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NURSES' BARRIERS TO INCIDENT REPORTING IN PATIENT SAFETY CULTURE: A LITERATURE REVIEW

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ABSTRACT

Patient safety culture becomes the responsibility of every health care provider, but there are still barriers to reduce adverse events, and one of them is due to the barriers to incident reporting. This study obtained and used the databases from ProQuest, Science Direct, SAGE Publications, and EBSCOhost. The inclusion criteria were nurses and other health care providers as the sample population, barriers, factors, reporting, patient safety culture, adverse events, nurses' perception, implication, and experience. Four electronic databases were searched for data from 2016 to 2020 with English guidelines and full-text search assessed for the inclusion criteria. Fourteen articles fulfilled the inclusion criteria. The study found various barrier factors in incident reporting, including psychological problems and emotional reactions, such as shame, guilt, fatigue due to overwork, patient-nurse ratio, increased workload, insufficient time to respond the patients, lack of professionalism, medication errors, lack of resources and staff, and lack of feedback for error reporting. Personal and professional support for nurses or other health care providers is required to encourage error reporting without feeling guilty and ashamed to colleagues or feeling fearful of the supervisor in order to obtain more accurate data and improve the process that support patient safety and nurses' self-awareness.

Keywords: nurses' barriers; patient safety culture; reporting

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INTRODUCTION

One effort to improve the quality of health services is patient safety culture. Surveys showed that among the problems of patient safety culture is the culture of incident reporting. A study of 70 participants in a private hospital in Turkey in 2016 found a persistent problem of reporting culture (Kilic et al., 2017). To date, patient safety culture remains an important issue in the effort to improve service quality (Alquwez et al., 2018). Research on 554 nurses in Turkey indicated that they perceived no culture of reporting (Güneş et al., 2016). Meanwhile, a study in China showed an increase by less than 50% in the frequency of incident reports and non-punitive responses to errors, and such improvement could reduce adverse events although the rate remained below expectations. This shows that improved patient safety culture is associated with decreased adverse events (Wang et al., 2014).

Research conducted through interviews with 33 officials of Indonesian organizations, including government organizations, professional organizations, public hospitals, and independent institutions, revealed that non-punitive culture has not been fully implemented (< 100%) at either local or national level (Dhamanti et al., 2019). There

were in fact conflicts of interest, particularly those related to the human resource department which required disciplinary sanctions. Furthermore, there was increasing demand for a non-punitive system, confidentiality, expert analysis, and reporting time, while the regulations, policies, and guidelines in Indonesia have yet to meet the requirements of WHO incident reporting characteristics, and the system for patient safety incident reporting in Indonesia has not fully complied with the WHO guidelines (Dhamanti et al., 2019).

Voluntary reporting is more frequently used as a tool to identify adverse events and errors (Heavner & Siner, 2015). The National Reporting and Learning System (NRLS) stated that the increasing number of reported incidents indicates an improvement in the reporting culture and should not be interpreted as a decrease. Meanwhile, as a health care provider, more nurses identified adverse events and medication-related incidents in their reports to treatment (Heavner & Siner, 2015).

A study of 121 nurses in Surabaya found a number of influencing factors in incident reporting, such as rewards, training, and feedback, as well as non-influencing factors, including knowledge and motivation (Jenita et al., 2019). Reporting is done when problems remained unresolved, but those in East Java were likely to be underreported when they inflicted no injuries to the patient due to nurses' lack of understanding of such incidents as near misses and unsafe conditions (Jenita et al., 2019). The abovementioned explanation highlights the importance of reviewing the barriers to incident reporting in hospital. This study therefore aimed to identify nurses' barriers in reporting in relation to patient safety culture. The research adopted a literature review approach with an observation method used for the article results.

METHOD

Search strategies

This research employed four databases consisting of ProQuest, Science Direct, Sage Publications, and EBSCO host. The keywords were barriers to nurse OR obstacles to nurses' reporting AND patient safety culture OR adverse events. Four electronic databases were searched for the texts written within the period of 2016-2020.

Inclusion criteria

The inclusion criteria consisted of nurses as the sample population, barriers, factors, reporting, patient safety culture, adverse events, nurses' perception, implication, and experience.

Search outcome

In the first stage, 124 titles were found with 4 duplications. The titles and abstracts were then selected for the full-text articles, and 22 articles were finally processed.

Quality appraisal

The reviewer read 14 selected articles. In the synthesis stage, the article inputs and eliminations were based on the inclusion criteria by taking into account the research subjects. The main variables, design and methods, and research samples were then identified. Each article was identified for the whole content, starting from the abstract,

identification of nurses' internal as well as external barriers to reporting, up to the conclusion (Table 1).

Table 1.
Characteristics of the study

Author(s), year of publication, country	Design & methods	Main variables	Sample size
(Choi *et al.*, 2019) Seoul, Republic of Korea	A qualitative study	Nurses' perception of the disclosure of patient safety incidents (DPSI)	20 participants
(Khoshakhlagh *et al.*, 2019), Tehran, Iran	A cross-sectional study	Factors in patient safety culture	1,203 health workers
(Lee *et al.*, 2019) Ulsan, Republic of Korea	A qualitative study	Experience in responding to patient safety incidents	16 healthcare professionals (six physicians, eight nurses, and two pharmacists)
(Gao *et al.*, 2019) China	An observational study	Implication of patient safety incidents reporting system	nurses, physicians, medical technologists
(Askarian *et al.*, 2020), Iran	A cross-sectional self-administered questionnaire	Non-reporting	283 participants, including 151 nurses, 77 physicians, and 55 medical students
(Boussat *et al.*, 2018) France	A cross-sectional survey and a qualitative study	Understanding of patient safety culture	5,064 employees including nurses, physicians, and other healthcare providers
(Farokhzadian *et al.*, 2018), Iran	A qualitative study, semi-structured design	Nurses' perception	23 nurses
(Kim *et al.*, 2020) Republic of Korea	A cross-sectional survey	Open disclosure of patient safety incidents	389 nurses
(Peyrovi *et al.*, 2016), Iran	A descriptive qualitative analysis design	Barriers to reporting nursing errors	16 nurses
(Soydemir *et al.*, 2017), Turkey	A descriptive qualitative design	Barriers to medical errors	15 nurses and 8 physicians
(Zarea *et al.*, 2018) Iran	A cross-sectional descriptive analytical study	Factors affecting the incidence of medicinal errors.	225 nurses
(Ayorinde and Alabi, 2019), Nigeria	A quantitative descriptive design	Nurses' perception and factors of medication errors	300 nurses
(Mjadu and Jarvis, 2018) South Africa	A non-experimental quantitative descriptive survey	Registered nurses' attitudes toward critical incident reporting	127 nurses
(Mansouri *et al.*, 2019), Iran	A descriptive analytical study	Barriers to nurses reporting errors	251 nurses

RESULTS

This study found a large number of discussions on the barriers to the implementation of patient safety culture. Research on the Disclosure of Patient Safety Incidents (DPSI) revealed that a closed organizational culture, fear of worsening relationships with patients, and concern about workload were among the barriers to DPSI (Choi et al., 2019). Various opinions from the research participants regarding patient safety incidents indicated heavy workload, insufficient time to respond to patients, and even emotional reactions such as shame, guilt, depression, insomnia, avoidance, and career change consideration (Lee et al., 2019).

Another barrier was the concern that reporting errors was associated with legal issued and concern about being criticized by the supervisor and colleagues (Askarian et al., 2020). Other research found a lack of professionalism as well as resources and staff as the barrier to reporting (Boussat et al., 2018). Other barriers included a lack of commitment, unsupportive management, and non-participatory decision making (Farokhzadian et al., 2018). In addition, failure to improve the quality and clinical risk management system, weak feedback on reporting errors, weak organizational education and learning culture, lacking prevention, gaps in team coordination, and challenging team interaction dynamics also became other barriers (Farokhzadian et al., 2018).

Nurses and doctors did not report the medical errors they experienced due to administrative attitudes, systems, and staff's perception (Soydemir et al., 2017). Other barriers were overwork-related fatigue, limited time for drug administration, nurses' psychological problems, lack of pharmacological knowledge, environmental factors, increased workload, large number of critically-ill patients, crowd and noise in the environment, managerial factors, high ratio of patient to nurse, and ignorance about medication orders (Zarea et al., 2018). Another barrier was shown as a negative impact of work shifts due to work fatigue (Khoshakhlagh et al., 2019).

Other barriers found in the studies were caused by medication errors, patient-nurse ratio, increased workload, fatigue, fear of legal issues, fear of spreading hoaxes, and embarrassment (Zarea et al., 2018). Another study found the barriers as errors in drug administration, doctors' poor communicative skills, and poor reporting systems (Ayorinde & Alabi, 2019). Other research also showed such barriers as nurses feeling uncomfortable with incident reporting because of the fear of being blamed or considered anonymous (Mjadu & Jarvis, 2018). In addition, fear, procedures, and management became the barriers to reporting (Mansouri et al., 2019). All of the barriers found could lead to adverse events in patients, such as fall, decubitus/bedsores, and self-injury, most of which were caused by the poor standards of care in addition to patients' condition (Gao et al., 2019).

DISCUSSION

Patient safety culture is the responsibility of health care providers, including nurses, but numerous barriers can persist due to both internal and external factors. Reporting is frequently implemented to improve individual behavior and attitudes in recognizing the improvement in feedback mechanism and process (Heavner and Siner, 2011). Consequently, nurses' self-awareness is required to support reporting as a culture (Martin et al., 2018). In the management of patient safety culture, a manager should be

aware of events in the workplace, thereby encouraging the staff to be confident about reporting near misses without fear (Martin et al., 2018). An effective patient safety culture should be based on positive disclosure, thus allowing nurses to trust and put their trust in patients, which eventually has an impact on developing trust, ethical perception, awareness, and support system (Kim & Lee, 2020). This study found that awareness and ethical perception of patient safety culture are important among the nurses working in hospital (Kim & Lee, 2020).

There are four main barriers to error reporting by nurses working in the critical care unit, such as in Iran, including legal issues and organizational errors, insecure feeling, accusation, and lacking managerial support to investigate the root cause of errors (Peyrovi et al., 2016). Nurses face the barriers to error reporting due to their insecurity, fear of consequences, and effort to maintain a personal and professional reputation. To overcome such barriers, an atmosphere of mutual trust should be built among nurses and nursing managers with prevailing transparency and impartiality (Peyrovi et al., 2016). Barriers to patient safety culture, such as a barrier to reporting, can affect nurses' job satisfaction since the work environment of a staff member is the area which provides job satisfaction (Golle et al., 2018). Essential criteria for team satisfaction are efficient and effective communication between the manager and team members by paying attention to enriching knowledge, understanding team activities, and motivating the members to improve the quality of patient care as well as to reduce adverse events and complications, thereby increasing job satisfaction (Golle et al., 2018). The manager and staff can collectively obtain incident data through benchmarks so as to improve performance and insight into management, training, and how to overcome fatigue (Martin et al., 2018).

A study of response to adverse events in patient safety conducted among 1000 nurses and health care providers in Vietnam found a satisfaction rate of 76% and underdeveloped patient safety conditions, including incident reporting, in which the participants admitted that an incident was not reported to the manager or hospital if they could handle it on their own. The participants stated that the impacts of reporting should be in the form of not only non-punitive reporting but also positive learning and changes, protocol revision, colleague empathy, feedback, and supervision, as a result of patient safety reporting (Harrison et al., 2019). A nursing supervisor should create a supportive environment that allows non-punitive reporting of drug administration errors to initiate preventive actions for future events (Ayorinde & Alabi, 2019). Nurses' barriers to reporting adverse events can come from within the nurses themselves, thus causing internal conflicts, and from the hospital management which lead to external conflicts, thereby discouraging the development of patient safety culture.

CONCLUSION

Policy makers and nursing/health managers should support the patient safety culture managed by the hospital to support and provide security for nurses. Personal and professional support is required by nurses or other health care providers to encourage incident reporting without feeling guilty and ashamed to coworkers or afraid of the manager in order to obtain more accurate data and to improve the process of supporting patient safety and building nurses' self-awareness.

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CONFLICT OF INTEREST STATEMENT
The authors declare the absence of any conflicts of interest.

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