Medication Administration: Quality Improvement

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Quality improvement is crucial in any field that involves providing services to groups of people. Specifically, regarding healthcare, quality improvement can directly influence the livelihood of clients, their families, and healthcare team members. Pinpointing the different ways of doing things and identifying methods that provide the highest quality of care enhances client relationships, experiences, and outcomes (QSEN, 2020). QSEN, the Quality and Safety Education for Nurses, uses a core set of initiatives for nursing practice to enhance the quality of nursing care. One of these initiatives is quality improvement, which aims to positively influence the care nurses provide clients (QSEN, 2020). Returning to an implemented practice, analyzing the strengths and weaknesses, and evaluating and implementing newer best practices as they develop is a necessary attitude for quality improvement (QSEN, 2020). This utilization of QSEN allows for the analysis of experiences and outcomes and the implementation of interventions to improve these things for clients and nurses. Expanding the knowledge regarding pharmacology and new medications and understanding the practices and pressures regarding medication administration can best be accomplished by considering the experiences of those who hold that responsibility (QSEN, 2020). This method of quality improvement regarding medication administration relates to the quality of care we, as nurses, provide, and the safety of the clients (QSEN, 2020). The QSEN use of quality improvement aims to educate and prepare us to continue adjusting our practices based on developing evidence-based practices to positively impact our clients and their outcomes. Improving the health and outcomes of patients requires research and the implementation of evidence-based practices to change to a systemic and routine way of doing things. Medication errors are a huge cause for concern within the healthcare field and can be detrimental to client care and the careers of healthcare professionals. Administering

an incorrect dosage of a medication can have a subtherapeutic effect on the client by not being enough or causing overdose symptoms due to a toxic level of the medication. Administering the wrong medication can have little to no effect depending on the client and their situation, or can cause life-threatening damage, such as an unnecessary paralytic causing cardiac and respiratory failure, or an antihypertensive given to a client who is already hypotensive causing their pressure to bottom out. The possibilities of outcomes with medication errors are endless because each situation, client, and medication are different. A medication error can be the sole link between life and death for a client. The professional and legal repercussions for medication errors can also range from minor punishments to losing a license and even jail time, depending upon the severity of the mistake. The presenting article aims to assess the topic's leading concerns and improve medication administration techniques and client outcomes in a hospital setting (Salar et al., 2020).

Article Summary

The research study interviewed nurses and a doctor in a hospital, and the article points to two themes influencing medication errors: a lack of professionalism and a knowledge deficit (Salar et al., 2020). Each participant interviewed was asked four main questions regarding the cause of medication errors and how to prevent them. The suggestions included storing similar medications separately, having particularly harmful medications labeled differently, continuing pharmacological education throughout the career, and utilizing an experienced nurse's guidance and assistance when administering medications (Salar et al., 2020). Quality improvement regarding medication administration to clients can improve client outcomes and enhance trust within the medical field while preventing unnecessary complications.

Introduction

This article is from a qualitative study done to decrease the incidence of medication errors and improve outcomes for nurses and clients (Salar et al., 2020). The information provided offers insight into common causes of medication errors, such as insufficient pharmacological knowledge and carelessness, and proposes ideas for how to combat these errors with support from other nurses and more distinct storage practices (Salar et al., 2020). The study is relevant to quality improvement because it analyzes an issue seen in the healthcare setting and proposes ways to mitigate the issue and improve health outcomes for all clients. The researchers recognize the benefit of seeking a variety of experiences and using those to change daily practices.

Overview

This article addresses the individuals most often administering medications, nurses, and seeks ways to improve the accuracy by decreasing errors during this task (Salar et al., 2020). Delivering various medications to clients is a task that nurses do many times during their day and throughout their careers. Errors occur when medications are given incorrectly, such as by the wrong route, to the wrong patient, at the wrong time, or even the wrong medication. Nursing professors tell us that we will make at least one medication error at some point in our careers. Depending on the medication error, clients can be unaffected or have complications and even death as a result. This article aims to identify practices that impede the incidence of medication errors. This study relates to the QSEN competency of quality improvement because it sought to explain why medication errors occur and methods to improve medication administration skills to enhance the quality of client care. This research was necessary to improve the clients' quality, safety, and standard of care within the healthcare system (QSEN, 2020). The researchers

identified that undergoing continuing education and monitoring medication administration efforts would decrease the incidence of these errors (Salar et al., 2020). Also, the use of control systems to prevent and report medication errors is thought to positively affect client outcomes by preventing and reconciling medication errors (Salar et al., 2020). Finally, holding us nurses to high professional standards, behaviors, and attitudes is said to be beneficial for decreasing the incidence of medication errors and minimizing the complications of these errors by promptly reporting of the error (Salar et al., 2020). This topic impacts nursing practice because it is a considerable portion of our daily tasks, and correctly performing this skill is crucial for nursing and client success. Improving the quality and accuracy of medication administration contributes to optimal client care and can alleviate some stress related to our duties as nurses. Minimizing the incidence of medication administration can save the client's lives and preserve the livelihoods and careers as nurses.

Quality Improvement

This specific research was conducted with staff from the emergency department, surgery, ICU, and pediatrics at a university hospital in Iran (Salar et al., 2020). Based on the research in this article, all types of facility care settings could benefit from the suggested improvements. Medication errors are present in all areas of healthcare and the suggested improvements could be implemented anywhere medications are administered. For all stages of implementation, there would always need to be at least one dedicated medication administration nurse to offer a second pair of eyes and verify doses, routes, medications, or the availability for another nurse to do so. For all implementation stages, there would always need to be adequate storage space to separate certain medications that are more dangerous or appear like others in some way. Finally, there needs to be adequate resources to offer and ensure continuing pharmacological education.

Resources required would come in the form of finances to provide the courses and time as a resource so that nurses can complete the coursework. Initially, nursing satisfaction is likely to decrease or remain the same upon implementation of the suggested interventions due to the extra work it requires to involve another nurse consistently for such a frequent task and the general fatigue and workload that come with stretching nurses thin and having to complete additional tasks and education (Salar et al., 2020). However, there is much fear surrounding medication errors and potential legal repercussions, so upon the success of the program implementations, nursing satisfaction is likely to increase, especially considering the burden it alleviates from the individual nurse of the stress and fear of making these costly mistakes (Salar et al., 2020). Financially, there is some burden on facilities to provide the resource nurse, additional medication storage spaces, and continuing education, but minimizing medication errors also helps with accreditation and can cut the costs associated with client care related to medication errors and legal settlements (Salar et al., 2020). Patient and family satisfaction and the safety of nurses and patients are enhanced with improved outcomes, which is made possible by not making medication errors and managing complications efficiently when they occur.

Application to Nursing

Some identified causes of medication errors are fatigue, busyness, and burnout, in which a nurse moves too quickly and does not accurately read a label or an order. Nurses typically work under the supervision of and alongside other nurses. Utilization of these other sets of trained eyes when administering medications, even just in the latter part of a shift or during busier periods, can alleviate the frequency of medication errors, as the second person can catch mistakes before they happen. Continuous education regarding medications and administration errors prepares us

to be thorough with this daily task and know how to respond efficiently and effectively to prevent adverse outcomes in clients when an error does occur. Additional research is needed to determine whether errors are more frequent during certain days or times to adequately formulate intervention strategies such as staffing an additional nurse to verify medications or staggering medication times so that nurses are available to verify medication orders for one another.

Practice

The current best practices for medication administration involve using the rights of medication administration for every client. This includes using two client identifiers, typically their name and date of birth, the scanning of their barcoded bracelet, and confirming the right drug, right client, right dose, right route, right time, right assessment, right education, right documentation, right evaluation, and right to refuse (Hinkle et al., 2022). While tedious, this requires the nurse to think critically and carefully confirm the medications they are giving to their client. It acts as a template of steps for every medication, is widely taught in nursing curriculums, and is posted in most hospitals as a reminder. Additional best practice includes the requirement of a second nurse to sign off on certain high-risk medications to verify the rights are satisfied and decrease the risk of an incorrect dose, route, client, or medication (Hinkle et al., 2022). This practice was implemented because certain medications can be more detrimental to the client if given incorrectly, such as paralytics. This computerized prompt will also alert the nurse if they mistakenly scanned in a medication that could be more detrimental, not prescribed to that client, enter an incorrect dosage, or the time is incorrect. Finally, most hospitals use medication dispensing machines that make a nurse select their client and only offer the prescribed medications for that client. The machine guides them to each medication's slot to

minimize the risk of errors. This type of medication dispenser decreases the nurse's risk of grabbing an incorrect medication stored nearby and misreading a medication on the prescription. It also saves us time when preparing to administer medications by not having to search for things, and time crunches is associated with increasing incidences of medication errors.

Education

Medication errors are often due to a knowledge deficit regarding pharmacology and the need for careful, professional actions, as outlined in the article (Salar et al., 2020). Nursing licensure in Illinois requires the completion of a pharmacology course, including practice with administration and clinical hours relating to pharmacology (Department of Financial and Professional Regulations, 2019). In order to prevent medication errors, nurses require extensive training and education regarding pharmacology, which must continue even after licensure. Medications are constantly developing and changing, so the education and training need to continue to adapt so that medication errors are minimized, and clients can have optimal outcomes.

Research

Further research on medication errors should investigate the incidences of medication errors connected to fatigue and communication issues. It would be worthwhile to obtain the data on when medication errors most frequently occur within a shift, at a particular time of day, during certain situations and events, and even at times of year. Determining whether circumstances place a nurse more likely to commit a medication error can guide where additional interventions might be beneficial. For example, if the data shows that medication errors are more likely to

occur in the last 2 hours of a 12-hour shift or the 3rd shift in a row when nurses are meeting that criterion, additional safety precautions could be in place to curb that risk. Similarly, research could explore incidence of errors resulting from miscommunication in the form of prescriptions. Some errors result from miscommunication between nurses, providers, clients, and pharmacists. This information could catalyze the creation of interventions that may alleviate this, like a dual sign-off on prescriptions or an entity that verifies that medications are safe with one another.

Conclusion

The concept and practice of quality improvement in healthcare should be of the utmost importance as clients' lives hang in the balance and often rely on thorough and purposeful care by nurses and providers. The idea behind quality improvement is a goal to improve the health and well-being of clients and healthcare professionals. The QSEN concept of quality improvement involves seeking information about the quality of care provided and the outcomes of clients and implementing projects to improve further the client's experience and outcome (QSEN, 2020). Quality improvement requires outlining the steps for offering the most up-to-date, high-quality care and continuous updating of these practices as the knowledge becomes available (QSEN, 2020; Salar et al., 2020). Education for nurses is career-long and must continue and evolve to provide evidence-based practices and expand knowledge while adapting routines in the pursuit of offering clients and their families the best outcomes possible (QSEN, 2020; Salar et al., 2020). Quality improvement in nursing will involve teamwork with other nurses and interdisciplinary collaboration, including the clients (QSEN, 2020; Salar et al., 2020). Quality improvement is necessary to continue to adapt the practices of medication administration for us as nurses, and because medications can be life or death for our clients. Revising the current standards to better care for clients and their families and promote positive outcomes can improve

nursing satisfaction and help combat burnout and fatigue related to mistakes and stress. Improving nursing education, skills, and attitudes in nursing in quality improvement will improve client outcomes and experiences. Nurses are humans who can and do make mistakes like everyone else. Because we are responsible for administering potentially harmful and life-saving medications, quality improvement is crucial to saving clients' lives and improving their health status. We must continue learning, growing, and developing strategies to keep clients as safe as possible.

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