Evaluation of Clinical Reasoning Skills Using High Fidelity Simulation (HFS): Knowledge Retention and Role Differentiation

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Background

Simulation is gaining popularity and **enhances learning** in a safe and controlled environment.

Students are unable to effectively evaluate self-performances & **objective evaluation** is needed.

Purpose

Examine knowledge retention after HFS exploring blood transfusion focusing on how **assigned roles** within HFS affects student learning.

Will the assignment of the Team Leader or the Medication Nurse (active roles) in HFS have a greater effect on knowledge retention and learned clinical skills?

Literature Review

Role Differentiation: A role is a responsibility or character assigned to a student in HFS.

Meakim, et al. (2013)

Role differentiation of students within the HFS **has not** been explored in depth.

Observer roles within simulation reported **more satisfaction** with learning than those taking an active role within HFS.

Yaun, Williams, & Fang (2011)
Thidemann & Saderhamn (2013)

Method

Quasi-experimental repeated measures design covering standards of blood transfusion and protocols for possible transfusion reactions allowed for **quantitative data** collection.

Based on The Joint Commission National Patient Safety Goals (2014) and the American Association of Blood Banks standards for blood banks and transfusion services (2012) on transfusion safety.

Distributed to faculty experienced in Care of Adults medical surgical nursing for **face validity**.

Students *(N-67)* **randomly assigned** roles in HFS including charge nurse, medication nurse, assessment nurse, family nurse, and family member.

Results

SPSS utilized to **compare pre, post, and 4-week posttest scores.**

Those with **a passive role** (family member) in the HFS**, scored higher** on the first and second post-tests with a ten point difference on 4-week post testing.

No difference in test scores considering **demographic variables** of age, gender, previous employment in the medical profession, previous history of blood transfusion, previous education on blood transfusion.

References

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