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DETERMINANT OF PATIENT SAFETY INCIDENT REPORTING INPATIENT UNIT IN INDONESIA REGIONAL HOSPITAL

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ABSTRAK

Abstract:
Reporting Patient Safety Incidents (PSI) is a crucial component in improving healthcare quality and preventing adverse events. However, the rate of PSI reporting in Indonesia remains relatively low. Bunda Sejati Hospital has shown an increasing trend in reported incidents, but the influencing factors behind this reporting are not yet fully understood. This study aims to identify the factors associated with the reporting of patient safety incidents in the Inpatient Unit of Bunda Sejati Hospital. This research is an analytical study with a quantitative approach and cross-sectional design. The population consisted of all 32 nurses in the Inpatient Unit of Bunda Sejati Hospital. Data were collected using a questionnaire, and data analysis was performed using the chi-square test. The results showed significant relationships between knowledge (p=0.001), reporting/feedback response (p=0.006), patient safety culture (p=0.006), leadership (p=0.006), reward (p=0.000), and training (p=0.002) with the reporting of patient safety incidents. Knowledge, reporting/feedback response, patient safety culture, leadership, reward, and training are significantly associated with the reporting of patient safety incidents. Improving these factors is expected to encourage a stronger reporting culture and enhance patient safety in hospitals.

***Abstrak*:**
Pelaporan Insiden Keselamatan Pasien (IKP) merupakan bagian penting dalam upaya peningkatan mutu pelayanan kesehatan dan pencegahan kejadian tidak diharapkan. Namun, angka pelaporan IKP di Indonesia masih tergolong rendah. Rumah Sakit Bunda Sejati menunjukkan tren peningkatan jumlah insiden yang dilaporkan, namun belum diketahui secara pasti faktor-faktor yang memengaruhi pelaporan tersebut. Penelitian ini bertujuan untuk mengidentifikasi faktor-faktor yang berhubungan dengan pelaporan insiden keselamatan pasien di Instalasi Rawat Inap Rumah Sakit Bunda Sejati. Penelitian ini merupakan penelitian analitik dengan pendekatan kuantitatif dan desain cross sectional. Sampel dalam penelitian ini adalah seluruh perawat pelaksana di Instalasi Rawat Inap Rumah Sakit Bunda Sejati sebanyak 32 orang. Pengumpulan data dilakukan menggunakan kuesioner, dan analisis data menggunakan uji chi-square. Hasil penelitian menunjukkan terdapat hubungan yang signifikan antara pengetahuan (p=0,001), respon pelaporan/feedback (p=0,006), budaya keselamatan pasien (p=0,006), peran kepemimpinan (p=0,006), pemberian imbalan/reward (p=0,000), dan pelatihan (p=0,002) dengan pelaporan insiden keselamatan pasien. Faktor pengetahuan, respon pelaporan/feedback, budaya keselamatan pasien, peran kepemimpinan, pemberian imbalan/reward, dan pelatihan memiliki hubungan signifikan dengan pelaporan insiden keselamatan pasien. Upaya peningkatan keenam faktor tersebut diharapkan dapat mendorong peningkatan budaya pelaporan dan keselamatan pasien di rumah sakit.

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INTRODUCTION

Patient safety has become a crucial issue in healthcare, both at global and national levels, and it constitutes a fundamental component of the quality of care. Patient safety systems in hospitals are designed to create a safer care environment for patients, delivered by both healthcare and non-healthcare personnel, with the primary objective of preventing Adverse Events (AEs) [1]. World Health Organization (WHO) defines a Patient Safety Incident as a deviation from the standard of care that may pose a risk or cause harm to a patient [2].

Patient Safety Incident (PSI) reporting is the core of a learning system for improving the quality of care. Without such reporting, hospitals lose the opportunity to identify systemic weaknesses, analyze root causes, and implement corrective actions to prevent similar incidents from recurring. The failure to report incidents negatively impacts not only the patients, who may suffer preventable harm, but also the healthcare system as a whole, as it undermines the safety culture, erodes public trust, and can lead to financial and legal implications for the facility.

The Institute of Medicine (IOM) report, "To Err is Human," highlights that many deaths are caused by preventable medical errors [3]. Through incident reporting, hospitals can design programs centered on addressing patient safety issues, thereby benefiting various stakeholders, including the institution and the patients themselves [4].

Joint Commission International (JCI) has indicated 52 incidents across 11 hospitals in five countries, with the highest number of cases occurring in Hong Kong (31%), followed by Australia (25%), India (23%), the United States (12%), and Canada (10%) [2]. In Indonesia, the National Patient Safety Committee (KNKP) recorded 7,465 Patient Safety Incidents (PSIs) in 2019, which comprised 171 deaths, 80 cases of severe harm, 372 of moderate harm, 1,183 of minor harm, and 5,659 cases resulting in no harm [5]. Of the 2,877 hospitals in Indonesia in 2019, only 12% reported such incidents. The 7,465 reports received were composed of 38% Near Misses, 31% No-Harm Events, and 31% Adverse Events [6]. This low reporting rate is also a challenge in other Southeast Asian countries, indicating the presence of similar systemic and cultural barriers in the region.

One of the greatest challenges in patient safety implementation is establishing a reporting culture [7]. A poor reporting culture is attributed to several factors, including insufficient dissemination of information on reporting formats and workflows, limited staff knowledge, low compliance rates, inadequate facilities, and a lack of follow-up and feedback on submitted reports [8]. Other research also highlights a blame culture, a lack of management commitment, the absence of rewards for reporting, and staff uncertainty about what should be reported as key impediments [9].

Based on the challenges identified in the literature, this study focuses on six determinant factors strongly presumed to influence nurses' willingness to report: knowledge, reporting feedback, patient safety culture, leadership role, rewards, and training. This is critical, as Patient Safety Incident (PSI) reporting lies at the core of care quality, with a process that involves both internal reporting to the hospital's patient safety team and external reporting to the National Patient Safety Committee (KNKP) [10] [11].

Based on a preliminary study conducted by the researcher at Bunda Sejati Hospital on July 10, 2024, it was found that the number of Patient Safety Incidents (PSIs) in the inpatient unit showed a significant upward trend compared to other units. Data from the Quality Improvement and Patient Safety (PMKP) team indicated that there were 7 cases in 2021, which increased to 9 cases in 2022, and surged to 16 cases in 2023.

Although the number of reports has increased, the factors that drive this reporting have not been comprehensively identified. Therefore, this study aims to answer the research question: "What are the determinant factors associated with patient safety incident reporting by nurses in the Inpatient Unit of Bunda Sejati Hospital?" Specifically, this study will analyze the relationship between PSI reporting and the independent variables of knowledge, reporting feedback, patient safety culture, leadership, rewards, and training.

RESEARCH METHOD

This was a descriptive-analytic study using a quantitative approach and a cross-sectional design. The independent variables were knowledge, feedback on reporting, patient safety culture, leadership, rewards, and training. The dependent variable was patient safety incident reporting. The study population comprised all 32 staff nurses in the inpatient unit of Bunda Sejati Hospital.

Total sampling method was employed, meaning the sample size was equal to the entire population. With the following criteria: nurses assigned to the inpatient unit, permanent employees, contract employees with more than 3 years of service, not currently on leave, not a nursing intern, and unwilling to participate as a respondent. This research was conducted from June to July 2024 at Bunda Sejati Hospital, Tangerang.

RESULT AND DISCUSSION

The frequency distribution indicates that almost half of the respondents, specifically 16 individuals (50.0%), were in the 17-25 age range. Age is often associated with an individual's comprehension and mindset; as one ages, these abilities tend to develop. This finding is relevant to the research by Suyoto [12], which suggests that age is a contributing factor to patient safety incidents. Senior nurses are typically more skilled, cautious, and meticulous in their patient care [12]. An individual's maturity and capacity for critical thinking and professional behavior generally increase with age, whereby those in the adult category tend to be more thorough in providing services (Table 1).

Table 1.
Characteristics of Respondents by Age, Gender, Education, Length of Work, and History of Training at Bunda Sejati Hospital

Variable	Frequency (n)	Persentage (%)
Age (years)		
17-25	16	50.0%
26-35	15	46.9%
36-45	1	3.1%
Gender		
Male	1	3.1%
Female	31	96.9%
Education	4	12.5%
D3	28	87.5%
Ners		
Length of Work	23	71.9%
(years)	9	28.1%
≤ 3		
> 3		
Training History		
Ever	12	37.3%
Never	20	62.5%

The study shows that respondents at Bunda Sejati Hospital were predominantly female, with 31 individuals (96.9%). This result is consistent with research conducted by Zulkifli [13], who also found that the majority of their respondents were female, accounting for 72 out of 85 nurses (84.7%). This confirms that women hold a significant and dominant role in the healthcare sector, where globally, over 70% of the healthcare workforce is female. The data indicate that almost all respondents, 28 individuals (87.5%), held a professional nursing degree (Ners). An individual's level of education is believed to correlate with their quality of work. The higher the level of education, the greater their cognitive abilities and skills are likely to be. In analyzing incident reports, nurses require adequate intellectual, interpersonal, and technical capabilities. Therefore, it is assumed that higher education contributes to better knowledge [14].

The distribution of respondents by length of service shows that a vast majority, 23 individuals (71.9%), had a work tenure of ≤ 3 years. This finding aligns with Roifah [15], who reported that 52.94% of their respondents also had a work tenure of ≤ 3 years [15]. Length of work is often directly proportional to experience. The longer an individual works, the richer their experience becomes, and they tend to have higher job retention, having adapted to the work environment. Effective adaptation leads to employees feeling more comfortable in their roles.

It was found that a majority of respondents, 20 individuals (62.5%), had never attended patient safety-related training. This result is consistent with the findings of Zikri [16], who reported that 19 of their respondents (57.5%) had also never received such training. To achieve high productivity, hospital management must continuously enhance the capabilities of its employees, both in knowledge and skills. Intensive training is an effective method for staff to adapt to the various changes and demands within the institution.

The statistical analysis revealed a significant relationship between knowledge and PSI reporting ($p=0.001 < 0.05$; OR=1,800). Strong knowledge provides the foundation for nurses to understand the importance of reporting and to act effectively. This relationship exists because strong knowledge serves as a foundation for nurses (Table 2). This finding is consistent with research by Eka and Prawiro (2020), who stated that a p-value of 0.000 (where $p < \alpha=0.05$) indicated a significant relationship between knowledge and the implementation of patient safety measures [17]. These results also align with previous studies by Khairina [18] The variable suspected to have the strongest relationship with the accuracy of completing the triage scale is the level of knowledge. Ginting [19], which found a significant association between nursing knowledge and patient safety [19]. A nurse's understanding of PSIs and the six patient safety goals is a primary driver for correct and safe reporting.

Table 2.
The Relationship between Knowledge, Reporting Feedback, Patient Safety Culture, Leadership, Rewards, and Training with Patient Safety Incident Reporting at Bunda Sejati Hospital

Category	Patient Safety Incident Reporting		*P-Value*
	Reported	Didn't Report	
Knowledge			
Good	23	0	0.001
Poor	5	4	
Feedback			
Fast	20	0	0.006
Slow	8	4	
Patient Safety Culture			
Good	20	0	0.006
Poor	8	4	
Leadership			
Good	20	0	0.006
Poor	8	4	
Reward			
Often	26	0	0.000
Rarely	2	4	
Training			
Ever	25	1	0.002
Never	3	3	

A significant relationship was found between reporting feedback and PSI reporting ($p=0.006 < 0.05$; OR=1,500). Effective and timely feedback on submitted reports is crucial for identifying risks, raising awareness, and motivating staff to continue reporting in the future [20].

This finding is consistent with research by Karmila et al. [21], which concluded there was a significant relationship between reporting feedback and patient safety incident reporting at TK. II Pelamonia Makassar Hospital [21]. It was concluded that a prompt response, followed by analysis, evaluation, and preventive action, is key to preventing incident recurrence.

The research indicated a significant relationship between patient safety culture and PSI reporting. A positive safety culture—which includes commitment, compliance, and effective communication promotes reporting [9].

This result aligns with a study by Anggraeni [22], which showed that patient safety culture had a significant simultaneous influence on the incident reporting attitudes of nurses in the inpatient unit of Dr. Soepraoen Hospital [22]. Strengthening the safety culture through clear policies, guidelines, and Standard Operating Procedures (SOPs) is essential for improving incident reporting at Bunda Sejati Hospital.

A significant relationship exists between the leadership and PSI reporting ($p=0.006 < 0.05$; OR=1,500). Effective leadership can motivate and empower staff, using reports as a learning tool for system improvement rather than for blaming individuals.

This finding is consistent with research by Fauzia [23], Pratama et al. [24], and Yarnita and Maswani [2], which also demonstrated a significant relationship between the leader's role and patient safety incident reporting [23] [24] [2]. From this and previous studies, it can be concluded that leaders who establish a vision for safety, act as role models, and focus on system improvement are key to building a robust reporting system.

The analysis showed a significant relationship between the provision of rewards and PSI reporting ($p=0.000 < 0.05$; OR=3,000). Reward systems, both monetary and non-monetary, are one of the strongest influences on performance.

This finding is consistent with research by Sariroh [25] and Zees [26], which also indicated a significant relationship between rewards and patient safety incident reporting [25] [26]. However, a contrasting finding was reported by Sumarni and Naili [27], who found no relationship between rewards and the caring behavior of staff nurses ($p=0.303$) [27]. A well-designed reward system can create a results-oriented work culture and encourage nurses to deliver their best performance [28].

This research found a significant relationship between training and PSI reporting ($p=0.002 < 0.05$; OR=25,000). Training and socialization are necessary to enhance the skills and knowledge of staff, as well as to overcome practical barriers to incident reporting [6].

This result aligns with research by Jenita et al. [20], which stated that training had a positive correlation with patient safety incident reporting, indicating a unidirectional influence [20]. The better the training provided, the more proficient nurses become in completing report forms, which ultimately improves overall reporting performance [29].

CONCLUSION

The findings of this study indicate that enhancements in knowledge, patient safety culture, leadership, reporting feedback, provision of rewards, and training play a crucial role in improving Patient Safety Incident reporting in the Inpatient Unit of Bunda Sejati Hospital. Therefore, it is recommended that the hospital management continuously strengthen these factors to create an effective incident reporting system and an optimal patient safety culture. For example, creating a pocket guide for PSI (Patient Safety Incident) reporting.

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