RISING TO MAJOR SAFETY CHALLENGES:

VIRTUAL SIMULATION & ENHANCING STUDENT NURSING SKILLS IN RESPONDING TO THE DETERIORATING PATIENT

This study demonstrates the positive impact of virtual simulation on knowledge and confidence of undergraduate nursing students from four countries.

Nursing students reported that virtual simulation positively impacted learning, increased confidence and critical thinking ability.

After the six-case virtual simulation intervention there were significant differences.

A major patient safety challenge is recognition and response to deteriorating patients since early warning signs are often not detected in a timely manner.

This study's **aim** was to explore the impact of a virtual simulation intervention on the recognition and response to the rapidly deteriorating patient among undergraduate nursing students using a **quasi-experimental pre/post design.** The virtual simulations were completed asynchronously and the debrief and focus groups ere conducted online through the zoom platform. Participants were **3rd or final year BScN students** from five university sites in four countries (Canada, England, Scotland and Australia, n=88). Students were randomly assigned to a treatment or a control group. The treatment group received a virtual simulation intervention over three weeks and completed six virtual simulations with debriefing at the end of each week. Both groups completed a pre and post clinical selfefficacy and knowledge survey. The treatment group also participated in a 30-minute focus group. The virtual simulation intervention had a significant effect on improving nursing student knowledge and clinical self-efficacy in the recognition and response to the rapidly deteriorating patient. Students reported that the virtual simulations decreased anxiety, helped them prioritize and filled in the gaps in their learning within a safe 'low risk' environment.

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