# APPLICATION OF PATIENT SAFETY INCIDENT REPORTING SYSTEM IN HOSPITALS: LITERATURE REVIEW

# Rumini<sup>1</sup>, Justina Purwarini<sup>2\*</sup>

1,2 Master's Program in Nursing, STIK Sint Carolus Email: justinearini@gmail.com\*

#### **ABSTRACT**

Patient Safety Incident Reporting for improvement of the service system and prevention of recurring patient safety incidents is a very important part and affects the quality of service, so it is necessary to evaluate the implementation of the ICP reporting system at the hospital. Objective: To ascertain the elements that impact hospital patient safety event reporting. Method: This article was written utilizing a literature review methodology. Data was gathered from database sources, and 20 articles between 2018 and 2023 were examined for PICOT analysis using the keywords patient safety incident, reporting, and health service. Results: There are three elements that affect the reporting of patient safety incidents that take place in hospitals: government, organizational, and human factors. It can be observed from features of nurse skills and patient safety culture in addition to environmental influences (individuals, organizations, and government). Cultural barriers (avoidance of conflict and fear of being blamed and penalized) and practical barriers (lack of expertise, so officers do not know how to report occurrences, lack of feedback, and lack of socialization connected to reporting incidents). Discussion: As a result of the existing literature review, no one has discussed the existence of organizational/hospital and government targets in efforts to achieve the target percentage (%) of PSI reporting. In order to improve employee motivation and involvement in reporting patient safety incidents and, ultimately, raise the standard of care provided to hospital patients, more research is required regarding the implementation of patient safety incident reporting in hospitals. Conclusion: The reporting of patient safety incidents in hospitals is influenced by three factors: personal, organizational, and governmental. Lack of feedback has been recognized as one of the weaknesses in incident reporting.

Keywords: Patient Safety Incident, Reporting, Health Service

### 1. INTRODUCTION

Hospital is a health service facility that provides individual health services in full through promotional, preventive, curative, rehabilitative, and/or palliative health services through the provision of nursing care, street care, and emergency care (K IND, n.d.) . Hospital patient safety is a system that helps hospitals provide safer patient care. It consists of risk assessment, identification and management of patient risk-related issues, incident reporting and analysis, the capacity to draw lessons from events and follow up on them, and the application of strategies to reduce risks and avoid injuries brought on by misbehavior or failing to take necessary action (Peraturan Menteri Kesehatan Republik Indonesia, n.d.).

E.ISSN: 2620-4061

Application of Patient Safety Standards is required in all hospitals that have received **Hospital** Accreditation Commission accreditation. The Nine Life-Saving Patient Safety Solutions of WHO Patients Safety (2007) are referred to in this target formulation. Joint Commission International (JCI) and the PERSI Hospital Patients' Safety Committee (KKPRS PERSI) also use these solutions. Each hospital forms the Hospital Patient Safety Team (TKPRS) appointed by the head of the hospital to carry out patient safety activities. TKPRS is responsible for carrying out one of the tasks of which is to report to the Director of the hospital

directly.

The Directorate of Quality of Health Services, Directorate General of Health Ministry of Service, Health RI's Performance Report (2022), the Ministry for Health in 2023 has targeted PSI reporting percentages gradually 60% (2022), 80% (2023), and 100% (2024), averages for Health Service Facilities Reporting Reference (RS, Laboratories and Blood Transfusion Unit/UTD). However, according to the Annual Report 2023 access by 2022 is 36% due to: 1. Hospital understanding of PSI still needs to be improved. 2. Patient Safety Incident Reporting System is still not optimal and needs further development for the use of the system. 3. There are still internet network constraints in the region. When viewed according to the type of reference healthcare facility, the proportion of patient safety incidents that are reported, hospitalbased PSI reporting was highest (49 %), compared to lab reporting (45%) and UTD reporting (33%). The report does not classify hospitals by location (urban or rural)(Direktorat\_mutu\_akreditasi\_pelayanan \_kesehatan\_lakip\_2022-1, n.d.).

The low level of reporting of patient safety incidents still occurring in hospitals, makes researchers interested in finding out the factors that hinder or influence patient safety incident reporting at hospitals. By knowing the inhibitory factors or causes of low levels of patients safety incidence reporting in hospital, it is expected to help improve patient safety scores, reduce error incidence and provide an overview to stakeholders in formulating and establishing policy for reporting patient security incidents at hospital.

## 2. RESEARCH METHOD

The method used in writing this article is literature review. Data collection is done database sources: PubMed. ScienceDirect, ResearchGate, and Google Scholar and PICOT compilation. The word PICOT is a mnemonic derived from the elements of a clinical research question – Patient. Intervention. Comparison, Outcome and (sometimes) Time. The keyword used in the search for the article was in the early stages of "patient safety incident", then the word reporting was "patient security incident added to reporting". The keyword "patient safety incident" enriches the discussion related to the entire aspect of Patient Safety Incident (PIC), while the next stage is narrower with a focus on PIC Reporting. Article search is limited to articles from 2018 until 2023. Articles used in original article, full text and open access form. Using the above technique, nine relevant journals based on PICOT are scanned for for review.

#### 3. RESULT

The following table displays the analysis of the study's findings.:

**Table 1. Article Search Results** 

No	Journal Title	Name of The Researcher	Outcome	Time
1	Analysis of Factors Related to Patient Safety Incident Reporting in Nurses. Fundamental and Management Nursing Journal Vol. 2, No. 1,	Albina Jenita, Yuni Sufyanti Arief, Eka Misbahatul M. Has	<ul> <li>PSI Reporting Factors are grouped into:</li> <li>Individual characteristics: Good knowledge is not a barrier in improving the performance of nurses in incident reporting, when not supported by the nurse's awareness in terms of getting</li> </ul>	2018

2	Assessment of patient safety challenges and electronic occurrence variance reporting (e-OVR) barriers facing physicians and nurses in the emergency department: a cross sectional study (Medical Informatics Unit, Medical Education Department, Research Chair for Health Informatics and Promotion, College of Medicine, King Saud University)  BMC Emergency	Albarrak, et al	<ul> <li>used to reporting every occurrence/incident.</li> <li>Organizational characteristics: Rewards and training Rewards/rewards are connected to patient safety event reporting.</li> <li>Job characteristics: feedback Responses and comments have been connected to reporting patient safety incidents. A challenge associated with PSI reporting is the deficiency of input.</li> <li>A significant obstacle that prevents staff from using electronic occurrence variance reporting (e-OVR) is the absence or lack of feedback, and the required forms are complex.</li> <li>Overall satisfaction with e-OVR, with typically positive results</li> <li>In Jordan, reporting was hampered by fear of punishment, whereas in Saudi Arabia, fear of penalty and job loss prevailed.</li> </ul>	2017 – May,
	Medicine (2020) 20:98			
3	Patient safety culture and nurses' attitude on incident reporting in Indonesia. Faculty of Nursing Universitas Indonesia, Depok, West Java, Indonesia Yogyakarta Hospital, Yogyakarta, Indonesia oleh Elsevier.	Kusumawati a,b, Hanny Handiyani a, Shanti Farida Rachmi	<ul> <li>Factors such as the department, patient safety culture, age, years of experience, and educational attainment of nurses are all associated with the attitude of nurses when reporting occurrences.</li> <li>Organizational support is expected to increase employment. Hospitals have an obligation to guarantee the adequate number of staff who are adequately qualified and trained and qualified to provide safe services.</li> </ul>	
4	Practical and Cultural	_	Factors that hinder the reporting of PSIs are:	2020
	Barriers to Reporting Incidents Among	Sandra Leggat 1	Practical obstacles:  Officers are ignorant, so they are unable	
			orners are ignorant, so they are unable	

	Health Workers in		to record incidents	
	Indonesian Public	•	Insufficient comments	
	Hospitals	•	The lack of socialization related to	
			reporting incidents	
		$\mathbf{C}$	ultural barriers:	
		•	Avoid conflict, thus causing reluctance	
			to report	
		•	Fear of guilt and punishment	
5	Barriers of Reporting	Samah B. Mourd. In	cident Reporting Barrier:	2020
	Incident and Suggested		Limited reporting time due to hospitals'	
		Seada, D.N.Sc.	heavy nursing workload and patient	
	Perspective of Staff		volume	
	Nurses.Department of			
	-	Elway, D.N.Sc.	Insufficient training on reporting patient	
	Nursing Administration,		safety incidents	
	Faculty of Nursing,			
	Cairo University			
	Med. J. Cairo Univ.,			
	Vol. 88, No. 1, March:			
	11-17, 2020			
6	Safety Culture and	Abuosi AA, Poku •	Establishing a culture of patient safety	2022
	Adverse Event	CA, Attafuah	through teamwork, manager	
	Reporting in Ghanaian	PYA, Anaba EA,	responsiveness to errors, open	
	Healthcare Facilities:	Abor PA, Setordji	communication about errors, proper staff	
	Implications For	A, et al	reception and exchange of information,	
	Patient Safety.		and appropriate staff placement all have	
	PubMed		an impact on health professionals'	
			capacity to report.	
		•	A stronger patient safety culture is linked	
			to fewer negative events occurring on a	
			regular basis, and it also predicts the	
			reporting of negative incidents.	
7	Practice, perceived	Turyahabwe Fa	actors influencing PSI reporting:	2020
,	-	<del>-</del>		ZUZU
	barriers and motivating factors to medical-		Limited reporting time because hospitals	
		Mwesigwa	have a high flow of patients and a high	
	incident reporting: a		workload of nurses	
	cross-section survey of		Lack of education in reporting patient	
	health care providers at		safety incidents.	
	•	Mugisha Fa	actors that hinder the reporting of PSIs	
	referral hospital,	ar	e:	
	southwestern Uganda.	•	Lack of official knowledge of the incident	
	BMC Health Services		and how it was	
	Research (2020)	•	No incident reporting team at the hospital	
	20:276		Fear of being brought to justice by the	
			administrator	
		•	Administrative failure to keep the	
		•	confidentiality of health workers	
			Community of Health Workers	

8	Awareness of Reporting Practices And Barriers to Incident Reporting Among Nurses.Nursin g Administration at Zarqa University, Zarqa, Jordan) BMC Nursing (2023) 22:231	Oweidat et al	<ul> <li>reporting incidents</li> <li>Fear of administrative punishment</li> <li>Isolated by the same health officer.</li> <li>Of all the barriers to incident reporting, the most common one is fear of disciplinary action. This can be lessened by putting in place an anonymous reporting mechanism.</li> <li>The biggest barrier is blaming; very few individuals firmly concur that they won't receive feedback if they report something.</li> <li>Compared to nurses who do not work in</li> </ul>	2019- 2020
			unaccredited hospitals, nurses employed in accredited hospitals exhibit greater awareness of incident reporting and self- perceived reporting habits.	
9	Medical error reporting among physicians and nurses in Uganda. Rumah sakit Entebe dan Rumah sakit Kisubi, Uganda, Afrika Timur	Mauti & Githae	Factors affecting the low level of medical error reporting are:  • Health professionals who disclose medical errors are not protected by the law.  • Reports of medical misconduct resulting in prosecution or punishment	2019

This research has conducted an in-depth study of 9 articles related to PSI reporting. From the 9 articles above, it is clear that the factors that cause low PSI reporting are due to individual characteristics and organizational/hospital characteristics. These characteristic factors are closely related to individual motivation factors and

# 4. DISCLOSURE

The survey's findings indicate that a variety of factors can impede or have an impact on a hospital's ability to disclose patient safety incidents (PSI). Reviewing papers about PSI reporting reveals that the two most common barriers to reporting patient safety incidents are those pertaining to individuals/health workers and organizations/hospitals (Asli et al., n.d.). There's only one study that finds that there are barriers that come from government factors. The findings of Mauti & Githae's

patient safety culture in hospitals which were studied in 8 articles. Only 1 article reviewed the factors that government policy contributed to. There are practical obstacles related to the lack of knowledge of nurses in reporting PSI. Study of articles that convey discussions related to software applications in PSI reporting.

investigation (2019) at Entebe Hospital and Kisubi Hospital, Uganda, East Africa, show that there is an obstacle to the aspects of government that laws do not protect health workers who report medical errors (Mauti & Githae, 2019). Three areas can be identified from the analysis of the aforementioned paper as the elements that impede or impact hospital patient safety incident reporting: individual factors, organizational factors, and governmental issues.

## **Personal Factor**

A personal or individual factor is a factor that arises from a person who plays a role in shaping social interaction in behavior. (Asli et al., n.d.) from a study conducted at Kupang of 121 nurses on 10-21 December 2018 explained that there is no connection between knowledge and motivation with reporting. His research proves that there is a correlation between reporting and rewards with p value = 0.011, reporting and training with p value= 0.007 and also reporting and feedback with P value = 0.030. The influence of the feedback aspect was reinforced by a study conducted by (Albarrak et al., 2020) that conducted a study of 197 respondents in Riyadh, Saudi Arabia between October 2017 and May 2019 which led to the conclusion among others that feedback was very significant, yet there were 22% of respondents who did not receive feedback on time.

The absence of comments Additionally, (Dhamanti et al., 2020) discovered that inadequate incident reporting occurs because the public is informed about their actions by the feedback they receive from their research in three hospitals in the East Java Province. One acknowledged shortcoming in incident reporting is the lack of prior input. On the contrary, properly done feedback will result in the specific improvements needed to improve incident reporting.

Personal factors can influence a person's decision to report patient safety incidents. (Dhamanti et al., 2020) also found that practical obstacles suggested reported 39 individuals (or 11.4% of the participants) in the reporting group had encountered difficulties. The largest challenge (38.5%) is associated with a lack of understanding of reporting protocols. Both quantitative and qualitative studies showed that one of the main real-world barriers to reporting occurrences is ignorance. This is in line with earlier studies that found that even

though hospital staff members were aware of the reporting system, they were unsure of how to access the incident form or what to do once it was completed.

# **Organizational/Hospital Factors**

Organizational variables or the behavior of organizations are factors that influence the activities of individuals and groups inside the company and influence organizational systems structures. Incident reporting is an essential procedure in an organization that helps to improve patient safety. The readiness to disclose prescription errors was not correlated with the number of years of nursing experience, according to the findings of Kusumawati et al., 2019. Organizational factors can also have an impact on attitude formation, in addition to expertise. Meanwhile, Dhamanti et al., 2020, minimal or nonexistent response from the patient safety team regarding the reporting of patient safety issues, coupled with a management that is unable to produce encouraging responses. Besides, the fact that no investigation has been conducted into the root causes of the problem has also made the staff reluctant to report the incident. A positive response from the organization is essential to motivate staff to report incidents (Dhamanti et al., 2020).

According to Naome et al. (2020), who carried out the study at the Regional Hospital, one of Uganda's 13 regional reference hospitals that accepts patients from both inside the country and from neighboring ones, including Rwanda, Tanzania, Burundi, and the Democratic Republic of the Congo. The organization's reporting system, which includes written guidelines, anonymous reporting, and easy staff access to administrators, has a significant impact on incident reporting (Naome et al., 2020).

## **Government Factor**

According to Mauti & Githae (2019), protection and legal consequences are key in voluntary incident reporting. Staff members are most afraid to report patient safety concerns because of the law's lack of protection for medical practitioners who do so, and because disclosing medical errors might result in penalty or prosecution (Mauti & Githae, 2019).

The obstacles associated with PSI reporting, in addition to being seen from environmental factors (individual. organizational and governmental) can also be seen from aspects of nursing skills and patient safety culture. (Dhamanti et al., 2020) categorized reporting barriers into two categories: cultural barriers (avoidance of conflict, which causes reluctance to report and fear of guilt and punishment), and practical barriers (lack of knowledge, so officers don't know how to report incidents, lack of feedback, and lack of socialization associated with reporting incidents). Staff members are most afraid to report patient safety concerns because of the law's lack of protection for medical practitioners who do so, and because disclosing medical errors might result in penalty or prosecution. This was confirmed by Albarrak et al., 2020, during PSI reporting research using e-OVR, who found that while fear of punishment and job loss was a barrier to reporting in Saudi Arabia, it was not in Jordan. Technically, this barrier could be reduced by anonymous reporting Oweidat et al., 2023. The reporting obstacles from the practical aspects of lack of knowledge were also by Naome et al., 2020, and Mourd et al., 2020.

According to Abuosi et al., 2022, the development of a patient safety culture through collaboration, managers' response to errors, open communication about mistakes, adequate staff reception and exchange of information, and appropriate staff placement all have an impact on health professionals' capacity to report.

## 5. SUMMARY

Three elements influence the reporting of patient safety incidents in hospitals, according to literature studies: government, organizational, and human factors. There is a relationship between reporting and rewards, training, and feedback, but there is association between knowledge. motivation, and personal variables. It is acknowledged that one of the weaknesses in incident reporting is the absence of prior input. Instead, properly performed feedback will result in specific improvements needed to improve incident reports. Low positive comments on incident reports and a failure to look into the problem's underlying cause are related to organizational problems. It also has to do with the overly complex reporting system, the absence of manager assistance, the staff's lack of socialization and training, the culture of retribution, and the belief that staff members are incapable in the event of a patient safety incident. The lack of incident reporting systems in hospitals can prevent staff from learning from their mistakes and improve patient safety.

The government factor has to do with the lack of laws protecting medical professionals who disclose mistakes in patient care. The results of the existing literature study, no one has discussed the existence of target organizations/hospital and government in efforts to the target percentage (%) of PSI reporting. In order to improve staff motivation and participation in reporting patient safety incidents and, ultimately, raise the standard of care provided to hospital patients, more assessment of the implementation of patient safety incident reporting in hospitals is required.

Apart from looking at environmental factors (individuals, organizations and government), it can also be seen from aspects of nurse skills (practical barriers) and patient safety culture (cultural barriers). Practical barriers include: lack of

knowledge (causing officers not to know how to report incidents), lack of feedback and lack of socialization related to incident reporting). Cultural barriers include: avoiding conflict and fear of being blamed/punished. These obstacles affect the implementation of the PSI reporting system.

#### 6. REFERENCES

- Abuosi, A. A., Poku, C. A., Attafuah, P. Y. A., Anaba, E. A., Abor, P. A., Setordji, A., & Nketiah-Amponsah, E. (2022). Safety culture and adverse event reporting in Ghanaian healthcare facilities: Implications for patient safety. *PLoS ONE*, *17*(10 October). https://doi.org/10.1371/journal.pone.0 275606
- Albarrak, A. I., Almansour, A. S., Alzahrani, A. A., Almalki, A. H., Alshehri, A. A., & Mohammed, R. (2020). Assessment of patient safety challenges and electronic occurrence variance reporting (e-OVR) barriers facing physicians and nurses in the emergency department: cross a sectional study. BMC Emergency Medicine, *20*(1). https://doi.org/10.1186/s12873-020-00391-2
- Asli, P., Jenita, A., Arief, Y. S., Misbahatul, E., & Has, M. (n.d.). Analisis Faktor yang Berhubungan dengan Pelaporan Insiden Keselamatan Pasien pada Perawat (Factor Analysis retaled to the Incident Reporting of Patient Safety Incident). http://ejournal.unair.ac.id/FMNJ/7JournalHomepage:https://e-journal.unair.ac.id/PMNJ/index
- Dhamanti, I., Leggat, S., & Barraclough, S. (2020). Practical and cultural barriers to reporting incidents among health workers in Indonesian public hospitals. *Journal of Multidisciplinary*

- *Healthcare*, *13*, 351–359. https://doi.org/10.2147/JMDH.S2401
- direktorat\_mutu\_akreditasi\_pelayanan\_ke sehatan\_lakip\_2022-1. (n.d.).
- *K IND*. (n.d.).
- Kusumawati, A. S., Handiyani, H., & Rachmi, S. F. (2019). Patient safety culture and nurses' attitude on incident reporting in Indonesia. *Enfermeria Clinica*, 29, 47–52. https://doi.org/10.1016/j.enfcli.2019.0 4.007
- Mauti, G., & Githae, M. (2019). Medical error reporting among physicians and nurses in Uganda. *African Health Sciences*, 19(4), 3107–3117. https://doi.org/10.4314/ahs.v19i4.33
- Mourd, S. B., Seada, A. M., & Etway, E. A. (2020). Barriers of Reporting Incident and Suggested Sloutions from the Perspective of Staff Nurses. In *Cairo Univ* (Vol. 88, Issue 1). www.medicaljournalofcairouniversity .net
- Naome, T., James, M., Christine, A., & Mugisha, T. I. (2020). Practice, perceived barriers and motivating factors to medical-incident reporting: A cross-section survey of health care providers at Mbarara regional referral hospital, southwestern Uganda. *BMC Health Services Research*, 20(1). https://doi.org/10.1186/s12913-020-05155-z
- Oweidat, I., Al-Mugheed, K., Alsenany, S. A., Abdelaliem, S. M. F., & Alzoubi, M. M. (2023). Awareness of reporting practices and barriers to incident reporting among nurses. *BMC Nursing*, 22(1). https://doi.org/10.1186/s12912-023-01376-9
- Peraturan Menteri Kesehatan Republik Indonesia. (n.d.).