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Patient Safety Incident Reporting in District Hospitals, Indonesia; Nurses' Perspective

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Abstract

Patient safety incident reporting is an important component in efforts to improve the quality and safety of healthcare services. However, its implementation remains suboptimal, particularly in developing countries. This study aimed to describe patient safety incident reporting practices among nurses. This study employed a descriptive cross-sectional design and involved 328 nurses working in inpatient and intensive care units. A total sampling technique was used in this study. Data were collected using the Hospital Survey on Patient Safety Culture (HSOPSC) version 2.0 questionnaire. Data were analyzed using descriptive statistics. The findings

showed that 65.5% of respondents had never reported a patient safety incident within the previous 12 months. In addition, the average percentage of positive responses to patient safety incident reporting was 34.5%, indicating that nurses' patient safety incident reporting practices remained low. It can be concluded that patient safety incident reporting practices among nurses are still suboptimal; therefore, organizational support and an effective reporting system are needed to improve incident reporting in hospitals.

Keywords: Incident Reporting, Patient Safety, Nurses' Perspective

1. Introduction

Patient safety is a fundamental pillar of healthcare systems and an important indicator for assessing the quality of hospital services, aimed at minimizing the risk of preventable harm during care. ^[1,2] Despite various efforts to improve patient safety, adverse events remain a significant global issue. The World Health Organization (WHO) reported that approximately 1 in 10 patients experiences harm during healthcare delivery, with more than three million deaths occurring annually due to unsafe care, particularly in low- and middle-income countries. Furthermore, an estimated 134 million adverse events occur each year among patients in hospitals in developing countries ^[2]. One of the key strategies for building a strong patient safety system is through patient safety incident reporting ^[3]. Incident reporting systems serve as organizational learning mechanisms to identify root causes, prevent the recurrence of errors, and strengthen transparency and accountability in healthcare services ^[2-7]. Patient safety incident reporting systems have been introduced in approximately 70% of countries; however, their effectiveness remains limited, and only one-third of countries actively report patient safety incidents ^[8].

In Indonesia, the patient safety incident reporting system has been implemented nationally since 2006. However, its implementation remains suboptimal and continues to experience underreporting ^[1, 9]. According to the 2021 patient safety incident report from hospitals in Indonesia, a total of 2,272 incidents were reported from the analyzable data. Various studies have shown that the rate of patient safety incident reporting among healthcare professionals remains low due to multiple contributing factors ^[1, 10, 11]. Nurses, as healthcare professionals with the highest intensity of patient interaction, often encounter barriers to reporting incidents, including fear of punitive consequences, lack of feedback, and the perception that reporting does not lead to meaningful improvements ^[4, 10]. Incident reporting is an integral part of the patient safety system that requires organizational and policy support. Nurses play important roles in reporting incidents, participating in root cause analysis, and implementing solutions to prevent their recurrence ^[2].

Although various studies have examined factors associated with patient safety incident reporting, research specifically describing incident reporting practices among nurses in Indonesian district hospitals remains limited. In addition, data on the

implementation of patient safety incident reporting in regional hospitals remain scarce. Based on these gaps, this study aimed to analyze patient safety incident reporting practices among nurses in district hospitals in Indonesia.

2. Methods

This study employed a descriptive cross-sectional design and was conducted among 344 nurses working in 15 inpatient and intensive care units at a district hospital in Indonesia. A total sampling technique was used in this study. A total of 328 returned questionnaires were eligible for analysis, resulting in a response rate of 95.3%. The demographic characteristics assessed included age, gender, educational level, employment status, work unit, length of employment at the hospital, clinical authority level, and participation in patient safety training. Patient safety incident reporting practices were measured using the Hospital Survey on Patient Safety Culture (HSOPSC) version 2.0, developed by the Agency for Healthcare Research and Quality (AHRQ). This instrument includes a single item that directly measures patient safety incident reporting practices over the previous 12 months, with five response options: none, 1–2 times, 3–5 times, 6–10 times, and 11 or more times [12, 13]. The instrument demonstrated acceptable reliability, with Cronbach’s alpha values ranging from 0.60 to 0.89, and has also been reported to have good discriminant and convergent validity [14-16]. Data were collected using printed questionnaires from September to October 2025. Data collection was conducted after obtaining ethical approval and permission from the study institution. The researcher distributed the questionnaires after respondents agreed to participate in the study.

3. Results

Socio-Demographic Characteristics: Of the 328 respondents, the majority were female (76.5%), held a Diploma III in Nursing qualification (56.7%), had contract employment status (75.9%), were categorized as Clinical Nurse Level I (52.7%), and had never attended patient safety training (84.8%). The largest proportion of respondents worked in the ICCU and ICU units (9.5%). The mean age of respondents was 30.9 years (SD = 6.54), with a minimum of 22 and a maximum of 51 years. The mean length of employment was 6.41 years (SD = 6.09), ranging from 1 to 29 years (Table 1).

Table 1: Socio-demographic characteristics

Demographic characteristics	f	%
Gender		
Male	77	23,5
Female	251	76,5
Educational level		
Diploma III in nursing	187	57
Bachelor of nursing	8	2,4
Professional nurse (Ners)	133	40,8
Employment status		
Civil servant	60	18,3
Government Employees with Employment Agreements (PPPK)	19	5,8
Contract employee	249	75,9
Unit/work area		
Jeumpa in-patient ward	20	6,1
Neurology in-patient ward	23	7,0
Pediatric in-patient ward	24	7,3
Pavilion in-patient ward	12	3,7

Internal medicine in-patient ward	21	6,4
Pulmonary in-patient ward	18	5,5
Surgical in-patient ward	25	7,6
Neonatal Intensive Care Unit	23	7,0
Pediatric Intensive Care Unit	25	7,6
Intensive Cardiac Care Unit	31	9,5
Urology in-patient ward	14	4,4
Cardiac in-patient ward	17	5,2
Orthopedic in-patient ward	23	7,0
Intensive Care Unit	31	9,5
Seulanga in-patient ward	21	6,4
Clinical authority level		
Clinical privilege nurse level I	173	52,7
Clinical privilege nurse level II	84	25,6
Clinical privilege nurse level III	24	7,3
Unknown/other (excluding nurses with clinical privilege level IV and V)	47	14,3
Patient safety training		
Yes	50	15,2
No	278	84,8

Incident Reporting Practices: A total of 65.5% of respondents had never reported a patient safety incident within the previous 12 months (Table 2), and the average positive response rate for incident reporting was 34.5% (Figure 1).

Table 2: Patient safety incident reporting practices

Category	f	%
Dit not report	215	65,5
Reported	113	34,5

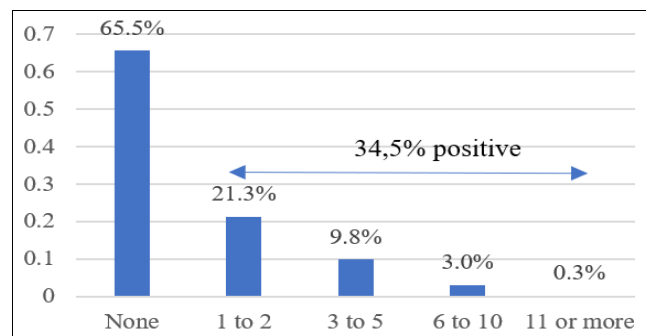


Fig 1: Average percentage response to the number of patient safety events reported in the past 12 months

4. Discussion

The findings of this study showed that the majority of nurses (65.5%) had never reported a patient safety incident within the previous 12 months. In addition, the average positive response rate for patient safety incident reporting was only 34.5%. These findings indicate that patient safety incident reporting practices among nurses remain low and suggest that underreporting persists within hospital patient safety systems.

These findings are consistent with previous studies reporting that the majority of healthcare professionals have not actively reported patient safety incidents [10, 11, 17, 18]. The low rate of patient safety incident reporting may be influenced by various factors, including a blaming culture, fear of punishment or negative consequences, lack of feedback from management, and the perception that reporting does not result in meaningful improvements [4, 10, 18]. These conditions may cause healthcare professionals, including nurses, to feel unsafe in reporting incidents that occur.

Patient safety incident reporting is an essential component of the patient safety system, serving as an organizational learning mechanism to identify root causes, prevent recurrence of errors, and enhance transparency and accountability in healthcare services [2]. The findings of this study indicate the need to strengthen incident reporting systems in hospitals. Hospitals need to create a work environment that promotes openness and avoids blaming individuals when errors occur. In addition, organizational support is required through user-friendly reporting systems, feedback on incident reports, patient safety training, and the reinforcement of just culture principles in healthcare practice.

Previous studies have shown that training programs aimed at strengthening the role of head nurses can reinforce patient safety culture and improve incident reporting behavior [19]. A supportive and non-punitive work environment can increase healthcare professionals' trust and willingness to report patient safety incidents. This study has several limitations, particularly because it was conducted in only one hospital, limiting the generalizability of the findings.

5. Conclusions

The findings of this study showed that patient safety incident reporting practices among nurses remain low, with most nurses having never reported a patient safety incident in the previous 12 months. These findings indicate that underreporting remains a challenge in hospital patient safety systems. Therefore, implementing a non-punitive approach, increasing organizational support, and developing effective reporting systems are needed to improve patient safety incident reporting among nurses.

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