Abstract

Original Paper

Mathematical and Drug Calculation Skills of Nursing Students in Turkey

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Abstract

Background: Numerical and drug calculation skills are reported to be important for patient safety.
Aims: The aim of this study, which employed a descriptive and cross-sectional design, was to investigate the mathematical and drug dose calculation skills of nursing students.
Methodology: This research was conducted in 2014 at two nursing schools in two different Turkish cities. A total of 128 nursing students participated in the study. Validated numerical and drug calculation tests were given to senior-year nursing students. Mathematical and dose calculation skills did not differ between genders or between the students' schools. Nursing students were significantly more capable of performing calculations for solids, liquids and injections than for intravenous fluid and infusion rates.
Results: The median of the mathematical skill scores was 50%, and the range was between 0% and 100%. The drug dose calculation score varied between 10% and 100%, and the median was 60%. Of the 128 students, 36.4% scored below 60%, and 82.9% scored below 80%.
Conclusions: This study indicates that nursing students have poor mathematical and drug dose calculation skills.

Key Words: Drug dose calculation skill, mathematical skill, nursing student