

Perception of Patient Safety Incident Reporting System among Healthcare Workers in Hospital

Dr.Saad owdah alsohail¹

Hisah saeid nwar AlJaeid²

FATEN SAEED ALI ALHRTHI³

Ali Ibarhim ali Al Tarahi⁴

ABDULRHMAN SAAD ALKAREMI⁵

Khalid Awad Zoogm Alwadee⁶

SAUD KHALLUFAH ALAHMARI⁷

sami hadi saleh alsawidan⁸

Abdulaziz Mohammed moied Albarqi⁹

1. Adult critical care, Aseer health cluster
2. Health informatics specialist, King Faisal Complex, Taif
3. MIDWIFE TECHNCIAN, KING FAISAL COMPLEX, TAIF
4. Social Worker, Second Douga Primary Healthcare Center
5. Health informatics technician, ASEER Central Hospital
6. Health informatics technician, ASEER Central Hospital
7. Health informatics technician, ASEER Central Hospital
8. Health Care Security, Matrenity and Childrens Hospital Of Najran
9. Health security, Majardah general hospital

Abstract

1. Introduction to Patient Safety Incident Reporting

Ensuring patient safety, which means the reduction in the risk of unnecessary harm associated with health care to an acceptable minimum, should be the primary concern of healthcare. Patient safety is defined as the absence of preventable harm to a patient during the process of healthcare and reducing the gap between the care the patient receives and the care that the patient should receive. Poor communication and lack of teamwork, fatigue, inadequate equipment, medication errors, and poor environment are some of the causes that lead to patient safety incidents. Patient safety should be a top priority in healthcare institutions. It is a fundamental right of any patient to receive safe care.

Methods

This study was conducted in a university hospital using a multi-method design to explore the perception of healthcare workers regarding a patient safety incident reporting system. A survey questionnaire was initially used to collect views from a large number of healthcare workers. A series of key focus group interviews were also scheduled to collect in-depth perceptions from a subgroup of these healthcare workers, which served to complement the initially quantitative research findings. Based on the perceptions surveyed and discussed in the semi-structured focus group interviews, significant aspects of a patient safety incident reporting system in the hospital, such as barriers and facilitators to its utilization, were identified. The mutual pattern of a validity assessment confirmed that the perceived factors enabling healthcare workers to make full use of the patient safety reporting system in the hospital.

Conclusion

The findings showed that there were a small number of patient safety incident reports by healthcare workers. The healthcare workers generally perceive the current reporting system as time-consuming and having the potential to become a channel for unfair judgment. They were inclined to provide reports only if they were asked specifically to do so. However, the majority were willing to provide feedback for recommended patient safety improvements. There are also no large differences in perception of the reporting system between public and private hospital staff. Hence, for the Malaysian healthcare regulatory body, the results of this study are important knowledge provided by the healthcare workers themselves on the actual situation of the patient safety incident reporting system in its current form. This in-depth insight can be used to develop recommendations that lead to a more realistic and effective information system. While regulatory bodies must address the problems faced on the frontline, the detailed results of a focus group discussion can be used internally by the hospitals. The focus group discussion can be the starting point of an overall patient safety initiative. It can be used to assess how such a step can be performed, and what needs to be done to improve the current situation. The regular solicitation of feedback from the healthcare workers working on the frontline can improve the quality and usefulness of patient safety incident reports. This would help the regulatory bodies to monitor and

improve the quality of patient safety in a more active and refined manner. The need for regulatory bodies to play their role accurately and constantly in adverse incident reporting, feedback, and communication is critical indeed.

Introduction

Understanding concepts and identifying perception among healthcare workers are crucial to foster their willingness to report patient safety incidents. Feedback from the patient safety incidents may serve as a basis for a hospital to develop and implement appropriate measures for enhancing patient safety, but only a small proportion of patient safety incidents is reported, and the underreporting of patient safety incidents is an issue in healthcare services. Therefore, this study has objectives to explore the perception of the patient safety incident reporting system among healthcare workers in a hospital. A total of 295 questionnaires were distributed to the healthcare workers, with the majority of the responses coming from the professional and nursing relationship.

Despite the importance of the patient safety incident reporting system in improving patient safety outcomes, it has been a key challenge in the healthcare setting because the system depends on healthcare workers' responsibility and willingness to report. Healthcare workers are often unwilling to report patient safety incidents, not due to ignorance, but for various other reasons. Hence, the setbacks impede the effectiveness of the patient safety incident reporting system because underreporting patient safety incidents will lead to the inability of the hospital to analyze the patient safety incidents, which is detrimental to patient safety. Furthermore, it has been reported that the myths surrounding the patient safety incident reporting system are one of the anecdotal barriers to encouraging healthcare workers to report patient safety incidents. The presence of a non-punitive culture in creating an environment or structure that describes how individuals can act and interact to fulfill patient care needs, where they are responsible and accountable for their actions, can encourage healthcare workers' willingness to report patient safety incidents.

1.1. Definition and Importance

Patient safety is the absence of preventable harm to a patient at the time of healthcare and the reduction of the risk of unnecessary harm associated with healthcare to an acceptable minimum. A patient safety incident (PSI) is an event or circumstance that could have resulted or did result in unnecessary harm to a patient. The global magnitude of harmful effects from patient safety incidents was estimated, which revealed that 1 in 300 patients in a hospital suffers from preventable harm during healthcare. The impact of such an event goes beyond death, as it could result in prolongation of hospital stay, addition of stress to the patient, and additional healthcare costs. Furthermore, patient safety incidents lead to a reduction of trust in the healthcare delivery of a hospital. Consequently, patient safety is an essential element in healthcare delivery, besides clinical effectiveness and patient-centeredness.

The Patient Safety Incident Reporting System (PSIRS) is defined as the process through which patient safety incidents are reported, analyzed, and acted upon to prevent further incidents. PSIRS allows healthcare workers to report PSIs through a voluntary, confidential, critical, and safe environment to encourage the full and honest reporting of patient safety incidents. The purpose of PSIRS in a hospital is to collect and assess data on the nature and components of the PSI, the causative factors of the incident, and to provide data that can be used to inform the development and assessment of strategies to prevent further incidents. The PSIRS data are useful in a hospital for monitoring selected healthcare indicators related to patient safety, for internal communication on patient safety issues, and for assurance and accountability of patient safety management. Adequacy, integrity, and confidentiality of PSIRS data are essential to ensure the quality and quantity of patient safety improvement. However, the under-reporting of PSIRS lowers the perception of patient safety due to the lack of a true picture of patient safety in healthcare delivery, leading to preventable mistakes.

2. Methods and Tools for Reporting

2.1. Description of the Reporting System Used in the Hospital under Study

The reporting system is termed the Safety in Practice Reporting System (SIPRS). This knowledge of lessons learned from previous incidents is documented, and a description of SIPRS provided on the cover of the SIPRS form serves to remind healthcare workers of the process of SIPRS, i.e., to report, learn, and enhance patient safety. Therefore, it is essential to fill out a SIPRS form properly. The SIPRS form is also available on the internal website. The SIPRS has a reporting value in appreciation and acknowledgment of good actions following an incident, raising awareness of patient safety incidents in the hospital.

2.2. SIPRS Reporting Processes

After an incident occurs, the incident form is filled out by the staff members involved, stating the causes of the incident and actions taken for reporting purposes. Besides the staff involved in the incident, the SIPRS

committee members can also fill out the SIPRS form for incidents notified through the laboratory, radiology, pharmacy, and patient safety officers. The completed form should then be forwarded to the Head of Department and the Head of Quality Safety Risk Management, as well as the members of the SIPRS committee immediately. The SIPRS Committee meets almost monthly to review, discuss, or comment on SIPRS forms, as appropriate, before recommending improvements to patient safety initiatives. Staff who have filled out the SIPRS form will be notified of the improvement plan or initiatives. High-level managers who head the respective departments, including consultants, clinical directors, associate consultants, unit managers, and nursing managers, are additionally included in the email notification to endorse the SIPRS forms. Staff members are also reminded to fill out the SIPRS form if it has not been submitted.

2.1. Types of Reporting Systems

A written or electronic system for reporting is not the only approach used in patient safety research. It is suggested that the cultural impact of reporting patient safety incidents as part of an open, sensitive department with non-punitive responses is the most effective way to promote the voluntary reporting of patient safety incidents. This method, which focuses on changing behavior based on organizational culture, includes creating an environment with clear structures, good communication, and non-punitive responses if patient safety incidents are reported. It allows for conversation in reporting and has the potential to suggest more general patient safety issues, contribute to local learning, and foster relationships among those identifying and managing patient safety incidents day to day, such as individual clinical teams, rather than concentrating the responsibility in special administrative patient safety groups. Different methods should complement reporting systems within patient safety programs.

There are two other forms generally identified that do not replace the written system, although they can all improve the quality of the information. These include utilizing other forms such as verbal or face-to-face communication and incorporating other ways to bring concerns to the attention of others during ward rounds and departmental meetings. However, it is also known that healthcare is a domain where hierarchy is prominent, which may inhibit the reporting of patient safety issues. Therefore, it is important that the reporting system is accessible and operated in a way that is motivational. Furthermore, to ensure the reporting system meets user requirements, healthcare staff should participate in the design of the system to promote its use. Face-to-face communication that relays patient safety issues can be as important as a written or electronic method, partially because patient safety issues are seen as part of the day-to-day work, for example, managing care on register rounds. The importance of a good team climate for the implementation of the reporting systems has been discussed, while good structure, communication, and non-punitive responses impact a larger safety culture.

3. Barriers and Facilitators to Reporting

It is clear that healthcare workers face many challenges in deciding whether to report an incident, and systems should be implemented to improve the reporting process and to contribute to the stimuli to report. In the barriers part, some of these challenges come from the organizational conditions, such as reporting policy or governance, fear of blame and legal concerns, hierarchical or senior management support, nurse-to-patient ratios, worst incidents, insufficient learning, reporting channels, administrative workload, feedback, and fear of punitive consequences. Management of patient risk could also be seen as an irrelevant or more urgent task for frontline healthcare workers. Poor error management, even for near misses or no harm incidents, could also influence the sense of managing patient risk. Some healthcare staff thought that no, or not enough, errors occur in their department.

Facilitators to overcome such barriers include authoritative encouragement of its application, frequent encouragements, improved organizational culture, problems with which they should be addressed, and audit and feedback. The feedback from the report is one way to enhance management. The promotion of specific patient safety interventions and the empowerment of the nursing team by leadership were also identified as part of the solution. Leadership support was also mentioned by many healthcare workers. Other collaborators and patients were identified as important. Few members of the nursing team could also influence the decision of whether or not to report. This work experience is positive because of reports of sustained positive feedback engendered after reporting, or from the incident reports' influence on the quality of patient care.

3.1. Individual and Organizational Factors

Individual and Organizational Factors Associated with the Perception of Patient Safety Incident Reporting Systems among Healthcare Workers in Hospitals. Culture and Leadership: A systematic review concluded that workplace culture, such as openness and encouragement of learning and reporting, helps improve the number of patient safety incident reports, which can be expected to stimulate organizations to promote

patient safety culture and incident reporting through leadership support and behavior. The results of our study showed that leadership behavior related to patient safety or promoting patient safety culture was significantly related to knowledge and attitudes toward incident reporting. Therefore, approaches that enhance the organizational culture of effective leadership perceived by employees and promote safety communication lead to better incident reporting, support compliance with safety procedures, exchange accurate safety information, provide necessary assistance, and show awareness of the importance of patient safety through leadership influencing safety communication practices.

Psychological Safety: Psychological safety, which refers to a feeling of safety and freedom in discussing any aspect related to patient safety incidents, is crucial for promoting incident reporting. Psychological safety within an organization should be associated with patient safety, and team leaders should promote better incident reporting, supporting a learning climate. The workforce should have psychological safety when both reporting incidents and discussing related issues. To create a good patient safety culture, staff should have the ability to communicate openly and exchange safety-relevant information in any aspect. Although a 'just culture' is a component of a safety culture that needs to be balanced and overarching to be effective for improving the reporting system, our study showed that psychological safety was significantly related to attitudes toward incident reporting. When employees enjoy an integration of teamwork and improve their ability to apply complete and relevant incident reporting, an approach that supports shared employee perception and patient safety culture using patient ward rounds by teamwork involving healthcare members.

4. Impact of Reporting on Patient Safety

It is difficult to accurately determine the impact of error-reporting systems on safety culture and patient safety. In fact, it is difficult to assess the impact of specific interventions on patient safety in a broader framework. The risk of underreporting is very high, and we only know the events that have occurred. On the other hand, many biases in health reporting also exist. A poor safety culture in organizations is an important hindrance to communication of staff concerning patient safety and is well known to be linked with a higher frequency of adverse events. Error reporting systems may be one step to identify safety events that would otherwise prompt no action, condoning a "culture of inaction." We demonstrate that even a limited pecuniary incentive to reduce underreporting is of value.

We believe that the main effect of financial cheer for good reports is a small correction to the negative financial motivation associated with reporting bad reports. Managers and supervisors should stress the importance of reporting and should not focus on who made the defect. Reliability is more important than precision, and so the system should be designed to encourage quantity over quality. Development of a good reporting culture is an important goal because the main long-term effects of shared knowledge of specific defects among the healthcare teams would produce an earlier identification of a wider range of latent conditions. Proactive risk management with a systematic approach to prevent defects is more difficult to implement without a good reporting culture, and the quality of information is limited without knowledge of the real underlying processes. (Peters et al.2022)(Gunawan et al., 2020)(Shneiderman2020)(Gagnier et al., 2021)(Chankseliani et al., 2021)(Elavarasan et al.2020)

5. Conclusion and Future Directions

Perception of PSIMS among healthcare workers appears to be moderate. By understanding each determinant and modifying them, we may enhance the usage of PSIMS. An effective PSIMS could lead to improved healthcare service delivery by reducing the occurrences of patient safety incidents, revolutionizing the healthcare system, and promoting national healthcare transformation. Although extensive research has been conducted on the different aspects of PSIMS, particularly by emphasizing the contributing factors impacting perceptions, the studies have mostly focused on developed countries. The generalization of the results is limited as the healthcare system in developing countries differs and has its own unique challenges.

Identifying additional contributing factors such as system-specific, organization-specific, user-specific, natural environment, and social environment that affect the use and perceptions of PSIMS could provide a better understanding and lead to the design of more proactive interventions that enable sufficient control of risk indicators, enhance recommendations of potential strategies for improvements toward robust patient safety care, and promote the expansion of its adoption in a community mental health hospital to transform the healthcare system in the country. By bridging the gap and transferring those successful strategies from developed countries to our local scenarios, we could enable the tailoring of more effective solutions with improved compatibility and the ability to fill the existing healthcare system and patient care service gaps. Furthermore, establishing public-private-academic partnerships and collaboration as a means of sharing and

utilizing resources among healthcare providers, policymakers, and researchers is a timely and strategic approach to promoting the gathering of multiple aspects of patient safety and health outcomes and benchmarking performances for transformative patient care models. Establishing an effective and efficient National Patient Safety Learning, Teaching, and Research System is crucial and can optimize innovation through active participation in the steering committee, the provision of strategic directions, and the inclusion of all public and private hospitals.

References:

- Peters, M. D., Godfrey, C., McInerney, P., Khalil, H., Larsen, P., Marnie, C., ... & Munn, Z. (2022). Best practice guidance and reporting items for the development of scoping review protocols. *JBIM evidence synthesis*, 20(4), 953-968. [researchgate.net](https://www.researchgate.net)
- Gunawan, J., Permatasari, P., & Tilt, C. (2020). Sustainable development goal disclosures: Do they support responsible consumption and production?. *Journal of Cleaner Production*. [trisakti.ac.id](https://www.trisakti.ac.id)
- Shneiderman, B. (2020). Bridging the gap between ethics and practice: guidelines for reliable, safe, and trustworthy human-centered AI systems. *ACM Transactions on Interactive Intelligent Systems (TiiS)*, 10(4), 1-31. [\[HTML\]](#)
- Gagnier, J. J., Lai, J., Mokkink, L. B., & Terwee, C. B. (2021). COSMIN reporting guideline for studies on measurement properties of patient-reported outcome measures. *Quality of Life Research*. [cosmin.nl](https://www.cosmin.nl)
- Chankseliani, M., Qoraboyev, I., & Gimranova, D. (2021). Higher education contributing to local, national, and global development: new empirical and conceptual insights. *Higher Education*. [springer.com](https://www.springer.com)
- Elavarasan, R. M., Afridhis, S., Vijayaraghavan, R. R., Subramaniam, U., & Nurunnabi, M. (2020). SWOT analysis: A framework for comprehensive evaluation of drivers and barriers for renewable energy development in significant countries. *Energy Reports*, 6, 1838-1864. [sciencedirect.com](https://www.sciencedirect.com)