

Assessment of patients receiving complex pain management interventions: An educational module of epidural analgesia using standardized patients for Registered Nurses

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Background

- Registered nurses (RN's) receive didactic training regarding caring for patients receiving epidural analgesia.
- Although nurses are tested on their knowledge following this training, their ability to critically think through adverse events is not assessed.
- Unintended effects of epidural analgesia, including: insufficient analgesia, excessive sensory or motor block, dural puncture headache, and hematoma have been reported.

Objective

- The objective was to fill a gap in RNs' education related to caring for patients receiving epidural analgesia through the use of simulation education, with the ultimate goal of improving quality of care and patient safety.
- The research questions were:
 - (1) Is the use of an instructional module using standardized patients a feasible approach for RN's to learn the safe care of individuals receiving epidural analgesia?
 - (2) Does progression through the learning process of knowledge through skills acquisition to implementation, using standardized patients, improve RN's application of the critical assessment components for individuals receiving epidural analgesia?

Description of Innovation

- Research ethics board approval was obtained at North York General Hospital.
- After obtaining informed consent, RN's completed: the education intervention [(4 hr workshop)
 - a pre-workshop evaluation of skill performance where they completed a Objective Structured Clinical Examination (OSCE) to demonstrate an epidural assessment a standardized patient
 - a demographic and knowledge questionnaire
 - a lecture regarding care, management and assessment of patients who are receiving epidural analgesia.
 - RN's practiced epidural assessments within small groups.
 - a post-workshop OSCE, questionnaire and de-brief prior to the end of the workshop.

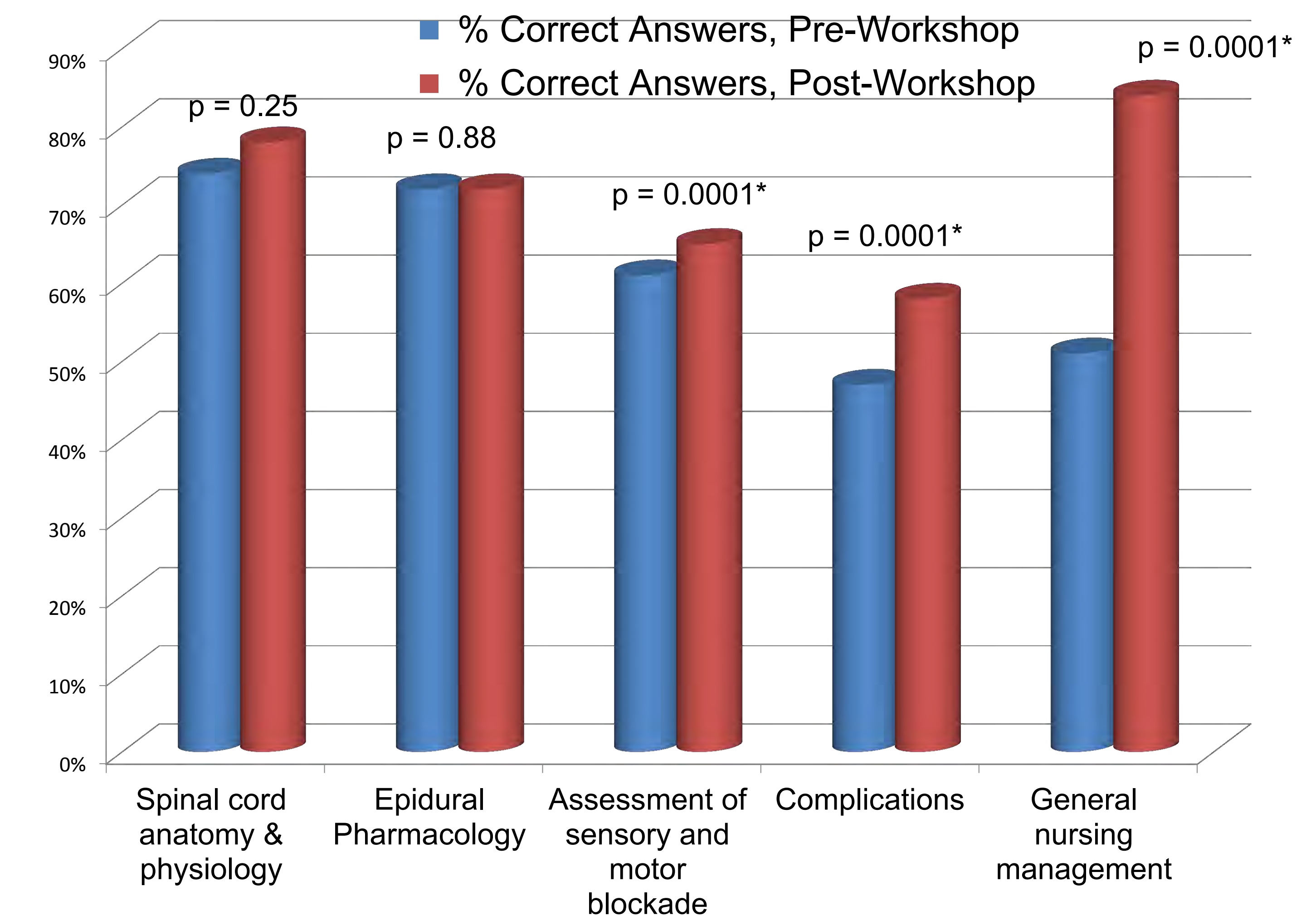


Impact

| RN's (n=37) | Mean (years) |
|--------------------------------|--------------|
| Age | 43 |
| Years practicing as an RN | 13 |
| Years experience with epidural | 4.6 |

For the pre & post knowledge questionnaire, there was significant improvement in 8/21 questions.

Improvements in answers on the questionnaire were most frequently related to epidural pharmacology and assessment of blockade questions.



For the pre & post OSCE, there was a significant increase in the number of correct procedures performed in all categories with the exception of equipment (this score was high in the pre OSCE).

There was also a significant change in the proportion of RN's who stated they felt confident in their assessment and interpretation of findings.

Conclusion

The results of our study showed that it is feasible to use standardized patients as an approach for RN's to learn the safe care of individuals receiving epidural analgesia. It also showed an improvement in RN's application of the critical assessment components for individuals receiving epidural analgesia.

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