

Factors related to the Incident Reporting Culture in Health Services: A Literature Review

Reni Astuti, Takdir Tahir*, Kusrini S. Kadar, Erfina Erfina

Universitas Hasanuddin, Indonesia

* Correspondent Author: takdirtahir@unhas.ac.id

ABSTRACT

A literature search was performed using computerized databases of PubMed, ProQuest, Willey, and secondary searching journal portals. The keywords “patient safety, incidence report, and healthcare were used in various combinations. Inclusion criteria were as follows: written in the English language published in the last ten years and origin research, focusing on the cultural incident reporting, reported nurse staff, or other healthcare workers as participants. Exclusion criteria were: a review of literature or assessment tools development and report article

A total of 77 articles were obtained from the search. Of these, 70 articles were excluded due to did not meet the criteria of this review. We finally reviewed seven articles and categorized them into two main factors: Organizational culture and healthcare staff

This review emphasizes the importance of promoting the factors related to incidence reporting culture in health services, both organization level, and healthcare staff. These findings suggest the important to improve organizational support to implement safety culture in hospital, and it is essential to provide healthcare staff with the training and encourage a culture of error reporting.

Keywords: Incident Reporting Culture, Health Services, Patient Safety

Received April 18, 2021; Revised April 27, 2021; Accepted May 1, 2021



STRADA Jurnal Ilmiah Kesehatan, its website, and the articles published there in are licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

BACKGROUND

Patient safety has been a national priority in many countries for more than a decade.¹ The major cultural change firmly in continuous improvement is required to improve patient safety.² Patient safety with a reporting system has been developed to serve as learning from experience, to prevent the same mistakes from recurring.³ Incident reporting system are designed to be used to obtain information about patient safety and guidance that strongly influenced by organizational, professional health staff and safety culture itself.^{2,4}

The World Health Organization has estimated that tens of millions of patients are the victims of injuries and deaths from unprotected medical care and activities around the world.⁵ Regardless of the effort of improving the incidence reporting culture made by healthcare organizations, the prevalence of medical error still high.⁶ This problem can be due to cultural factors and lack of patient safety culture in healthcare workers.⁷ An assessment of incident reporting as part of the patient safety culture still requires more attention.⁶ It also allows the hospital to identify the safety culture in improving the quality of healthcare services.⁸

The important goal of incident reporting system was to provide information on the frequency of occurrence of a patient safety incident. However, the value of an incident reporting system began to debated.⁹ A positive safety culture can encourage healthcare staff to assess the current safety culture, and hospitals should create an incidence reporting culture among healthcare providers before implementing a structural intervention.⁶ However, there were barriers to report incidents among the healthcare staff, including fear of punishment, blaming culture, and poor safety culture.¹⁰ Thus, with the full support of the hospital where all staff, leaders, and management should understand and have a positive perception of a good reporting culture, will improve optimal service quality.¹¹

Several studies of a range of incident reporting as a method improve patient safety through an incident reporting culture.^{2,4,12} One the other hand, the study of the impact of incident reporting on the quality of services in hospitals was limited. Therefore, considering the importance of this issue, the present study aimed to describe the findings from our literature review, focusing on factors related to incident reporting culture on healthcare services.

METHODS

A literature search was performed using computerized databases of PubMed, ProQuest, Willey, and secondary searching journal portals. The keywords “*patient safety, incidence report, and healthcare*” were used in various combinations. Inclusion criteria were as follows: written in the English language published in the last ten years and original research, focusing on the cultural incident reporting, reported nurse staff, or other healthcare workers as participants. Exclusion criteria were: a review of literature or assessment tools development and report article. Initially, we read through all articles and organized them into a general bibliography. A total of seven articles were selected in this review due to their relevance to the topic. The studies were conducted in Pakistan, South Korea, Israel, Palestine, the United Kingdom, and Saudi Arabia. We perform an in-depth data comparison of articles included. We extract the data related to authors, year of publication, country, the aim of the study, design, and methods, sample and setting, and key findings Table 1. The information obtained from the literature review was summarized and discussed with the research team to synthesize. Finally, data synthesis involved the integration of essential findings and highlighted unique research articles.

RESULTS

Because not to meet the criteria of this review. We finally reviewed seven articles and categorized them into two main factors: Organizational culture and healthcare staff. A summary of this review is presented in Table 2.

Table 1. Impact of Incident reporting culture

Themes	Sub-themes	References
Organizational culture	Nurse manager ability	Jafree SR., Zakar R., Zakar MZ., Fischer F., 2016 ¹³
	Organization climate and tradition	Jafree SR., Zakar R., Zakar MZ., Fischer F., 2017 ¹⁴
	Management support	Kagan I., Barnoy S, 2013 ¹⁵ ; Reed et al., 2014 ³ Alzahrani N., Jones R., Abdel-Latif ME , 2018 ¹⁶
Healthcare staff	Development of the nursing care plan	Jafree SR., Zakar R., Zakar MZ., Fischer F., 2016 ¹³
	Psychological safety	Rashed & Hamdan, 2015 ¹⁷
	Improving feedback	Lee YH., Yang CC., Chen TT, 2015 ¹⁸

DISCUSSION

This study reviewed the literature on factors related to the incidence reporting culture in healthcare services. We identify factors contributing to the incidence reporting culture among healthcare providers in hospitals, especially in nursing services, including organizational culture and healthcare staff factors. An organizational culture of patient safety is closely related to incidence reporting by healthcare staff.¹⁹ The nurse professional is an integral member of healthcare who is responsible for patient safety and the efficiency of healthcare services in organizations.¹³ This review highlight that nurse manager ability, leadership, support, participation in hospital policy-making, and nurse teamwork are related to organizational culture for error reporting in a public hospital.¹³ One study revealed that healthcare organization included senior healthcare managers can make a major impact on the development of patient safety culture by creating and promoting a vision and strategy for quality safety and fostering healthcare staff motivation to implement patient safety.¹⁵

Several study reported that considered essential for patient safety, however the study found that many errors went unreported¹⁵ The organizational culture that promotes patient safety is a crucial factor for the effectiveness of hospital services and patient care.¹⁶ One component in the organization is management levels play essential roles in establishing patient safety Culture¹⁵. This review reported that hospital management related hospital work conditions, the safety climate, and the human resource component associated the safety issue, conversely lack of management support has been associated with lower safety culture attitudes including errors reporting culture.¹⁶ Thus providing resources for safety training and management support would be a benefit to improve patient outcome and reduce hospital error rates.¹⁶

Several surveys in Pakistan, Israel, and Palestine have shown the low level of reporting incidents by health workers¹⁰. However, health workers who established a professional attitude can improve the patient safety culture. This current review revealed that several doctors and nurses held a similar safety attitude¹¹. However, one study reported that nurse practitioners are more competent and have a higher error reporting compared to

other healthcare providers.²⁰ The development of nursing care plans and higher levels of nurse autonomy is facilitating a positive culture of error reporting among nurses consequently improving patient safety and reducing mortality rates.¹³

The other factors related to incidence reporting culture were psychological safety, attitude toward reporting incidents, subjective norms, and behavioural control correlate positively to the intention to report incidents.¹⁸ This behaviour of healthcare staff indicated that lack of personal reporting knowledge and skills might influence the incidence reporting behaviour—furthermore, the complexity of the reporting system and challenging to write the report impact to a negative reporting culture.¹⁸ Therefore, acknowledge the importance of reporting incidents, and providing feedback about errors, simplify procedure reporting, providing clear guidelines, and avoiding blame would improve the incidence reporting culture among healthcare professionals.

CONCLUSION

This study contributes to knowledge about factors related to the incidence reporting culture in healthcare services. This review emphasizes the importance of promoting the factors related to the incidence reporting culture in healthcare services, both in the organization level and among the healthcare staff. These findings suggest improving a positive, well designed organizational safety culture as a form of support can encourage error reporting by staff. Besides, to implement patient safety culture in hospitals, sufficient knowledge and skills are essential. Thus the organization needs to provide healthcare staff training to encourage a culture of error reporting and so improve patient safety.

REFERENCES

1. Reed S., Arnal D., Frank O., Gomez-Arnau JI., Hansen J., Lester O., et al. National critical incident reporting systems relevant to anesthesia: A European survey. *Br J Anaesth.* 2014;112(3):546-55, doi: 10.1093/bja/aet406.
2. Stavropoulou C., Doherty C. How Effective Are Incident-Reporting Systems for Improving Patient Safety? A Systematic Literature Review. 2015;(December), doi: 10.1111/1468-0009.12166.
3. Dhamanti I. What can Indonesia learn from Taiwan ' s successful patient-safety reporting system ? 2018;(June 2014):23-6.
4. Budi SC., Lazuardi L., Sari F., Dewi T. Information Systems and Patient Safety Incident Reports A Systematic Review of Literature and Observational Incident Reporting System in Hospitals. 2019;(May):807-14.
5. World Health Organization. Minimal information model for patient safety incident reporting and learning systems. World Health Organization. Disponible en: www.impact-test.co.uk.
6. Khoshakhlagh AH., Khatooni E., Akbarzadeh I., Yazdanirad S., Sheidaei A. Analysis of affecting factors on patient safety culture in public and private hospitals in Iran. *BMC Health Serv Res.* 2019;19(1):1-14, doi: 10.1186/s12913-019-4863-x.
7. Khater WA., Akhu-Zaheya LM., Al-Mahasneh SI., Khater R. Nurses' perceptions of patient safety culture in Jordanian hospitals. *Int Nurs Rev.* 2015;62(1):82-91, doi: 10.1111/inr.12155.
8. Anderson JE., Kodate N., Walters R., Dodds A. Can incident reporting improve safety? Healthcare practitioners' views of the effectiveness of incident reporting. *Int J Qual Heal Care.* 2013;25(2):141-50, doi: 10.1093/intqhc/mzs081.
9. Klemp K., Zwart D., Hansen J., Hellebek T., Verstappen W., Beyer M., et al. A safety

- incident reporting system for primary care. A systematic literature review and consensus procedure by the LINNAEUS collaboration on patient safety in primary care. 2015;4788, doi: 10.3109/13814788.2015.1043728.
10. Sinclair JE., Austin MA., Bourque C., Kortko J., Maloney J., Dionne R., et al. Barriers to Self-Reporting Patient Safety Incidents by Paramedics: A Mixed Methods Study. *Prehospital Emerg Care*. 2018;22(6):762-72, doi: 10.1080/10903127.2018.1469703.
 11. Jafree SR., Zakar R., Zakar MZ., Fischer F. Nurse perceptions of organizational culture and its association with the culture of error reporting: A case of public sector hospitals in Pakistan Health systems and services in low and middle-income settings. *BMC Health Serv Res*. 2016;16(1):1-13, doi: 10.1186/s12913-015-1252-y.
 12. Verbakel NJ., Langelaan M., Verheij TJM., Wagner C., Zwart DLM. Effects of patient safety culture interventions on incident reporting in general practice: A cluster randomized trial. *Br J Gen Pract*. 2015;65(634):e319-29, doi: 10.3399/bjgp15X684853.
 13. Jafree SR., Zakar R., Zakar MZ., Fischer F. Nurse perceptions of organizational culture and its association with the culture of error reporting: A case of public sector hospitals in Pakistan Health systems and services in low and middle-income settings. *BMC Health Serv Res*. 2016;16(1):1-13, doi: 10.1186/s12913-015-1252-y.
 14. Jafree SR., Zakar R., Zakar MZ., Fischer F. Assessing the patient safety culture and ward error reporting in public sector hospitals of Pakistan. *Saf Heal*. 2017;3(1):4-11, doi: 10.1186/s40886-017-0061-x.
 15. Kagan I., Barnoy S. Organizational safety culture and medical error reporting by Israeli nurses. *J Nurs Scholarsh*. 2013;45(3):273-80, doi: 10.1111/jnu.12026.
 16. Alzahrani N., Jones R., Abdel-Latif ME. Attitudes of doctors and nurses toward patient safety within emergency departments of two Saudi Arabian hospitals. *BMC Health Serv Res*. 2018;18(1):1-7, doi: 10.1186/s12913-018-3542-7.
 17. Rashed A., Hamdan M. Physicians' and Nurses' Perceptions of and Attitudes Toward Incident Reporting in Palestinian Hospitals. *J Patient Saf*. 2019;15(3):212-7, doi: 10.1097/PTS.0000000000000218.
 18. Lee YH., Yang CC., Chen TT. Barriers to incident-reporting behavior among nursing staff: A study based on the theory of planned behavior. *J Manag Organ*. 2015;22(1):1-18, doi: 10.1017/jmo.2015.8.
 19. Singla AK., Kitch BT., Weissman JS., Campbell EG. Assessing patient safety culture: A review and synthesis of the measurement tools. *J Patient Saf*. 2006;2(3):105-15, doi: 10.1097/01.jps.0000235388.39149.5a.
 20. Evans SM., Berry JG., Smith BJ., Esterman A., Selim P., O'Shaughnessy J., et al. Attitudes and barriers to incident reporting: A collaborative hospital study. *Qual Saf Heal Care*. 2006;15(1):39-43, doi: 10.1136/qshc.2004.012559.