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Abstract for oral presentation

Title:

Educating for teamwork- Simulation-based method to promote teamwork skills in a three-year nursing educational programme

Keywords:

Simulation, nursing education, nursing students, interaction

Type of presentation:

PhD-research project

Author/s, Organization:

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Abstract text

Background:

Most research on high-fidelity simulation as a tool for learning in nursing education applies randomized experimental designs with a focus on individual outcomes. The ability to learn teamwork skills in a simulation-based environment with patient simulators requires complementary knowledge based on research traditions that deal with the process of learning itself. This presentation takes theoretical and methodical point of departure in interaction analysis. A basic assumption, from such a perspective on learning, is that it is the participants' own concerns in the midst of the ongoing activity that guide the analysis.

Purpose:

The overall aim of the project is to gain new knowledge in how simulation-based environments can function as an arena for training and improving teamwork skills in a three-year nursing educational program. Since breakdowns in emergency care teamwork are a contributing factor to adverse events, it is necessary to train and improve those skills in nursing education. To address the overall aim two research questions were formulated:

- 1) How can facilitators during the briefing instructions make visible the practical skills necessary to act in the simulation scenario, how students' display their understandings of those instructions and the interaction between instructions and such displays?

- 2) What methods are employed by students to coordinate their actions in a simulation-based environment, i.e. how are such methods constituted and enacted in student interaction?

Method

The sample consists of 80 nursing students (71 female and 9 male) in the last semester of a three year nursing educational program and five female faculty members. The current study is based on twenty-six hours of video recordings of 28 simulations in nursing education. The selected analytical approach was Interaction analysis which can be defined as a method for studying how people interact with each other and with the artifacts available in their environment. The goal of this method is to identify how the participants' make their actions understandable and display their understanding of the actions of others'. This include speech, bodily behaviour and environmental structures that are used by participants in order to align their conduct to each other and displayed, shared understandings about what to do next.

Results

The preliminary results from the analysis of the video- and audio recorded data demonstrate:

- The facilitators instructions on the relevant similarities and irrelevant differences between simulation and clinical practice in the briefing part is an important condition for understanding how to behave during a simulated cardiac arrest situation
- Simulation-based environments offer a promising solution for training coordinated action in resuscitation teams, as they provide possibilities for training essential aspects of teamwork that would otherwise not be possible

Conclusions

Simulation-based environments offer a promising solution, as they provide possibilities for training essential aspects of teamwork in nursing education that would otherwise not be possible. These aspects can be systematically trained in simulations for the purpose of improving patient safety.