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Fostering Patient Safety: Importance of Nursing Documentation

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Abstract

Background: Nurses are professionally accountable for assessing and documenting patients' vital signs. Nurses failing to fulfill this responsibility position their patients at risk. This paper presents two real-life cases pertaining to patients' safety resulting in fatal outcomes, leading to the professional, legal, and ethical liability of nurses as the providers of patient care. Objective: This paper focuses on the role of organizational culture in fostering patient safety specifically in monitoring and documentation of patients' vital signs and early recognition of warning signs. Methodology: A comprehensive literature search was conducted using various databases, examining the significance of vital signs monitoring and documentation and early warning signs in patient safety. Relevant articles combining quantitative and qualitative data were analyzed. Results: By fostering an environment of honest reporting, healthcare organizations can enhance patient safety and improve the quality of care. This paper offers valuable insights and recommendations for developing effective strategies aligned with organizational policies and protocols. Conclusion: This paper serves as a valuable resource, encouraging healthcare professionals to reflect on their practices and the organizations to assess their contributions to creating a culture of safety. It also highlights the importance of reporting and disclosing adverse events as learning opportunities and outlines the role of ethics, professionalism, legislation, and organizational support in achieving patient safety.

Keywords

Case Scenarios, Patient Safety, Disclosure, Ethics, Legislation, Electronic Health Record

1. Introduction

During hospitalization, receiving safe and competent care is a patient's right and

the healthcare providers' professional, moral, and ethical responsibility. However, this does not always occur and there remains a gap. This is depicted in two clinical cases that are presented here.

1.1. Case 1

A young lady aged 35 was hospitalized for an incision and drainage of an abscess in her right scapula. Postoperatively, the patient's vital signs were documented within the normal range throughout the day and the night shift. The next day in the morning the patient's clinical condition was critical and she required to be transferred to the intensive care unit. Her condition could not be managed, and she expired. A critical analysis of the case revealed that due to fake documentation, her early warning signs could not recognize.

1.2. Case 2

A 34-year-old male patient was admitted to the emergency room with a complaint of high-grade fever with rigors. The patient was diagnosed with dengue and was admitted to the medicine ward. The next day of his admission in the evening, the patient was very critical and required to be transferred to the intensive care unit. Upon assessment the patient had tachypnea, and his spo2 was 65% on 15 liters of oxygen/min. A critical analysis of the case indicated patient's vital signs were recorded without monitoring. The patient expired after one day.

The World Healthcare Organization (WHO) focuses on patient safety and its vision is a world where every patient receives safe care, and healthcare without risk and harm, every time everywhere, whereas unsafe care causing adverse events is one of the leading ten reasons for mortality and morbidity. It is estimated that one in every 10 patients is harmed while receiving care in a hospital with nearly 50% being preventable [1]. It is attributed to errors classified as failure to adhere to standards of care, incorrect use of equipment, communication failure, documentation errors, incomplete or improper assessment and monitoring of patients, and failing to serve as a patient advocate [2]. Each year, thousands of patient deaths or other negative outcomes occur due to these medical errors [3]. Research on patient safety in Saudi Arabia reported that a crucial component of a nurse's professional competency and safe care is documentation which is at risk because of incomplete, inaccurate, or absent nursing paperwork [4]. A significant part of adverse hospital events is due to errors, inaccurate readability, and staff knowledge gaps about documentation [5]. Training is required to eliminate inaccuracies and improve the quality of documentation [4].

In the scenarios mentioned above in both cases, patients expired, and when nursing documentation was referred it indicated a mismatch between patients' clinical condition and the information documented. This revealed that assigned nurses breached their professional and ethical responsibilities. Its accountability is upon individuals and healthcare organizations [6].

The diagnosis and treatment of critical clinical conditions are significantly

impacted when nursing care is not properly documented. Mistakes in nursing documentation result in negligence in one out of four cases [7]. The most prevalent types of documentation errors are the absence of critical care competencies, incorrect timing of documentation, the use of jargon or inaccurate information, and the inclusion of uncertainty in reports [8]. Hence, documentation may not be a great part of the job, but it is vital because complete care relies on part of the documentation to ensure that nurses are giving the right care at the right time. On the contrary, it is also essential that the care that is documented is also provided.

1.3. Purpose

This paper aims to invite readers' reflections on professional practices and the role of organizational culture in shaping these practices.

1.4. Critical Analysis of the Case

A critical analysis of both cases discovered inaccurate and fraudulent documentation. Thus, patients' early warning signs of a decline in the clinical condition were not recognized in a timely manner. This resulted in the loss of lives of both patients. Compromised the fundamental ethical principle of "Do no harm". The hospital ethics committee performed a detailed analysis.

1.5. Ethical Analysis of Case Scenarios

The cases presented above raised a number of questions including why do nurses engage in fraudulent documentation? It is crucial to ensure patient-centered care and to uphold ethical standards in healthcare settings.

A study was conducted in Brazil with the aim to establish a connection between ethics and patient safety, which significantly impacts the standard of care and the sustainability of the healthcare system. The researchers emphasized that healthcare professionals must prioritize the protection of their patients by providing quality support [6]. The two aforementioned cases serve to illustrate that nursing documentation is both an ethical and legal responsibility of nursing staff when caring for patients where neglecting the assessment and documentation of vital signs led to compromising patient safety. To effectively address these cases and make morally sound decisions, it is essential to analyze ethical principles and pertinent literature associated with these scenarios. Kadivar *et al.* (2017) emphasize the significance of ensuring patient safety as an ethical responsibility of healthcare providers. It is crucial to prevent and manage errors, such as subtle changes in vital signs, through proper documentation in order to protect patients from harm and foster a culture of safety aimed at error prevention [9].

The term "vital sign" is globally recognized and practiced in the health care discipline. It describes the patient's physiological status at a specific time [10]. The measurement can be done either manually or through electronic equipment (which includes Temperature, blood pressure, respiration, oxygen saturation,

and pulse) to get the optimal patient outcome [10]. In the context of the case scenarios, various ethical issues will be examined in relation to four fundamental principles: autonomy and the right to self-determination, beneficence and non-maleficence, veracity, and disclosure and the right to knowledge.

1.5.1. Autonomy and Right to Self-Determination (Respect for Person)

The ethical principle of autonomy means that nurses should respect patients' decisions and support them in making choices based on patients' personal beliefs and values. Patients also have the right to be informed about their ongoing care plan and any errors that may have occurred. Autonomy relates to the ability to make decisions and take appropriate actions based on professional knowledge and judgment [11]. In the given scenarios the staff informed the consultant about the patient's sudden collapse but did not disclose the falsified documentation. When the Medicine team assessed the vital signs, they noticed that the patient's oxygen level was low, and they started administering oxygen at a rate of five liters (5L/minute). In this scenario, the nursing staff failed to properly assess the patient's vital signs and chose to forge documentation. The staff inaccurately recorded the patient's saturation level of 92% without actually checking it. However, when the patient was later transferred to the ICU and underwent an initial assessment, it was found that the saturation level had dropped to 60%. As a result, the patient had to be intubated. The family members, who were outside the ICU, were shocked to learn that their young 35-year-old relative had been suddenly moved to the critical area. They were unaware of what had happened to the patient. The healthcare providers chose not to inform the family members due to concerns about potential legal action. Autonomy is also associated with accepting one's own responsibility, which would help the family to understand and make an adequate decision. Healthcare professionals should be honest and transparent with the family when announcing such events. It is essential to recognize that in the current circumstances, it is challenging to reveal the truth, but the family has a fundamental right to know what has occurred. It is important to acknowledge that discussing such matters with the family can be stressful and may result in high levels of emotional reactions, such hostile.

Further investigations were conducted by calling the nurses to appear before the ethics committee. During the investigation process, the nurses expressed that they perceived the forged documentation as minor negligence and never anticipated that it would result in such a serious situation for the patient. The fear of punishment and negative media exposure motivated their decision to conceal the situation. These concerns need to be addressed to prevent the occurrence of these incidents.

1.5.2. Beneficence, and Non-Maleficence

According to Lachman (2007), Beneficence and non-maleficence are connected to the patient's rights [12]. The patient's rights, the safety of the care, and the availability of medical services that ensure a life free from risk or danger are related to these two concepts. The term "beneficence" refers to the moral duty to

"do good", whereas "non-maleficence" is the moral duty to "do no harm". When incidents are not reported, the principle of beneficence is compromised because other professionals are prevented from accessing relevant information and may repeat mistakes. On the other hand, every time a patient is harmed, the principle of non-maleficence is compromised. When there is a lack of commitment to finding solutions and an absence of honesty in communication, these disrespects both principles. In the given scenarios it is possible that the healthcare providers might have considered sharing their mistakes with management, but due to fear of being punished, and losing their jobs they hid the facts. It is crucial for healthcare providers to take necessary precautions to prevent such incidents from causing harm in the future, such as conducting ongoing awareness sessions for all healthcare providers on how to assess patients at the beginning of their shifts. Additionally, establishing a Rapid Response Team can be beneficial, where one member of the team conducts rounds in the morning to identify subtle changes in patients, share observations, and provide training to the bedside staff. It is the responsibility of departmental heads and managers to foster an environment where nurses feel mentally and psychologically safe, encouraging them to report incidents without fear and promoting transparency. Creating such an environment can prevent adverse events and ensure the safety and well-being of patients.

1.5.3. Veracity

Veracity or truth-telling is one of the basic moral principles in ethics. Veracity creates a strong relationship with the patient. The principle of veracity helps an individual to admit error if it had occurred and accept the consequences. Some mistakes are not intentional but when one does not accept them then this becomes a part of the individual's behavior. Consequently, it cannot be understood whether the error was intentional or unintentional. It is important to note that the concept of veracity develops the understanding that healthcare providers respect the patient's dignity and keep promises which build professional trust between the patient and healthcare providers.

1.5.4. Disclosure and Right to Knowledge

In a study conducted in Jordan to assess knowledge, attitude, and skills about the disclosure of error it was stated that medical error disclosure refers to communication between a healthcare provider, patient, and family members. News is broken about the occurrence of an error, what happened is discussed, and a link is formed between the error and outcomes in a manner that is meaningful to the patient [13]. Although it is an ethical obligation of the healthcare providers and also the patient's bills of rights state that healthcare providers must disclose the incident to the families but in the two cases presented in this paper, disclosing the incidents to the families was very difficult and challenging. It is important for the organization to promote patient safety. To prevent unanticipated events, it is vital to have clear institutional policies on the disclosure of unexpected pa-

tient care outcomes, so that a trusting relationship can be built between the patient and healthcare providers. Also, the organization must install a proper system of reporting and reviewing the incidents and actions if incidence occurs.

While analyzing case scenarios and reviewing ethical principles, a dilemma is whether the patients' families to be informed or not. The ethical principle of veracity (disclosure) is applied, or the approach of deception (non-disclosure) is employed? Professionalism requires an individual to be honest enough to disclose the situation to the family, even though the family may be very angry as the patient was harmed. The senior leadership in the organization can play a role to help resolve the issues. Additionally, this approach would benefit the organization by preventing potential problems and fostering a patient-safe environment. Furthermore, it would enhance nurses' integrity and confidence.

2. Literature Review

A comprehensive literature search was conducted using various databases, Wiley Online, Google Scholar PubMed, Science Direct and Sage. The keywords used were "prevalence" and "quality of nursing documentation", "the relationship between patient mortality and vital sign documentation, ethics and nursing documentation "outcome failure in rescue" barriers in documentation "patient deterioration, communication among physicians and nurses" and "patient outcome admission" and "early warning signs" and "Pakistan". Relevant themes extracted through analysis of literature are described.

2.1. Historical Perspective of Nursing Documentation

The history of nursing documentation can be traced back to the early times of Florence Nightingale, who recognized its significance as a means of communication between nurses and doctors. Nightingale emphasized that documentation serves as evidence that a doctor's orders have been effectively implemented [14]. Nursing documentation is defined as the record of a plan of care that is provided to patients by a licensed nurse or unlicensed health care providers working under the supervision of qualified and experienced nurses. Nursing Documentation is universally recognized as a crucial element in evaluating the quality and standardization of patient care. According to Alkouri, et al. (2016), nursing documentation represents approximately 15% - 20% of nurses' time" indicates that a significant portion of nurses' working hours is dedicated to documenting patient care. It implies that nurses spend a considerable amount of time documenting various aspects of patient assessment, interventions, and outcomes. This includes recording vital signs, documenting medication administration, documenting nursing assessments and interventions, updating patient charts, and ensuring accurate and comprehensive documentation of patient care activities [15].

Nurses have a professional responsibility to ensure accurate and comprehensive documentation, as it is closely linked to their accountability within health-

care organizations. Nursing governing bodies also emphasize the significance of nurses' precise, clear, and relevant documentation within the framework of legal and ethical guidelines. These legal documents serve as essential tools for physicians and nurses to collaborate effectively. Distorting information can impede the therapeutic process of patient care [16].

2.2. Prevalence of Problem

A study was conducted in the emergency department of a hospital in Ethiopia. Its objective was to assess patient-reported hospital stay and frequency of vital signs monitoring to avoid unplanned admission in intensive care unit (ICU). Results indicated that in 33% of patients' vital signs were not recorded [17]. In another study which was an observational study of hospitalized patients it was reported that 9% of patients experienced at least one clinically abnormal vital sign or adverse incident within the first 24 hours after admission. Consequently, signs that are overlooked during admission and hospitalization have been found to be associated with mortality rates [18].

Accurate documentation can motivate nurses to ensure continuity between diagnosis, intervention, progress, and outcome. A quantitative cross-sectional retrospective study was conducted using the medical records of discharged patients, which revealed incomplete nursing documentation (71.6%) and poor quality (54.7%) [19]. Olivares, Bogeskov and Grimshaw-Aagaard (2019) conducted a study and reported that nurses have varying perspectives on documentation. Some consider it essential, while others view it as a burden that detracts nurses from their "true" work and conflicts with their professional individuality [20].

2.3. Importance of Vital Signs Monitoring and Documentation

Langkjaer, et al. (2021) conducted a focus group study about nurses' experiences and perceptions of two Early Warning Score systems to identify patient deterioration and reported that the majority, specifically 84% of patients, had abnormal vital signs before experiencing serious adverse events, which could have been prevented if detected and acted upon by healthcare providers. Researchers also reported that approximately one in thirty hospitalized patients triggered a Rapid Response Team due to abnormalities detected in a single set of vital signs. 20% of hospitalized patients in wards with no or low risk of declining condition at the time of admission need intensified care at 24 hours [21]. Similarly, the above scenarios illustrate instances where nurses failed to recognize subtle changes in patients, resulting in their transfer to the ICU. This negligence on the part of the nurses seized the opportunity for timely intervention and resulted in mortality.

To prevent the unplanned transfer to ICU and mortality Hwang and Kim (2022) highlighted the importance of introducing nurses to the Modified Early Warning Score or National Early Warning Score. Modified Early Warning Score

is a simple bedside scoring index that evaluates the patient's physiological state based on six vital parameters: heart rate, blood pressure, respiratory rate, core body temperature, mental status, and urine output [22]. National Early Warning Score is a tool developed by the Royal College of Physicians which improves the detection and response to clinical deterioration in adult patients and is a key element of patient safety and improving patient outcomes [23]. Hwang and Kim (2022) advocate to introducing the Modified Early Warning Score and National Early Warning Score among nurses to prevent unplanned transfer to ICU and to prevent mortality [22].

Dall'Ora, et al. (2021) undertook a time and motion study of medical and surgical wards across England [24]. They reported that approximately 35% of vital sign assessments planned according to Modified Early Warning Score protocols were either missed or delayed. The study concluded that nurses feel that measuring and documenting vital signs is time-consuming at the bedside when multiple times repeated monitoring is required on multiple patients. Therefore, the frequency of vital signs as per the human resource (nurses) availability is considered a major challenge. The key to timely intervention impacts nurses' ability to recognize and respond in order to prevent unplanned ICU transfers and mortality because the importance of vital signs monitoring helps to identify subtle changes. Vital signs measurement is a fundamental clinical assessment that takes only five minutes to assess [25]. However, findings from various studies indicate that vital signs assessment is often inadequate, with the respiratory rate being frequently overlooked, inaccurately recorded, or poorly documented, and appropriate actions not being taken [24] [26] [27] [28] [29]. Elliott and Endacott (2022) reported that more than 75% of patients experienced an adverse event in which at least one vital sign record is missed, and the event occurred. In the documentation audit, it was found only 17% of medical records had complete documentation of vital signs including respiratory rate [25]. According to Allen (2020), non-critical care nurses' recognition and response to subtle changes are inconsistent which could lead to untoward events such as an increased length of stay, financial burden, increased morbidity, and mortality. Vital sign monitoring is often neglected due to time constraints. Respiratory rate is not counted by the healthcare providers but by making a quick estimate of a patient's respiratory rate [30]. Allen (2020) also reported that the National Patient Safety Agency (2018) found inadequacies in clinical assessment, such as failing to set up systems and react to illness because delays were responsible for 26% of avoidable fatalities [30].

2.4. Role of Organizational Culture in Fostering Patient Safety

Moral values refer to norms about right and wrong human conduct [11]. Moral values are to protect and promote human dignity, both are equally essential for the healthcare system. The integrity, beliefs, and values that nurses need to maintain in order to practice with commitment are safeguarded by a clear conscience. In the above scenarios, there was falsified documentation in which vital

signs were missed or not monitored but were documented as fake. This placed organizations and healthcare professionals at legal risk. In both cases, it was identified there was no proper system of incident reporting. There was no mechanism for nurses to disclose the error and feel safe about their honest reporting. It is important to develop a culture of transparency in an organization where nurses can disclose errors without the fear of stigma, impact on their annual appraisal and being worried about legal consequences [31]. Organizations need to promote a culture of open communication and understand the notion of "to err is human" [32]. To prevent errors, organizations can follow a root cause analysis process; identify lapses in system-level processes, restructure the system, and reduce the likelihood of future sentinel events [33].

To documentation of health records organizations are shifting from manual to electronic documentation [34] and on average, nurses use the computer for more than half of their shift time. Studies have also reported that electronic recording of vital signs takes less time compared to traditional paper and pen methods. It is estimated that monitoring and documenting a set of vital signs at the bedside takes an average of three minutes and forty-five seconds [24]. Lang, et al. (2019) also presented similar results by implementing a transition from a paper-based patient observation system to a mobile handheld device, aiming to assess the effectiveness of capturing real-time early warning scoring in clinical practice. The findings demonstrated that Early Warning Signs the adoption of this technology reduced patient safety concerns associated with Early Warning Signs and increased the amount of time nurses and doctors could dedicate to bedside care. Additionally, the study revealed a time savings of 1 minute and 23 seconds per patient when utilizing an electronic record system. This indicated that approximately 170 hours of nursing time are saved daily, allowing for more time to be allocated to patient care. Hence, this evidence indicates that implementing digital documentation enhances the practical effectiveness of Early Warning Signs and offers improved visibility of patient data [35]. However, while adapting to digital documentation nurses face different challenges. These include limited experience with information and technology, frustration with equipment malfunctions, time constraints, discrepancies between staffing resources and workloads, uncertainty regarding proper documentation procedures, and insufficient training. These increase the burden of documentation resulting in an increase in medical errors even in digital documentation [36].

2.5. Legislation Implications in Patient Safety

Healthcare organizations develop policies and protocols to standardize care. However, these are not present in all the institutions in Pakistan. There are a few private and public organizations that have voluntarily decided to be certified by International Organization for Standardization (ISO) and Joint Commission of International Accreditation (JCIA) [37]. Looking at the above scenarios, due to a lack of national policies and protocols for patient safety there is an absence of an organizational culture that holds professionals accountable for their actions.

Learning from developed and developing countries, Pakistan was also facing challenges in the healthcare sector, so the government formulated a quality team at the provincial level. Sindh Healthcare Commission (SHCC) Act 2013 was passed by the Provincial Assembly of Sindh on 24th February 2014, and notified on 20th March 2014, SHCC is an autonomous body to improve the quality of healthcare services and strives to ban quackery, focus on health promotion, and disease prevention, safeguard the rights of the patients and healthcare providers, build capacity, implement policies, provide patient safety, and help to develop an organizational culture of accountability and ownership [37]. However, knowing the ground realties compliance to act is still missing.

2.6. Relationship between Patient Safety and Nursing Documentation

The concept of patient safety is not new in nursing; its origins can be traced back to the 19th century and Nightingale's theories on protecting patients from harm at the bedside. Ethics plays a significant role in ensuring safe practice for patient safety. The cornerstone of nurses' safe practice lies in safety values, with safety norms serving as the guiding principles and standards that direct their practice. While these fundamental principles are prevalent throughout the healthcare sector, it is crucial to comprehend how they can be applied to promote safe practice.

Bjrekan, et al. (2021) conducted a study to evaluate patient safety by collecting information on adverse events that occur in the organization. It was identified that a link between patient safety and inadequate, incomplete, documentation may be due to a lack of competence that led to an adverse event [34]. A study was conducted in the acute trauma ward at a regional hospital in South Africa [38] where nurses recording vital signs of trauma patients use Modified Early Warning Score to classify the physiological changes and their clinical impact. It was revealed that quality of vital signs was poor as the respiratory rates were estimated rather than manually measured. The researcher reported that 33% of vital sign recordings lacked the necessary interventions and impacted the clinical outcomes. The researchers hypothesize that it may be due to lack of understanding of the importance of accurate measurement or time constraint [38]. A similar situation was observed in the aforementioned scenarios where incorrect documentation of saturation and respiratory rates was later found to have discrepancies with the parameters in the arterial blood gases (ABGs) report and oxygen saturation (SO2) levels in the ICU.

A study in Ethiopia to determine and identify factors associated with nurses' inadequate response to documentation reported a low-quality or incomplete records. It also highlighted that patient safety relies on the nurse's quick assessment and action [39]. In another study in Ethiopia revealed that nursing documentation was poor and shared inadequate sheets for documentation, lack of time, and unfamiliarity with operational standards have a significant impact on documentation practice [40].

The goal of patient safety can be considered from practical perspective and from moral and ethical perspective which focus on the protection and promotion of humanity and human dignity. From a professional point of view, one cannot separate medical obligations from moral values in patient safety. There is a close relationship between patient safety and human dignity. In other words, professional commitment is the responsibility of healthcare providers [41]. The relationship between patient safety and nursing documentation ensures accurate and comprehensive records. The continuity of care is maintained through handing and taking over between nurses in incoming and outgoing shifts.

2.7. The Role of Nurses' Professionalism

Nurses are obligated to provide the best possible care for their patients. However, in countries like Pakistan in a few healthcare organizations nurses are burdened with non-professional tasks such as housekeeping tasks, billing inquiries, and clearing food trays to list a few. These tasks lead to inappropriate perceptions of nurses' duties in clinical areas impact their public image, and position nurses in a vulnerable position. As a result, nurses feel demoralized and dissatisfied, and may leave the profession. Nevertheless, the public holds nurses accountable for their professional judgment and its outcomes. To prevent a negative perception, it is crucial for the organizational management team to define nurses' roles and responsibilities, focusing primarily on clinical nursing care. Organizations can establish an atmosphere that empowers nurses to fully devote their time and expertise to delivering exceptional patient care. For the non-clinical tasks, the organizations can employ support staff.

Professional ethics and patient safety are closely intertwined. Ethical standards serve as the foundation for ensuring patient safety and are considered indicators of high-quality care. To effectively promote patient safety, healthcare providers should be equipped with a professional code of ethics that they can apply in their daily practice. Respecting patient dignity and safeguarding them from harm are paramount. Therefore, healthcare providers must be vigilant in recognizing potential safety issues and take necessary precautions to prevent them [9]. Jensen, et al. (2019) [41] explored nurses' experience using National Early Warning Score and its impact on their professionalism. The study findings suggest that the National Early Warning Score can have various effects on nurses' professionalism. Nurses have acknowledged the importance of combining their professional competence, including clinical judgment, discretion, and accountability, with the use of the National Early Warning Score to accurately assess patients' conditions. The study indicates that the National Early Warning Score has been beneficial to nurses' professional practice. However, it also emphasizes that solely adhering to the National Early Warning Score standard does not guarantee quality care and patient safety.

This study provides valuable insights related to the discussion on nurses' professionalism and its impact on patient safety. The study examines how nurses perceive the influence of the National Early Warning Score on their professionalism.

nalism, highlighting the significance of integrating professional competence with the tool's utilization. This aligns with the manuscript's objective of understanding nurses' professional accountability when employing the National Early Warning Score to enhance practice and ensure patient safety [41].

Both professional responsibility and accountability were absent in the aforementioned scenarios, specifically in relation to timely vital signs and incomplete or falsified documentation. Incidents were not reported to management and physicians, highlighting the need for the organization to establish an incident reporting mechanism. This entails identifying and collecting data on hospital incidents, followed by the development of formal guidelines that include disclosure and apologies to the patient as part of the policy. This process should involve the presence of the physician, legal representative, and Medical Director. To achieve this, professionals must acknowledge and recognize these errors as ethical issues. Nurses should receive education and training through in-service sessions to raise awareness. These scenarios serve as examples, emphasizing the crucial importance to all nursing staff of conducting accurate assessments (such as vital signs) that align with the patient's condition, avoiding forged documentation, and reporting events promptly to prevent harm.

To ensure patient safety, it is crucial for nurses to report errors and take responsibility for their actions. It is the duty of responsible individuals to notify those in authority to prevent further mistakes, yet in reality, many choose to ignore errors and remain silent. The aforementioned scenarios shed light on several factors that could have contributed to these errors.

2.8. Organizational Culture Factor

Organizations must create an enabling environment where healthcare providers feel supported and comfortable in reporting, disclosing, and discussing errors without fear or hesitation. Blaming culture contributes significantly to the occurrence of errors. To prevent such situations in the future, a case-based presentation in the form of storytelling can be introduced for healthcare professionals. These sessions involve discussing sentinel cases with all nurses in the organization, providing them an opportunity to engage in rational thinking and reflect on their professional practices, which encompass their responsibility and ethical accountability that may have been compromised. Through this reflective process, nurses can uncover their beliefs, values, and professional obligations. The case-based presentation plays a crucial role in preventing potential adverse events.

One of the major weaknesses and challenges faced by the country's health system is the lack of a structured approach to identify, report, and disclose errors. This issue demands significant attention from healthcare policymakers at the national level [3]. Similarly, in Pakistan limited research and practical initiatives have been undertaken in public sector hospitals to promote patient safety culture and error reporting. Research was conducted in two public hospitals in Pakistan, to analyze and gain insight into nurses' perceptions of patient safety culture in their respective wards. Results revealed that there is a need for proactive meas-

ures by public hospitals, ward administrators, and health governing bodies to implement and oversee robust patient safety and error reporting systems [42].

2.9. Technical Factors

In the healthcare organization of the clinical scenario presented in this paper, electronic health record was introduced for documentation of vital sign. However, due challenge with to usability of system and the need for it to be customized nursing personnel as the user of this system complained about the excessive clicks required to enter vital signs, leading to inconsistencies and fragmented information. As a result, nurses preferred continuing with the system of handwritten documentation. The management in the organization is currently working to determine the most suitable mode of documentation that ensures safety for patients, professionals, and the organization.

2.10. Reporting and Disclosure Mechanism

After conducting a literature search, the author identified certain strategies to create a mechanism that enables nurses to report errors openly and confidently. Establishing such a mechanism is essential for fostering a culture of transparency and continuous learning in healthcare. The following are the steps that should be taken, based on the aforementioned case studies, to improve the culture of the organization [43] [44].

2.11. Training and Education

Training and education: Comprehensive educational programs should be provided to managers at all levels, including top, middle, and lower management. This is crucial for transforming a blame culture into a safety culture that prioritizes error reporting, confidentiality, and recognizes the potential benefits of disclosure. Additionally, nurses should receive education regarding the organization's commitment to fostering a culture that encourages honest reporting and offers support in such situations.

2.12. Roles of Nurse Leaders in Improving Patient Safety and Error Management

Nurse leaders are responsible for promoting error disclosure, creating a supportive culture, and emphasizing ethical values in nursing care. Nurse leaders also help alleviate moral distress by apologizing to patients and families, using standardized tools and feedback, providing communication skills training, and teaching coping strategies to reduce emotional stress among nurses. Implementing user-friendly guidelines and reporting mechanisms is essential.

2.13. Policy Development

Managers must develop a policy that includes a component of contractual evaluation, which eliminates the punishment for nurses who report medical errors during their contract. By implementing such policies, managers can create an environment that encourages nurses to report medical errors without the fear of facing negative consequences. This approach fosters a culture of transparency and trust, where nurses feel supported and valued for their contributions to patient safety.

2.14. Foster a Learning Culture

Place emphasis on the significance of learning from errors and implementing system improvements to prevent their recurrence by sharing the incidents with all departments. Encourage nurses to actively participate in root cause analysis and quality improvement initiatives associated with reported errors. This approach promotes a culture of continuous learning and improvement, where errors serve as valuable opportunities to identify areas for enhancement and enhance patient safety.

3. Impact of the Study

This study is relevant to clinical practice because it provides insights into how nurses can use National Early Warning Score to improve patient safety. By understanding the challenges and opportunities associated with National Early Warning Score, nurses can use the tool to its full potential and to help ensure that patients receive the care they need. This can lead to the following impacts:

3.1. Improved Patient Safety

By encouraging error reporting, healthcare organizations can identify potential risks and take proactive measures to prevent future errors.

3.2. Increased Reporting of Errors

Establishing a non-punitive reporting culture can encourage nurses to report errors without fear of retribution. This can lead to a more accurate understanding of the frequency and types of errors occurring in the organization, enabling targeted interventions to address them.

3.3. Enhanced Organizational Learning

Creating a culture of transparency and continuous learning allows healthcare organizations to analyze reported errors, identify root causes, and implement changes in processes or protocols to prevent similar errors in the future. This iterative learning process can drive ongoing improvement in patient care.

3.4. Improved Nurse Engagement and Satisfaction

When nurses feel supported and empowered to report errors, it can positively impact their job satisfaction and engagement. Knowing that their voices are heard and that they are part of a culture that values learning and improvement can contribute to a positive work environment.

3.5. Strengthened Trust with Patients and Families

Openly acknowledging and addressing errors can help build trust with patients and their families. Apologizing and taking steps to prevent future errors demonstrate a commitment to patient safety and quality care.

Overall, the study's impact can lead to a safer healthcare environment, improved patient outcomes, and a culture of continuous improvement and learning within the organization.

4. Conclusion

Assessment and documentation of vital signs is an integral part of nursing practice to communicate patient physiological information to the healthcare team and to provide safe and competent care to patients. In many countries it remains a challenge yet, nurses are ethically, legally, and professionally responsible to fulfill this responsibility. The organizations are also responsible to create a positive and safe environment for patients, family members and members of the healthcare team in the organization.

Conflicts of Interest

The authors declare no conflict of interest.

References

- [1] World Health Organization (2019, September 13) Patient Safety. Key Facts. https://www.who.int/news-room/fact-sheets/detail/patient-safety
- [2] Hameed, R.Y. and Allo, R.R. (2018) Nurses' Errors during Nursing Work. *Journal of the Bahrain Medical Society*, 30, 35-44. https://doi.org/10.26715/jbms.1_26032018
- [3] Najafpour, Z., Arab, M., Haghighi, S.B., Shayanfard, K., Yaseri, M., Hatamizadeh, M. and Bahramnezhad, F. (2021) Nurses' Decisions in Error Reporting and Disclosing Based on Error Scenarios: A Mixed-Method Study. *Health Scope*, 10, e114868. https://doi.org/10.5812/jhealthscope.114868
- [4] AlThubaity, D.D. and Mahdy Shalby, A.Y. (2023) Perception of Health Teams on the Implementation of Strategies to Decrease Nursing Errors and Enhance Patient Safety. *Journal of Multidisciplinary Healthcare*, 16, 693-706. https://doi.org/10.2147/IMDH.S401966
- [5] Steel, J., Georgiou, A., Balandin, S., Hill, S., Worrall, L. and Hemsley, B. (2019) A Content Analysis of Documentation on Communication Disability in Hospital Progress Notes: Diagnosis, Function, and Patient Safety. *Clinical Rehabilitation*, 33, 943-956. https://doi.org/10.1177/0269215518819717
- [6] Nora, C.R.D. and Junges, J.R. (2021) Patient Safety and Ethical Aspects: Scoping Review. Revista Bioética, 29, 304-316. https://doi.org/10.1590/1983-80422021292468
- [7] Mountain, C., Redd, R., O'Leary-Kelly, C., et al. (2015) Electronic Medical Record in the Simulation Hospital: Does It Improve Accuracy in Charting Vital Signs, Intake, and Output. Computers, Informatics, Nursing, 33, 166-171. https://doi.org/10.1097/CIN.00000000000000144

- [8] Stewart, K., Doody, O., Bailey, M., et al. (2017) Improving the Quality of Nursing Documentation in a Palliative Care Setting: A Quality Improvement Initiative. International Journal of Palliative Nursing, 23, 577-585. https://doi.org/10.12968/ijpn.2017.23.12.577
- [9] Kadivar, M., Manookian, A., Asghari, F., Niknafs, N., Okazi, A. and Zarvani, A. (2017) Ethical and Legal Aspects of Patient's Safety: A Clinical Case Report. *Journal of Medical Ethics and History of Medicine*, 10, Article No. 15.
- [10] Thran, J.S. (2018) Documentation of Vital Signs during the Post-Operative Phase. https://doi.org/10.28971/542018TJ73
- [11] Beauchamp, T.L. and Childress, J.F. (2001) Principles of Biomedical Ethics. 5th Edition, Oxford University Press, Oxford, 59.
- [12] Lachman, V.D. (2007) Patient Safety: The Ethical Imperative. *MEDSURG Nursing*, **16**, 401-403.
- [13] Mansour, R., Ammar, K., Al-Tabba, A., Arawi, T., Mansour, A. and Al-Hussaini, M. (2020) Disclosure of Medical Errors: Physicians' Knowledge, Attitudes and Practices (KAP) in an Oncology Center. *BMC Medical Ethics*, 21, Article No. 74. https://doi.org/10.1186/s12910-020-00513-2
- [14] Sum, M.T. and Chebor, M.A. (2013) Documentation: Historical Perspectives, Purposes, Benefits, and Challenges As Faced by Nurses. *International Journal of Humanities and Social Science*, **3**, 236-240.
- [15] Alkouri, O.A., AlKhatib, A.J. and Kawafhah, M. (2016) Importance and Implementation of Nursing Documentation: Review Study. *European Scientific Journal*, **12**, 101-106. https://doi.org/10.19044/esj.2016.v12n3p101
- [16] Tajabadi, A., Ahmadi, F., Sadooghi Asl, A. and Vaismoradi, M. (2020) Unsafe Nursing Documentation: A Qualitative Content Analysis. *Nursing Ethics*, 27, 1213-1224. https://doi.org/10.1177/0969733019871682
- [17] Belachew, Y.B., Yidnekachew, M. and Gizaw, A.B. (2018) Patient Reported Hospital Stay and Frequency of Vital Sign Monitoring Practice in Emergency Room and Adult ICU at Jimma University Medical Center, 2018. *Palliative Medicine & Care*, 5, 1-5.
- [18] Zografakis-Sfakianakis, M., De Bree, E., Linardakis, M., Messaritaki, A., Askitopoulou, H., Papaioannou, A. and Aggouridakis, P. (2018) The Value of the Modified Early Warning Score for Unplanned Intensive Care Unit Admissions of Patients Treated in Hospital General Wards. *International Journal of Nursing Practice*, 24, e12632. https://doi.org/10.1111/jin.12632
- [19] Asmirajanti, M., Hamid, A.Y.S., Hariyati, R. and Sri, T. (2019) Nursing Care Activities Based on Documentation. *BMC Nursing*, 18, Article No. 32. https://doi.org/10.1186/s12912-019-0352-0
- [20] Olivares Bøgeskov, B. and Grimshaw-Aagaard, S.L.S. (2019) Essential Task or Meaningless Burden? Nurses' Perceptions of the Value of Documentation. *Nordic Journal of Nursing Research*, 39, 9-19. https://doi.org/10.1177/2057158518773906
- [21] Langkjaer, C.S., Bove, D.G., Nielsen, P.B., Iversen, K.K., Bestle, M.H. and Bunkenborg, G. (2021) Nurses' Experiences and Perceptions of Two Early Warning Score Systems to Identify Patient Deterioration—A Focus Group Study. *Nursing Open*, 8, 1788-1796. https://doi.org/10.1002/nop2.821
- [22] Hwang, J.I. and Kim, S.W. (2022) Using an Early Warning Score for Nurse Shift Patient Handover: Before-and-After Study. Asian Nursing Research, 16, 18-24. https://doi.org/10.1016/j.anr.2021.12.005

- [23] National Health Service 75 (n.d.) National Early Warning Score.

 https://www.england.nhs.uk/ourwork/clinical-policy/sepsis/nationalearlywarningscore/
- [24] Dall'Ora, C., Griffiths, P., Hope, J., Briggs, J., Jeremy, J., Gerry, S. and Redfern, O.C. (2021) How Long Do Nursing Staff Take to Measure and Record Patients' Vital Signs Observations in Hospital? A Time-and-Motion Study. *International Journal of Nursing Studies*, 118, Article ID: 103921. https://doi.org/10.1016/j.ijnurstu.2021.103921
- [25] Elliott, M. and Endacott, R. (2022) The Clinical Neglect of Vital Signs' Assessment: an Emerging Patient Safety Issue? *Contemporary Nurse*, 58, 249-252. https://doi.org/10.1080/10376178.2022.2109494
- [26] Badawy, J., Nguyen, O.K., Clark, C., Halm, E.A. and Makam, A.N. (2017) Is Everyone Really Breathing 20 Times a Minute? Assessing Epidemiology and Variation in Recorded Respiratory Rate in Hospitalized Adults. BMJ Quality & Safety, 26, 832-836. https://doi.org/10.1136/bmjqs-2017-006671
- [27] Kamio, T., Kajiwara, A., Iizuka, Y., Shiotsuka, J. and Sanui, M. (2018) Frequency of Vital Sign Measurement among Intubated Patients in the General Ward and Nurses' Attitudes toward Vital Sign Measurement. *Journal of Multidisciplinary Healthcare*, 2018, 575-581. https://doi.org/10.2147/JMDH.S179033
- [28] Saab, R., Wu, B.P., Rivas, E., Chiu, A., Lozovoskiy, S., Ma, C. and Sessler, D.I. (2021) Failure to Detect Ward Hypoxaemia and Hypotension: Contributions of Insufficient Assessment Frequency and Patient Arousal during Nursing Assessments. *British Journal of Anaesthesia*, 127, 760-768. https://doi.org/10.1016/j.bia.2021.06.014
- [29] Van Graan, A.C., Scrooby, B. and Bruin, Y. (2020) Recording and Interpretation of Vital Signs in a Selected Private Hospital in the KwaZulu-Natal Province of South Africa. *International Journal of Africa Nursing Sciences*, 12, Article ID: 100199. https://doi.org/10.1016/j.ijans.2020.100199
- [30] Allen, G. (2020) Barriers to Non-Critical Care Nurses Identifying and Responding to Early Signs of Clinical Deterioration in Acute Care Facilities. MEDSURG Nursing, 29, 43-52
- [31] Woo, M.W.J. and Avery, M.J. (2021) Nurses' Experiences in Voluntary Error Reporting: An Integrative Literature Review. *International Journal of Nursing Sciences*, **8**, 453-469. https://doi.org/10.1016/j.ijnss.2021.07.004
- [32] Kohn, L.T., Corrigan, J.M. and Donaldson, M.S. (2000) To Err Is Human: Building a Safer Health System. Institute of Medicine, Committee on Quality of Health Care in America.
- [33] Singh, G., Patel, R.H. and Boster, J. (2021) Root Cause Analysis and Medical Error Prevention.
- [34] Bjerkan, J., Valderaune, V. and Olsen, R.M. (2021) Patient Safety through Nursing Documentation: Barriers Identified by Healthcare Professionals and Students. *Frontiers in Computer Science*, 3, Article ID: 624555. https://doi.org/10.3389/fcomp.2021.624555
- [35] Lang, A., Simmonds, M., Pinchin, J., Sharples, S., Dunn, L., Clarke, S. and Swinscoe, C. (2019) The Impact of an Electronic Patient Bedside Observation and Handover System on Clinical Practice: A Mixed-Methods Evaluation. *JMIR Medical Infor*matics, 7, e11678. https://doi.org/10.2196/11678
- [36] Moy, A.J., Schwartz, J.M., Chen, R., Sadri, S., Lucas, E., Cato, K.D. and Rossetti, S.C.
 (2021) Measurement of Clinical Documentation Burden among Physicians and Nurses Using Electronic Health Records: A Scoping Review. *Journal of the Ameri-*

- can Medical Informatics Association, **28**, 998-1008. https://doi.org/10.1093/jamia/ocaa325
- [37] Shah, M. and Perveen, S. (2016) State of Healthcare Quality and Patient Safety in Pakistan. *Pakistan Journal of Public Health*, **6**, 1-4. https://doi.org/10.32413/piph.v6i4.3
- [38] Keene, C.M., Kong, V.Y., Clarke, D.L. and Brysiewicz, P. (2017) The Effect of the Quality of Vital Sign Recording on Clinical Decision Making in a Regional Acute Care Trauma Ward. *Chinese Journal of Traumatology*, **20**, 283-287. https://doi.org/10.1016/j.citee.2016.11.008
- [39] Ayele, S., Gobena, T., Birhanu, S. and Yadeta, T.A. (2021) Attitude towards Documentation and Its Associated Factors among Nurses Working in Public Hospitals of Hawassa City Administration, Southern Ethiopia. *SAGE Open Nursing*, 7, 1-9. https://doi.org/10.1177/23779608211015363
- [40] Tasew, H., Mariye, T. and Teklay, G. (2019) Nursing Documentation Practice and Associated Factors among Nurses in Public Hospitals, Tigray, Ethiopia. *BMC Research Notes*, **12**, Article No. 612. https://doi.org/10.1186/s13104-019-4661-x
- [41] Jensen, J.K., Skår, R. and Tveit, B. (2019) Hospital Nurses' Professional Accountability While Using the National Early Warning Score: A Qualitative Study with a Hermeneutic Design. *Journal of Clinical Nursing*, 28, 4389-4399. https://doi.org/10.1111/jocn.15021
- [42] Jafree, S.R., Zakar, R., Zakar, M.Z. and Fischer, F. (2017) Assessing the Patient Safety Culture and Ward Error Reporting in Public Sector Hospitals of Pakistan. *Safety in Health*, **3**, Article No. 10. https://doi.org/10.1186/s40886-017-0061-x
- [43] Nasiri, T., Bahadori, M., Ravangard, R. and Meskarpour Amiri, M. (2020) Factors Affecting the Failure to Report Medical Errors by Nurses Using the Analytical Hierarchy Process (AHP). *Hospital Topics*, **98**, 135-144. https://doi.org/10.1080/00185868.2020.1796555
- [44] Vaismoradi, M., Vizcaya-Moreno, F., Jordan, S., Gåre Kymre, I. and Kangasniemi, M. (2020) Disclosing and Reporting Practice Errors by Nurses in Residential Long-Term Care Settings: A Systematic Review. Sustainability, 12, Article No. 2630. https://doi.org/10.3390/su12072630