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Healthcare students as innovative partners in the development of future healthcare services: An action research approach

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ABSTRACT

Background: Health care systems in Norway and the western world have experienced extensive changes due to patients living longer with complex conditions that require coordinated care. A Norwegian healthcare reform has led to significant restructuring in service delivery as a devolution of services to municipalities.
Action Research Design: Partners from three rural healthcare services, students from four professional programmes, and one lecturer from each of the professional programmes used a collaborative approach to obtain new knowledge through interprofessional practice. Using an action research design, the research group facilitated democratic processes through dialogues with healthcare services and students. The design is visualised as a cyclical process in which each cycle contributes to improvements, innovations, and increased understanding. A total of 32 students and 3 supervisors were interviewed before and after the clinical practice experiences. Fieldwork was conducted during three clinical periods.
Findings: Interprofessional student groups formed small healthcare teams and assessed patients with chronic and long-term conditions. Students prepared and negotiated patient follow-up. The teams' responsibilities led to reflective practices that enhanced their professional knowledge. The teams achieved a new understanding of patient situations, which influenced "second opinions" for patients with complex conditions and led to innovative practices. The change in perception of patient needs led to a changed professional approach. The students' perceptions changed as they learned from and about each other and in collaboration with the health service; this led to more coordinated care of patients with complex conditions. Interprofessional learning in community settings provided a platform to improve both healthcare education and rural healthcare services.
Conclusion: This research contributes to knowledge of how students' placement in interprofessional teams can enhance students learning from, with and about each other. The student teams promoted new ways of approaching and delivering complex patient treatment and care in community healthcare service. Collaborative partnerships in interprofessional learning have potential in the wider international arena as a means for practice improvement.

1. Introduction

Interprofessional practice is viewed as a means to improve health services for people with long-term and complex conditions who are in need of coordinated care (Reeves et al., 2010).

Learning of collaboration across professional boundaries has mainly been studied in specialized hospital wards rather than in community settings, and there is a need for empirical exploration of the relationships between IPE, teamwork and collaborative practice (Thistlethwaite, 2012). In this research study, the focus is on the mutual learning that occurred in the community healthcare service and within the student groups during a module of interprofessional education (IPE) in a northern university of Norway. IPE is defined by CAIPE (2002) as occasions when two or more professions learn from, with and about each other to improve collaboration and the quality of care. The learning that arises from interaction between members (or students) of two of more professions (Freeth et al., 2005) can be a result of IPE or occur spontaneously. This article focus on the learning that occurred due to a collaborative approach by four health professional programmes: medicine, nursing, physiotherapy and occupational therapy (OT) and healthcare services. Reeves et al. (2008) stated that there is a need for more research on the impact of IPE on professional practice.

This study will explore how partnerships for the contextualisation of learning environments in community health services can contribute to the knowledge and requirements of new methods of working. Thistlethwaite (2012) and Barr et al. (2014) recommend that educators and practicing healthcare professionals collaborate to provide authentic

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learning experiences for students. This article will also present unintentional outcomes of interprofessional learning when student teams worked with patients selected by healthcare services.

1.1. Background

Public healthcare systems in Norway, as in much of the Western world, are encountering profound challenges in the organisation and delivery of efficient and effective services. Demographic changes, increases in the number of people living with chronic diseases, and advances in medical expertise mean that more people are surviving life-threatening conditions. The need for health care services will increase; however, the recruitment of qualified health care professionals has been limited.

The Norwegian government implemented *The Coordination Reform* (Norwegian Ministry of Health and Care Services, 2012) to address these changing demands. Within this document, municipalities are perceived as key agencies for new modes of organising and working across traditional boundaries. However, the success of this transformation will depend on the development of new relational and cooperative competencies and modes of working.

The need to develop new competencies and modes of working is addressed in the Norwegian white paper *Education for Welfare* (Norwegian Ministry of Education and Research, 2012) and in recent research in healthcare education (Benner et al., 2010; Frenk et al., 2010; Solvoll and Heggen, 2010; Thistlethwaite, 2012). The main arguments in both domains are that societal changes and reforms in health and welfare services require corresponding changes in health and social education, particularly through clinical learning environments. However, clinical placements must be developed in cooperation between healthcare education and healthcare services. This cooperation will ensure that students develop the competence, skills, and knowledge relevant to future health care work.

Interprofessional learning (IPL) is being utilised worldwide as a means to assist fragmented healthcare systems and address unmet needs (Hopkins et al., 2010). A review of IPL (Reeves et al., 2010) indicates that the learning outcomes, to an extent, improved how professionals worked together. The students' understandings of the roles of other team members were enhanced, and students and supervisors perceived the programme to be valuable for student learning. The Thistlethwaite review of IPE (2012) shows positive interaction among different professions in connection with authentic learning experiences for students.

To investigate some of these challenges, an IPE programme was conducted from 2013 to 2015 with a collaborative approach that included three rural health services and four graduate health professional programmes at a university in a northern region of Norway. The aims of the project were:

1) To establish interprofessional learning environments for health care students in community health care services.
2) To describe, analyse, and disseminate experience and knowledge from the new learning environments.

Students from medicine, nursing, physiotherapy, and occupational therapy (OT) programmes formed interprofessional teams during the two weeks of clinical placements. The research questions were as follows: How do students perform interprofessional cooperation in clinical practice? What impact does an interprofessional student group have on municipal health services? Frenk et al. (2010) states that there is a need to promote interprofessional education that enhances collaborative and non-hierarchical relationships in teams. The current study contributes to the body of knowledge in this area including knowledge of how students themselves can establish teams bearing impact for future healthcare service.

2. Action Research

To address and acknowledge aspects of collaboration and the processes involved, we used an overall action research approach that is suited to improving the different practices involved in the research (Elliot, 1991; Kemmis and McTaggart, 2000; McNiff and Whitehead, 2011).

2.1. Design

An action research design inspired by Elliot (1991) was used to visualise the action research process. This design should contribute to understanding, the negotiation of understanding, and the creation of new knowledge. As the action research process is cyclical, improvements in and amendments to the practice should be made with each cycle (Elliot, 1991). The research process in each cycle should explore the interventions and lead to an amended and improved plan. The action research cycles were as follows:

- Cycle 1 focused on preparing to place interprofessional student groups in clinical practice. The preparation was conducted in accordance with each professional programme and aimed to prepare mentors and healthcare settings.
- Cycle 2 focused on how the students learned *with, from and about each other* as defined by (CAIPE, 2002).
- Cycle 3 focused on three different perspectives of interprofessional learning: those of the students, the mentors, and the health service personnel.

Stakeholders at the university and in healthcare services were involved in designing the research to secure leadership commitment at all levels. Students were recruited through informational bulletins and meetings and could withdraw from the project at any time. A total of 32 students from medicine, nursing, physiotherapy and OT were included and formed 9 different interprofessional groups. Each team consisted of one student from each of the professional programmes and was subjected to two weeks of clinical placement in rural health services. The students were performing the last part of their graduate professional programme and were responsible for two to three patients with long-term and complex conditions because this presented a challenge according to the Coordination Reform (2012). The students negotiated how they could work as a team as they assessed the patients' needs, suggested and initiated different coordinated initiatives, and explored how they learn *with, from and about each other* (CAIPE, 2002). Everyday healthcare practice was the basis for their IPL activities. In daily group meetings and based on their meetings with their patients, they negotiated alternative treatment and care plans and decided which initiatives they could implement during practical work with the patients. After two weeks of IPL placement, each group reported their results and suggestions for future treatment and care plans to the health services included.

Data were collected from multiple sources to monitor changes over time (McNiff and Whitehead, 2011). Semi-structured qualitative interviews were conducted individually with all students and their supervisors before clinical placement to determine a baseline. All interviews were transcribed verbatim. Recordings from IPL team meetings and supervising sessions were part of the fieldwork conducted in one community health service and were supported by field notes. Inspired by McNiff and Whitehead (2011), circulated minutes, reflection logs and recordings of workshops and dialogues throughout the process were part of these data.

Transcribed material from interviews, circulated minutes and field notes were analysed during monthly meetings as an inquiry of both practical issues and topics of mutual concern.