The Role of Leadership of Head Nurses in Implementing a Culture of Patient Safety Applied by Associate Nurse in Public Bekasi Hospital

Nur Miladiyah R and Puji Sarwati

STIKes Bani Saleh, Bekasi, Indonesia

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Abstract: The need to improve the culture of patient safety in hospitals was very imperative. The efforts to implement safety culture has been affected by the role of the leadership. This study aimed to determine the role of leadership of the head nurse to apply the patient safety culture in the ward. The research design used a correlations analytics with a cross-sectional approach to 155 clinical nurses as the samples in Public Hospitals Bekasi. The questionnaire used a Hospital Survey On Patient Safety Culture (HSOPSC) from The US Agency For Healthcare Research and Quality (AHRQ). Data analysis used a Pearson, Spearman, t independent and linear regression. The result of the linear regression equations was obtained by the increasing of the leadership role of the head nurse. It was 86,309 after controlling 1,971 times organizational support and 1,512 times the supervisors of head nurses implemented a patient safety culture. This study recommendation was the improvement of the capability of the head nurse which was related to the leadership function and it gave the relevant reward system based on patient safety culture.

1 INTRODUCTION

Hospitals as the most important element of the healthcare systems, are aimed to provide high-quality care to patients (Ghahramanian, Akram; Rezai, Tayyebeh, 2017). Safety culture refers to the way patient safety is thought about and implemented within an organization and the structures and processes in place to support this (Health foundation, 2011). Leadership competencies around patient safety are intended to identify and establish skills common to nurses (Parand, A; Dopson, S, Renz, A 2014). Patient safety is a cultural transformation. A leader with his leadership can make a cultural change towards the success of a patient safety program (Hewitt, D.B; Goldstein,Scott D; Isenberg., 2017). This attention because leadership is an important element in creating a strong culture in implementing patient safety (Parand, A; Dopson, S, Renz, A 2014). Fleming and Wentzell, (2008) notes the safety culture influences by motivating healthcare professionals to choose behaviors that enhance, rather than reduce, patient. Fleming and Wentzell, (2008) states identify the following patient safety culture elements are leadership commitment to safety, organizational resources for patient safety, a priority of safety versus production, effectiveness, and openness of communication.

Safety culture properties include leadership, communication, teamwork, management support, continuous learning, and patient-centered care (Aboshaiqah, Ahmad E; Hamdan Mansour, 2014). Low safety culture is associated with many adverse metrics such as increased length of stay, hospital mortality (Hewitt, D.B; Goldstein,Scott D; Isenberg., 2017)

Leadership in nursing is one of the factors that influence the safety and quality of care in hospitals (Schyns and Veldhoven, 2010). Safety leadership means that the direct supervisor advocates values inherent in safety and communicates this values to the staff, by prioritizing patient safety procedures are rewarded, open communications regarding mistakes is encouraged and mistakes are responded to with a fair evaluation of their causes (Livne, Y; Raskhovits S, Peterfreund, Ilana S., 2017).

The concerning of the healthcare quality and patients satisfaction through to the provision of high-quality healthcare services is a must. Patient safety incident at the public Hospital in Bekasi is the presence of various unexpected events and near-injury events that can threaten patient safety. The

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patient safety culture is included the frequency of event reporting, rating overall perceptions of safety, nonpunitive response to error, and communication due to the adverse events. Creating cooperation in carrying out nursing care, reporting when there are unwanted events, Therefore patient safety should be a culture for us to be developed in the hospital, and it requires support from the management function and leadership of a head nurse in order to be able to carry out supervision and control of patient safety programs which is carried out by the nurses at Bekasi Public Hospital. This study aims to determine the role of the head nurse in implementing a culture of patient safety applied by associated nurse Bekasi Public Hospitals.

2 METHODS

This research design carried out the descriptive correlation with cross-sectional. The study was conducted in 2018. Data collection period was taken from April to June 2018. The sampling population was 302 nurses, and it was only 155 nurses who were able to participate in the study. The iinstruments used questionnaire Hospital Survey On Patient Safety Culture (HSOPSC) from The US Agency For Healthcare Research and Quality (AHRQ) in 2011. It consisted of 42 statements about the staff perceptions of patient safety culture under the following domain: (1) supervisors expecting to promote patient safety, (2) teamwork within units (3) organizational learning continuous, (4) management support for patient safety (5) feedback and communication about error, (6)Frequency reported, (7) teamwork across units, (8) Staffing, (9) non punitive response to errors. Data was collected by using a questionnaire which was included the nurse characteristics, the role of leadership and the patient safety culture. Data were analyzed by SPSS 21. It was considered as suitable software for data entry, storage, and analysis. Descriptive statistical analysis such as frequency counts, percentage, the mean, median, and standard deviation was applied to describe the research sample. The Pearson product moment correlation coefficient was used to describe the association between variables. Data analysis was performed in linier regressions. Statistical significance was set at $p > 0,05$. Before administration of the questionnaires, informed consent were taken from the participants. The ethical clearance issued by the ethical committee Bekasi Public Hospitals.

3 RESULT

3.1 Descriptive Statistic Characteristic of Participants and Perceived the Role Leadership

The characteristics of nurses included the age, the gender and the length of service. The characteristics of a nurse in the inpatient ward of public hospital of Bekasi was presented in table 1.

Table 1: The characteristic of participants.

Variable	Total	Percentage (%)
Age a. 20-32 b. 33-55	82 73	52.9 47.1
Gender a. Male b. Female	42 113	27 73
Lengths of Service a. < 8 years b. ≥ 8 years	104 51	67 33
Education a. Diploma Nursing, b. Nurse	103 52	66 34
Total	155	100

Characteristics of respondents age were 20-32 years (52.9%), female sex (73%), work period <8 years (67%), Diploma nursing (66%).

Table 2: Distribution the Role of Leadership.

Variable	Mean	SD	Minimum Maximum	95% CI
Feedback and communication openness	50.5	6.86	33-109	49.45-51.63
Teamwork	12	1.91	8-16	23.29 – 25.08
Organizational	10.11	1.38	7-12	9.89–10.33
Management support	24	5.63	16-86	12.54 – 13.15
Supervisors expecting to promote patient safety	20.8	2.23	15-24	20.49-21.19
Frequency reported	20.6	2.47	4-24	20.22-21.01
Teamwork across	21	2.06	14-24	20.94-21.60
Staffing	23	2.81	11-18	23.08-23.97
Non punitive response to errors	16	5.63	6-20	23.29-25.08

Regarding the results shown the sub variable of role leadership has the feedback and communication openness was good with an average score 50.5, the teamwork of the nurses was good with an average score was 12, the organizational was applied fairly well by the head of the ward with an average score of 10.1. The management support of the head nurse with an average score was 24. The supervisors expecting to promote patient safety with an average score was 50.5. Frequency reported with an average score 20.6. The teamwork across with an average score 21. The staffing with an average score 23. Non punitive response to errors with an average score 16. All the sub variable the role of leadership was believed in 95%.

Table 3: distribution of patient safety culture by associate nurse's.

Variable	Mean Median	SD
Patient safety culture	137.76 139.00	10.094

Based on the results, the patient's safety culture of associate nurses with an average score was 137.76 and the median score was 139.00 and the standard deviation was 10.094.

3.2 The Correlations the Role of Leadership of Head Nurses in Implementing a Culture of Patient Safety Applied by Associate Nurse in Public Hospital Bekasi

Table 4: The Correlations the role of leadership with the patient of safety culture.

No.	Variable	Patient safety culture	
		R	Sig
1.	Age	0.057	0.479
2.	Supervisors expecting to promote patient safety	0.151	0.060
3.	Teamwork	0.224	0.005
4.	Organizational	0,371	0.000
5.	Management support	0.378	0.000
6.	Feedback and communication openness	0.242	0.002
7.	Frequently reported	0.208	0.009
8.	Teamwork across	0.122	0.129
9.	Staffing	0.081	0.129
10.	Non punitive response to errrors	0.285	0.000

Based on the table above, five sub variable has corelations with the patient safety culture, there are; teamwork (pvalue; 0.005, α=0.005) , organizational (pvalue; 0.000, α=0.005), management support (pvalue 0,000, α=0.005), Feedback and communications openness (pvalue; 0.002, α=0.005), and non punitive response to errors (pvalue; 0.0000, α=0.005). The next step is to include sub-variables related to the patient safety culture into multivariate analysis.

Table 5: Final Model of Multivariate analysis.

Variable	Unstandardize Coefficients		Standard Coeficients	Sig
	B	SE	B	
Constant	86.309	8.150		0.000
Organizational support	1.971	0.530	0.271	0.000
Supervisors expecting to promoting patient safety	1.512	0.329	0.334	0.000

According to our findings, the organizational support and the supervisors has significance relatiaonship role leadership to the culture of patient safety (pvalue 0.000, α=0.005).

Based on table 5, the result showed organizational support and had significant correlations (pvalue> 0.005). The constant 86,309 of patient safety culture by an associated nurse was 1,971 times after being controlled by supervisions of head nurses to promoting patient safety.
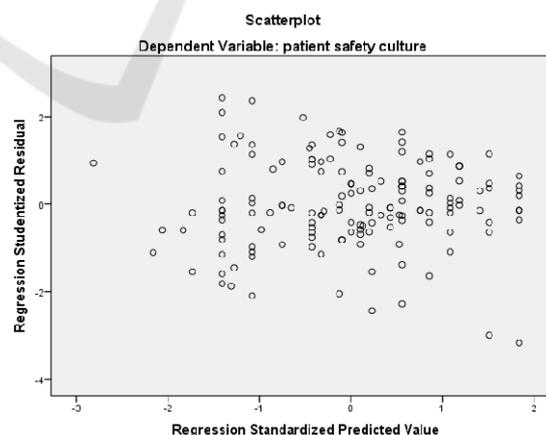

Figure 1: The nurse applied the patient safety culture with controlling of the organizational support and supervisors expecting to promote patients safety.

The final results of linear regression, $Y' = a + bX$

The implementation of a patient safety culture = 86.309+1.97 organizational support +1,512 Supervisors expecting to promoting patient safety.

4 DISCUSSION

The study examined the role of leadership of head nurse in Implementing a Culture of Patient Safety by an associate nurse in Public Bekasi Hospitals. Based on the result showed organizational support had significant correlations (pvalue > 0,005). The constant 86,309 of patient safety culture by an associated nurse was 1,971 times after being controlled by supervisions of head nurses to promoting patient safety. Regarding the results, organizational support had significant correlations with the patient safety culture. Parker et al (2006) in (Fleming and Wentzell, 2008) said that safety culture was affected by organizational changes, such as a change in leadership or in the introduction of new systems and process. With regard to the patient safety culture, the highest scores in our study related to the organizational support for patient safety. The organizational support was included the nonpunitive responses to errors and staff working issues (Ghahramanian, Akram; Rezai, Tayyebeh, 2017).

Leaders could build safety cultures by participating readily and willingly with care team members in initiatives designed to develop a safety culture. (Hewitt, D.B; Goldstein,Scott D; Isenberg., 2017). Effective leaders who deliberately engaged in strategies and tactics to strengthen their organization's safety culture. Kundu, Yadav and Yadav, (2016) it was shown that the safety issues became the problems within the organizational systems. It was not about their employees, adverse events and close calls ("near misses") as providing "information-rich" data for learning and systems improvement (Bahadori A, Peyrovi H, Ashgali-Farahani M 2016). Organizational commitment and leadership were the foundation for mitigating patient harm (Sherwood, 2015). Leaders were critical to an organizational's successful development of a culture safety (Setiowati, D 2010). The individuals within the organization respect and were wary of operational hazards, had collective mindfulness that people and equipment will sometimes fail, defer to expertise rather than a hierarchy in decision making, and develop defenses and contingency plans to cope with failures (Ehrmeyer, 2011). The culture was a product of what was done on a consistent daily basis. (Sammer C, Lykens K, Singh 2010). Hospital team members measured an organization's

commitment to culture by what leaders did, rather than what they saw or should be done (Pronovost P, Berenholtz S, Goeschhel C., 2008).

Safety culture in health services was defined as beliefs, values, and behaviors associated with the safety of patients who were consciously shared by members of the organization including implementing nurses who were directly seen in providing safe nursing care to patients. (Hall and Moore, 2008). The patient safety culture was important because it built the overall culture of patients (Cummings G.G., MacGregor T., Davey M., Wong C.C, Lo E, Muise M., Stafford E.,(2010). Building awareness of the value of patient safety, creating an open and fair leadership and culture was the first step in implementing patient safety (Health, 2010). The measurement of patient safety culture helped the leader to know the data needed in implementing the patient's safety program so that the leader could design and implement patient safety designs that were in accordance with the data found (Adler, L David Y; Michael L, Marry Mc Broom. (2015). Leadership was an important component that assures organizational quality health care services, patient satisfaction and financial performance. Moreover, nurses perception of their ability to manage patients health needed appropriately (Sherwood, 2015). The results suggested that the supervisors expecting to promote patient safety would be increased by the number of applied nurses to implement patient safety culture. Whereas strong leadership was often cited as critical to an organization"s culture of safety (Safety and Components, 2017). Leaders requires basic insights into safety problem and need rationals for focusing on patient safety (Sammer C, Lykens K, Singh (2010).

Regarding Change, (2010), the leadership of competency models should consist of the core patient safety technologies competencies, patient safety leadership competencies and culture of safety competencies. The three component results practiced environments of safety. Supervisors in promoting patient safety were intended to identify and establish skills common to nurses in executive practice (Change, 2010). Vesterinen, S. Marjo, S, Arja Isola (2012) stated that nurse managers with that skill could easily form relationships with others, read employees feelings and responded accurately and led successfully. Nurse managers had an important role in leading the ward to promote patient safety culture (Livne, Y; Raskhovits S, Peterfreund, Ilana S., 2017). Leadership styles affected the organizational climate and the ways how

information was given and communicated and how question day of the day was discussed regarding the patient safety culture (Vesterinen, S. Marjo, S, Arja Isola, 2012).

According to Swanburg (2000) in (Setiowati, D 2010) states the head of the ward was a nurse who had responsibility and authority in regulating and controlling care activities in the ward. The head of the ward as a first-line manager had a critical role in supporting a patient safety culture with leadership and creating a positive environment and culture for patient safety. Fleming and Wentzell, (2008), states that one component of the enforcement of patient safety culture is leadership. This was in line with Hall and Moore, (2008) stated that patient safety was also influenced by leadership and organizational culture, because leadership changed were strongly influenced by the system in an organization. Improved patient safety culture was supported by strong leadership and systems. Candidate and Kaya,(2014) said that nurses had a major role in leading to improve patient safety and achieved good quality nursing care in health care organizations. Nurse's leaders in patient safety programs were compiling an initial statement about patient safety (The Health Foundation, 2011). The contents of the statement contained elements, about the commitment that patient safety became important and priority, commitment to leadership responsibility in patient safety, use of up-to-date knowledge and skills, and the implementation of honest and non-blameless reports (Jonsson and Øvretveit, 2004).

Morello R, Lowthian J, Barker A (2013) state leaderships walk around and multi-faceted unit based strategies ware the two strategies for which some stronger evidence could be found to support a positive impact. Our findings showed that the organizational support was the most factor fluency to the implementation of patient safety culture when health care professionals understood to each others roles were able to communicate and work together effectively. The patients were more likely to receive safe of the quality of care.

5 CONCLUSIONS

In the present research, it was found that organizational support and the supervisors to promoting a patient safety culture were the main roles of the leadership of the head of the ward in implementing a patient safety culture in the Public Hospital Bekasi. Therefore, it was recommended that hospitals needed to give more support to improve the safety culture of care services and through by supervisors to promote patient safety. To do so, the hospitals should create an organizational support system and committed of head nurse supervise to promote a patient safety culture. This would enhance the implementation of patient safety culture by the applied nurses.

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