A SYSTEMATIC REVIEW OF FACTORS INFLUENCING NURSES CLINICAL RISK IDENTIFICATION SKILLS: IMPLICATIONS FOR PATIENTS SAFETY

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ABSTRACT

Patient safety is considered an important part of healthcare and also plays an important role in preventing and reducing harm, errors, and injuries that can occur during the care cycle. One way to address this challenge is to develop systematic clinical risk management. This study aims to determine the ability of nurses to identify clinical risks through risk management. The research used was a systematic review using the PRISMA protocol in selecting articles. The results showed 10 articles were identified and published in 2014-2024. All articles studied were indexed by Scopus. The study found two main factors that can affect nurses' ability to identify clinical risks, namely intrinsic and extrinsic factors. The largest factor was found in extrinsic factors which found that effective communication is the main factor that can affect nurses' ability to identify clinical risks in patients in hospitals.

Keywords: Nurses, Nursing abilities, Identification Skills, Clinical Risk, Patient Safety

BACKGROUND

The safety of patients is considered as part important to service health and also plays a role in preventing as well as reducing dangers, mistakes, and injuries that can occur during the cycle process service (Chalenge, 2017). The danger in question is an incident or circumstances that are not can predicted which, if happen, can impact positive or negative to success service (Kimiafar, 2015). One method for overcoming challenges this to develop a management risk systematic clinical. Management risk clinical covers all structures, processes, instruments, and activities that make things easier for House Sick in identifying, analyzing, containing, and managing risk while giving maintenance clinical. Management effective risk is considered very important Because considered can increase Hospital image (Singh, 2012).

According to National Patient Safety Agency report (2017), UK recorded 1,879,822 incidents safety patients, while in Indonesia, KKPRS described 877 incidents Not Expected (KTD) between 2006-2011 (Galleryzki, 2021). WHO stated that every year happen around 134 million incident injuries in income countries low-medium, where about 50% are related with surgery (27%), error treatment (18.3%), and infection-related service health

(HAIS) (12.2%). KKP-RS reported enhancement significant in incident safety patients in Indonesia in the period January-April 2011, with error action or procedures and medications take notes incident the largest, respectively 9.26 %.

More further, kind incident Incident Almost Injury (KNC) reported higher (18.53%) than Incident No Suspected (KTD) (14.41%), with 2.6 % resulting events death (Sutejo, 2021). According to Suparna, (2015) incidents related to the safety of patients the more widespread and enter the realm of law even until to court (Suparna, 2015). The reality is that in the hospital there are dozens even hundreds of types of medicine, hundreds of procedures, there are Lots of patients, lots of them working profession, as well as lots a system that has enormous potential for happen errors. So, nurses are required to own various mandatory competencies mastered in giving care nursing to patients. Competence nurse must be very broad, encompassing practice professional, ethical, legal, sensitive culture, gift care, management care nursing, and development of personal and professional qualities (Puspitasari, 2018).

Several phenomena related ability of nurses to identify risks and their impact on the safety of patients were found, as did Thompson et al., (2012) that several nurse good nurse new nor nurse experienced tend No can separate and identify risk clinical in the environment work they (Thompson, 2012).

Research conducted by identified connection competencies possessed nurse to reduction in ventilator-associated pneumonia in patients (Yonghee, 2020). In the study latest carried out by they found that reporting incident error Work is Still high, which is an error giving drug occupy ranking First in incidents (Goekcimen et al., 2023). Similar results in research assesses that the ability of clinical nurses in a way whole is low one in field system safety patients and knowledge treatment (Willman, A. (2020). Besides this, assess the score ability of safety nurses in China with associate degrees and them get score levels currently Yan, and Lupei (2021). Found a correlation positive between ability safety and dimensions of Work teamwork, security psychology, leadership, communication, mutual support, monitoring situation, and structure team Aghil (2022). Found that the night shift in between nurses' terrible emergency at home Korean pain has an impact negative to ability safety and correlates positively and significantly with amount years of experience in the emergency unit emergency and the amount incident bad reported by others (Han, and Jee Hye, 2020).

Based on the gap in levels of ability identified by nurses from backgrounds behind there is extensive complexity in the ability of nurses To identify risky clinical conditions and the factors that influence them. Study more carry on required For explore underlying factors gap This is for understanding We about dynamics This can deepened. So the study aims to know the ability of nurses to identify risk clinical through management risk**.**

Overview

Patient safety is described as a collaborative effort by healthcare providers in an integrated system to prevent medical errors or avoidable injuries to protect patients. According to the WHO report, 134 million injuries occur annually in low-middle income countries, with 2.6 million deaths, but 50% of

injuries are preventable. WHO defines the concept of effective coverage referring to UHC as an approach to achieve better health outcomes and ensure that quality of care prioritises patient safety. Therefore, WHO established patient safety as a global health priority.

As a labour-intensive, capital-intensive, technology-intensive, and problem-intensive place with various procedures, professions, and standards, hospitals are the most vulnerable places for patient safety incidents. A patient safety incident is any unintentional event that can result or may result in preventable patient harm. According to Permenkes RI Number 1691 Year 2011, the types of patient safety incidents consist of Unexpected Events (KTD), Nearly Injured Events (KNC), Non-Injury Events (KTC), and Potential Injury Events (KPC). As a result of the occurrence of incidents in these patients can result in injury, life endangerment, prolongation of care, and even death (Permenkes, 2011).

Nurses in implementing patient safety are influenced by internal and external factors. Internal factors are the innate characteristics of nurses identified in the form of intelligence level, emotional level, and personal experience. External factors that influence nurses' behaviour are the environment such as the influence of other people who are considered important or leadership, culture and organisational systems. This factor is often the dominant factor that colours a person's behaviour. External factors in the form of the influence of others can also lead to nurses' attitudes towards implementing patient safety.

METHODE RESSEARCH

Study This is a study review systematic using the PRISMA protocol in the selection article. Evaluation quality article uses Critical Appraisal Checklist To evaluate the risk of bias in the article selected. Three databases were used in search articles among them Google Scholar, Science Direct, and Pubmed with enter keywords selected from Combined Medical Subject Headings (MeSH). with Boolean operator (Table 1). 4 stages are used in the selection of customized articles with PRISMA Flowchart, including (Figure 1):

Table 1. Keywords

Nurse		Abilities		Clinical Risk		Health sectors
Nurse	AND	Abilities	AND	Clinical Risk	AND	Health sectors
OR		OR				OR
Registered Nurses	AND	Skills	AND	Patients safety	AND	Hospital

Keywords above Then combined with Boolean operators being (" Nurse " OR "Registered Nurse") AND ("Ability" OR "Skill") AND (" Clinical Risk " OR " Patient Safety ") AND (" Health Sector " OR " Hospital "). The selection of articles is adjusted to the inclusion and exclusion criteria that have been determined through the PICOS Framework.

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Table 2. Inclusion and Exclusion Criteria

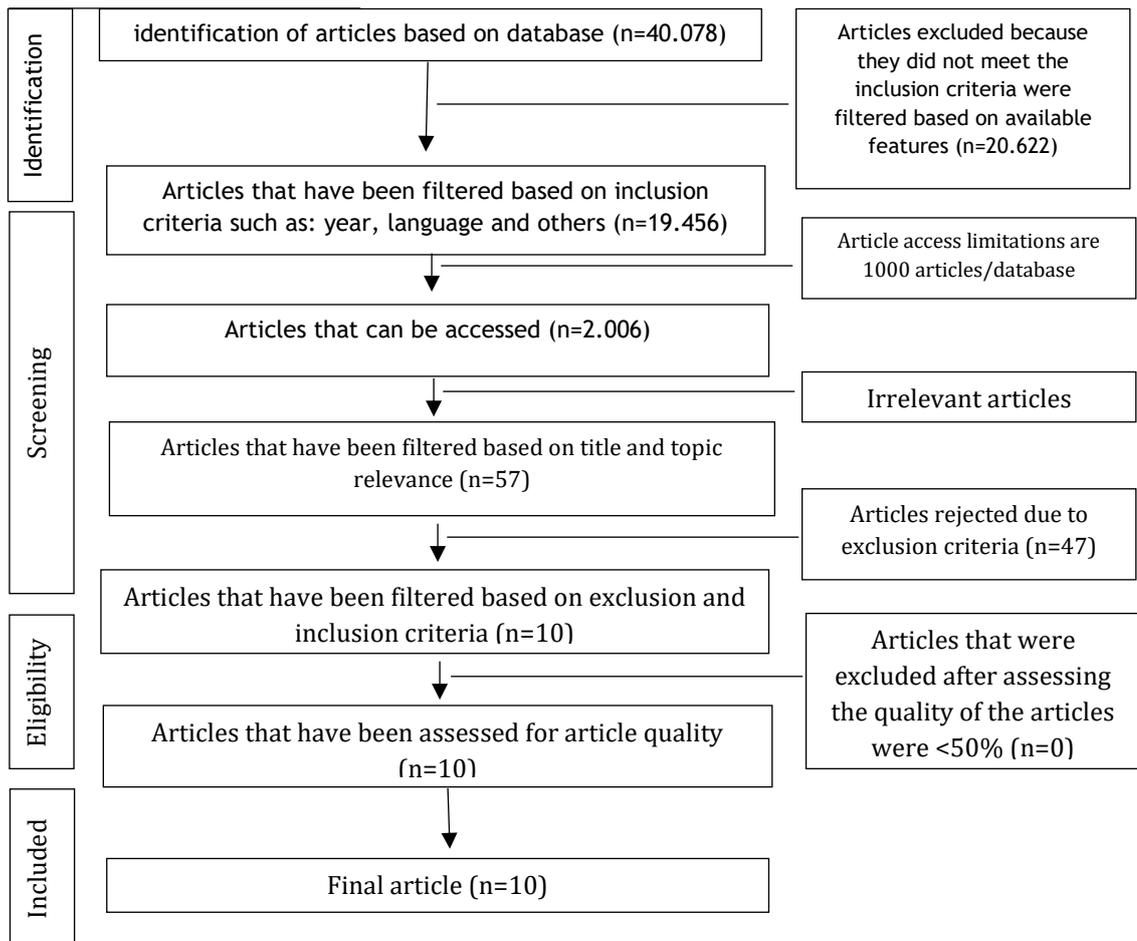| Inclusion	Exclusion
1. Topic study containing One or more influencing factors ability nurse in management risk clinical	1. No discuss possible factors influence ability management risk clinical nurse
2. Study carried out in Indonesia and overseas	2. Research conducted besides At home Sick
3. Article written in English	3. Article written besides language English
4. Articles published from 2014 to 2024	4. Published articles before year 2014
5. Population taken that is nurses working at home Sick	5. Article is not full paper
6. design study quantitative / qualitative / Mixed-Methods Research / experimental / observational / correlational	6. Found articles published in two or more journal (duplicate)
7. Indexed Scopus	7. Research design article use article review.
	8. No indexed Scopus

Figure 1. PRISMA Flowchart

RESULTS RESEARCH

The research results show that 10 articles were identified (Table 2) and published in 2014-2024. However No there are articles published in 2017, 2018, 2021, and 2023. All article studies indexed Scopus with the highest score in a study conducted by Teris Cheung and Paul SF Yip (2015). Following Results of the analysis of 10 articles about influencing factors ability nurses in management risk clinical.

Table 2. Search Results Literature

No	Author [Year]	Results
1	Ammouri, Tailakh, Muliira, Geethakrishnan, Al Kindi [2014]	Findings from this study indicate that in the hospital context, collaboration and communication between care teams are key factors influencing nurses' ability to provide effective and safe care to patients. Patients are often cared for by multidisciplinary teams consisting of a variety of healthcare providers, working in a variety of clinical settings within the hospital. Deficiencies in communication can potentially threaten patient safety and impact the outcomes of care provided.
2	Patricia S. Groves, Kirstin A. Manges, Jill Scott Cawiezell [2016]	The research results found that communication factors during patient handover were crucial in influencing nurses' abilities. Nursing bedside shifts report (NBSR) has been proven to have a positive impact on the recognition of clinical risks to patients. NBSR is a communication method used by nurses to explain the patient's situation during shift changes at the patient's bedside. This allows nurses to identify clinical risks, reduce potential harm, and prevent possible errors.
3	Teris Cheung and Paul SF Yip [2015]	Shift rotation and work pressure are factors that have the potential to influence the sleep quality of nurses. Persistent sleep deprivation can result in serious health problems, which in turn can reduce the effectiveness of nurses' work, threaten the quality of patient care, and affect overall treatment outcomes. Poor physical and mental health in nurses can interfere with their ability to assess and manage clinical risks that may arise during the care process.
4	Sookhee Yoon Taewha Lee [2022]	The results of this study indicate that military nurses' ability to identify patient safety events is influenced by several factors, both direct and indirect. These factors include organizational aspects, such as safety climate and equitable culture, as well as individual factors, such as knowledge of patient safety. This research confirms that organizational factors have a greater contribution to the process of

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No	Penulis	Hasil
		identifying patient safety events by nurses than individual factors.
5	Margit Lappalainen, Marja H€ark€anen, Tarja Kvist [2019]	transformational leadership style had a moderate but statistically significant correlation with treatment safety. In addition, nurse medication competency and nursing process management are also significantly related to medication safety. This indicates that the leadership style applied can influence the level of medication safety in patients, with errors in medication being a clinical risk that must be minimized as much as possible.
6	Yonghee Han, Ji-Su Kim, and YeJi Seo [2020]	In this research, the aspect that has a dominant influence on nurses' abilities is communication. It was found that patient safety culture was significantly associated with reduced rates of clinical risk events, along with higher levels of communication in the workplace. This study underscores the importance of a good hospital cultural structure in reducing clinical risks for patients. In addition, other findings highlight that nurses' competence in identifying hazards also has a positive impact in reducing undesirable events.
7.	Jee -in hwang, Sung wan kim, Ho jun chin [2019]	The results showed that nurses' PCC, teamwork, and safety climate had a positive impact on patient participation in hospital practices. Specifically, PCC nurses and wards work was significantly associated with patient participation. This emphasizes the importance of nurses' ability to provide patient-focused care and create a safe work environment to increase patient participation in patient safety efforts.
8.	Judith Johnson, Gemma Louch, Alice Dunning, Olivia Johnson, Angela Grange, Caroline Reynolds, Louise Hall, And Jane O'hara [2016]	The results showed that depressive symptoms and levels of fatigue were associated with nurses' ability to identify clinical risks, highlighting the importance of nurses' well-being in improving patient safety and reducing clinical risks in hospitals. This shows that efforts to improve the mental and physical well-being of nurses can directly support improving the quality of care provided to patients.
9.	Miho Saiga, Yoko Yamamoto, Reiko Okuda and Mika Fukada [2024]	Based on research, nurses with 3-5 years and 6-10 years of experience provide a higher assessment of clinical nursing competency compared to those with 2 years of experience. The 6-10 year group felt more confident in their clinical assessment and care coordination abilities. Research also finds a positive relationship between clinical nursing competency and a supportive work environment, such as good interpersonal

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		relationships and support from superiors and senior colleagues. Support systems that facilitate taking time off to care for children also play a role.
10	Marja Harkanen, Jouni Ahonen, Marjo Kervinen, Hannele Turunen, Katri Vehvilainen-Julkunen [2015]	The research results found that in the process of identifying clinical risks that occurred during treatment, potential problems were found related to drug handling and training needs for nurses. The researchers explained that there was a correlation between errors in treatment and poor quality communication, lack of knowledge, and lack of support from colleagues. Therefore, variables-variables the can influential to level ability nurse.

CONCLUSSION

This research found two main factors that can influence nurses' ability to identify clinical risks, including intrinsic and extrinsic factors. The biggest factor was found to be extrinsic factors which found that effective communication was the main factor that could influence nurses' ability to identify clinical risks in patients in hospitals.

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