Patient Safety Culture in Relation to Patient Safety Incidence; Basis for an Enhanced Patient Safety Culture Program

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Abstract. Patient safety has been started as a global issue since the report published by the Institute of Medicine (IOM) in 1999 titled "To Err is Human, Building to Safer Health System" which reported that there were 44,000 to 98,000 patients died from adverse events and over 50% is caused by preventable mistakes. This study aimed to investigate the relationship between patient safety culture with patient safety incidence reported in the hospital. This study used quantitative design with descriptive correlational method. The total of participants were 92 that consisted from nurses and midwifes. Hospital survey on patient safety culture (HSOPSC) and patient safety incidence reporting frequency grade from Indonesian Patient Safety Committee were used. It was found out that there is significant relationship between patient safety culture dimensions with patient safety incidence. Blaming culture, knowledge and fear of punishment found as the main cause of the low patient safety incidence reported.

Keywords: Patient safety culture, Patient Safety Incidence

1. Introduction

Patient safety is a global issue and a central focus that is gaining the world's attention in healthcare today. The focus of attention on patient safety has started since 1990 and became the main concern since then. The report published by the Institute of Medicine (IOM) titled "To Err is Human, Building Safer Health System" in 1999 reported that in the United States there were 44,000 to 98,000 patients who died from adverse events and from deaths over 50% were caused by preventable mistakes [1].

Since the report of the IOM has been published every country began to evaluate its health services. The World Health Organization in 2004 conducted research in hospitals in some countries such as America, UK, Denmark, and Australia and found adverse events ranging from 3.2% to 16.6% on patient [2]. Adverse event problems not only occur in developed countries in Europe and America but also in Asia. The report published by WHO in 2008 mentioned that, in the Asian region, specifically in the Republic of Korea, there was a significant increase of adverse events in 2005, 2006 and 2007 with 1.8%, 2.7%, and 12% respectively of persons interviewed reporting that they suffered an adverse event from medication errors [3]. In the same year, the patient safety incidence reported in Indonesia by Province found out that of the 145 reported

incidences, 55 cases (37.9%) occurred in Jakarta and 67 cases (46.2%) reported was adverse event [4]. Subsequently, in 2008 the Agency for Healthcare Research and Quality (AHRQ) reported that from 1999 until 2008, there were about 42 million deaths due to service errors. Morse reported 2.2-7 incidences of falling patients / 1000 beds per day in acute care room per year, 29-48% of patients were injured, and 7.5% were seriously injured [5].

Currently, the patient safety incidence documentation that occurs in hospitals is still very rare and the data found has not been able to reflect the actual event. Wijaya and colleagues reported in their study that about 27% of hospital nurses had not reported 3 to 5 patient safety incidences per year [6]. Some research that has been done in Indonesia only focuses on the number of patient safety incidence in hospitals, but investigations of the problem in the documentation of incidence are still very rare. Many health workers have not yet realized the importance of patient safety incidence report for hospital evaluation. Based on these issues, it is important to investigate the relationship of patient safety culture to patient safety incidence report in the hospital so the researcher became interested in conducting research on the topic.

2. Methods

This research used quantitative design with descriptive correlation method. In this study, the researcher assessed the patient safety culture and patient safety incidence in Sari Mulia Private Hospital. Purposive sampling was used where the participants were selected by inclusion and exclusion criteria. Participants in this study were 92 participants obtained from emergency unit, ICU, operating room, delivery room and baby care unit. Data in this study were obtained from of September 1 to September 28, 2018. The research instrument used to collect primary data in this study is the Patient Safety Culture Measurement Questionnaire (PSCMQ) Obtained From The Agency For Healthcare Research And Quality (AHRQ) (2004) [5], And The Secondary

Data obtained from patient safety committee of Sari Mulia Hospital of patient safety incidence report frequency and graded with frequency rating grade from the Indonesian patient safety committee consisting of five frequency categories; almost certain (every week or month), likely (several times / year), possible (once / 1-2 years), unlikely (once / 2-5 years) and rare (once / >5 years) [7].

3. Results

Table 1. Extent Of Patient Safety Incidence					
Extent of Patient Safety Incidence	Frequency	Percentage			
Rare (once / >5 years)	53	57.60			
Unlikely (once / 2-5 years)	30	32.60			
Possible (once / 1-2 years)	6	6.50			
Likely (several times / year)	3	3.30			
Almost certain (every week or month)	0	0.00			

Table 1 reveals the frequency and percentage of participants' overall extent of

patient safety incidence. Out of 92 participants, 53 or 57.60% rated rare occurence (once /> 5 years). Generally, the data show that majority of occurrence of patient safety incidence were rare at 57.60%, while unlikely with 32.60%, possible with 6.50% and likely 3.30%.

The result shows that most of the participants were rarely or almost never reported patient safety incidence. Griffin stated that most health workers feel ashamed and afraid of the errors they committed and try their best to cover it up and shift the blame to someone or something else [8]. The staff's fear is due to the not optimal standard even though Indonesian Health Depatment has stated that hospital service standards must be optimized by protecting the rights of patients and employees, one of which is protection from blaming culture [7].

The knowledge possessed by nurses and midwives at Sari Mulia Banjarmasin Hospital has a very important influence on patient safety incidence report because with good knowledge they can see the differences of each patient's safety and realize the importance of this to advance their performance. This has been explained previously by Gunawan, Fajar and Tatong in their study which concluded that how to report events encountered and the benefits of reporting patient safety incidence have not been fully known to nurses. Health workers are still focused on the negative impact of reporting patient safety incidence that they cannot see the good side of reporting such [9].

Patient Safety Culture Dimensions	Average PPR	Composite Level	
Teamwork within units	87%	Strength	
Supervisor / Manager expectation	78%	Strength	
& Action promoting patient safety			
Organizational learning -	94%	Strength	
continuous improvement			
Management support for patient	86%	Strength	
safety			
Overall perception of patient safety	86%	Strength	
Feedback & communication about	91%	Strength	
error			
Communication openness	90%	Strength	
Frequency of events reported	21%	Weaknes	
		S	
Teamwork across units	85%	Strength	
Staffing	54%	Neutral	
Handoff & transitions	79%	Strength	
Nonpunitive response to errors	58%	Neutral	

Table 2. The Composite Level of Patient Safety Culture Dimensions

Table 2 shows that the participants patient safety culture out of 12 dimension, 1 dimensions were in the category of weakness and 2 dimensions were in neutral that need to be the focus of attention. Overall perception of patient safety is the dimension in the weakness category, frequency of events reported and nonpunitive response to errors were dimensions in the category of neutral. Which means that the participants rarely reported mistakes that occur when they do the nursing services espescially when the mistakes did not cause real harm to the patients.

This result is similar with the study conducted by Kagan & Barnoy among 247

nurses at Tel Aviv University which found out that most nurses experienced medical errors from every day to every week, but 6% of the participants claimed they had never reported their own mistakes, while half were rare or sometimes

reported the error [10]. The cause of this problem is the blaming culture and fear of the punishment they will get. Sammer, et al. found out that the cause of a rare incident reporting is the fear of being blamed and punishment [11].

	Rare	Unlikely	Possible	Likely	Total	
Weakness	3	0	0	0	3	
Neutral	20	3	0	0	23	
Strength	30	27	6	3	66	
X2 – Value = 14.685, P – Value = 0.023, Decision at $\alpha = 0.05$ = significant						

Table 3. Significant Relationship Between Patients Safety Culture And Patient Safety Incidence

Table 3 reveals the relationship between patient safety culture and patient safety incidence. From the results of statistical tests using chi-square, P - Value = 0.023 were < 0.05 which can be interpreted as there is significant relationship between the patient safety culture and patient safety incidence reported.

It can be gleaned further that fear of punishment, knowledge and blaming culture are the main causes of the lack of reporting on the patient safety incidence. Griffin [8] also stated that most health workers feel ashamed and afraid of the errors they committed and try their best to cover it up and shift the blame to someone or something else. The staff's fear is due to the not optimal standard even though Indonesian Health Department [12] has stated that hospital service standards must be optimized by protecting the rights of patients and employees, one of which is protection from blaming culture.

Health workers who work in a negative environment with the culture of blame and punishment do not report all errors due to the fear of the punishment that would be given. The fears of social exclusion and punishment create a culture of silence or silence to report thus, health care professionals need to be aware of their concerns, including errors and dangerous behavior of co-workers [13]. The fear of "blaming culture" and the attitude of "none of my business" is a cause of reluctance to report the incidence to avoid receiving punishment and errors to avoid getting into trouble the same with Maxfield, et al, in his study, analyzed the impact of blaming culture and concluded that the blaming culture gave rise to culture of silence [14] [15]. Just like the results in this study, many participants were silent and did not report adverse events due to fear of being blamed and fear of punishment. Blaming has been natural reaction for errors but patient safety incidence needs to be discussed to evaluate the existing system and if possible to create a better new system where blaming does not exist [16].

The knowledge possessed by nurses and midwives at Sari Mulia Banjarmasin Hospital has a very important influence on patient safety incidence report because with good knowledge they can see the differences of each patient's safety and realize the importance of this to advance their performance. This has been explained previously by Gunawan, Fajar and Tatong in their study which concluded that how to report events encountered and the benefits of reporting patient safety incidence have not been fully known to nurses. Health workers are still focused on the negative impact of reporting patient safety incidence that they cannot see the good side of reporting such [9].

4. Conclusions

The variables show that there is significant relationship between patient safety culture to patient safety incidence. It can be concluded that fear of punishment, knowledge and blaming culture have major effect on patient safety incidence reporting. The existence of blaming culture and punishment made the adverse events found were not reported. Based from the data collected the patient safety enhancement program that can be promoted are patient safety workshop and training, hire new staff, patient safety incident reporting and evaluation program, and reward and incentive program scheme.

5. Acknowledgements

I would like to thank to all of participants who generously participate in this stud. I especially thanks to Ms. Anunciacion T. Talosig, DNS of SPUP, for her assistance, advice, and direction with the study and Sir. Rufo B. Tuddao, MAED of SPUP, for his assistance in the statistical. On the other hand, special thanks also given to Mr. Jeremy Godofredo C. Morales, Ph.D. for his patience and assistance and the Director of Sari Mulia Banjarmasin Hospital, for the permission to conduct the study in the hospital. This study was supported by Sari Mulia University, Banjarmasin, South Kalimantan, Indonesia.

6. References

- [1] Park, J.H., Karmaus, W., & Zhang, H. Prevalence of and risk factors for depressive symptoms in Korean women throughout pregnancy and in postpartum depression. Asian Nursing Research, 9, 219-225. (2015).
- [2] Institute of Medicine (IOM). To err is human: Building a safer health system. Washington, DC: National Academy Press. Retrieved from. (2000).
- [3] World health organization. Regional strategy for patient safety in the WHO South-East Asia Region (2016-2025). (2016).
- [4] World Health Organization. The World Health Organization Quality of Life (WHOQOL) BREF. (2004).
- [5] World Health Organization. Primary Health Care: Now More Than Ever. (2008).
- [6] Agency for Healthcare Research and Quality (AHRQ). About us. Rockville, MD: Author. Retrieved from http://www.ahrq.gov/about/index.html. (2014).
- [7] Wijaya, A.S, et al. Analysis of patient safety culture at Bantul PKU Muhammadiyah hospital (2013) Retrieved from: http://journal.umy.ac.id/index.php/mrs/article/ download/975/1065
- [8] Patient's patient safety committee. Patient safety incident report guideliness. Jakarta: Ministry of Health Republic of Indonesia. (2015).
- [9] Griffin RJ. Patient safety in the department of veterans affairs: Testimony. (2001).
- [10] Gunawan, Fajar Yuli Widodo and Tatong Harijanto. An Analysis of Low Adverse Error Reporting at Hospital Retreieved. from: http://jkb.ub.ac.id/index.php/jk b/article/view/962. (2015).
- [11] Kagan, I., & Barnoy, S. Organizational Safety Culture and Medical Error Reporting by Israel Nurses. Journal of Nursing Scholarship. 273-280. (2013).
- [12] Sammer, C. E. R. N. P., Lykens, K. P., Singh, K. P. P., Mains, D. A. D., & Lackan, N. A. P. What is Patient Safety Culture? A Review of the Literature. Journal of NursingScholarship. 42(2). 156-165. (2010).
- [13] Indonesian Health Department. National Hospital Patient Safety Guide. Jakarta: Health Department RI. (2006).
- [14] Peng, H., Wang, Y., Reporting system construction of medical adverse event and patients potential safety hazard. Chinese Hosp. Manage. 32 (12) 53–54. (2012).
- [15] Bann S, A, Darzi, A. Protocol for The Reduction of Surgical Errors. Qual Saf Health. (2014).

- [16] Maxfield D, Grenny J, McMillan R, et al. Silence kills: the seven crucial conversations in healthcare. Retrieved from: www.silencekills.com/UPDL/ SilenceKillsExecSummary.pdf. (2006).
- [17] Yilmaz, Z., & Goris, S. Determination Volume 3 Nomor 1. Juli 2018. (2015)