

THE INFLUENCE OF EFFECTIVE LEADERSHIP, WORKLOAD AND MOTIVATION ON NURSES PERFORMANCE IN APPLICATION OF PATIENT SAFETY IN PKU MUHAMMADIYAH BANTUL HOSPITAL

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ABSTRACT

One of the method to improve hospital quality services is by improving performance in the application of patient safety. Nurses are health workers who held key of success on patient safety. Effective leadership from the head nurses, workload and work motivation of nurses are considered to be an important factor in improving the performance of patient safety by nurses. Type of study was quantitative research with cross-sectional design. Knowing effective leadership, workload and motivation of 76 nurses for performing patient safety at ward of PKU Muhammadiyah Bantul Hospital during July to August 2018. Data analysis using multiple logistic regression. This study showed the significant result (p value < 0,05) with p value of effective leadership 0,033, workload 0,027, and motivation 0,017. Effective leadership has an influence on nurses performance in the application of patient safety. Workload has an influence on nurses performance in the application of patient safety. Motivation is the most influential on nurses performance in the application of patient safety.

INTRODUCTION

As the main health referral center, hospitals accused to improve service quality. One of the effort to improve the quality service was by performing patient safety system. Patient safety is one aspect that influences the improvement of the quality of hospital services (Herwina, 2012). Patient safety is a system in the hospital to makes safer of patient care and prevents injury caused by errors. (Depkes RI, 2008).

Patient Safety is a public health problem that impacts the level country development. The World Health Organization (WHO) estimates that patients in the world suffer from stress or death every year due to unsafe medical practices and services, while one in several patients is disadvantaged when receiving health services at the hospital (Andermann et al., 2011).

Health workers play the important role directly in the patient safety programs. Nurses are health workers whose dominate in numbers in hospital, as well as establishing the first and longest contact with patients. Nurses as medical personnel who often make contact with patients are considered to have an important role in the success of patient safety program.

The application of patient safety is influenced by five factors there are self (individual) and nurse performance, patient factors, work environment factors, organizational factors, and external factors. It can be concludes that patient safety performance is influenced by individual performance (in this case the nurse) (Yulia, 2010). The performance of nurses in the patient safety program plays an important role in improving quality service in hospitals.

Gibson said there are three factors that affect performance, there are (Gibson, 2011):

- Individual factors: skills and abilities, background, and demographics
- Psychological factors : motivation, attitude, perception, personality, and learning.
- organizational factors : leadership, workload, resources, compensation system, job design structure, supervision, and co-workers.

Some factors that mentioned by Gibson was influencing the performance of employees including workload, motivation and leadership. Several studies on workload, motivation, and leadership on performance have been conducted.

The influence of workload on patient safety supported by research conducted by Richard J. Holden

(2007) with the title "Nursing Workload and its Effect on Patient and Employee Safety". In this study, interesting results are shown how the workloads at various levels may be related to patient and employee safety issues (Holden et al., 2007).

Heavy workload is considered to affect the performance of nurses. Heavy workloads and increased travel demands, for instance, made it increasingly hard for many employees to meet both work and personal responsibilities (Robbins and Judge, 2013).

The results of previous studies on the relationship of knowledge, workload and motivation to patient safety performance in Syekh Yusuf Gowa Hospital stated that there was a relationship between the level of knowledge, workload and motivation on the performance of nurses in implementing patient safety (Wahyuningsih et al., 2014). From the study also mentioned that motivation affects performance in the application of patient safety.

Motivation is the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal (Robbins and Judge, 2013). In implementing the patient safety, motivation and workload programs are considered to have an important role to improve nurse performance. The Increase of motivation and appropriate workload will have a positive impact on the performance of nurses and the implementation of patient safety.

Another factor that important in the application of patient safety is the leadership factor. Leadership practices are considered as key factors that influence nurses' motivation and performance (Agnew et al., 2012). Leadership is an activity in influencing other people or employee to work hard with the full ability to achieve organizational goals. Leaders can influence their employees to carry out work activities according to their desire to achieve a goal of the organization (Gillies, 2000). Leadership is the ability to influence a group toward the achievement of a vision or set of goals (Robbins and Judge, 2013).

Leaders play an important role in the success of nurses' performance in implementing patient safety. This is in accordance with the research by Nurma Putraningrum regarding the relationship of leadership style of the head of space with the application of patient safety. In the study shows the results there is a relationship between leadership style with the application of patient safety (Putraningrum, 2014).

Effective leaders are leaders who succeed in influencing their subordinates to work together on productivity and achieving job satisfaction (Huber, 2013). The importance of effective leadership for obtaining individual, group, and organizational performance is so

critical that there has been much effort to determine the causes of such leadership (Gibson, 2011). To improve the effective strategic leadership, a leader have to be a strategic expert, then to be change agent and should be able to create clear and relevant visions and mission of the organization (Hidayah et al., 2015).

The room head nurse is a leader who interacts more frequently with the nurse. In the implementation of patient safety, the head nurse plays an important role in improving the performance of the patient safety program.

PKU Muhammadiyah Bantul Hospital is a hospital located in Bantul Regency, Daerah Istimewa Yogyakarta. One of the efforts in improving the quality of service at PKU Muhammadiyah Bantul Hospital is the application of patient safety. Data obtained from the Patient Safety team of PKU Muhammadiyah Bantul Hospital stated that the incidence of patient safety in 2018 to June was 90 incidents. In 2017 recorded 154 incidents of patient safety. Of the total incidents in 2017, 7 incidents were unexpected events. Of the 7 unexpected events, 3 incidents were caused by negligence of nurses. Reporting and documenting the incidence of patient safety are considered insufficient, because in reality in the field, there are still many incidents of patient safety that have not been successfully recorded.

Regarding this background, the formulation of the problem of this study is:

1. How was the influence of effective leadership on nurses performance in the application of patient safety?
2. How was the influence of workload on nurses performance in the application of patient safety?
3. How was the influence of motivation of nurses on nurses performance in the application of patient safety?

METHOD

This is a quantitative research with cross-sectional research design. The population of this study was nurses at ward of PKU Muhammadiyah Bantul Hospital which was 92 people. The number of samples in this study was 76 people by random sampling.

Questionnaire was done to collect the data. Validity tested by using product moment correlation test. Reliability tested by using Cronbach Alpha formula.

Univariate analysis was used to determine the frequency distribution of effective leadership, workload, motivation, and performance of patient safety application by nurses. Bivariate analysis was conducted to determine the relationship between the independent variables and the dependent variable using the Chi-Square test. Multivariate analysis (Multiple Logistic Regression Test) was conducted to determine the most dominant independent variables that affect the dependent variable.

RESULTS

Respondents Characteristic

76 respondents used as sample in this study. Number of the sample calculated by using Slovin formula. Descriptions of respondents obtained as described in Table 1.

Table 1: Crosstab description of respondents characteristics

	Performance (patient safety)				Total	P
	Not good		Good			
	F	%	F	%		
Age						
< 25	7	53,8	6	46,2	13	0,077
26 – 30	5	29,4	12	70,6	17	
31 – 35	4	16	21	84	25	
> 35	9	42,9	12	57,1	21	
Sex						
Male	2	25	16	45,7	8	0,615
Female	6	14,6	35	85,4	68	
Education						
Diploma	23	35,4	42	64,6	65	0,261
Bachelor	2	18,2	9	81,8	11	
Years of service						
< 5 y	13	44,8	16	55,2	29	0,085
6 – 10 y	7	20	28	80	35	
> 10 y	5	41,7	7	58,3	12	
Employee status						
Regular	17	29,8	40	70,2	57	0,400
Contract	8	42,1	11	57,9	19	
Marital Status						
Married	15	27,3	40	72,7	55	0,091
Single	10	47,6	11	52,4	21	

Source : Primary Data processed, 2018

This study was dominated by nurses in the age of 31 – 35 years old. The most good performance done by respondent in 31 – 35 years old. P value of Chi square analysis was 0,077. It can be said that there is no correlation between age and patient safety performance.

The respondent of this study was dominated by female respondent. The most good performance was done by female respondent. P value of Chi square analysis was

0,615. It can be said that there is no correlation between sex and patient safety performance.

The respondent of this study was dominated by nurses with diploma degree. The most good performance was done by nurses with diploma degree. P value of Chi square analysis was 0,261. It can be said that there is no correlation between education level and patient safety performance.

The respondent of this study was dominated by nurse in 6 -10 years of service. The most good performance was done by nurse in 6 -10 years of service.. P value of Chi square analysis was 0,085. It can be said that there is no correlation between years of service and patient safety performance.

The respondent of this study was dominated by regular employee nurse. The most good performance was done by regular employee nurse. P value of Chi square analysis was 0,400. It can be said that there is no correlation between employee status and patient safety performance.

The respondent of this study was dominated by married nurse. The most good performance was done by married nurse. P value of Chi square analysis was 0,091. It can be said that there is no correlation between marital status and patient safety performance.

Univariate Analysis

Variable Frequency Distribution

Univariate analysis results obtained from the calculation of computer data processing programs in the research sample in the form of frequency distribution of each variable studied based on aspects of effective leadership, workload, motivation and performance in the implementation of patient safety by nurses in the hospital ward.

Table 2: Frequency Distribution

Variable	Frequency	(%)
Effective Leadership		
Not good	26	34,2
Good	50	65,8
Workload		
Not heavy	29	38,2
Heavy	47	61,8
Motivation		
Not Good	35	46,1
Good	41	53,9
Performance (patient safety)		
Not good	25	32,9
Good	51	67,1

Source : Primary Data processed, 2018

Based on the table of frequency distribution on the variables assessed, it can be seen that 50 people (65.8%) considered that the effective leadership of the head nurses was good. A total of 47 respondents (61.8%) had a heavy workload. In the aspect of motivation, most respondents have good motivation (53.9%). While from the performance, most of the respondents, namely 51 people (67.1%) have good performance in the application of patient safety.

Bivariate Analysis

Chi square test of bivariate analysis was used to determine the relationship between the independent variables and the dependent variable.

The hypothesis that Ho is accepted means that there is no relationship between the independent variables on the dependent variable, whereas if Ha is accepted it means that there is a relationship / influence between the independent variables on the dependent variable (Saryono, 2010).

Table 3: Bivariate analysis

Variable	Performance (patient safety)				p
	Not Good		Good		
	F	%	F	%	
Effective Leadership					0,000
Not Good	16	61,5	10	38,5	
Good	9	18	41	82	
Workload					0,000
Not Heavy	17	58,6	12	41,4	
Heavy	8	17	39	83	
Motivation					0,000
Not good	19	54,3	16	45,7	
Good	6	14,6	35	85,4	

Source : Primary Data processed, 2018

From the results of chi-square test analysis between effective leadership and performance in the application of patient safety obtained p value 0,000. According to the result, p value is less than 0.05, so it can be said that there is a relationship between effective leadership and nurses performance in implementing patient safety.

The results of chi-square test analysis between workload and performance in the application of patient safety obtained that p value 0,000. This shows that there is a relationship between workload and performance in implementing patient safety.

The results of chi-square test analysis between work motivation and performance in the application of patient safety obtained that p value 0,000. This shows that there is

a relationship between work motivation and performance in implementing patient safety.

Multivariate Analysis

Multivariate analysis was carried out to determine the most dominant independent variables affecting the dependent variable. Multivariate analysis in this study used multiple logistic regression tests with a 95% confidence level ($p < 0.05$) (Saryono, 2010).

Table 4: Multivariate Analysis

Variable	p	OR	Nagelkerke
Effective Leadership	0,033	3,678	0,416
Workload	0,029	3,768	
Motivation	0,017	4,335	

Source : Primary Data processed, 2018

The table showed final result of multivariate analysis with Multiple Logistic Regression test. According to the result, all variables have an influence on performance in the implementation of patient safety. Motivation is the biggest variable influencing the performance in the application of patient safety, with a p value of 0.017 and an OR value of 4.335. Nurses with good work motivation tend to have good performance by 4.335 times in the application of patient safety compared to nurses with bad motivation.

Workload is the second influential variable after motivation on performance in implementing patient safety, with p value 0.029 and OR value of 3.768. In the data shows that nurses with a heavy workload tend to have good performance in the implementation of 3,768 patient safety compared to nurses with a heavy workload.

Effective leadership becomes the third influential variable after motivation and workload on performance, with p value 0.033 and OR value 3.678. Good effective leadership from the head of space tends to improve the performance of nurses in the implementation of patient safety 3,678 times compared to effective leadership that is not good.

Based on the results of the analysis, it is known that the value of Nagelkerke is known as 0.416, which means that effective leadership, workload and work motivation have an influence on the performance of nurses in the implementation of patient safety by 41.6%. While 58.4% of other influences came from other factors not examined by the researcher.

DISCUSSION

The Influence of Effective Leadership on Nurse Performance in Patient Safety Implementation

Result of this research showed that the effective leadership can influence the performance of nurses in the application of patient safety. Effective leadership is the ability of leaders in influencing their employees in productivity and job satisfaction to achieve organizational goals. Effective leadership is an important factor in employee performance in order to achieve organizational goals. The goal to be achieved in this problem is the application of optimal patient safety. Effective leaders will be able to direct their employees to show good performance in achieving common goals. The head nurses in this study have good effective leadership so that it can affect the nurses performance in the patient safety implementation. This is also in accordance with previous research by Agnew entitled "Nurse Leadership and Patient Safety", that leadership practices are considered as key factors that influence nurses' motivation and performance (Agnew et al., 2012).

The Influence of Workload on Nurse Performance in Patient Safety Implementation

From this study, nurses in hospital ward showed that most of the respondents had a heavy workload. Even though the heavy workload, most respondents still have good performance. Multivariate test results also showed the influence of workload on nurse performance in the application of patient safety. From these data we can state that a heavy workload will improve performance. This was not equivalent with the previous theory, that heavy performance should cause work fatigue which can cause a decrease in performance. Heavy workloads and increased travel demands, for instance, made it increasingly hard for many employees to meet both work and personal responsibilities (Robbins and Judge, 2013).

Such discrepancies can occur due to other factors that can affect performance such as good leadership and motivation, so that nurses can still show good performance despite having a heavy workload.

In this study, nurses self-evaluate the workload they have based on perception seen from various aspects. Aspects evaluated in the workload questionnaire include physical aspects, psychological aspects and time. Workload is the average amount of work activities at a certain time, which consists of physical workload, psychological workload and work time (Irwandy, 2007).

The Influence of Motivation on Nurse Performance in Patient Safety Implementation

Most nurses in this study have a good motivation. About 53,9% from the 76 respondents had good work motivation. In this study, motivation is the most influential factor on the performance of nurses in the application of patient safety. Data shows that good motivation from nurses will improve performance in the patient safety implementation. This is in accordance with previous research proposed by Wahyuningsih that motivation affects performance in the application of patient safety (Wahyuningsih et al., 2014). One reason our understanding of motivation is important is that high levels of motivation are significant contributors to exceptional performance (Gibson, 2011).

Frederick Herzberg reveals this motivation theory known as the two-factor theory (Two-Factors Theory). There are factors that influence a person's motivation, namely intrinsic factors and extrinsic factors. Intrinsic factors are factors that motivated employees (motivation factors). Extrinsic factors are comes from outside a person, especially from the organization where he works (Hygiene factors) (Herzberg, 2003).

Hygiene factors are important work factors for motivation at work. This factor does not lead to positive satisfaction for the long term. But if these factors are not present, dissatisfaction arises. Hygiene factors include salary, personal life, supervision quality, working conditions, job security, personal relationships, corporate policies and administration. Hygiene factors cannot be considered as motivators. Motivation factors must produce positive satisfaction. The factors inherent in work and motivating employees for superior performance are called satisfaction factors or motivation factors. Motivation factors consist of achievement, recognition, work itself, responsibility, progress, and individual potential development. The motivation of the respondents in this study was measured from the aspects of motivation factors. From this aspect showed the good work motivation of the nurses.

CONCLUSIONS

Effective leadership has a significant influence on nurses performance in the application of patient safety at ward of PKU Muhammadiyah Bantul Hospital. Workload has a significant influence on nurses performance in the application of patient safety at ward of PKU Muhammadiyah Bantul Hospital. Work motivation has a significant influence on nurses performance in the application of patient safety at ward of PKU Muhammadiyah Bantul Hospital. Motivation is the most influential factor in nurses performance in the application of patient safety.

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