

Safety of Medications: Change Paper

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Safety of Medications

There are many cogs in the wheel called health care. One of those cogs is called medications. Medications are an essential part of a client's life as they provide wellness and improved health maintenance. Nurses act as the lubricating oil to provide proper medication usage and maintenance instruction, especially in older, neonatology, and pediatric populations. As nurses and the interdisciplinary team, which can consist of pharmacists, providers, social workers, nurse case managers, speech, occupational, and physical therapists, nutritionists, and others, work toward client wellness, one significant way is through the safety of medications. For example, nurses can safely administer current medication with input from providers and pharmacists using the *Beers Criteria* as an additional adjunct to the older aged client. Other safety measures include utilizing the *Five Rights of Medication Administration*. This paper points out some causes, preventions, and reasons why medication errors in nursing occur and an example of where the usage of the safety of medications. This paper demonstrates the role of the professional nurse as an advocate for the client in providing safe nursing care, as outlined in Course Learning Objectives number 1. This paper provides an improvement in healthcare using research articles and other sources of evidence, as outlined in Course Learning Objectives number 2. Finally, this paper facilitates interpersonal collaborations, as outlined in Course Learning Objective number 3.

Causes of Medication Error in Nursing

There is no universal definition of medication errors. However, medication errors have many negative consequences, such as an increase in mortality rates of patients, delay in discharges, financial burdens on the hospitals, and increased burnout in nurses (Khan & Tidman, 2022). This evidence-based research article highlights nurses' causes and standard solutions for

medication errors and effective leadership styles for ineffective medication management (Khan & Tidman, 2022). The authors of this peer-reviewed research article state that 38% of medication errors are nursing-related (Khan & Tidman, 2022). Lack of collaboration among health care providers, not reporting medication errors, and lack of knowledge of medication's mechanism of action are the primary causes of medication errors in hospitals (Khan & Tidman, 2022). According to the Joint Commission, leadership style can affect patient safety and quality of care (Khan & Tidman, 2022). Adopting a transformational leadership style leads to increased reporting of medication errors, thus reducing medication errors (Khan & Tidman, 2022). Transformational leadership style causes decreased stress and anxiety in nursing staff, leading to optimal medication administration.

Synopsis

Safety of medications is one of the components of QSEN competencies. It is vital to understand the causes of medication errors in a healthcare facility and adopt effective strategies to reduce medication errors. Good team collaboration, proper reporting of medication errors, increased nursing knowledge of medications, adopting the transformational leadership style, and appropriate staffing in hospitals reduce medication errors, promoting the safety of medications (Khan & Tidman, 2022).

Medication Errors: A Focus on Nursing Practice

One of the most damaging consequences that compromise patient safety is healthcare professionals' medication errors. 7,000- 9,000 people die in the USA due to medication errors (Alrabadi et al., 2021). Medication errors are preventable. Drug errors lead to increased hospital financial burden and impact the US economy. The government pays more than 40 billion dollars each year for medication errors in the US (Alrabadi et al., 2021). Medication errors cause an

increased length of patient stay by two days and increased cost for each patient by \$2,000-2,500 (Alrabadi et al., 2021). In this evidence-based research article, the authors highlight knowledge-based, rule-based, activity-based, and memory-based errors (Alrabadi et al., 2021). Although there are many causes of medication errors, the most common cause is not adapting the five rights of patients: right medication, patient, time, dose, and documentation (Alrabadi et al., 2021). The next most common cause of drug errors is nurses' interruptions by patients and their coworkers. About 7% of medication errors are due to interruptions (Alrabadi et al., 2021). An effective strategy to reduce drug errors and increase medication safety is simply following the five rights of medication administrations.

Synopsis

Nurses are the heart of healthcare settings and are frontline healthcare professionals who should be encouraged to prevent medication errors. As the evidence demonstrates, drug errors can be prevented by following the five rights of demonstration and using two medication reconciliation methods, such as two patient identifiers and reading the prescription back to the provider. In addition, proper documentation and appropriate storage of medications so that different storage racks separate similar drugs (Alrabadi et al., 2021).

Preventing the Medication Errors in Hospitals: A Qualitative Study

One of the essential duties of nurses is administering medications. Patients must receive proper medications to provide effective treatment. According to this research article, medication errors are the sixth leading cause of mortality in the USA (Salar et al., 2020). Statistics show that 38% of medication errors are related to nurses, and the prevalence of medication errors among nurses is between 16 and 27 % (Salar et al., 2020). In this qualitative study, 17 participants in an educational hospital were selected using a purposeful sampling method (Salar et al., 2020). Data

were collected by asking questions regarding medication administration in the one-on-one, face-to-face interview. Results showed that medication errors could be prevented by simple methods like nurses acting professionally, compelling reading of the drug label, keeping medication separate, and documenting drug administration accurately (Salar et al., 2020).

Synopsis

The studies showed that although nurses commit medication errors, nurses' most effective method for preventing drug errors is adopting a professional attitude (Salar et al., 2020). A simple approach like rechecking the medication twice and asking for further clarification from the provider if nurses suspect some prescription errors leads to a reduction in medication errors.

Common Barriers to Reporting Medical Errors

Medical errors are the third leading cause of death in the United States after heart disease and cancer (Aljabari & Kadhim, 2021). More than 200,000 patients die annually in the United States from Medication Errors (Aljabari & Kadhim, 2021). This systematic study aimed to research possible factors leading to medication errors and compare them with different health care institutions. This research article focused on Medline and Scopus databases for conducting a meta-analysis of the cause of medication errors (Aljabari & Kadhim, 2021). The majority of these studies focused on nurses and physicians, the most vital pillars of the healthcare system. A synopsis of results suggested that fear of being blamed for the error is the most common factor leading to medication errors (Aljabari & Kadhim, 2021). In addition, the busy nurse's schedules and poor understanding of reporting drug-related errors are other factors leading to drug errors (Aljabari & Kadhim, 2021). The most prevalent cause of drug-related errors in the United States is the work environment (Aljabari & Kadhim, 2021). In addition, a lack of collaboration and effective collaboration among healthcare teams can cause medication errors.

Synopsis

Evidence suggests that fear of consequence is the most common cause of medication error worldwide, and work climate is the most reported barrier in the United States (Aljabari & Kadhim, 2021). This meta-analysis provides six potential causes of medication errors: fear of consequences, lack of feedback, work climate, not adequate reporting of medication errors, longer hours of work, and lack of knowledge about drugs (Aljabari & Kadhim, 2021).

Safety in drug administration: Research on nursing practice and circumstances of errors

Despite the advanced technology and sciences, health care services are still facing the challenges of providing safe care to patients. In health care facilities, around 98,000 annual deaths occur due to errors, and 30% of fatalities have occurred due to medication errors (Manzo et al., 2019). Medication error is preventable events in the health care facility, and not all medication errors would cause harm to the patient. However, it is crucial to prevent and avoid medication errors because they can damage a patient's health, increase the hospitalization stay and cost, and cause death (Manzo et al., 2019). The author states that the medication error frequency is indistinguishable between children and adults; however, children have a higher risk of having adverse effects due to immaturity of the organs (Manzo, 2019).

Synopsis

Related to decreasing medication errors and promoting patient safety, participating in the system as a nursing team is vital (Manzo et al., 2019). Especially, medication administered in pediatric patients can cause more adverse effects due to different body surface areas and weight than in adult patients. The author insists that proactive and preventive management interventions can improve the quality of care (Manzo et al., 2019). The most significant factors that lead to medication errors are working conditions and failure to communicate with other professionals

(Manzo et al., 2019). Critical thinking and decision-making are required to understand the circumstances of medication errors as a nurse and nursing team. Moreover, understanding and reviewing the patient and drug information before administering the drug can reduce errors.

Case Study/Example

One of the safety issues noted during a clinical was the excessive medications the older aged population would bring to the hospital. This issue is called *polypharmacy*. Khamis et al. (2021) defined *polypharmacy* as a client having four or more medications used in the older population. There are several safety problems with the older aged client and polypharmacy. The older client may be under-medicated, resulting in poor health outcomes from functional disability to death. The older client can also refuse to take or overtake their medication, leading to disastrous results. Both of these scenarios present safety medication issues. Khamis et al. (2021) found that older clients entered a hospital with a large percentage of polypharmacy. Reducing the number of medications upon the client's discharge was the goal. Khamis et al. (2021) utilized a tool to evaluate potentially inappropriate medication older adult clients took in the hospital. That tool is called the Beers Criteria. Using the Beers Criteria as one aspect of the total approach to medication with other tools and assessments will minimize the usage of potentially inappropriate and unsafe medications in older-aged clients. Khamis et al. (2021) found that 107 clients brought 1,039 prescribed medicines to the hospital. 16.9% of potentially inappropriate medications were taken upon admission, whereas discharged clients totaled 12%. The prevalence of polypharmacy was 79.4%. They concluded that a nationwide assessment is needed to minimize polypharmacy in older clients to provide the safety of medications.

Synthesis

Practice

The best or preferred nursing practice to reduce medication errors would be following the rights of medication administration (Alrabadi et al., 2021). Collaborating with other healthcare professionals while providing patient care can improve patient care quality (Manzo et al., 2019). One of the ways to improve the nursing practice to reduce medication errors would be to provide patient care as a nursing team and enhance the work environment for the nurse (Khan & Tidman, 2022). Extending the length of work shifts for nurses' results in increased judgment errors related to the patient's care and medication administration (Khan & Tidman, 2022).

Education

The current guidelines for medication administration and nursing practice related to medication errors are that nurses should systematically and conscientiously check the procedure and act according to instructions. The rights of medications are the right person, right medication, right dose, right time, right route, and right documentation (Alrabadi et al., 2021). Nurses are the final verifiers of the medications before administration to the patient; it is essential to review the medication interactions, adverse effects, and patient charts.

Research

The priorities for further studies related to medication administration are analysis of the previous medication errors to increase the accuracy of medication administration. There will be human factors resulting from medication errors, such as neglecting instructions (Sessions et al., 2019). The nurse should be aware of the risk of medication errors and should increase the awareness of safe medication administration (Escandell-Rico et al., 2021). Healthcare facilities need to involve medication safety by evaluating medication errors and educating healthcare professionals.

Conclusion

Overall, patients need to take medication adequately and precisely to control and improve their health conditions. Therefore, nurses have a responsibility and unique role in medication administration. Nurses have the potential strength to prevent and avoid medication errors. Evaluating the cause of errors and improving the nursing practice by educating and providing a quality work environment would enhance patient care and increase the safety of medications.

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