

Medication Errors in Nursing

Literature Review

Marranda Steffen

Lakeview College of Nursing

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Medication administration errors in nursing is a critical topic for all nurses in all fields of nursing. According to the Food and Drug Administration (2019), “The U.S. Food and Drug Administration (FDA) receives more than 100,000 U.S. reports each year associated with a suspected medication error. FDA reviews the report and classifies them to determine the cause and type of error”. The article also states that “studies have shown that almost in 44 to 98 thousand deaths due to medical errors, 7000 occurred due to medication errors” (Food and Drug Administration, 2019). This is preventable problem and by doing research on it will hopefully help reduce the numbers of errors. When the medication administration errors increase then the chance for patients to experience a harmful adverse effect increases. There can be many adverse effects that a patient can experience when there is a medication error, such as hospitalizations, disability, congenital disabilities, life-threatening, and death (Food and Drug Administration, 2019). Throughout this literature review, three qualitative studies will explain the causes of those errors in various areas of nursing, the effects of the medication errors, and how to reduce the chance of a medication error in multiple nursing areas.

Investigating the Causes of Medication Errors and Strategies to Prevention of Them from Nurses and Nursing Student Viewpoint

The purpose of the article is to “investigate the causes of the medication errors and strategies to prevent them from a nurses and nursing student viewpoint” (Gorgich et al., 2015). It is crucial to figure out the cause behind the medication errors because if there is one common cause, then hopefully, it can be prevented if all nurses and nursing students are made aware of common mistakes. If a computer flaw is making the mistakes leading to nurses administering the wrong

medication, then the computer needs to be fixed, or the nurses need to be made aware of being extra careful in those situations. Is the medication errors that are happening preventable or not, is the crucial question that is being addressed in this article (Gorgich et al., 2015).

The most critical information in this article is the sample volume for the study, who was included in the sample volume, and what shifts that these nurses worked. The sample volume is significant because knowing that the number of nurses chosen for the study was decent. When researching medication errors, it is essential to have multiple people be included because it will prevent bias toward one side or the other. It is also necessary to understand that two nurses, working in the same unit, that make mistakes should not represent all nurses in all types of specialties. According to Gorgich et al. (2015), “the sample volume consisted of 327 nurses working in different wards of hospitals and 62 nursing students”. This information helps transition to the following important information in the article, which was included in the sample volume. It is critical to know that nurses from other units and nursing students were all involved in this study because this helps prove that there is no bias included in this article. The nurses that were apart of this study were from different units, which helps determine the cause of medication errors in all nursing types and not just specific to one field of nursing. The nurses and nursing students that were chosen had to meet specific criteria. The nurses had to “have at least one year of work experience in the current ward and having at least a bachelor’s degree in nursing” (Gorgich et al., 2015). The students had to “be senior nursing students and were required to pass the course of pharmacology” (Gorgich et al., 2015). The last vital information to know about the article is what shifts the nurses worked while this study is being conducted. There were nurses in different shifts, such as morning, afternoon, and evening, in the survey (Gorgich et al., 2015). The reasoning for knowing when the nurses worked is to help from bias as well. When a variety

of shifts are involved, it will help decide whether one shift has more medication errors than another or if it is a reoccurring error that is happening at all times of the day.

The main inferences in this article are “fatigue due to high workload, the large number of critically ill patients, doctor’s damaged or unreadable orders and the low nurse to patient ratio (Gorgich et al., 2015). Doctor’s damaged or unreadable orders are factors that can be prevented either by the facility making sure that the doctors type out the prescription in a computer system by the nurse calling the doctor when they see a damaged or unreadable order to verify it. Two things that could be prevented is fatigue due to high workload and low nurse to patient ratio. Facilities should hire more nurse in order to lower the number of patients that one nurse takes care of. By reducing the number of patients per nurse, it relieves stress on the nurse helping them keep a clear mind and making it easier to for the nurse to take the time needed with each patient. A large number of critically ill patients cannot necessarily be prevented but facilities can help only assign a certain number of patients to each nurse so the nurse is able to spend more quality time with each patient. According to Gorgich et al. (2015),

“To control and reduce risk factors of medication errors followings are recommended: having a systematic approach to recognize the effective causes of medication errors and trying to solve them, quantitative and qualitative increase of the knowledge of nursing students about the medication errors that results in improving students function and reducing the medication errors, holding retraining periodical classes about pharmacological knowledge according to student’s needs, easy access to internet for students in health centers for updating their pharmacological information and students

continuous evaluation about their pharmacological knowledge in the clinical internship course.”

This previous quote is what the article recommends to reduce the medication administration errors that are occurring in all units and the steps that nurses can take to help prevent these errors. Overall, these errors can be avoided and must be stopped in the best interest of the patients.

Key Points

The key concepts nurses need to understand in this article are medication errors can be prevented by reducing the workload on the nurse. Also, by making staff proportional to the number of patients according to their condition, it can help prevent errors from being made (Gorgich et al., 2015). Another key concept would be educating and improving nurses’ knowledge about drugs so they can recognize that there is an error before administering the medication (Gorgich et al., 2015). Other important information about medicines that nurses should know about is the proper medical prescription and knowing that some medications require special techniques when administering the medication (Gorgich et al., 2015). One last key concept would be the availability of the necessary information about drugs, side effects, and interaction in each unit for the nurse to access when they have a question about the medication (Gorgich et al., 2015). By making the medication information readily available, it can help prevent a medication error from occurring.

Assumptions

There are a couple of assumptions made in this article. According to Gorgich et al. (2015), “It is necessary for the nursing managers to solve the lack of manpower proportional to the

number of patients.” If facilities follow this, then they will have fewer medication errors occur. If the facility chooses not to comply with this for whatever reason, they will have more medication errors occur than a facility that has fewer patients per nurse. Another assumption would be “Familiarity and education of nurses with the impressive processes in reducing medication errors and making electronic medicine cards for patients” (Gorgich et al., 2015). If a facility follows this assumption, it will reduce medication errors. If a facility does not support this assumption, it will not reduce the number of medication errors that occur.

Deficit/Conclusion

This article includes some vital information for nurses, and it could be beneficial not only for them to read but also for health care facilities. For example, it is essential for health care facilities to understand the importance of having a low patient-to-nurse ratio to decrease medication errors. This article states ways to reduce medication errors by pointing out the causes of the mistakes and ways to prevent them. By pointing out these problems that are being faced by nurses, it could be an eye-opener for nurses and facilities, which can be beneficial to patients. Nurses are there to help the patients that need help and not cause them more problems than they already have.

References

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