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THE CORRELATIONBETWEENORGANIZATIONAL COMMUNICATION CLIMATE AND TEAMWORK ABOUT PATIENT SAFETY INCIDENTSATA PRIVATE HOSPITAL

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Abstract. Patient safety is one of the important efforts to guarantee and improve hospital quality.However, there are still patient safety incidents in several hospitals in Surabaya, both government and private hospitals.Based on patient safety incident reports, hospital X (private hospital) still has a high number of patient safety incidents in the last three years. It shows that the performance of patient safety in hospital X is still not optimal. The purpose of this study is to analyze the correlation between organizational communication climate and teamwork to patient safety incidents in hospital X. This research is an analytic study with a cross-sectional design conducted in a private hospital in Surabaya. There are 77 respondents from 21 work units as the sample of this study, where the population is 378 respondents from 21 work units. The results of this study indicate the influence of organizational communication climate and teamwork on the implementation of patient safety efforts. Well-organized organizational communication climate and teamwork in the hospitals can reduce the number of patient safety incidents and improve the patient safety culture.Therefore,this study concludes that there is a correlation between organizational communication climate and teamwork onpatient safety incidents.
Keywords: patient safety, organization communication climate, teamwork

1. Introduction

Hospitals are institutions providing health services for the community. As health service providers, hospitals should pay attention to the quality of the services they offered to patients. One of the indicators to measure hospital quality is through assessing patient safety management. Thus, hospitals should maintain patient safety and reduce patient safety incidents. Safety is one of the global issues to be implemented in hospitals; it includes patient safety, worker safety, building as well as equipment safety, environmental safety, and hospital business safety. These five aspects should be implemented in hospital organizations to maintain the quality and image of the hospital [1].

According to the Institute of Medicine in the United States (2000), patient safety incidents are still commonly found in government and private hospitals. It is reported that the number of inpatient hospital deaths is 33.6 million per year across America. Moreover, in 2004, the WHO reported that the number of adverse events in hospitals in various countries, including America, Britain, Denmark, and Australia was in the range of 3.2% - 16.6%. It shows that patient safety incidents remainhigh in various countries [1].

Hospital X is one of the private hospitals in Surabaya that carries outpatient safety efforts in the process of providing health services. However, based on the Patient Safety Incident Report, there were still several incidents that occurred in the hospital. The number of patient safety incidents in hospital X has decreased in the past three years. From 2015 to 2017, the most significant number of cases found was a Non-Injury Event (KTC), while in 2016, the most significant number of incidents was Near-Miss Event (KNC). However, despite the decrease, the number of patient safety incidents was still high. Thus, hospital X needs to improve and increase its patient safety efforts.

Patient safety is one of the standards that should be fulfilled by every hospital. The development of patient safety is very influential on the quality of the hospital. Therefore, patient safety often becomes the cornerstone of high-quality health care. In addition, the patient safety incident is closely related to a human resource error.In this case,it is the healthcare provider. As an effort to prevent patient safety incidents, the healthcare provider shouldcarry out various things in maintaining the quality of performance, including the organizational communication climate and teamwork.

2. Material andmethods

This research is an analytic study with a cross-sectional design, which was conducted in a private hospital in Surabaya. The samples of this study were 77 respondents from 21 work units from a population of 378 respondents from 21 work units. The data analysis was conducted by performing ordinal logistic regression, with organizational communication climate and teamwork as the research variables.

3. Results

Based on the data obtained, the following were the analysis results of the correlation between organizational communication climate and teamwork variables.

Table 1. The Number of Patient Safety Incidents in the Private Hospital in the Last Three Years

No	Cases	Number of Cases		
		2015	2016	2017
1	KTD	32	10	18
2	KTC	44	28	24
3	KNC	32	49	27
4	KPC	0	0	0
5	Sentinel	0	0	0
Total		**108**	**87**	**69**

Table 2. Correlation between Organizational Communication Climate and Teamwork toward Patient Safety Incidents

No	Variable	p-value	Note
1	Organizational Communication Climate		
	Category :		
	Less	0.013	Correlated
	Good	0.023	Correlated
	Very Good	0.018	Correlated
		0.017	**Correlated**
2	Teamwork		
	Category :		
	Less	0.010	Correlated
	Good	0.000	Correlated
	Very Good	0.000	Correlated
		0.000	**Correlated**

From the table above, it could be seen that there was a correlation between organizational communication climate and teamwork on patient safety incidents in hospital X. This result signifiedthat organizational communication climate and teamwork on several levels affect patient safety incidents. This correlationindicatedthat organizational communication climate and teamwork could reduce patient safety incidents, and vice versa.

4. Discussion

Patient Patient safety is one of the efforts to guarantee and improve health care services in hospitals. It is a system to reduce unnecessary harm associated with health care in hospitals. The system includes risk assessment, identification, and management of matters related to patient safety, report and analysis of incidents, the ability to learn from incidents, and the follow-up and implementation of solutions to minimize the occurrence of incidents. The system is expected to prevent harm caused by errors due to acts of commission or omission [2].

Patient safety incident is an unintentional event and conditions that result in or have the potential to cause harm that can be prevented by patients. It consists of Adverse Event (KTD), Near-Miss Event (KNC), Non-Injury Event (KTC), (KPC) [2].

The high patient safety incidents in hospital X disclosed that there were still hazards in the hospital. According to Kim et al (2010), the complexity of work in hospitals could increase the hazard or danger in providing health services to patients [3]. Another research also showed that the high complexity in high-risk work units in hospitals could create higher patient safety incidents compared to other work units [4]. Furthermore, Rasmussen et al. (2014) found out that the complexity in providing health services was a threat to patient safety in a hospital[5]. It was because it could create a bad organizational climate in terms of communication and cooperation within the organization. The need for completing tasks of an individual was strong that could result in weak organizational teamwork.

According to the Institute of Medicine (IOM), patient safety is defined as the freedom of accidental injury[6]. In addition to this understanding, patient safety is also be interpreted as the prevention of harm to patients, which emphasizes on giving health care by preventing mistakes, learning from the mistakes made, and building a culture of patient safety that involves professional health nurses, organizations, and patients. Furthermore, the Agency for Healthcare Research and Quality (AHRQ) explains patient safety as being free from intentional or preventable harm carried out by medical personnel [7].

Based on the Regulation of the Minister of Health of 2011, about hospital patient safety, the objectives of patient safety program included creating of patient safety culture in hospitals, increasing hospital accountability for patients and the public, decreasing Adverse Events (KTD) in hospitals, and implementing prevention programs to avoid the repetition of Adverse Events to occur [2].

The correlation between organizational communication climate and teamwork showed the importance of communication and cooperation within the organization to maintain and enhance patient safety culture. According to Dennis (1975), communication climate has the quality of an organization's internal environment experienced personally by employees, which includes the perceptions of messages and events related to events that occur within the organization[8]. In addition, he also explained that communication is the most basic human activity which influences other activities in the work environment [8].

Climate communication was determined by several factors, including the leadership, the behavior of co-workers, and the behavior of the organization. In general, the communication climate was determined by the communication behavior of the leader to the subordinates. For instance, leaders who did not want to communicate with their subordinates and did not care about what they performed might make their subordinates lazy to work and not being productive. Gibb (1961) stated that there were two communication climates, defensive and supportive, which could be identified through certain behaviors [9].

Effective communication could be achieved if the recipients did not feel threatened; the communication was deemed not to accuse, made the recipients worry, caused anxiety, or endangered organizations[9]. Moreover, supportive communication climate would increase employee work participation, the work information could be accessed freely and openly, and minimized conflicts in the workplace. However, in organizations, a defensive communication climate would make employees tend to keep more distance from other employees [10].

However, communication is the most basic human activity and influence other activities in the work environment. It could not be imagined an organization without communication, for it was a means to exchange information and delivered meaning in every social system or organization [11]. Communication stood alone as a factor and was separated from other climate factors. Thus, in studies of organizational effectiveness, especially on employee motivation in achieving organizational goals, communication climate was used as a separate concept from the organizational climate.

The correlation between communication climate and patient safety incidents showed that the communication climate had an essential factor in increasing the culture of patient safety. Communication climate was an emotional atmosphere in an organization that developed based on the comfortable feeling felt by all members of the organization [12]. According to Redding (1972), to create an effective organization, communication climate was far more important than communication

skills or techniques [12]. This included efforts to reduce the number of incidents that occured in hospitals. Certain communication climate provided guidance for individual decisions and behavior, for instance, the decision taken by employees to carry out their work effectively, to be loyal to the company, to be honest at work, and to maintain a patient safety culture.

Communication climate could be used to measure the quality of an organization's internal environment experienced by employees, which included the perceptions of all employees about the messages and events related to events that occurred within the organization [8]. Based on the definitions of the communication climate aforementioned, it could be seen that the concept of communication climate was employee perceptions about messages in an organization. Communication climate consisted of three components, namely individual perception about the internal environment, messages, and events that contain messages.

Goldhabler (1990) stated that"*communication climate is that employee's cognitive and affective perceptions of an organization influence that employee's behavior in the organization*". It showed that the communication climate could affect employees' behavior at work. It also led to its association with efforts to improve the patient safety culture. The communication climate could affect the productivity and retention of employees. Besides, it could also encourage and motivate employees to achieve organizational goals. Moreover, it also could encourage employees to work strategically, collaboratively, innovatively, accountably, and increase employee involvement in the organization.

Communication climate could also influence organizational productivity because it had an impact on members of the organization, including reducing patient safety incidents. Organizational communication climate had an impact on restructuring, reorganizing, and revitalizing basic elements in the organization. Organizational communication climate influencedhow the employees behave in organizations [13]

The tendency of the communication climate in work units was also determined by the behavior of the leaders, especially in making decisions. Every decision taken in a work unit should be participatory. Pace (2002) stated that participatory decision-making was one of the determinants of communication climate [14]. The joint decision-making was meant to make employees at all levels in the organization participate in communicating and consulting on all issues in all areas of the organization's policies following their position in the organization. All employees had the opportunity to communicate and consulted with their leaders to participate in the decision-making process and setting goals.

However, patient safety incidents in hospital X were also influenced by teamwork. Teamwork was important to provide safe and effective health services as well as health care to create high-quality services[15]. From the identification of several Adverse Events, most of them could be prevented by conducting good communication and teamwork [16].

Blegen (2010) stated that teamwork could improve patient safety culture [17]. Collaboration and coordination between work units in hospitals to provide the best service for patients could improve the patient safety culture. With proper coordination and cooperation, the service, information, and patient safety would be better. The failure in conducting communication-related to patient care was a major factor in the occurrence of errors in providing health services [18].

The team was defined as a cooperative unit of individuals with specific expertise who worked together and interacted to achieve goals [13]. Thompson (2000) defined a team as a group of people who were interrelated to information, resources, skills, and trying to achieve goals. On the other hand, teamwork was a system of a combination of group work, which was supported by various expertise with clarity of purpose, participatory leadership support, and intensive communication to produce higher performance than individual performance.

There were five characteristics of a team according to Thompson (2000), namely a team was formed because of common goals, the team that was formed because of interrelationships, the team that was formed because of engagement and stability, the team with members that had the authority to regulate teamwork and internal processes, and the team that had functions in the context of a greater system.

Furthermore, the stages of a team formation were: forming (the stage where the members agreed to join a team), storming (the stage where chaos started to arise in a team), norming (the stage where the individuals and sub-groups in the team started to feel the benefits of working together and fought to

defend the team), performing (the stage which was the culmination point where the team had succeeded in making a system that allowed it to work independently and efficiently), and adjourning (some teams had limited tasks to perform so there were dissolution stage)

In addition, WHO (2009) stated that health service organizations should develop patient safety cultures, such as setting clear goals, fixed procedures, and safe processes[19]. Safety culture was influenced by organizational changes, such as changes in leadership or the introduction of new systems. It was influenced by organizational systems, practices, and processes. For example, an organization with a weak patient safety culture would limit its safety system. On the other hand, an organization that had good patient safety culture had many people to promote patient safety [19].

5. Limitation of thestudy

The limitation of this study includesthe lack of identification of the cause of the incident at the private hospital.

6. Conclusion

Based on the research that has been carried out, it is identifiedthat there is a positive correlation between organizational communication climate and teamwork toward patient safety incidents in hospital X. To maintain patient safety and achieve zero incidents, the hospital organization should have good teamwork and organizational communication climate. In addition, supports from the organization's environment, such as legal products, leadership, and work culture that exist in the organization, are also essential.

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