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Clinical Teaching as a Challenge in Transforming the Nursing Profession in Estonia

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Abstract

The changes in European healthcare education, building on the Bologna Process, aimed at the integration of clinical work and teaching and promoted a holistic patient and learner-centred professional paradigm. The article, based on the findings of two qualitative studies (2017–2019), focuses on the transformation of the nursing profession in the context of the Estonian healthcare curriculum reform. Thematic written interviews accompanied by a drawing task were collected from clinical nurse teachers and graduating students. The data was analysed using hermeneutic content and comparative analysis.The findings showed that the students had internalised the patient-centred paradigm and integrated teaching into their clinical work, but their learning was hampered by the institutional atmosphere dominated by clinical values. Among the nurses, only the "ideal clinical teachers" had combined clinical work and teaching in their professional paradigm. The tensions in the clinical internship limit the attainment of the reformed profession.

Keywords

Clinical teaching and learning, healthcare education reform, nurse, patient- and learner-centred professional paradigm, professional development, transformative learning

Introduction

Healthcare education faces the presence of the medical and the patient-centred professional paradigms. The medical or clinical healthcare paradigm focuses on illness, primarily based on declarative knowledge and quantitative indicators, such as clinical analyses, procedures, and medication (Epstein & Street, 2011). The patient-centred healthcare paradigm emphasizes communication and functional and also metacognitive knowledge to build on input from patients where declarative knowledge must be applied to solve problems or to plan learning and teaching (Ericson, Masiello, & Bolinder, 2012). In hospital settings, the current emphasis of the work is on a clinical approach at the expense of a more comprehensive understanding of the social nature of healthcare (Bleakley, 2006) and educational aspects of the healthcare profession (Frenk et al., 2010).

The impact of the clinical environment on healthcare education has been thoroughly studied and the internship period is recognised as a powerful influencer (Isba & Boor, 2011; Nordquist et al., 2019). According to studies, informal learning is widespread in the clinical environment, where the acquisition of practical knowledge takes place on the basis of the hidden curricula in everyday activities (Lempp & Seale, 2004; Wiese, Kilty, & Bennett, 2018). Previous research indicates how difficult it is to engage healthcare professionals in teaching, since they focus more on their development as mono-professional clinicians than as multi-professional clinical teachers (Dent, Harden & Hunt, 2017; Kotkas, 2018). This is why many practitioners, managers and policymakers do not consider teaching in a hospital setting an important topic (Zabat & Stabler-Haas, 2009). In the current hierarchical system, simplified assumptions still prevail suggesting that long-term work experience and good manual skills are sufficient for clinical teaching. However, the lack of a patient-centred approach can lead to misunderstandings and communication problems and hinder the development of a learner-centred environment during internships (Stoilnicova-Hartmann, Franssen, Augustin, Wouters, & Barnard, 2018).

To enhance the patient-centred practice, European health care curricula were modernised and harmonised as part of the Bologna Process in 2000, with a cross-curricular patient- and learner-centred approach (The Council of Europe, 2000). The new profession was expected to combine clinical work and teaching. However, little attention was paid to the challenges of integrating the clinical internship with education in healthcare colleges. Yet, clinical teaching also needs learning goals, self- and teacher-centred learning, mentoring and the theory of adult learning: the functions of clinical teaching are educational, supportive, and administrative (Kilminster & Jolly, 2000). Despite recommendations in support of clinical

teaching (Ramsden, 2003), there is hardly any research describing the pedagogical practices implemented in a clinical internship, and how far they promote the achievement of the new professional paradigm.

In Estonia there is about 8,000 clinical nurses. There are no previous studies on the experiences of the curriculum reform among clinical teachers, or on the impact of clinical teaching on the students' achievement of the goals of the new curriculum. This article is based on two studies. The first, conducted in 2017, examined changes in conceptions about teaching among experienced clinical nurse teachers. The second study in 2019 explored nursing students' conceptions about teaching. The aim of both studies was investigation of teaching in clinical practice since the implementation of the healthcare education reform in Estonia. On the basis of these two studies, in this article we pose the following two research questions:

1. How did the conceptions and values about "teaching" among clinical nurse teachers change during the students' internships?

2. What do the nurse students' conceptions about "teaching" show about the possibility of changing the professional paradigm of nursing in the context of clinical practice?

The analytical concepts guiding the hermeneutic interpretation of data are professional paradigm, professional development, and transformative learning. In the following we present the study context and theoretical background, then the research methodology and analytical strategies before we discuss the findings.

Context of clinical teaching in Estonian healthcare education

Until 1991, the training of Estonian nurses took place in medical schools on the basis of different curricula approved by the Soviet Union Ministry of Education. It was possible to study nursing after graduating from both basic and secondary school; accordingly, the length of study was 3 or 2 years, including an internship of one year. The healthcare education reform in nursing (hereinafter "the reform") began in early 2000: the emergence of nursing sciences and the new curricula aimed at upgrading the qualifications of nurses to higher education level and extend their professional autonomy. It was only possible to start studying after graduating secondary school and studies was extended to 3.5 years. Subjects from various theoretical approaches, research and evidence-based nursing practice were added to the nursing curriculum to support the achievement of professional paradigm and the lifelong professional development of nurses. Due to the extension of studies, the volume of internships increased.

Before the reform, all nurses had to go through continuing training courses to maintain their professionalism, but purely clinical skills courses were preferred, and specific teaching-related training was not compulsory. The reform should have also meant a change in the

pedagogical training for clinical teachers. Still, the 57-hour pedagogical training included in all nursing qualifications was considered sufficient for teaching in the clinical environment, although the integration of teaching into the new professional paradigm required nurses to be able to create a learner-centred environment using a patient-centred approach (Kõrgharidusstandard, 2000). Studies are supplemented by internships in the future workplace, where students should apply theoretical knowledge and practice clinical decision-making and self-reflection. While teachers in healthcare colleges have master's degrees, nurses teaching student nurses in the clinical internship ('clinical teachers') have diverse educational backgrounds based on older curricula.

Although nursing pedagogy has been in the basic curriculum since 1997, the reform emphasized professional paradigmatic changes in approaches to teaching and learning: (1) from remembering facts and learning-by-doing to critical analysis and the synthesis of information for decision-making; (2) from adapting professional qualifications and acquiring key competencies to reflection and cooperation; (3) from mechanical learning and teaching to developing well-grounded professional priorities and achieving a patient- and learner-centred approach (General Professional Standard for Nurses, 1999; Higher Education Standard, 2000; The Council of Europe, 2000; Nursing Training Development Plan, 2002).

This required collaboration between clinical teachers, health care colleges and internship institutions in developing programmes and instruction for clinical teachers to achieve competency in planning, implementation, feedback loops and reflection (cf. Zakari et al., 2014). Although all teaching professionals are expected to create an emotional, supportive, and secure environment for reflection (Sarv, 2013), skills for achieving this in the Estonian healthcare system are limited (Reva, 2008). Therefore, professional associations, internship institutions and two healthcare colleges started a 57-hour pedagogical course in 2002 to prepare clinical teachers.

The changing professional paradigm of nursing: Theoretical background

In this article, our aim is to interpret the change of nursing paradigm in the context of clinical teaching and learning. Therefore, the main analytical concepts related to the reform, are professional paradigm, professional development, and transformative learning. The reform suggested a new understanding of professionalism as a practice, where knowledge and competence develop through an awareness of teaching skills as an integral part of the nursing profession. The integration of knowledge and practice in clinical nursing and teaching could free nurses from the previous subordinate role in the clinical hierarchy, subsumed to decisions by physicians (Elston & Gabe, 2013). The reform officially provided nurses the right to engage in clinical teaching, and new opportunities for the ownership of their knowledge and practice, and new paths for development of the patient-centred professional paradigm.

An occupational group gains professional status due to objective and subjective qualities of the tasks they perform for society (Abbott, 1988: 39). External forces, such as technology, may lead to changes in objective tasks, but the qualities of the subjective tasks are affected by the activities of other professions. To achieve and maintain their jurisdictional status, professions should be able to expand their cognitive domain through the use of abstract knowledge about new areas of work and to define them as their own (Abbott, 1988: 91, 102). In healthcare, the hierarchies and paradigm differences between physicians, university educated teachers in nurse training institutes, and clinical teachers have traditionally been rigid (Elston & Gabe, 2013). Each profession has their own way of understanding themselves and their work, and their own habits for occupational practice, whose acquisition involves the significant subjective development of a professional identity (Evetts, 2012).

The internship of clinical nursing has in the past followed an expert-novice system, where the expert teaches the beginner, building on Patricia Benner's philosophy of professional development in nursing (Benner, 1982). According to the model, students must act according to what the teaching nurses believe is correct and traditional (Weissmann, Branch, Gracey, Haidet, & Frankel, 2006). Expertise is associated with a professional who works intuitively, drawing unconsciously on a repertoire of context-specific paradigmatic cases (Alligood, 2014). At the highest level of this professional development, the practitioner constructs informal theory out of practice, applies it in practice, and reflexively modifies it according to changing clinical situations (Rolfe, 1997).

The success of curricular reforms, which transform professional as well as teaching and learning paradigms, depends on the quality of the strategies and practices adopted by the teaching staff responsible for their implementation. Traditionally, the change of such paradigms has been interpreted as a purely cognitive process, drawing on rationality and cognitivism, such as in experiential learning, critical thinking, and reflective practice (Bleakley, 1999).

The reform was guided by the social-constructivist and social learning approach and adult and social learning theories. In the reform, social learning theory was connected with the previous paradigms of professional practice and teaching-learning in the clinical environment: the terminology of critical reflection—reflexivity, critical-self-reflection or critical thinking—as the core of transformative learning (Taylor, 1998; Mezirow, 2000) was used to describe patient-centred expertise and clinical decision-making (National development strategy for nursing and midwifery, 1999; European Commission, 2000; Nursing training development plan, 2002; WHO, 2013). Critical self-reflection should help teachers and students to connect clinical practice to studies in the healthcare college, and to promote professional development.

However, patient- and learner-centred and reflective methods have shown to be inefficient without integration with practice (Bloom, 2005). The perspective change requires the

experience of dissonance between current and new perspectives, examining them and becoming estranged from the old situation. Forsetlund et al. (2009) argue that learning that is linked to conscious professional development and practical educational intervention is more effective. The reform assumed that clinical teachers would adopt the transformative learning approach, change their teaching practice, reflect this critically and become able to make decisions and choices about the content and process of learning.

Findings from studies about the implementation of the Bologna Process in other professional areas indicate contradictory results. After the Finnish Police Curriculum Reform, which upgraded police degree training to university of applied science level, graduates successfully developed new competences (in research, information systems use, English language and communication skills), but the police-specific professional competencies even decreased (Laitinen, 2020). High levels of degree training and workload have also shown to cause interruptions and the prolongation of professional studies and to hinder internships (Masic & Begic, 2016). In some studies, healthcare students constantly report challenges in clinical practice, such as conflicts between learner and teacher, unclear responsibilities and learning Tynjälä goals, overload, fear of making mistakes and feeling unnecessary in the team (Tynjälä, Välimaa, & Boulton-Lewis, 2006; Sommer et al., 2016). In some countries, study programmes are even considering leaving the Bologna model or using pre-Bologna curricula in parallel, although corrections in the deficiencies in clinical courses have failed (Morgan, 2004). Furthermore, the level of the autonomy of the nursing profession is still found to be low in Europe, Britain, and the US, despite this academisation (Toffel, 2020). Still, studies indicate that the internship is critical for the students to develop their own teaching skills quicker than before the reform (Gray & Smith, 2001).

Research methodology

This article draws on data from two separate qualitative studies: one on clinical nurse teachers and the other on nurse students. Although teachers and students are implementing the reform in clinical practice together, the potential differences in their experiences are expected to reveal how the paradigm shift operates in there. Both studies are included in one article to comprehensively interpret the interaction and transformation of the parties involved in the process, to illustrate differently experienced curricular reform in nursing.

Data collection and participants

The empirical data from the two studies consisted of two types of the data: interview texts and drawings. Commitment to teaching is expressed through action and the way teachers explain and justify their actions (Lindlof & Taylor, 2002). In order to reveal perspectives on learning and teaching, teachers and students were asked questions to help them explore the topic and to probe for further thoughts and reflections. They were invited to critically reflect upon their experiences and express this in writing (text-based interview technique) in

their own words. In addition, drawing was used as an opportunity to illustrate and interpret the written interview text (Literat, 2013; Puglionesi, 2016). While visual data enriches the written data by allowing the discovery of additional layers of meaning, the drawings were expected to illustrate especially hidden aspects that are more difficult to express in words (Glaw, Inder, Kable, & Hazelton, 2017). The empirical data was collected using a text-based interview technique and drawing tasks with eight nurses and 66 students. Participants were chosen as purposeful case participants (Larsson, 2009). Data collection was ended after empirical saturation was achieved (Hirsjärvi, Remes, & Sajavaara, 2005).

In the study of the clinical nurse teachers, written and drawn data was collected between October 2017 and February 2018 in Tallinn, during three education development meetings for clinical teachers. The total number of registered clinical teachers in Estonia in October 2017 was 71. Eight voluntary clinical teachers who met the criteria participated in the first study. The group of nurses involved clinical nurse practitioners, who had completed the additional training, had teaching experience of 15 to 25 years, repeated the practice supervision course, and had had special reflection training to implement the new curriculum. Therefore, they were considered “ideal clinical teachers” and representative of the conceptual change in their teaching and the reflective transformative learning of patient- and learner-centred teaching practice. To understand the conceptual change and the transformation of the teaching and learning paradigm, in-depth structured thematic (text-based) interviews were used with the subsequent three open-ended self-analysis questions: “Why and how am I teaching?”, and “What factors have transformed my teaching perspective?”. They were invited to critically reflect upon their experiences and express this in writing in their own words. The interview question—“How am I teaching?”—elicited a drawn response in order to collect visual data about meanings, emotions and values related to teaching.

In the study on nurse students, empirical data was collected from a purposeful, homogeneous group of participants. They represented all Estonian final (third) year nurse students and could share their personal experience of the transformation in their clinical practice. The data was collected between February 2018 and May 2019 in Tallinn after the students had returned to college from their last internship. The (text-based) interviews took place in meetings with two groups of students in two pre-exam seminars. Interview texts were collected from 66 volunteers, who were asked similar questions to those asked of the teachers: “Why and how am I teaching?”, and “What factors have transformed my teaching perspective?” To visualise the learning experiences in the clinical environment, they had to draw a response to the third question: “How was I trained in practice?”

The anonymity of the participants and informed consent requirements of the General Regulation on the Protection of Personal Data were ensured.

Hermeneutic content analysis

Data analysis was carried out in two stages using hermeneutic and comparative analyses (Larsson, 2009; Polit & Beck, 2010). The analysis process included five steps: 1) empirical data was prepared for hermeneutical analysis and read carefully; 2) the units of analysis were explored as segments for coding; 3) the units provided the basis for a coding system; 4) codes were generated; 5) thematic codes were applied and analysed across all empirical materials (Saldańa, 2009).

During the first step, the clinical nurse teachers' interview texts were read repeatedly and coded focusing on how they reflect the changing content, process, and emotions of teaching, how they perceive their position as teachers, and how this affects their professional and teaching practice. The shifts and related dilemmas and emotions from previous to new meanings and practices in teaching were coded. During the second step, the students' interview texts were read repeatedly focusing on how they reflect the changing content, process and emotions of learning and teaching, how they perceive their position as novices in healthcare, as learners and teachers, and what kind of experience they obtained through the internship. The shifts and related dilemmas and emotions from previous to new meanings of learning in healthcare, and dilemmas and conflicts between perspectives on meanings for the teachers and students were coded.

The reading gave an initial sense of the meanings. During reading, notes were made on emerging key meanings and themes, such as interesting ideas, confusions, and challenges. Empirical material was first classified according to aspects of the patient- and learner-centred professional paradigm, followed by comparison of similarities and differences between teachers and students. The notes were used for an analysis of the written material with a focus on whether the teaching and learning paradigms of the 2000 curriculum reform had been adopted in clinical practice. They were also used to deepen the interpretations by analysing the connection between the drawings of the meaning schemes that emerged in the earlier iteration. The sub-themes related to transformative learning extracted from the teacher interviews revealed a dilemma between clinical work and teaching, the importance of both clinical and teaching skills in healthcare practice, and personal qualities supporting the new role. The sub-themes characterising the students' written responses about teaching included teacher incompetence, lack of social relatedness and unjustified autonomy. Examples that indicate this can be seen in sentences like: "There is little patient-centredness in the hospital" and "There are many similarities in nursing and teaching".

The sub-themes related to transformative learning were extracted from the teachers' written interview texts to reveal dilemmas in integrating clinical work and teaching, the importance of clinical and teaching skills and personal qualities supporting the new professional paradigm. From the students' written responses, the identification of sub-themes focused on clinical teaching in practice and on teacher qualities. Teachers' and students' paradigms were finally compared to highlight their similarities and differences.

Findings

In the following we present the findings from the two studies on respectively clinical nurse teachers and the other on nurse students and how they have experienced the curricular reform in nursing. The findings of the data analysis from both studies are presented according to the questions, asked from the participants. The quotations, as empirical examples, have been translated from Estonian into English accurately and carefully preserving the context of the content.

Clinical nurse teachers

The dilemma between clinical work and teaching was mentioned repeatedly by teachers, when they listed factors considered critical in going through the change in professional and teaching and learning paradigms, and in building self-confidence for the new role. The teachers suggest the high workload and the lack of time among clinical nurses as one major obstacle to becoming a clinical teacher. Another factor identified as a hindrance was the lack of support from the rest of the clinical community, colleagues, and management. This was indicated by the concern of the respondents that patients may be neglected due to their additional teaching obligations.

> […] There is a lot of theoretical talk (in school -xx); however, in hospital as the place for the internship, it is impossible to implement many skills in real life; for example, if there are 25 patients in the ward and only one nurse. […]

In teaching practice, efforts were made to achieve the same roles considered important in nursing practice, using evidence-based nursing knowledge reflectively. During the internship the clinical teachers highlighted characteristics valuable in teaching (and nursing), such as being *encouraging, helpful, positive, professional, inspiring, thought-provoking,* and *open-minded*. The ideal clinical teachers also emphasized psychological competences—the ability to *identify, understand, comfort, see one's strengths and weaknesses, take into account individual differences,* and *the ability to innovate*. They experienced the similarity of patient and learner-centred approaches, and analysed, and assessed the respective skills of their students. Values important for teaching expressed in the teachers' written interviews included their dedication to the healthcare profession, desire to learn, self-management, empathy, and patience.

> […] "I am"—as the teacher, probably a person who wants to be very clear about what the purpose of my learning or further training is and what the result or goals should be. /…/ In general, I also conduct an analysis of what was relevant in the training and where to focus, and what to explain next. /…/ I think I am proactive but maybe provocative too, because I use reflection and drama in teaching. Slightly when being more playful, you can try it yourself, and it gives you a better understanding and a new level of knowledge. […]

The teachers identified their teaching practice as a factor that had strengthened their identification with the healthcare profession and their professional development.

> […] Self-directed independent learning, the opportunity to teach patients or students, and self-development helped me become a clinical teacher. Also, as a teacher now, I look forward to learning from people as well as from topics and discussions. And I want to simplify the earlier knowledge gained, enrich it with clinical experience. /…/ The teaching in my opinion is about acquiring knowledge, applying it, developing skills, understanding, and thinking, problem solving and critical thinking. […]

These clinical nurse teachers liked the term *clinical teacher* because it was a good description of the tasks and context of their work and helped them better explain and reason their pedagogical activities in the clinical environment. Doing so will reveal the knowledge that guides their professional activities and decisions. This implied reflection on teaching and belief in oneself as a teacher: most nurses considered that despite their pedagogical education and experience, they are still developing as teachers. The drawn response to the question "How am I teaching" visualizes the professional learning-related meaning scheme: equal relationship to students, learning with and from students and positive emotions (Illustration 1).

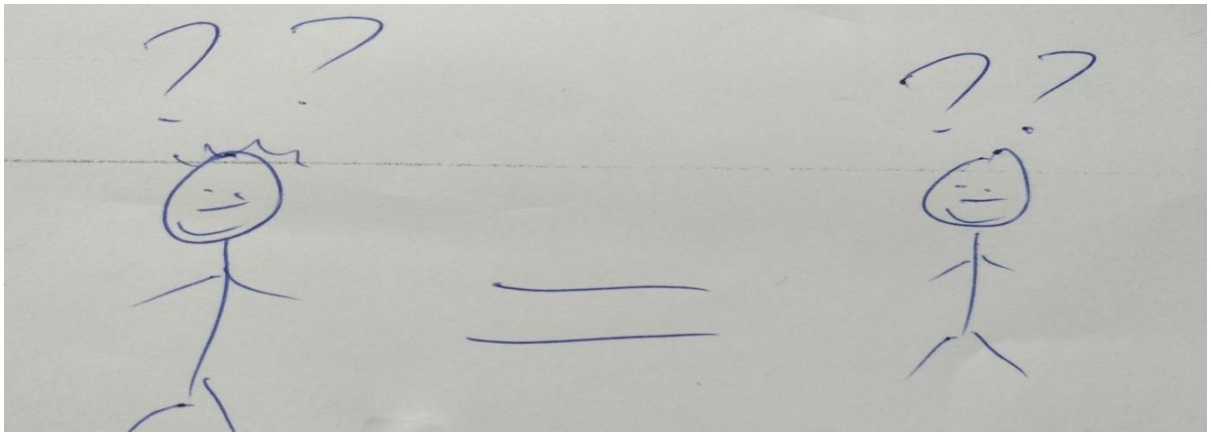

Illustration 1. Clinical teacher's visualisation: "How am I teaching".

The clinical teachers valued their role as teacher and were successful in teaching. They had received continuing training during the curriculum reform, used critical self-reflection and reflection in their daily practice and found the time for teaching and associated it with positive emotions. Some were able to compensate the shortcomings in their pedagogical knowledge with excellent clinical experience, practical skills and being a positive role model, using self-management and teaching techniques unconsciously.

Nurse students

The findings from the analysis provided illustrations about learning during the internship, when the clinical teachers were able to involve the student in the learning process, which included the critical analysis of information needed for decision-making in the team.

> […] My practice-based experience has always been very pleasant—I have received positive feedback and clinical teachers have been calm, even when I have done something wrong. […]

The students' desire to teach indicated that clinical practice provided them opportunities both for social and constructivist learning. The analysis showed that the greatest autonomy and opportunity to practice critical thinking in the learning process exists in the context of patient education, compared to previous clinical procedures. Using a patient-centred approach in teaching patients, amplified the students' identities as nurses. They referred to this as a new factor that made them active in learning and developing themselves professionally.

> […] My own experience in the field of teaching is (still -xx) judged to be insufficient, but the support of the clinical teacher is valuable. […] Nurses teach on the basis of their practical experience, but sometimes trainees teach instead. […] I've already been in the role of a teacher, and it feels great to pass on my knowledge to someone. In doing this, I felt how my own knowledge and skills were anchored... /…/ Teaching is a privilege, but it also means responsibility. […] But really, our job is much like a teacher... […]

Concerning learning competences, which relate to specific clinical knowledge and experience, students still only considered manual skills as "learnable by doing". The students "remembered facts" from the curriculum but valued the role of the clinical teacher in acquiring professional knowledge and professional development as 'most important'.

> […] The greatest and most important teachers are the hospital staff who teach real-life activities. /…/ Now I have realized that the best skills come from the work environment or the internship. Not everything has gone smoothly in practice… […]

From the perspective of professional development, the analysis showed contradictory learning opportunities due to varying contexts because the curriculum change has not led to a professional paradigm shift in the teaching practices of all nurses.

> […] I have come across very different teachers. […] There has been a lot of talk at school about the patient-centred approach in different lectures. In practice, however, little is seen. The work culture in hospitals is already well established, and it is very difficult for the trainee to break it. […]

However, students often equated teaching with continuing professional development, and in their professional understanding rather than in their teaching and learning paradigm, they considered the roles of the healthcare professional and teacher to form an integrated whole.

> […] In my view, a nurse's profession is (just like) a teacher's profession. […] The healthcare professional must teach others—to learn by themselves. […] Already (as a nurse—xx), everyone is asking different things about their health. Now I realize that answering these questions (correctly—xx) is a patient-centred approach and teaching at the same time. You can teach in healthcare only if you have a very broad knowledge base, and still, you must constantly upgrade yourself. […]

In their drawings, nurse students reflected more complex situations than in their writing. The drawings were dominated by the teacher, portrayed as a larger figure transmitting skills and knowledge (Illustration 2).

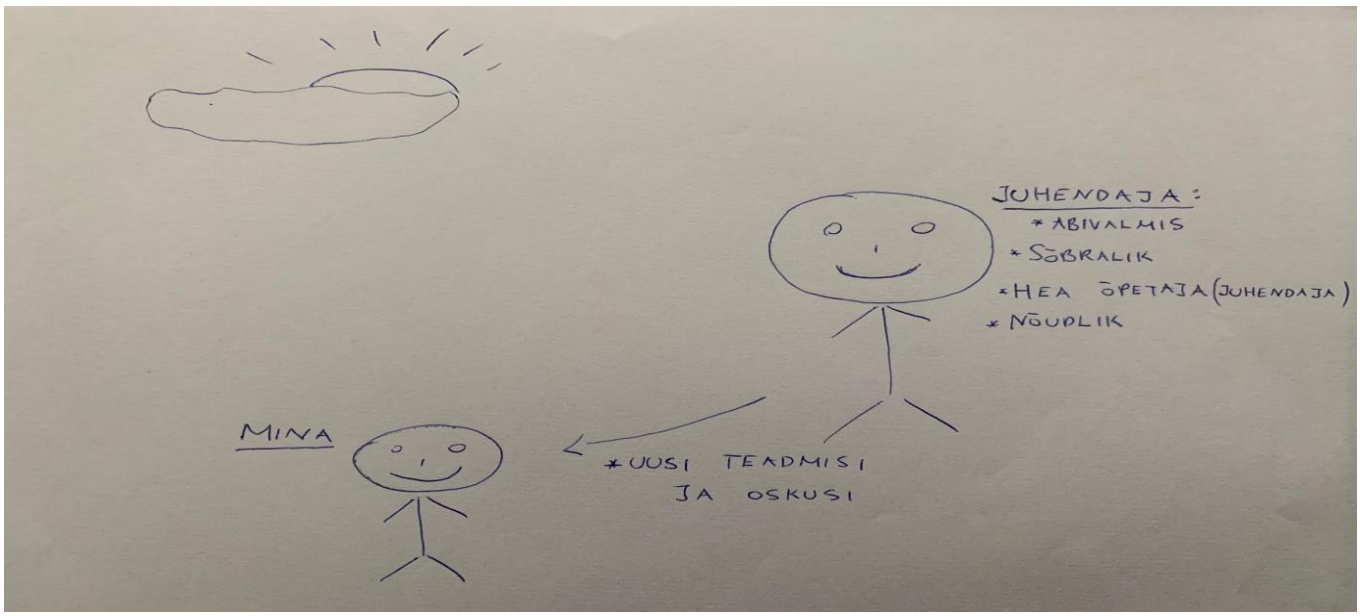

Illustration 2. *Nurse students' visualization: "How I was trained in practice".*

In contrast, the valued qualities for the teacher, added to their drawings, mentioned a helpful, friendly, good, or demanding teacher or mentor.

Concerning the *why* and *how* interview-questions on teaching, the students' drawings showed tensions during the internship, especially between the paradigms and values of the students and teachers. Some drawings by the students show that the internalization of the new professional and teaching-learning paradigms indicated in the written expression of the ideal clinical teachers was far from the reality in their clinical practice (Illustration 3).

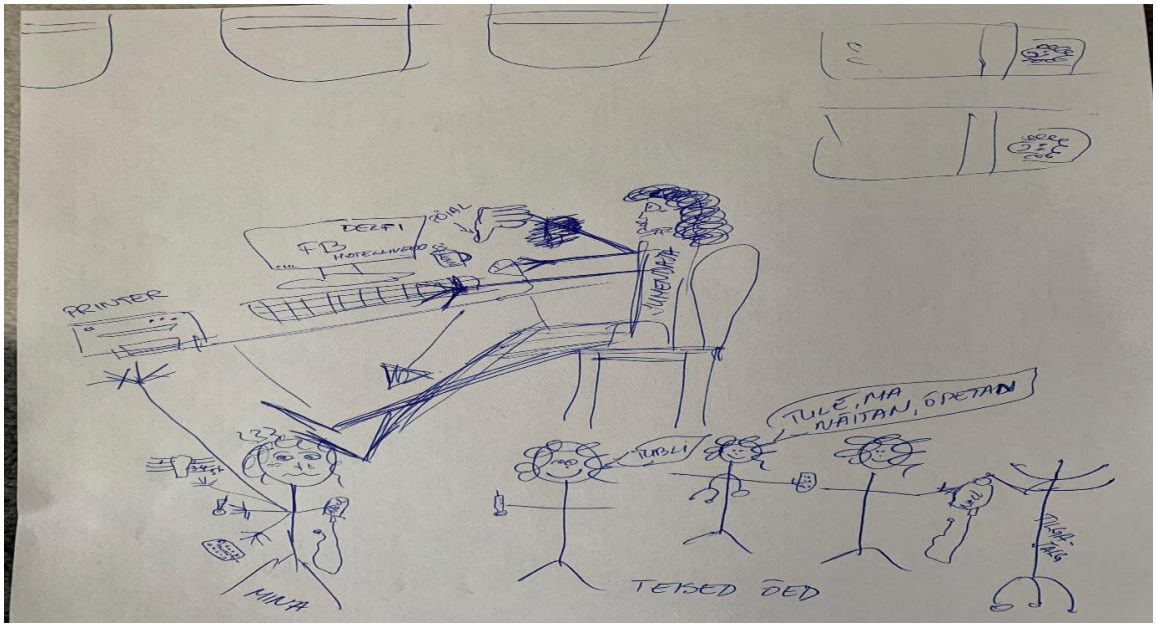

Illustration 3*. Nurse students' visualisation: "How I was trained in practice".*

The student (under the feet of the nurse) demonstrated fear (tears) about making mistakes or harming patients (when exercising invasive procedures), as well as unclear learning goals and responsibilities and excessive workload (five hands). The pictures illustrated, that the teachers do not fulfil their clinical and teaching responsibilities, and so both the student and the patients are left alone. Drawings showed that nurses had not progressed from the level of mechanical teaching in the context of patient education and had limited skills in creating an emotionally supportive and secure environment for learning. In addition, the students' written responses about teaching in their clinical internships were characterised by barriers to learning, such as *teacher incompetence, lack of social relatedness* and *unreasonable autonomy.*

> […] Not all people qualify as teachers and then they should not teach! […] In order to be taught at all, more communication and understanding of what the student wants to achieve and what skills are already available are needed. With a high workload and being in a hurry, teaching is often neglected. […]

The most frequently mentioned deficiencies in the skills of the teachers were the *inability to communicate* and the *lack of psychological knowledge*. The students expressed feeling small, unnecessary and redundant in the practice institution, indicating a need for significantly more support and commitment from the clinical teachers. The findings revealed factors that hinder teaching, such as *treating students in the hospital as free labour* and *clinical teachers being indifferent and short of time*.

Discussion of key findings

The findings showed that the goals of the 2000 curriculum reform in Estonian healthcare education—the adoption of a patient-centred approach among all healthcare professionals through the new curriculum and the improvement of their teaching competencies in continuing professional development—have been partially achieved.

The study of clinical nurse teachers and the first research question: How did the conceptions and values about "teaching" among clinical nurse teachers change during the students' internships? The findings showed that for the clinical nurse teachers the reform had an indirect impact on the acquisition of the new professional paradigm, as the students challenged the teachers' conceptions and values about teaching. The nurse teachers had adopted teaching methods that had not been taught in the old curriculum, and they mastered and valued reflection. They acted as ideal clinical teachers because it revealed to them the new professional paradigm of nursing. The teachers' perspectives on the professional paradigm changed due to a self-reflective process, becoming first patient-centred and then learner-centred. Self-reflection and critical analysis guided them to learn how to teach in order to develop well-grounded professional priorities in their students. Experienced "ideal clinical teachers" showed that teaching practice, accompanied by critical self-reflection seems most powerful in the formation of professional identity, which integrates the clinical work and the teaching. Yet the challenge in clinical teaching is to go beyond the professional identity of a nurse, which seems to dominate other professional identities, as long as the main obligation of teachers is to perform their clinical responsibilities (cf. Stalmeijer et al., 2013).

According to the findings, the dominance of medical conceptions and values in the clinical institution and among its staff seem to hamper the emergence of the new professional paradigm. The clinical nurses were expected to transform their professional paradigm while continuing their regular work, without the support of the (reformed) healthcare colleges. Nevertheless, despite their professional autonomy, ideal clinical teachers also expected support from colleagues and the management for their learning and teaching. The new curriculum recommendations do not recognize the interdependence of change between all professional paradigms in healthcare. Training for clinical teachers is not mentioned in the new curriculum recommendations and development plans for the nursing profession. When the specific nature of their work is not recognized in the design and implementation of the new curriculum, the "obligation imposed by society" (Abbot, 1988) is not enough for the transformation of the clinical nurse profession.

The study of nurse students, and the second research question: what do the nurse students' conceptions about "teaching" show about the possibility of changing the professional paradigm of nursing in the context of clinical practice? The findings show that the students had already internalized the meaning schemes of the new professional paradigm in the

college before the internship. As novices, students still considered learning-by-doing the most effective method in acquiring nursing skills, but they had a full experience of the reformed curriculum and could integrate the new professional paradigm into their clinical practice. Conceptions about teaching can be interpreted as belief about the clinical setting as fundamental for professional development, and which still has no alternatives. The students' professionalism during the internship seemed to rely on the connections they formed between the theory adopted in the healthcare college and the practical knowledge. Alongside staffing shortages, some clinical nurses were responsible for teaching students without preparation or proper teaching qualifications, which caused tensions between the teachers and the students.

Comparative discussion

Based on the findings, clinical nurse teachers as well nurse students still seem to question their roles in setting goals and carrying out learning in the professional growth process. While the students emphasized the role of the teacher in passing on knowledge, the clinical nurse teachers stressed the organisation of student activities and enabling student understanding. The students experienced a difference between the old and the new curriculum when cooperating with the ideal clinical teachers, who allowed them to train and work safely as independent professionals. While the ideal clinical teachers showed positive emotions towards the students in their writings and drawings, the students repeatedly indicated they confronted contradictions between the curriculum and the internship environment. While many of the reform goals were pictured in the partial interpretation categories, the professional paradigms of the old and new curriculum seem to be intertwined, indicating how vague the impact of the reform may be in hospital culture. Concerning clinical teachers, as nurses "in general", students had many experiences which did not match with the findings from the "ideal clinical teachers" of this study. The findings show that the reform had mainly affected change in nurses' knowledge, it had not led to conceptual changes about teaching as part of their profession, with the exception of the ideal clinical teachers. So, the different professional education background can influence the formation of professional identity and professional development.

Conclusions and recommendations

We assumed that after 17 years since the reform, teaching in clinical practice would be closer to the students' expectations. The findings showed the persistence of disparate professional paradigms. The achievement of the goals of the Estonian healthcare curriculum reform depends on the conceptions related to teaching and learning and on educational background of the clinical nurse teachers. When pedagogical tasks are added to medical tasks externally, nurses remain vulnerable to changes in their central tasks without support in terms of professional theory and internship practice (cf. Abbott, 1988: 39). The power of clinical nurses to expand their cognitive domain, add new fields of work and define them as

their own (Abbott, 1988: 102) depends on the support from the entire healthcare system and the professional system of the clinical institutions.

The studies focused on the implementation of reform policies and the experience among Estonian healthcare professionals. Since a similar reform has been implemented across European higher education, the results can be generalised beyond the national context. The study shows similarities with findings in other professional areas experiencing reforms following the Bologna Process, with the formal upgrading of educational institutions and practice-oriented professions to the level of higher education. With no recognition of their distinctive knowledge and practice in the context of the professional area, the reform policies may be difficult to achieve (Masic & Begic, 2016; Laitinen, 2020). The findings are also relevant for professional studies in general, since they confirm that professional paradigmatic change includes external as well as internal forces and requires collaborative and holistic analysis and reflection on how the diverse fields of knowledge and practice, including teaching, could be integrated between the professionals and institutions.

The progress towards a new professional paradigm and identity also requires collective mobilisation of clinical teachers into a specialist professional association (Sarv, 2013). Until this happens, clinical teachers will continue to feel isolated. The current short-term training is not enough to generate among them a sense of community. The creation of a special clinical teacher position and accreditation of the relevant professional competencies that promote the integration of teaching into the clinical nurse profession must be included in the nursing development plan.

The professional paradigmatic shift towards the clinical nurse profession, which integrates the patient-centred clinical nursing paradigm with the patient- and learner-centred teaching paradigm requires the integration of curriculum development and implementation involving healthcare colleges and clinical internship institutions. It requires collaboration among teachers in colleges, all the staff of the internship institutions and the patients, to assess the achievement of patient-centredness during the internship. In order to achieve a learner-centred professional paradigm, clinical teachers should participate in continuing pedagogical training in order to practice teaching rather than only build on their long-term experience in practice. It is important both in healthcare institutions and colleges to monitor who is appointed as clinical teachers and how students' clinical internship takes place. If clinical teaching is not prioritised in the internship institution, the requirements for quality cannot be fulfilled.

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