

**Implementing Cardiac Surgical Unit-Advanced Life Support Through Simulated-Based
Learning: Quality Improvement**

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Cardiothoracic emergencies most likely result in a visit to the intensive care unit in a hospital. Nurses, at times, have a delayed response to the needs of the patients. A delay of CPR can increase deaths among the patients who occupy the intensive care unit. A death devastates families and the nurses who are working. Having the proper training and a timely response is imperative during an emergency.

Article Summary

Simulated-based learning programs are to ensure nursing staff receives consistent reeducation (Marler, G at al., 2020). This study conducted took place over three months (Marler, G at al., 2020). Simulated-based learning is used to ensure nursing staff receives consistent reeducation. This study conducted took place over three months (Marler, G at al., 2020). The researchers prompted the nursing staff of intensive care to unite to participate for the three months (Marler, G at al., 2020). Thirty-four nurses took a test before, during, and after the simulated-based learning, exercises took place (Marler, G at al., 2020). The nurses who work in the intensive care unit have at least six years of nursing experience (Marler, G at al., 2020). The intensive care unit was eighteen patient beds, and during the time of the study, twenty-seven cardiac arrest situations that required CPR took place (Marler, G at al., 2020). A mean of tests from the nurses working in the intensive care unit by the researchers to evaluate the success in learning from the simulated-based learning (Marler, G at al., 2020). After the three months,

the mean for response time in cardiac emergencies was significantly higher than the first test taken by the nurses in the intensive care unit (Marler, G at al., 2020). The research collected indicated that the simulated-based learning was successfully reeducating nurses on proper procedure, which resulted in the CPR response time being faster than previously (Marler, G at al., 2020).

Introduction (note that the key points is flush to the far left)

The research group utilized simulated-based learning. The nurses who worked in the intensive care unit participated in the simulated-based learning activities to observe if the activities would improve the nurses' preparation and promptness to life-threatening situations (Marler, G at al., 2020). The simulated-based learning activities were consistent with test questions to observe the success of the simulated-based learning activities. The questions included knowledge recognizing signs and symptoms of medical emergencies, skills in CPR and proper preparation, and having confidence and good behavior when the medical emergencies emerged (Marler, G at al., 2020). The researchers wanted to see how simulated-based learning would improve the intensive care unit nurses' overall quality of care for the patients who occupy the unit's hospital bed (Marler, G at al., 2020). A simulated-based learning program can improve intensive care units if utilized by hospitals.

Overview

The researchers picked a hospital with thirty-four nurses who worked in healthcare for at least six years (Marler, G at al., 2020). During the study, the researchers monitored the cardiac situation in the intensive care unit in which the nurses worked (Marler, G at al., 2020). The

researchers measured the nurses' response times to emergencies. The nurses were required to participate using the simulated-based learning exercises and answer questions at the end of each exercise (Marler, G at al., 2020). The researchers noted improvement throughout the project.

Quality Improvement

This article showed that in the intensive care unit, there could be at least three improvements made with simulated-based learning. Improvements to emergency response times are observed, such as cardiac arrest, nurses' confidence in these situations requiring CPR, and a faster response to recognizing when an intensive care patient requires emergency care (Marler, G at al., 2020). Simulated-based learning helped improve each of these points during the project.

Application to Nursing

With simulated-based learning, the intensive care unit cardiac emergency responsiveness improved. Evidence using the mean of the thirty-four participant nurses' was taken and showed significant improvement. Utilizing this in each department, in nursing, could mean an overall improvement in healthcare (Marler, G at al., 2020). Simulated-based learning is used in schooling for nursing and should be a continuous tool outside of school. Simulated-based learning throughout a nurses' career can be beneficial.

Practice

The researchers' simulated-based learning system included interactive videos in which the nurses responded to each case differently (Marler, G at al., 2020). The skills included things such as medication administration, CPR skills, and responsiveness to medical emergency times

(Marler, G at al., 2020). The simulated-based learning improved the nurses' actual-time response to the patients occupying the intensive care unit (Marler, G at al., 2020).

Education

The simulated-based learning activities included test questions at the end of each scenario. The tests were to monitor for improvements for the nurses' working in the intensive care unit. The tests proved the nurses' improved knowledge of the care needed for the patients (Marler, G at al., 2020). The simulated-based learning improved the nurses' overall performance.

Research

The research suggests that the simulated-based learning improved care and response time for the nurses working in the intensive care unit (Marler, G at al., 2020). There was also an improvement in confidence as the simulated-based learning introduced the nurses' to a new and improved way of responding to emergencies (Marler, G at al., 2020). The research indicated that more research and studies might find more ways to improve nursing care through simulated-based learning (Marler, G at al., 2020). Future simulated-based learning research can help improve other care for patients in which nurses provide.

Conclusion

Simulated-based learning can improve the quality of responsiveness to emergencies such as cardiac emergencies. Further use of simulated-based learning can improve nurses' overall performance, as shown in this study. Nursing can always use improvement as medical science is constantly changing.

References

Marler, G. S., Molloy, M. A., Engel, J. R., Walters, G., Smitherman, M. B., & Sabol, V. K. (2020). Implementing Cardiac Surgical Unit-Advanced Life Support Through Simulation-Based Learning: A Quality Improvement Project. *Dimensions of Critical Care Nursing : DCCN*, 39(4), 180–193. <https://doi.org/10.1097/DCC.0000000000000425>