An Overview of the Literature on Patient Safety Culture

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ABSTRACT

The prevention of errors and negative consequences on patients associated with health care is referred to as patient safety. Healthcare has become more complex as new technologies, drugs, and treatments have become more widely available. Every year, 134 million adverse events occur in hospitals in low- and middle-income countries (LMICs), resulting in 2.6 million deaths worldwide. Many medical practices and healthcare risks are emerging as critical issues for patient safety, significantly increasing the burden of harm caused by unsafe care. There are numerous predictors, including safety and risk management, medication errors, fall risks, unsafe surgical care procedures, diagnostic errors, hospital-acquired infections, and diagnostic errors, all of which pose a risk to patient safety measures. The role of a nurse surrounds the complete analysis of the solemn issue associated with the well-being and safety culture. Nurses contribute to patient safety by remaining at patients' bedsides and interacting with their families and other healthcare professionals.

Keywords: *"Patient safety, risk management, medical errors, fall risks, unsafe practices.*

BACKGROUND

The avoidance of errors and harmful repercussions on patients related to health care is referred to as patient safety. Healthcare has gotten more complex as new technology, medications, and treatments have been more readily available and as well as more effective [1]. The emergence of poor outcomes as a consequence of hazardous care is likely one of the world's top 10 causes of mortality and disability. It is estimated that one out of every ten patients in high-income nations is harmed while obtaining hospital care. Furthermore, each year, 134 million harmful events take place in hospitals in low-to-middle-income countries (LMICs) as a result of inadequate care, culminating in 2.6 million fatalities [2]. Unfavorable occurrences can be destructive in a variety of ways, with around half of them producing harm [3].

Patient safety is essential for providing high-quality essential health services [4]. Indeed, there is a universal consensus that exceptional health care ought to be efficient, safe, and patient-centered [5]. Furthermore, for the potential benefits of high-quality care to be realized, health services must be accessible, affordable, coordinated, and effective [6].

A competent health system considers the growing number of medical facilities, making a person increasingly vulnerable to errors [7, 8]. Making mistakes is natural, and expecting outstanding performances from individuals working in complicated, high-stress circumstances is impractical [9]. Assuming that individual perfection is feasible will not promote safety. When humans are put in an error-proof workplace with well-designed structures,

responsibilities, and processes, they are safeguarded from making errors [10]. As a result, concentrating on the system that permits damage to occur is the initial move toward transformation, which can only happen in an open, transparent, and safe atmosphere.

SEARCH APPROACH

The scoping review for this article began with the creation of a component outline for the literature review, which influenced the keywords used in search databases. "Patient Safety Culture", "Patient Safety", "Patient Bill of Rights", "Patient Safety Measures", "Risk of Fall", "Safety and Risk Management", "Medication Error",
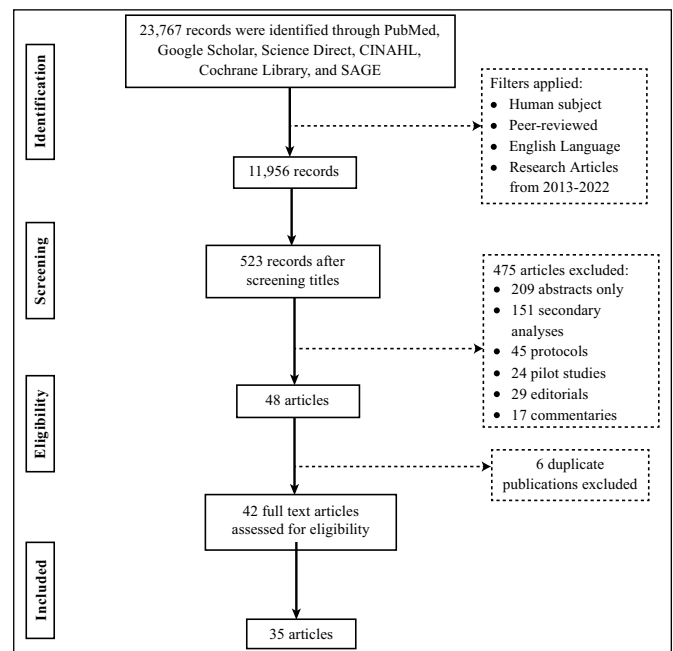

Fig. (1): Flow chart for search strategy.

and "Patient Management" were among the keywords used along with the Boolean operators "OR" and "AND". The PubMed, Google Scholar, Science Direct, CINAHL, Cochrane Library, and SAGE databases were searched.

In all, 23,767 records were found in these databases, which were reduced to 11,956 after applying filters; Human subject, Peer-reviewed, English Language, and Research Articles from 2013-2022. 523 records were shortlisted after screening for titles. Further 475 articles were excluded based on; 209 abstracts only, 151 secondary analyses, 45 protocols, 24 pilot studies, 29 editorials, and 17 commentaries. The remaining 48 publications were evaluated for duplication reducing the number to 42 articles. Finally, full texts were reviewed for relevance before being sieved down to 35 articles that were finally chosen after a thorough examination (**Fig. 1**).

DISCUSSION

Millions of patients are harmed or die each year as a consequence of unsafe and low-quality health treatment [11]. Several medical practices and dangers associated with medical services are emerging as key challenges for patient safety, substantially raising the burden of harm caused by negligent care. In this overview, we will look at some of the patient vulnerabilities that a healthcare organization may face, as well as some solutions for dealing with them.

Safety and Risk Management: It entails assessing and mitigating safety threats or hazards for the patient in a clinical setting [12]. The increased occurrence of clinical hazards and safety incidents in the care setting has exacerbated issues and challenges for healthcare workers. Patient safety and risk management are becoming increasingly important in healthcare. Patient safety is a medical specialty that evolved as a result of medical advances and complexities [13]. Its purpose is to avoid and reduce patient risks, mistakes, and injuries while providing care. Many factors, including time constraints, regulatory requirements, and financial constraints, impede the proactive pursuit of this goal. However, in order to improve patient safety, healthcare organizations must take a proactive approach.

One of the most fundamental principles of patient safety is the provision of high-quality healthcare facilities. As a result, a high-quality healthcare system must be efficient, safe, and clinically effective. Moreover, to gain the advantages of high-quality treatment, health care must be provided in a responsive, equitable, coordinated, and appropriate way [14].

Risk and uncertainty are unavoidable in the healthcare industry. Thus, risk management in healthcare is critical to providing quality care to patients. It includes administrative and clinical systems, procedures, and reports for detecting, monitoring, analyzing, reducing, and preventing hazards [15]. Risk management enables healthcare institutions to protect both patient safety and the assets of the organization in a proactive and systematic manner. It also focuses on lowering the rate of medical errors, which has an impact on an organization's ability to carry out its vision.

Patient safety and risk management have similar and multidisciplinary goals. Furthermore, patient safety and risk management are inextricably linked to quality improvement initiatives such as ensuring accurate data and updated infection control guidelines [16]. Patient safety and risk management should be integrated into healthcare because both are aimed at improving patient care [17]. The health of a patient should come first. To provide a high-quality service, the patient must be safe, and the care must be error-free.

As a result, risk management must be integrated with quality management because the relationship between the two is critical, and it is the responsibility of healthcare professionals to be aware of the importance of quality care [18]. A strong risk management program will reduce errors and inappropriate services while also improving patient care and lowering costs. Managing patient safety and risks necessitates the cooperation of multiple departments, which should be addressed and improved [13].

Any incident or unsafe practices should be addressed and prevented through the process. This ensures that the patient receives the best possible care. These are critical components of a successful patient safety program, and a collaborative effort by a large number of people can mean the difference between success and failure. Patient safety and risk management processes can help hospitals improve their bottom line and profit growth.

Nurses are critical to patient safety efforts. They frequently have the closest contact with patients. They give medications to patients, monitor their conditions, and communicate self-care and discharge information to them [16]. As a result, nurses play an important role in patient safety efforts and are responsible for ensuring that patients are not harmed. Successful patient safety and risk management strategy must prioritize improving nurses' ability to provide accurate care. They must be proactive to avoid any risks to patient care.

Medication Errors

Medication error is defined as Any avoidable incident that could result in the incorrect administration of medication to a patient [19]. The culture of patient safety pertains to the failure in the treatment process that has the potential to harm the patient [20]. With the phenomenon to maintain the culture of patient safety in the healthcare sector, quality improvement, and interventions have taken place. Effective patient safety culture is focused to a great extent in order to create an aspect for every notion to be considered to strengthen the culture of patient safety [21]. As quality improvement

has been built upon to the best of patient safety, the accreditation agencies such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) focus on the reporting of medication errors and also compel legislation to act against this grave issue [22].

Medication inaccuracies play an impact on the overall mismanagement of patients and hence hinder the quality of care and the level of satisfaction of the patient from a broader perspective. Miscommunication in the aspect of the medication of the patient within this aspect may hinder the sustainability of the health concerns at a larger level. Patient safety plans need to be developed in order to combat errors and effective communication is the most significant aspect of this matter. With an emphasis on an integrative medicine delivery system, communication of the proper drug, dose, route, and timing of dosage from one care provider to another to achieve the intended treatment effectiveness in the correct patient with the least amount of adverse effects [23].

Medical errors are the leading cause of mortality in the Western world, affecting hundreds of thousands of people each year. Even well-trained physicians have left equipment in patients, given an overdose of medicine, operated on the incorrect procedure site, or addressed medical illnesses that patients did not have. The most common causes of medical mistakes are gaps in regulation in executing routine treatments utilizing evidence-based training and the most recent medical research. A book written by P. Pronovost and E. Vohr in 2010, was reviewed and it primarily discusses the safety of patients in the outlook of smarter hospitals. The author overlooks a checklist being a doctor, to improvise the healthcare system and combat the insecurities and risks which he considers the roots of the destruction of the healthcare delivery system and which destroys the patient's safety level. While redeeming the solutions of how to build up the nature of Safe Patients, Smart hospitals, he highlighted that a cultural change needs to be embedded to overcome resistant attitudes and improve communication and teamwork. He emphasized educating the medical officers in a way that they act within multidisciplinary teams to make wiser and better decisions in reducing medical errors. He also iterated on the notion that the responsibility of patient safety should not be on the shoulders of the physician but also should be visualized as associated teamwork despite all the differences. And all should be able to implement and document the patient safety measures inside the healthcare system [24].

Fall Risk

Patient fall risk is defined as the risk of an unintentional drop of the patient to the surface, resulting in patient harm [25]. According to a study, absenteeism and fewer staff resources result in a heavy workload, which has a significant influence on Patient Outcomes [26]. The dearth of development and personal value, as exemplified by low wages and excessive team turnover, resulted in dissatisfied professionals. This relates to a lack of understanding of the safety precautions for the care quality of the patients, as well as a lack of professional growth in such areas, which can be the most significant cause of falls and insufficiency of personnel to keep up with the level of increased care for the patients. Education to the families, communication about the hospital bed area, and the orientation of the rooms also matter in the long run for the safety of patients and adherence to the reduced risk of falls. But unfortunately, in the Eastern culture, this is not a fact. The patients are at higher risk than family members and are unfamiliar with the environment [27].

Another bigger aspect is the poor adherence to the protocols of the hospital and in the identification of the goals and problems for the patients which enhances the chances of falls and then contributes to the increase in fall risks. Thus, this genre of hindrance in the patient safety culture also needs to be addressed at a larger scale [28].

MISCELLANEOUS HEALTH RISKS

Healthcare-associated Infections

Healthcare-associated infections (HCAIs) are infections that originate while receiving health treatment, develop in a hospital or other healthcare setting, and manifest 48 hours or more after hospital admission or within 30 days of obtaining health care. According to the Centers for Disease Control and Prevention, about 1.7 million hospitalized patients in the United States each year get HCAIs while being managed for other health conditions, and more than 98,000 persons (1:17) die as a result of these infections [29]. A survey of 183 US hospitals with 11,282 patients found that 4% of patients had at least one HCAI, with Clostridium difficile being the most frequent pathogen [27]. The most common infections were surgical site infections (SSIs), pneumonia, and gastroenteritis [30]. Eventually, these infections lead to sepsis. Sepsis is described as a state of potentially fatal organ failure caused by a person's dysfunctional immune response to infectious disease. In reality, it is the ultimate common method *via* which illnesses cause mortality. Sepsis is a leading cause of severe illness and death worldwide, with approximately 1.7 million adults reporting cases each year in the United States, accounting for 265 000 deaths. Since these infections are frequently antibiotic-resistant, they can quickly deteriorate clinical symptoms, impacting an average of 31 million individuals globally and inflicting over 5 million deaths yearly [31].

Unsafe Surgical Care Procedures

Wound infections, dangerous anesthetics, inept surgical staff, and contaminated surgical tools are all examples. Every year, nearly 7 million postoperative patients experience serious problems, with 1 million dying during or shortly after an operation [2]. Incidental Retention of a Foreign Object accounted for 23% of Sentinel Events

(2022), with Wrong Patient- Wrong-Surgery, Wrong-Procedure, Wrong Implant, and Wrong Site accounting for 36% as per The Joint Commission report about Sentinel Events (2022) [22].

Diagnostic Errors

The National Academy of Medicine defined diagnostic error in 2015 as "the inability to (a) construct a timely and accurate interpretation of the patient's presenting problem or (b) convey that interpretation to the patients" [32]. It affects roughly 5% of patients in ambulatory care settings, with more than half of them having the possibility of causing serious injury [2]. Diagnostic mistake accounts for 6 to 17 % of adverse occurrences in hospitals. A diagnosing error has also been linked to more closed malpractice cases than any other factor. In their seminal report on diagnostic safety, the Institute of Medicine (now the National Academy of Sciences) stated that "The majority of people will encounter at minimum one diagnostic error throughout their lifespan" [32].

Unsafe Transfusion Practices

Patients are put at risk of harmful transfusion responses and infection transmission. Commercial blood donors in Pakistan with illnesses like Hepatitis B and C and HIV are not subjected to severe screening standards preceding blood donation. In research to determine anti-HCV antibody seropositivity in several transfused thalassemia major patients, approximately 42% of patients tested positive for anti-HCV antibodies. However, public attitudes toward transfusions and transfusion-related hazards are inadequate and must be modified [33]. In a Nepalese study, a total of 3,288 instances were documented in the significant damage of blood transfusion report in 2018. Of the total number of these instances, 77.7% were caused by faults or "human factors," with just 10% being unpreventable (mainly severe allergy reactions). There were 166 instances with substantial morbidity and 26 deaths documented [34]. Statistics from 21 nations on unfavorable transfusion responses suggest an average of 8.7 harmful events per 100 000 disseminated blood components [2].

Venous Thromboembolism (blood clots)

Venous thromboembolism (VTE), or clotting in the veins, is dangerous, though avoidable, medical disorder that can lead to death and disability [35]. It is responsible for one-third of the problems associated with hospitalization. Each year, it is predicted that 3.9 million incidents occur in high-income nations and 6 million incidents occur in low- and middle-income countries [2].

CONCLUSION

The complete analysis of the solemn issue associated with the well-being and safety culture is surrounded by the role of a nurse. Nurses play a part in advancing patient safety through their continuous presence at patients' bedsides and interface with their families and other healthcare professionals. This caters to a huge percentage of the healthcare delivery system, whereby research also indicates that a strong patient safety culture is associated with a lower rate of patient complications and dissatisfaction and better patient outcomes. This safety culture is an international phenomenon and proper integration and implementation of the policies and regulations of safety culture in the cultural and organizational field can release considerable results within the healthcare era. Additional efforts will be required to promote an effective and positive safety mindset throughout the institution, including leadership and healthcare professionals. Accreditation and other quality improvement systems are valuable instruments for promoting patient well-being.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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