

## Conference Paper

# Relationship between Emotional Intelligence and Workplace Stress Among Nurses in West Java Province, Indonesia

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**Abstract**

Nurses have a higher risk of workplace stress due to higher workload and the responsibility of caring for patients in 24-hour shifts, individually and as part of healthcare teams. Therefore, emotional control and intelligence are important elements of the job. However, few studies explore the relationship between emotional intelligence and work stress among nurses, particularly in developing countries, a gap this article will address. This study was conducted using a descriptive correlational approach. Nurses were eligible to be considered in this study if they were a permanent worker with at least six months' experience, and not on maternity leave. A self-reported questionnaire of emotional intelligence and workplace stress was used to collect the data. The relationship between variables interest was determined using Spearman Rank test. Fifty nurses in a government hospital located in West Java, Indonesia participated in this study. The median score of emotional intelligent was 91 (and ranged from 74 to 103). The average score of workplace stress was 39.9 (SD: 11.23). The result from bivariate analysis found a negative association between emotional intelligent and workplace stress ( $r=-0.468$ ,  $p=0.001$ ). Nurses with a higher emotional intelligence had lower workplace stress. Promoting emotional intelligence among nurses in the hospital is important, and future studies are exploring more factors associated with emotional intelligence is warranted.

**Keywords:** Emotional intelligence, nurses, workplace, stress

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## 1. Introduction

Working within teams of health care professions Nurses play a significant role in the health care system caring for patients physical, psychological, social, and spiritual needs 24 hours a day [1]. However, their work load is higher (ratio: 1 to 10- 12 patients) then other team members. This requires them to be ready physically and mentally especially during night duty, where they often face unwanted or unknown situations and receive many requests from patients. Higher pressure in the working place would

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also contribute to the increasing work loading. Nurse required to be adherence to all the standard operational procedure set up by the hospital and as much as possible could fulfill patient's expectation. Friendly nursing services supported by empathy and good looks for their performance will help the patient more calm and comfortable during hospitalized.

Nurses are required to be able to work in the team, have a big responsibility to improve and promote patients' health, doing administrative work, as well as requires an excellent physical and mental stamina [2]. Significant roles and responsibilities of the nurse become one of the triggers of workplace stress. Stress experienced by individuals for long periods of time with high intensity can cause physical, psychological, and emotional problems [3]. The source of stress comes from unsupported or uncomfortable working conditions [4]. Symptoms of workplace stress categorized into three: 1) psychological symptoms such as confusion, anxiety, tension, sensitive, irritable, bored and others. 2) Physical symptoms such as increased heart rate and blood pressure, respiratory problems, stomach disorders, headache, sweating and so forth. 3) Behavioral symptoms, including low achievement, decreased work productivity, job avoidance, and absence from their work [5].

The ability of individuals to understand and manage their emotions will help to overcome their workplace stress well. The problem of work stress will develop complicated by the emotional factors of the nurse's personal, such as not being able to express and control their emotions [6]. Emotion is a certain feeling that a person experiences and affects one's thoughts and behaviours. Emotions encourage someone to react to the problems immediately [7]. For example, a nurse who feels that the workload is too heavy, they will think not able to finish it or uncompleted finish their work. Due to uncomfortable with working environment, nurse tend to get anxiety as shown with some behavior such as cold sweat during their working time, or hand shaking, nervous, confuse, cannot concentrate, and easy to angry.

A previous study stated that decisive emotional intelligence the ability of humans to understand their feelings and those of others [8]. It helps to motivate, control feelings, and make relationships. By controlling their emotions, it will help the individual adjust their working environment. A person who does not have the skill to manage emotion will exhibit tension during their work with poor work performance, while someone with the good skill to control emotion will remain calm and able to work well [7]. Another study during the years 1992-2002 found that many people who are working, including nurses experiencing emotional issues, such as holding emotional clashes with others (superiors, associates or subordinates), unable to express positive feelings of dislike

and unable to foster good relationships over a long period. That study also found that many people are suffering from workplace stress, depression, and insomnia [9].

Intelligence, good emotional can be seen with the ability to recognize one's own emotions, motivate yourself, empathize, control yourself, and the existence of social abilities [10]. A previous study reported that about 75-96% ability to adopt in working situations require emotional intelligence, while the role of the intelegent quotient (IQ) was the second one who contributes about 4-25% [7]. It highlights that nurse must have the good emotional intelligence to maintain good working performance and can adapt to all working. Only a few studies come from developing countries with limited health care resource to investigate the emotional intelligence and workspace stress including their relationship. Therefore our study aimed to identify relationship between emotional intelligence and workplace stress among nurses.

## 2. Methods and Equipment

### 2.1. Methods

This study was descriptive correlation with cross sectional design that conducted from January to February 2017. The inclusion criteria for an eligible participant was a nurse who works at a hospital as a permanent worker, aged over 20 years old, had experience working for at least six months. Nurses on maternity leave were excluded from this study. Total sampling technique was used to collecting respondent from 50 nurses who working at one of the government hospital in West Java province, Indonesia The distribution of nurses was 22 nurses worked at inpatients ward, 16 at emergency room, 4 at perinatology unit, 6 at operation room, and 2 at outpatients department. A descriptive statistic was used to describe variable interest by presenting their mean, standard deviation, median, and range. Spearman rank test was used to test the relationship among the variables.

This study has been approved by institutional review board of affiliated studies (No.015/KEPK/STIKEP/PPNI/JABAR/I/2017) Informed consent was made for the nurse who is eliglible to be included in this study. The participants had the right to withdraw from the study anytime for any reason. A private room were provided for nurses who willing participate in this study.

### 2.2. Equipment

### 2.2.1. Emotional intelligent

A self-reported questioned was delivered to all subject to measure their emotional intelligent. This instrument has been adopted from a previous study [4, 11]. Five Likert scales was used, which (1) means not very appropriate, (2) not appropriate, (3) less appropriate, (4) appropriate, and (4) very appropriate. This instrument has been validating, and pilot tested in one of district general hospital from a different region located in West Java to 20 nurses. The reliability was tested using the Cronbach' Alpha; it was 0.951 which reported good internal consistency. The higher score indicates the higher of emotional intelligence

### 2.2.2. Workplace stress

Workplace stress was measure using self-reported stress that developed by [4, 11]. The scale was five Likert scales, 1= indicates never, 2= rare, 3=seldom,4=often, and 5= indicated very often. This questionnaire also has been a pilot tester to determine validity and reliability. Pilot tested was conducted to 20 nurses in the different hospital. The internal constancy was tested using Cronbach' alpha and showed good reliability (Cronbach' alpha was 0.931). The higher score of an answer indicates the higher of the work stress experienced by nurses.

## 3. Results

TABLE 1: The distribution score of emotional intelligence and workplace stress among nurses (n=50)

	Range	Mean	SD
Workplace Stress	20 - 63	37.9	11.23
Emotional Intelligent	74 -103	88.5	6.48

Table 1 showed that the mean score of emotional intelligence was 88.5 (standard deviation (SD) = 6.48) with the lowest score was 74, and the highest score was 103. Higher score reflects higher emotional intelligence. The score of workplace stress was 37.9 with SD=11.23 and ranged from 20 to 63. Higher score reflects higher workplace stress, and it showed that majority of nurse had moderate workplace stress.

### 3.1. The relationship between emotional intelligence and workplace stress

The bivariate analysis evaluated using Spearman Rank test that found a negative correlation between emotional intelligence and workplace stress with correlation coefficient (r) was -0.468 and p value was 0.001. It showed that higher score of emotional intelligent associated with lower workplace stress.

## 4. Discussion

The results showed that the nurses' emotional intelligence was in the high category because the average score was 90.4 higher than the midpoint value (88.5). The results of this study indicate that most respondents have been able to solve the problems well, including the difficulties associated with their work. This result was consistent with the previous study which stated that individuals with adequate emotional intelligence able to control feelings of anger and maintain a life spirit [12]. Some respondents had low emotional intelligence score (score below the midpoint). Low emotional intelligence has the characteristics such as follow feelings without thinking of the consequences, being angry, acting aggressively and impatiently, having purpose in life and ideals that are vague, easily desperate, and insensitive to feelings of self and others, unable to control negative feelings and moods, susceptible to negative feelings, have negative self-concept. All those negative attitudes would make them unable to have good friendships with others even unable to communicate well and resolve the social conflicts. The low emotional intelligence may caused by individuals lacking self-awareness, lack of self-regulation, lack of motivation, low empathy skills, and low social skills [7].

The results also showed the maximum score of respondents is higher than the midpoint of workplace stress. It may vary due to several factors such as working shift system; For example, night shift may affect physical condition due to insufficient rest or sleep at night. Previous study revealed that factors influenced the occurrence of workplace stress was the physical condition and task, for example, physical noise, heat while the task includes workload, night work with risks and hazards [13]. The results showed that the workplace stress experienced by the nurse is in a low category. It can happen because every individual has their way to deal and cope with work pressure and environment. This difference can be influenced by several factors, including good relationships with colleagues or superiors that can reduce the working burden and loading.

There was a negative relationship between emotional intelligence and workplace stress among nurses, which means higher emotional intelligence then the lower the work stress experienced by the nurse. It may due to emotional intelligence could make someone more able to control the emotional response, and not easy to get stressed. One of the ability to handle workplace stress is emotional intelligence. Nurses with high emotional intelligence will perform a positive attitude as well to act positively in doing the work so that stress related to work condition helps will be reduced [7]. Conversely, if emotional intelligence is low, their attitude performance will be negative may not be able to undertake their work properly. Stressors at the workplace are perceived as a difficult constraint. Consequently, nurses will feel burdened lead to the stress [4].

From the description above, we can conclude that the nurses who have high emotional intelligence are not easy to experience workplace stress such as physical disturbances, psychological disorders, and behavioral disorders because of they are able to recognize their self, manage emotions, self-motivation, empathy, and fostering relationships with others.

## 5. Conclusion

In conclusion, the study found that majority of nurses had a higher score of emotional intelligent and lower score of workplace stress. Hospital management should promote emotional intelligent through continue education and training would benefit to reduce stress and improve nursing quality of care.

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