Original Article

Anonymous Reporting System as an Effort to Improve the Reporting Culture of Patient Safety Incidents

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Abstract

Background: Incident reporting systems are essential mechanisms designed to gather information regarding patient safety incidents within hospitals. An effective reporting system can prevent the recurrence of similar incidents in the future by ensuring the safety of informants, allowing them to report without fear of negative repercussions, such as threats or intimidation related to the information provided.

Materials and Methods: This research utilized a True Experimental design with a Posttest Only Control Group Design, incorporating both control and intervention groups. Data collection was conducted through a Patient Safety Incident Reporting System utilizing Google Forms. The data collection instrument consisted of a questionnaire designed for reporting patient safety incidents.

Results: The findings indicated a notable increase in the number of anonymous reports of patient safety incidents. However, there were no significant differences in the timeliness and completeness of data between the anonymous and conventional reporting systems.

Keywords: Incident reporting system, Patient safety, Anonymity

Introduction

Patient safety incidents are unintended events that may or may not cause harm to patients and are unrelated to their underlying medical conditions (Gqaleni & Mkhize, 2024). To improve patient safety, hospitals need to identify and address issues that could potentially harm patients, ensuring similar incidents do not recur by reporting patient safety incidents (Kemenkes RI, 2017). In hospitals, incident reporting is a mandatory requirement and must become a cultural norm to allow incidents to be analyzed and used as learning opportunities by identifying root causes and developing solutions. The culture of implementing patient safety incident reporting has become a benchmark for the quality of healthcare services (Budi et al., 2019). Patient

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safety incident reporting systems are designed to convey information; however, the culture of incident reporting in Indonesia has generally not been optimally implemented (Harsula et al., 2020).

Many countries have reported an annual increase in patient safety incidents and near-miss events in hospitals, which has become a public concern, including in South Africa. The Institute of Medicine (IOM) revealed that deaths due to patient safety incidents vary between 44,000 to 98,000 annually, leading to increased hospital expenditure (Gqaleni & Mkhize, 2024). In Indonesia, in 2019, there were 7,465 reported cases comprising 38% near-miss events, 31% non-injury incidents, and 31% adverse events (Toyo et al., 2022).

Several studies have identified barriers to reporting patient safety incidents, including fear of blame, lack of feedback, fear of sanctions, and perceptions that reporting does not contribute to improved patient safety (Fujita et al., 2021). A study by Patmawati & R. Djano (2020) found that 55% of respondents demonstrated negative attitudes toward the culture of patient reporting, while 45% showed positive attitudes. One of the main factors contributing to positive responses was workplace collegiality, as discomfort and fear of punishment were significant deterrents. Moreover, Dhamanti et al. (2023) stated that factors influencing the low reporting rates in hospitals include lack of knowledge, understanding, responsibility for reports, insufficient leadership, and the perception of reporting as an additional burden.

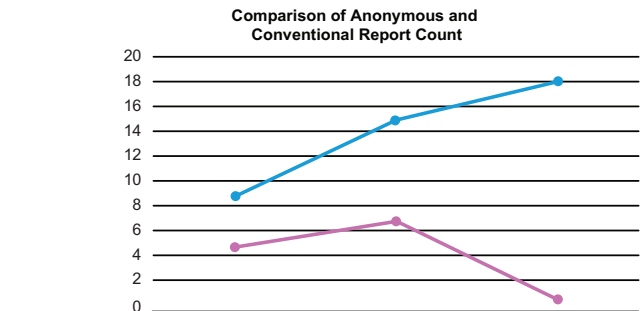
This suboptimal reporting culture has the potential to hinder efforts to improve patient safety because, without adequate data and information, hospitals struggle to identify incident patterns and develop better prevention strategies. Dhamanti et al. (2023) emphasized the need for reform in patient safety incident reporting systems, particularly concerning confidentiality, by anonymizing personal identifiers.Therefore, the aim of this study is to examine the extent of the comparison between anonymous and conventional reporting systems in hospitals for successful reporting. Confidentiality is one of the characteristics recommended by WHO for an effective Patient Safety Incident Reporting System.

Materials and Methods

This study employed a Posttest Only Control Group Design to compare the effectiveness of anonymous and conventional reporting systems. The population consisted of all nurses working at the Regional General Hospital dr. Zainoel Abidin. The sample comprised incident reports collected through a Google Form-based reporting system. Cluster random sampling was utilized for sample selection. The data collection instrument was a questionnaire in the form of a checklist, designed based on anonymous and conventional reporting systems sourced from the Google Form database. Data collection was conducted after obtaining ethical approval from the Ethics Committee of the Regional General Hospital dr. Zainoel Abidin, Banda Aceh.

Results

The study was conducted over three months, from October to December 2024. Out of a total of 55 samples, the number of incident reports included 42 reports in the anonymous group and 13 reports in the conventional group. The details of the comparison of the number and average reports for anonymous and conventional systems are presented in Figure 1.



	October	November	December
Anonymous	9	15	18
Conventional	5	7	1

Figure 1. Comparison of Anonymous and Conventional Reports

Further analysis indicated an increase in anonymous reports compared to conventional reports. The anonymous reports totaled 42, while conventional reports totaled 13. The results of the Independent Samples Test yielded a p-value of 0.03, indicating a significant difference between the two reporting systems.

Discussion

The results of the study indicate that the average number of reports in the two groups, namely the anonymous reporting system and the conventional reporting system, shows that anonymity in reporting is highly important. This finding aligns with the study by Dhamanti et al. (2023), which highlighted negative impacts on incident reporting, such as fear of punishment, feelings of anxiety, limited time to report incidents, lack of feedback, and insufficient anonymity. The book "To Err is Human" emphasizes that to improve professional healthcare services and focus on patient safety, various methods have been employed, including confidential and voluntary reporting systems that focus on identifying root causes (Brado et al., 2021).

A study by Azyabi et al. (2021) revealed that a significant portion of respondents refrained from reporting incidents due to fear of reprimand from their managers or supervisors. Healthcare workers, particularly nurses, are more likely to report incidents if they feel safe from accusations and punishment, are involved in the investigation and improvement processes after incidents, and observe periodic risk reduction for patients (Donaldson, 2020). Incident reporting systems are considered to help improve patient safety, and confidential and voluntary reporting is deemed essential to understand the frequency and types of adverse incidents without fear of punishment or sanctions, with the goal of encouraging more individuals to report incidents (Stavropoulou et al., 2015). The improvement of service quality and prevention efforts heavily depend on nurses' adherence to patient safety principles (Vaismoradi et al., 2020). Therefore, all healthcare workers must develop a sense of responsibility by identifying and reporting incidents through non-punitive reporting systems (Camacho-Rodríguez et al., 2022).

A non-punitive culture needs to be implemented by managers or supervisors to ensure that staff do not fear punishment and are less likely to conceal their mistakes, thereby fostering a culture of reporting and its application (Fekadu et al., 2025). Nurses' attitudes play a crucial role in healthcare services and safety and have a significant impact on the unit's patient safety culture (Alanazi et al., 2022). Leadership commitment to fostering a culture of patient safety incident reporting must also begin with creating a positive and supportive atmosphere and recognizing those who report incidents (Shemsu et al., 2024).

Patient safety incident reporting is a critical mechanism for improving patient safety. Many countries have emphasized the principle of incident reporting with a non-blaming culture, established as the concept of a "just culture," to encourage healthcare workers to exchange information about patient safety (Han et al., 2024). Another study also noted that healthcare workers lose motivation due to the lack of feedback when reporting incidents. In Saudi Arabia, it was found that high positive responses were associated with feedback and communication about errors (Azyabi et al., 2021). Regular feedback processes and leadership support for patient safety principles can motivate nurses' adherence to patient safety through incident reporting (Vaismoradi et al., 2020).

Conclusion

The study demonstrated that anonymous incident reporting systems tend to increase the number of incident reports compared to conventional systems. The primary reason for this increase is that anonymity alleviates fears of punishment, discrimination, or other negative consequences for reporters. With the assurance of anonymity, staff feel more comfortable reporting incidents without concern.However, anonymous systems also present challenges, such as reduced accountability for reporters and lack of feedback. The reporting culture remains suboptimal in terms of timeliness and data completeness, as nurses may lack clarity on what incidents should be reported. Therefore, training to enhance understanding and skills is crucial for effective incident reporting.

Ethical Approval: Approval for the research was granted by the Nursing Research Ethics Committee (KEPK) of Dr. Zainoel Abidin Regional General Hospital, Banda Aceh, with Approval Number 214ETIK-RSUDZA/2024.

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Conflict of Interest: The authors declare that there are no conflicts of interest with any parties in conducting this study.

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