

Ultrasound-Guided Peripheral Intravenous Catheterization: Literature Review

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This literature review aims to assess the usefulness of using ultrasound to guide peripheral venous catheters. This topic is essential because it has the potential to reduce the number of peripheral catheterization attempts, which will reduce patient frustration, pain, and risk of infection (Feinsmith et al., 2018). Ultrasound-guided peripheral catheterization also assists healthcare staff by easing the difficulty of obtaining vascular access (Feinsmith et al., 2018). Overall, ultrasound-guided peripheral catheterization helps the patients and staff, especially when obtaining access is difficult (Feinsmith et al., 2018).

Outcomes of a Simplified Ultrasound-Guided Intravenous Training Course for Emergency Nurses

This article studies the effectiveness of an ultrasound-guided intravenous catheterization class and if it will help reduce the number of sticks necessary to obtain peripheral access (Feinsmith et al., 2018). The researchers assessed the success rates of ultrasound-guided intravenous catheterization before and after a class taught by various physicians in the facility (Feinsmith et al., 2018). The study found that the class increased the success rates of peripheral intravenous access in general and ultrasound-guided intravenous catheterization (Feinsmith et al., 2018). Overall, the class increased intravenous access success rates for nurses.

Key Points

The researchers used a quantitative method and had 34 emergency registered nurses participate in the study (Feinsmith et al., 2018). The researchers used paper logs to keep track of the intravenous catheterization success rates (Feinsmith et al., 2018). The data showed that

ultrasound guidance would reduce the number of sticks and that the nurses would improve over time, making the data clinically significant (Feinsmith et al., 2018). The listed p-value was 0.013, and the authors concluded that ultrasound-guided intravenous catheterization could help nurses obtain difficult intravenous access (Feinsmith et al., 2018).

Assumptions

The author's primary assumption was that using ultrasound guidance to obtain intravenous access would help the staff and the patient, especially when intravenous access was difficult to obtain (Feinsmith et al., 2018). The authors assumed that when intravenous access was difficult to obtain, direct visualization of the vessels and access device would assist in successful catheterization (Feinsmith et al., 2018). After reviewing their data, the authors were correct to assume that ultrasound guidance would assist in successful catheterization (Feinsmith et al., 2018).

Deficit/Conclusion

After a review of the methodology, format, and results of the study, a researcher accepts the author's line of reasoning. This article proves that ultrasound-guided intravenous catheterization can reduce the number of times a patient is stuck and that ultrasound guidance is a tool that nurses should be able to utilize (Feinsmith et al., 2018). If nurses were to fail to accept the findings of this article, they would continue sticking patients multiple times to obtain difficult intravenous access. Failure to accept would lead to the patient becoming irritated over multiple sticks and the nurses spending more time attempting to obtain vascular access (Feinsmith et al., 2018).

Second article title here

Here add in a summary of the article. Follow the MEAL paragraph formatting and use Grammarly.com. Be sure to cover all aspects within the rubric. Be sure to use double space and to tab over for your first line of a new paragraph.

Key Points

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Assumptions

Paragraph goes here discussing the assumptions of the article. Follow the MEAL paragraph formatting and use Grammarly.com.

Deficit/Conclusion

Paragraph goes here discussing the conclusion of the article. Follow the MEAL paragraph formatting and use Grammarly.com. Do you accept the authors' line of reasoning? What are the implications for this article? If nursing fails to accept this line of reasoning, what would the implications be?

Third article title here

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Key Points

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Assumptions

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Deficit/Conclusion

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Conclusion

Write a conclusion here in your overall paper. Follow the MEAL paragraph formatting and use Grammarly.com. Provide a summary/conclusion of the analysis of all three articles.

Discuss how the information can improve:

- Patient outcomes
- Nursing practice
- Evidence-based practice/Quality Improvement efforts
- Healthcare as a whole

References

Feinsmith, S., Huebinger, R., Pitts, M., Baran, E., & Haas, S. (2018). Outcomes of a simplified ultrasound-guided intravenous training course for emergency nurses. *Journal of Emergency Nursing, 44*(2), 169-175. <https://doi.org/10.1016/j.jen.2017.10.001>