Correlation of Mobile Device Application Use During Student Registered Nurse Anesthetist Training and First Time NCE Pass Rates

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Background: Mobile devices offer access to a wide variety of medical references which are widely used by certified registered nurse anesthetists (CRNAs) and trainees. Previous research suggests that these mobile reference apps are quick, easy, and effective ways to access information but questions have been raised about students' reliance on these external references.

Objectives: This study aimed to examine whether there is a statistically significant correlation between the use of mobile apps while in nurse anesthesia training and the likelihood of a student registered nurse anesthetist (SRNA) to pass the National Certification Exam (NCE) on their first attempt.

Method: A descriptive, cross-sectional online survey design was used to identify SRNA behaviors associated with MR app usage during clinical training and determine whether any correlation exists between medical reference app usage and test performance.

Results: Data from 41 CRNA and SRNA respondents were collected. Younger CRNAs and SRNAs were more likely to use their phones as a medical reference. SRNAs used medical reference apps slightly more often than CRNAs and were more likely to look up specific medications, specific surgical procedures, and perform clinical calculations.

Conclusion: The study findings revealed that there was no correlation between frequency of app usage and first-time passage of the NCE ($r=-.154$, $p=.462$). Further studies incorporating GPA and other known predictors for the 1st time attempt pass rate in the NCE are warranted.

Keywords: nurse anesthetists, students, anesthesia, mobile applications, test performance, education.

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