

Development of health inter-professional telemedicine practice through simulation scenario training with students of physiotherapy-, occupational therapy-, medical laboratory technology-, and nursing education.

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Background: Welfare technology is considered to be cost effective and to promote consistent quality in health care (1, 2). Due to the pervasive deployment of telemedicine and the political focus thereon, it is very important that health professional students gain an understanding of its benefits and limitations and that they develop competences related to telemedicine practices. Because close interprofessional and intersectoral cooperation is required in the care and treatment of patients by the use of telemedicine, development of telemedicine competences must take place in an inter-professional context.

Aims:

The purpose of the project was

- to develop practice oriented competences related to telemedicine in an inter-professional and a cross-sectoral context among health professional students of physiotherapy-, occupational therapy-, medical laboratory technology-, and nursing education.
- to motivate and retain male students by the use of simulation training that involves technology.

Methodology:

The project was settled as a cross-professional telemedicine course on health educations. Nursing students (N=20) and physiotherapy students (N=34) participated actively and the scenarios were filmed and enacted via Adobe Connect. Students were divided into groups, and some students acted health professionals, while others acted patients. Excerpts of the recordings were analyzed and discussed with a focus on successful telemedical care and treatments well as challenges and they were followed by evaluation and qualitative interviews. Recordings, field notes, memos and observations of students and lecturers were used as empirical material for follow-up research. Data were analyzed in order to categorize the theoretical perspectives relating to learning and motivation.

Results:

Evaluations and follow-up research showed that students developed competences equivalent to novice level through simulation training (3). The project gave rise to wide project on Occupational Therapy education and medical laboratory technology education too. Follow-up research concludes that the boys who participated in the project responded positively to simulation training, as many of the girls did. Further results and perspectives will be presented at the conference.

References:

1. Accelerating innovation: the power of the crowd. Global lessons in e-Health implementation d Documents/e-health-implementation Case study: UK Department of Health: Whole System Demonstrator program
2. Danske Regioner, Kommunernes Landsforening, Ministeriet for Sundhed og Forebyggelse, Social- og Integrationsministeriet, Erhvervs- og Vækstministeriet, Økonomi- og Indenrigsministeriet & Finansministeriet (2012): National handlingsplan for udbredelse af telemedicin, Fonden for Velfærdsteknologi
3. Nortvig, Anne-Mette et. Eriksen, Kathrine Krageskov. Teknologistøttet simulationsundervisning som translokation for teoretisk viden og praktisk handlen. *Læring & Medier (LOM)* – nr. 11 – 2013. ISSN: 1903-248X
4. Murray C, Grant MJ, Howarth ML, Leigh J. The use of simulation as a teaching and learning approach to support practice learning. *Nurse Education in Practice* 2008;8[1]:5-8.
5. Watson K, Wright A, Morris N, McMeeken J, Rivett D, Blackstock F, et al. Can simulation replace part of clinical time? Two parallel randomised controlled trials. *Med Educ* 2012;46[7]:657-667
6. Dieckmann P, Friis SM, Lippert A, Østergaard D. Goals, Success Factors, and Barriers for Simulation-Based Learning A Qualitative Interview Study in Health Care. *Simulation & Gaming* 2012;43[5]:627-647.
7. Dreyfus, Stuart E.; Dreyfus, Hubert L. (February 1980). *A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition*. Washington, DC: Storming Media. Retrieved June 13, 2010.