positive as shown in Table 2.

Table 2. The impacts of stressors on the levels of stress and nurses' job performance

Dependent Variable	Independent	B	SE B	β	t_{hit}
Level of Stress $R^2 = 0.3652$ $F = 49.0190$ $P = 0.0000$	Stressor	1.3050	0.1860	0.5865	8.001
Performance $R^2 = 0.5210$ $F = 50.0491$ $P = 0.0000$	Stressors	-0.1638	0.3384	-0.4053	-4.445
	Level of stress	-0.0683	0.0153	-0.4050	-4.542

As shown in Table 2, the impact of stressors on the level of stress was significant with $R^2 = 0.365$. While the impacts of stressors and the level of stress on nurses' job performance were also significant with $R^2 = 0.5210$.

V. DISCUSSION

The purpose of this study was to examine stressors, stress level, and the impacts on nurses' job performance at one general public hospital in Jambi, Indonesia. The findings in this study indicated that the major sources of stress or stressors among nurses at the research site were role conflicts, unclear roles or workload, relationships with supervisors, and relationships with co-workers. Additionally, in this study it was also found that there were two kinds of stress, namely physical stress and psychological stress and the level of physical stress varied among participants from high to low. In terms of physical stress, participants experienced a variety of physical problems, including dry mouth and difficulty swallowing, headaches, respiratory problems, and high blood pressure. Regarding psychological stress, it was also found that participants encountered tension or uneasiness, nervousness, becoming easily agitated, and feeling bad about yourself or low self-confidence, and feeling bored with your job.

More importantly, our findings clearly indicated that role conflicts, unclear roles or workload, relationships with supervisors, and relationships with co-workers were the main causes of stress among participants. It was found that these stressors influence their performance at work regardless of participants' backgrounds. These findings support earlier work which suggested that a number of stressful situations are commonly encountered by all nurses. In terms of lack of support, for example, Shen, Cheng, Tsai, Lee, and Guo (2005), AbuAlRub (2004), Evans (2002), Bennett, Lowe, Matthews, Dourali, & Tattersall (2001), Tyler and Cushway (1992), and Dewe (1987) found that lack of teamwork or difficulties relating to other staff was one of the sources of stress for nurses. In my study, I found that relationships with supervisors and relationships with co-workers were not supportive which impacted participants' job performance because they could not discuss their problems at work. Participants had to handle their problems alone. In terms of work overload, the

finding of this study was consistent with much of the evidence reported in the literature. For example, Bogossian and Ahern (2010), Evans (2002), Bennett, et al. (2001), Tyler and Cushway (1992), Coffey, Skipper, and Jung (1988), and Dewe (1987) who found that work overload was one of the sources of difficulties that made them stressed.

The findings of this study indicated that participants regardless of their backgrounds are confronted with a variety of stressors and stress level, which contributed to their job performance. Nurses in this study were exposed to occupational stress. Stress with its consequences has influenced the aspects of participants' life, including emotions, behaviors, and physical health. Additionally, stress that was encountered by nurses in this study might also influence the life of the hospital where they worked, which finally would hold financial consequences.

VI. CONCLUSION, POLICY IMPLICATIONS, AND LIMITATIONS

Every nurse may experience a different kind of stress and what causes stress for one nurse may be of little concern to another. Lazarus (2006) argued, "Stress has become a household word, and we are flooded with messages about how it can be prevented, eliminated, managed, or just lived with" (p. 27). Nurses may handle stress in a different way. Some nurses may be better able to handle stress than others. However, occupational stress is not well documented for nurses in Indonesia. This study provided information for hospital policy makers, doctors, nurses, and researchers to understand what are the most stressful aspects of work for nurses in hospital? What do nurses actually experience at hospital? How do nurses and doctors or supervisors behave on daily basis? These are some of the questions the study attempted to provide with responses. Moreover, this study revealed the facts that the interactional aspects of hospital did not take place. From the findings of this study, it can be concluded that nurses in hospital were under significant stress related to work factors.

The results of this study also provide information for stakeholders at hospital to provide nurses and doctors with a variety of programs for reducing the stressors and the level of stress during and after their working hours. For example, stakeholders at hospital create a training program for nurses on how to handle stress resulted from their activities at hospital. Also to improve the relationship between nurses and nurses and supervisors, a social or cultural activity that can facilitate to gather nurses and doctors should be created (e.g. making seminars for open dialogue to share feelings, perspectives, and experiences, or scheduling of social events where nurses and doctors involve in culturally relevant activities together).

While this study will potentially contribute the sort of evidence necessary for providing support in terms of programs and policies to hospital policymakers who need to facilitate nurses to handle their stress, this study has two limitations regarding the findings. First, the research site of this study was a public hospital. Therefore, the participants of this study might not represent all nurses in Indonesia. Second, this study was specifically focused on the stressors, stress level, and the impacts on nurses' job performance. Due to this narrow focus; doctors, staff, and administrators at the research site were not included for the study, suggesting that the findings of this study just described experiences from nurses, while doctors, staff, and administrators' experiences were absent.

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