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STUDENTS PERCEPTION OF THEIR OWN AND EACH OTHER'S PROFESSION

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Interprofessional practice and teamwork are becoming more essential in health care. Increased collaboration gives the opportunity to enable patient centred health care with high quality of outcomes. If health professional students learn together they will be better prepared for interprofessional collaboration and teamwork, such initiative can be interprofessional education (IPE) at a clinical education ward (CEW). The aim of the study is to explore how students from medicine, nursing, physiotherapy and occupational therapy programs, perceive their own and each others` profession prior to a clinical placement at a CEW. This was a qualitative study using focus groups. 18 students participate in the study. Data were analyzed using thematic analysis and a thematic network was developed. A plethora of professional perceptions emerged as the highest order category. This was derived from four organizing themes; professional expectations, relationship to the patient, leadership and relationship across professions and from the respective basic themes: different areas of professional doing and explanation of professional images, being close, being distanced, being a coordinator and being a leader, collaboration and unclear boundaries. This perceptions are needed to discuss and reflect during the CEW and allowing the student, together rather than silos, to develop professional identities as well as the knowledge, skills and attitudes.

Keywords: clinical education ward, interprofessional education, focus groups, perceptions

Introduction

Interprofessional teamwork are becoming more essential in global health care and can be defined as a “partnership between a team of healthcare providers and a client in a participatory collaborative and coordinated approach to shared decision making around health and social issues” (CIHC, 2010). Increased collaboration gives the opportunity to enable patient centred health care with high quality of outcomes (Begley, 2009). Present and future health workforces are tasked with providing health services in the face of increasingly complex health issues (Gilbert, 2010).

CICH (2010) presents a framework that includes six competency domains that highlight the knowledge, skills, attitudes and values essential for interprofessional collaborative practice. The six competency domains are, interprofessional communication, patient/client/family/community-centred care, role clarification, team functioning, collaborative leadership and interprofessional conflict resolution. However, to be fully capable to appreciate these skills and attitudes and avoid potential conflicts, health care professionals need to understand not only their own professional role but also that of the other team members (Core Competencies for interprofessional collaborative practice, 2011). Furthermore, it is common that health care professionals who are working together consider themselves as an interprofessional team even though they are only a group of individuals working beside each other. An interprofessional health care team understand each other’s roles, demonstrate respect for each other, resolve conflict effectively together and share common goals (Grumbach & Bodenheimer, 2004). The six competencies, outlined, above are not intuitive or learned at work, rather they need to be implemented into curricula and practiced throughout the course of health care educational programs. One such initiative that can facilitate development of interprofessional competencies is interprofessional education (IPE).

The fundamental premise of interprofessional education (IPE) is that if health professional students learn together they will be better prepared for interprofessional collaboration and teamwork (Koppel et al, 2001). A collaborative practice-ready workforce is a specific way of describing health workers who have received effective training in IPE (Gilbert, 2010).

The purpose of implementing IPE in health care education programs are for students to gain a greater understanding of each other's expertise and how the different professions can work together to benefit the patient (Morison et al, 2003).

IPE occurs when two or more professions learn with, from and about each other to improve collaboration and quality of care (Caipé 2002). Students' attitudes and perception towards interprofessional collaboration and clinical decision making can be potentially enhanced through IPE (Lapkin, 2013). IPE can be important in helping to develop good working relationships between different professionals by promoting positive interprofessional attitude and behaviors (Coster, 2008). To encourage collaboration in healthcare for undergraduate students, IPE has been increasingly introduced over the last 30 years. IPE takes place in many different countries and health care settings with varying compositions of students and facilitators. Over the last 20 years, the implementation of clinical education wards (CEW) within hospital settings have increased in order to promote IPE among health care students. At CEWs, students from different health care professions work in teams with a high degree of clinical independence with continuous support from facilitators (Mogensen et al, 2002, Reeves et al, 2002). The general aim of the CEW is to develop the students' professional roles and enhance their understanding of others' professions and the importance of good communication for teamwork and patient care (Ponzer, 2004).

Students' perception of team training during an interprofessional CEW course have previously mainly been explored through quantitative studies. For instance, earlier studies with medical, nursing, physiotherapy and occupational therapy students, showed how perspectives and understanding of their professional roles had increased, as well as increased understanding of other professions' skills, after a placement at a CEW (Jacobsen, 2009; Hallin, 2014; Ponzer, 2004). Another study by Jacobsen & Lindqvist (2009) measured students' attitudes towards health care professionals before and after clinical placement at a CEW. The CEW intervention developed the students' attitudes towards each other and all the students viewed professionals more "caring" after working together for two weeks in the CEW.

In a qualitative study (Lidskog, 2007) students from nursing, occupational therapy and social work perceived their own and the other professions before clinical education at a CEW. There was a large variation in how the students perceived these professions, from simplistic in terms of tasks to more complex conceptions in terms of knowledge, responsibilities and values. Furthermore Lidskog (2008) investigated the students perception about their own and others professions perceptions before and after clinical placement at a CEW, and the similarities and difference in these perceptions. The findings indicate that there were changes in the students stereotyped views, enhancing understanding of each other's professions.

The medical profession constitutes a large part of an interprofessional team in somatic care where acute multi illness is cared for. Chronic ill and patients with co-morbidities are patients with complex needs who require an interprofessional team to provide the full spectrum of care. However, there seems not to be any studies exploring health care students, representing medicine, nursing, physiotherapy and occupational therapy, perceptions, knowledge and expectations of each professions prior to a clinical placement at a CEW. With a greater knowledge and understanding of this the education at a CEW could be planned for the better to accommodate the needs and expectations of students and teams. It will provide supervisors/educators with prerequisites for understanding how to best support the coming interprofessional interaction in the team of students in an IPE.

The aim of the study is to explore how students from medicine, nursing, physiotherapy and occupational therapy programs, perceive their own and each other's profession prior to a clinical placement at a CEW.

Methods

Research design

A qualitative descriptive design was used.

Setting

The study took place at a CEW which is located on a 27-bed medical ward of a university hospital in southern Sweden, with eight beds allocated to the clinical education ward. The patients at the CEW are usually elderly in need of general medical, nursing and rehabilitation care. During a two week long mandatory clinical placement, undergraduate students representing medicine (in term eight of eleven), nursing (in term six of six), physiotherapy (PT) (in term five of six) and occupational therapy (OT) (in term six of six), work and learn together as a team. This placement is the first clinical placement where the students are together in a realistic environment. The composition of each student team is typically made up of one or two medical students, two to four nursing students and one PT and/or OT student. Each team work on a rota, planning and delivering patient care, and students are expected to share all basic patient care in addition to their profession specific duties. The student teams

facilitates during day shifts (7 am-3 pm) by a team of facilitators, thus receiving profession specific as well as team oriented facilitating.

Data collection

To capture how the students perceive they own and the other’s profession, interprofessional focus group interviews were used. Focus groups provide an opportunity to gather information from different participants’ points of view can generate discussion of topics that would likely have been missed in individual interviews (Stalmeijer R el al, 2014). The interaction and communication in a focus group can gives an opportunity to go into the depth of how people perceive and relate to different issues (Kitzinger, 1995). The first author gained information about the students from each education department, thus allowing for study information and an enquiry about participation to be sent via e-mail to the potential participants a few weeks before their clinical placement at the CEW. When the students arrived to the CEW, they were asked by the first author whether they were willing to participate. The interviews were done when the student were in place at the CEW and after two shifts together. Before each interview, written, informed consent from the participants was obtained. 28 students were asked to participate in the study, 18 students participate and they were divided in 4 focus group (table 1).The ideal group size is between four and eight people (Kitzinger, 1995). The age of the participants range from 21-40 years. All except three of the students were female, the three male students representing the medicine, OT and the nursing programmes. The interviews took place in October 2017 and lasted between 1-1,5 hour. It was one interview session per focus group. All students, except one physiotherapist, had experience of care work (outside the education), either before or during the study period.

Table 1. Focus groups

Students	Focusgroup 1	Focusgroup 2	Focusgroup 3	Focusgroup 4
M *	2	1	0	0
N*	0	2	3	3
OT*	1	0	1	1
PT*	1	1	1	1

*M=medical student, *N= Nursing student, *OT=Occupational student, *PT= Physiotherapist student

The interviews contained a number of predefined questions like: ” How would you describe your own profession? ” and ” How would you describe the profession of the other team members?” During the interview, probing questions were asked, to clarify and further

understand what the participants described, such as “Can you give an example?” “What do you mean?” “Do I understand you correctly when I say...”

Data Analysis

The transcribed material from the recorded interviews was analyzed using thematic analysis and a thematic network was developed. A thematic network starts from the basic themes and develops inwards toward a global theme (Attride-Stirling, 2001). The analysis started by repeated reading and coding the transcribed material. Each code were reread and abstracted into basic themes and these themes are the first and lowest-order themes. These theme were based from the textual data. Then the basic themes, which illustrated similar issues, were clustered into organizing themes. The organizing themes summarizing abstract principles. An example of analysis in table 2. Finally, the organizing themes constitute the third theme, global theme, which comprehend principal metaphors in data. The second author read the analysis to verify that the themes reflected the transcribed material. In collaboration and discussion with second author the themes were created. The thematic networks aim to explore the understanding of an issue or the signification of the idea (Attride-Stirling, 2001).

Table 2. Example of the analysis

Quotes	Basic theme	Organizing theme
<p><i>"It is about the healthcare chain also I intend to keep it together ... to get a continuity in the care... things liked followed up and things like that but it is also the same thing as coordinated"</i> nurse student</p> <p><i>"The nurse has just that spider in the net role ... I have great respect for the nurse all simultaneous chores because it can be so hard to keep in mind as well"</i> PT student</p>	<p>Being a coordinator</p>	<p>Leadership</p>
<p><i>" the nurse led the whole team... what should we do with the patient today how what is the status right now what needs to be done"</i> PT student</p> <p><i>" It can be little that the doctor is seen as the leader in the teams, that it is in some way predetermined but that perhaps not always so "</i> OT student</p>	<p>Being a leader</p>	

Ethical considerations

All participants were informed both verbally and in writing about the aim of the study, that their participation was voluntary and that they could discontinue their participation at any time without affecting their placement at the CEW. The participants were informed that data from the interviews will not be used for any purpose except research. Permissions to conduct the research project were obtained from the head of the respective departments at each university and at the CEW. Data was handled confidentially meaning that the analyses were conducted at group level to avoid that any individual could be recognized when presenting the findings. The first author is a clinical teacher at the CEW and employed by the medical ward. The students at the CEW will not be assessed and there are no examination.

Findings

In exploring how health care students perceive their own profession and the other team members, the global theme *a plethora of professional perceptions* emerged. The global theme derived from four organizing themes; *professional expectations, relationship to the patient, leadership and relationship across professions*. Each of these organizing themes derived from different basic themes. The organizing theme *professional expectations* derived from two basic themes named *different areas of professional doing* and *explanation of professional images*. For the organizing theme *relationship to the patient*, the basic themes were *being close* and *being distanced*. The organizing theme *leadership* derived from two basic themes named *being a coordinator* and *being a leader*. The last organizing theme *relationship across professions* emerged from the basic themes *collaboration* and *unclear boundaries*. The structure of the thematic network is illustrated in Figure 1.

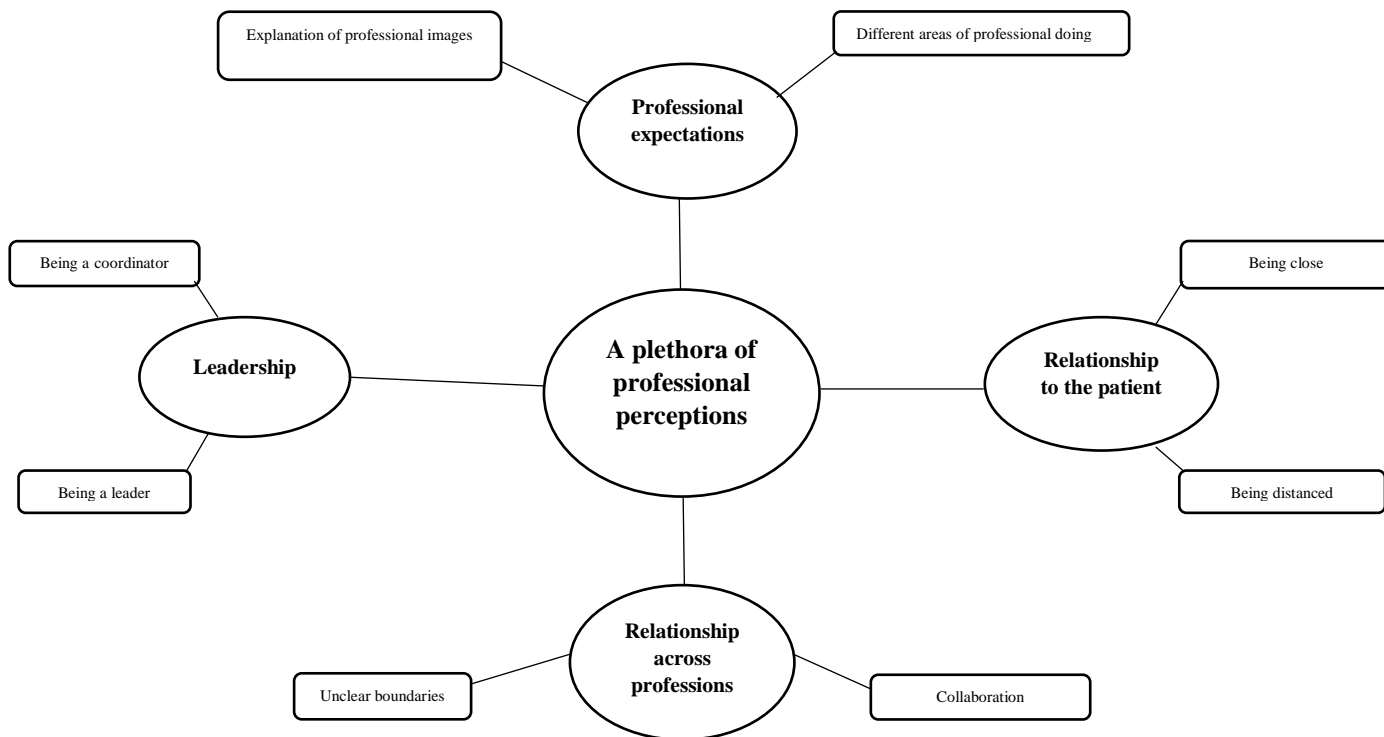


Fig 1. Thematic network of findings.

Basic theme: Different areas of professional doing and explanation of professional images

The theme *different areas of professional doing* describes each professions' perceptions of their own and others' actions and activities, based on their different areas of knowledge.

The students' picture of their own doing mirror, more or less, the others students perceptions of their doing. The nurse students expressed that their profession includes performing of different tasks and actions, based on patients' needs. The example of tasks and actions were of varying degrees, everything from administration of drugs, wound care, or just give a hug and sit down and talk to the patient about existential questions. The descriptions of these actions were simple and concrete. However, the nurse students pointed out a focus on the patients' well-being and how to make the patients feel as comfortable as possible when they described the work as a nurse. This focus was not visible in the other students' descriptions. They rather described the nurses' work in terms of performing specific tasks such as administration of drugs and taking blood samples.

“You see nurses running with drugs and hanging up dripsyou don't always see when the nurses are sitting and maybe talking to the patient..... the nurses are running in the corridors with their drugs and their drips.....and the other the nurses will do as taking blood samples on a patient. (PT student 4, focus group 4)

The PT students described how PTs perform functional assessments using the body as a starting point. They work to help patients with their disabilities and to improve upon an individual's function level and ability. PTs pointed out plentiful of actions for example, locomotion, mobility and respiratory functions as part of their field of expertise. The other students described the doings of the PT area similarly to the PT students themselves.

“The Pt they manage the musculoskeletal system and they manage the function and if the patient needs any aids, if there is damage to the muscles and they mobilize and rehabilitate the patients ability.” (nurse student 6 focus group 4)

OT students expressed themselves using general terms regarding their doings when they assesses the patients' activity capacity. They used terms as quality, problems and ability and they also pointed out plentiful of actions, when they expressed their assessment of the patients' activity execution.

They also pointed out that they teach the patients different strategies to manage daily life and also try to help the patient to find a balance in the daily activities.

"I am thinking that occupational therapists have a very big focus on activity ability in relation to health ... you looking at the problems in performing activities and also the involvement in life ... and the quality of the performance of activities .. focus on peoples ability to execute activities in order to promote health.... so it is everything from home adaptation, aids and exercise in activities ... learn strategies to perform activities in a different way ”(OT student 4, focus group 4)

The other students expressed the OTs doing in the form of more specific tasks during the assessment of a patient. For example, they described how the OTs assess how the patient washes, cooks and manages their daily tasks. Other examples that emerged were that OTs are testing out aids, removing thresholds and carpets if needed. However, the other students did

not mention the term " activity capacity" as a concept. Assessing the patients' situation at home is something all of the students identified as a field of expertise belonging to the OT.

The medical students described their own professional doings at a descriptive level and the doings as task oriented. They expressed that they do the rounds, dictate journals, diagnose and investigate but also that they think about treatments and planning forward for the patient.

"It is diagnosing and investigation of various diseases and applied adequate treatment and constantly have a plan for the patient." (medical student 3, focus group 2)

It corresponds to the image the other students have regarding what a physician does. They also pointed out that physician leave death certificates, write referrals, cure diseases and look at the patients bodily functions.

In the basic theme *explanation of images* the physician is described, by the other students as the profession that provides safety, gives security and which is respected. They are expected to have a lot of knowledge and the role is perceived as a heavy burden.

" physician are the security ... they can ... they are the safety ...you can always fall back on the physician... when you need help ... when you need help with something "

(nurse student 3, focus group 3)

"I think that you get respect for physician at once....just because you are a physician and you can expect that the physician have a lot of knowledge" (PT student 3, focus group 2)

PT, OT and medical students expressed a lot of respect for the nurses' work. They perceive that the nurses keep a track on the situation around the patient and in the organization. The PT and the OT expressed the nurse profession as having the most competence out of all and possessing a lot of knowledge.

"I want to pay tribute to the nurses and I almost think that they possess the most competence of all...they have a great knowledge" (OT student 1, focus group 1)

OT was described by the PT students as being creative, resourceful and ingenious. The medical students described that the PT has the ability to mobilize patients that the other

professions have no luck with and the PT students agreed. This agreement is illustrated by following quote:

“ then comes the physiotherapist who says hello and then the patient suddenly comes up on his feet and I reflect over how it is possible ... it is my experience of the physiotherapist that they are very good at helping the patient and finding ways to mobilize (medical student 3, focus group 2)

“ I agree ”(PT student 3, focus group 2)

The students explain that the role you have as a PT, Nurse, OT and MD is contextual. One nurse student reflect over this:

”The nurse's work includes a lot...and is very wide and it depends on where you work as well.... the focus differ depending where you work” (nurse student 3 focus group 3)

The nurse students were keen to highlight a perceived problem about step into roles, normally belonging to other professions, roles as being a psychologist or social worker for example. The challenge is also to be able to distinguish these different roles. Furthermore, the nurse students expressed that different patient situations requires a professional approach. As a nurse you sometimes need to be humble and empathic to satisfy the patient needs and at the same time you cannot become too emotionally engaged.

“ as a nurse you have to find a balance... you should not be too human..I think you have to have a professional approach and it is very important that you are humble and you show sympathy, empathy and have a personal knowledge...you have to do a distinction” (nurse student 5 focus group 3)

The medical students describe how their professional role demands them to be an administrator at times, especially when their work is engulfed by administration.

"I think that as a physician you are more or less an administrator"
(medcial student 1, focus group 1)

These two basic themes, *different areas of professional doing* and *explanations of professional images* creates the first organizing theme *professional expectations*.

Organizing theme: Professional Expectations

It surfaced that all the students have a lot of expectations, thoughts, ideas and preconceptions about their own profession and the other professions roles and functions. These conceptions and expectations include different descriptions of what actions, doings and tasks is included in the work of the different professions. Various images and preconceptions appeared towards each other, the students attributed each other diverse characteristics and attributes based on the profession the other student belonged to.

Basic theme: Being close and being distanced

In order to convey the patients status and how the patients are feeling the nurse students expressed that they are closest to the patient and meet the patient most. All four professions are of the opinion that nurses meet the patient the most and has the most comprehensive information. Is also included a responsibility towards the other professions in the team, especially towards the physician. The nurse signals whether the patient is getting worse and has the responsibility for how the patient is feeling.

" Generally the nurse meet the patient most... besides the nurse assistant....we are them who know the patient most and we get questions from the other professions ... regarding to how the patient is feeling and the patients condition and status....we keep track on the patient all the time, more or less "(nurse student 6 focus group 4)

It also appears from the nursing students that this responsibility also exists towards the patient, a responsibility to be able to answer the patient.

"During the day the physician does not meet the patients all the time as we do and sometimes we create a relationship with the patient.....and sometimes we become a lawyer for the patient because the physician thinks one thing but we know that the patient does not want that ... we speak up for the patient" (nurse student 3 focus group 3)

The PTs expressed that they have more time when they are with the patient and can work with the patients' independence and resources.

"we have more time when we are with the patients ... when we mobilize the patient for example... we have more time which is good" (PT student 3, focus group 2)

OT, PT and nurse students express a person-centered care as an attitude towards the patient. The OTs state that they work to create a meaning for the patient and, together with the PT, they work towards making the patient as independent as possible. PTs work towards patients' independence and maintain function. The nurses look for a holistic perspective of the patient and the person behind the disease.

"we have a holistic view of the patient and I will add the person-centered care, which is based on the patient needs....and based on relation to the patients point of view ... and what skills that the patients has and then I see the patient as a partner...I do not do something for the patient I do it with the patient and I also include the patients resources " (nurse student 2 focus group 2)

The theme *being distanced* emerged from all four professions experiences that the physician not have much contact with the patient. The medical students state that they set goals for the patients' care that is related to the lab values and they experienced that the personal contact between the physician and the patient disappears. An obstacle to more patient time is the amount of administration tasks, especially the task of documentation.

"It had probably become more contact with the patient ...if there was more possibility....a possibility to follow the patient during the day but also to different examinations...I don't know any physician who has the time to follow an acutely ill patient to a X-ray even if is desirable..... instead you have to dictated and do the documentation and in addition you have seven other patients you have to do the dictated on and if you cancelled the administrations task....its only to do the round...and when you are doing the round you just discuss the administration with the patient.....it is a very little part of the work,.....when you are talking to the patient. "(medical student 1 focus group 1)

The themes *being close* and *being distanced* create the second organizing theme *relationship to the patient*.

Organizing theme: Relationship to the patient

There was a consensus among OT, PT and nurse students within this theme. A consensus in a holistic approach towards the patient, even if they expressed it in different ways. The time perspective can be a prerequisite but also an obstacle to the patient relationship. All four profession expressed the nurse who is closest to the patient and the physician is furthest from the patient.

Basic theme: Being a coordinator and being a leader.

All four professions agreed that the nurse has a coordinating role towards the team in relation to patients. The nurses have a sense of being involved everywhere and they feel responsible in implementing actions according to the patient needs. There lies an expectation on the nurse, set by themselves or others, to keep an overall track over the patient's condition. The nurses coordinate the care to ensure that the patient receives the best competence in a situation.

"I think we have a coordinator role so that the patient receives good care " (nurse student 2 focus groups 2)

The medical student see themselves as the leader in the team who are in charge while the OT and PT describe the nurse as the leader of the team, while the physician has comprehensive responsibility and sometimes approves the nurses suggestions.

"In the care I think it is quite natural that the physician takes the initiative to discussions or actually it is the physician who has the responsibility and therefore must take the leadership role" (medical student 2 focus group 1)

I do not really agree....I have a limited experience in healthcare but where I have been before, it has been the nurses who have taken the leadership role in something which was called pulse and the physician snapped in...but it were the nurses who maintained the pulse" (PT student 1 focus group 1)

I fully agree .. in fact, my experience is that the nurses keep track of everything.... thus, nothing personal to you physician but I think the physician is seen as the leader in the most teams...it is predetermined.....but it not always that way "(OT student 1 focus group 1)

Furthermore, the medical students clearly expressed an overall responsibility and present themselves as decision makers for the patient care and that view is shared by the other professions.

"I have a great respect for the physician because they have the overall responsibility for the patient and it feels like we always can lean against physician...it is the physician who has the responsibility....and the overall responsibility is still on the physician ...I have big respect for the physician" (nurse student 2 focus group 2)

One of the PT and one medical student reflected over the leadership they have over their own area of knowledge and expertise.

" I think everyone has a leadership... to be able to lead your own work it requires a leadership in everyone's profession (medical student 2 focus group 1)

"I agree, it requires a little leadership in all professions for not being overrun....you have to speak up and what is important in my profession, so it does not end up in the dark (PT student 1 focus group 1)

These themes; *being a coordinator* and *being a leader* create the third organizing theme *leadership*

Organizing theme: Leadership

It emerged that leadership can exist within its own area of knowledge but also towards the team. The nurse students did not talk about a leadership as a concept unlike the OT, PT and medical student. It was clear that all the professions perceived that the nurse holds a coordinating role. In this theme it emerged that the different professions had split opinions regarding issues of leadership in the team.

Basic theme: Collaboration and Unclear boundaries

In the theme *collaboration* the four professions expressed that they have an understanding over the need to contribute your own knowledge area to the others and to the patient. In order for the patient to receive as good a care as possible, the professions need to complement each other.

” we have different tasks and different functions and that we collaborate for the patients best ”
(medical student 3 focus group 2)

”I also think that you are just a small part of something bigger .. for the patient to be able to achieve health you needs to cooperate with other professionals ” (OT student 3 focus group 2)

All professions expressed that communication is an important part of team work to secure the best patient care. The students highlighted the need to convey and inform the other professions about their professional assessment. The students expressed an understanding over the need of collaboration and the importance of complementing each other. But even so it emerged that there was a shortcoming regarding some of the professions´ skills and competences. There was a lack of understanding between the two professions, OT students and medical students. They expressed that this is mainly based on a lack of experience of each others work.

"I thought occupational therapists work at the healthcare insurance " (medical student 1 focus group 1)

Some of the PT, OT and medical students expressed a lack of understanding whether nursing was the main responsibility of the nurse or the nurse assistant.

"I think that the responsibility of nursing, perhaps lie on the nurse assistant" (PT student 3 focus group 3)

Nursing and medical students expressed a close collaboration between each other, as their professions are mutually dependent on each other.

”As a physician, nothing works without the nurses or if the nurses had not existed nothing had worked.” (medical student 3 focus group 2)

”we had not been able to do our work if we not had physician who supports us and is behind us ” (nurse student 3 focus group 3)

The PT and OT students also expressed close collaboration between each other, they often work with co-assessments. The PT and OT students could see an advantage to work close together, but emphasized the importance of being distinguishable to the other team members. Next theme *unclear boundaries* emerged from the reflections, from all students over the collaboration between PT and OT. The nurse and medical students expressed a lack of understanding of the PT and OT areas of competence. Sometimes it can be difficult to draw a line between the two different professions, especially for nurses and physician.

"The PT and the OT usually work together in consultation with each other...it is difficult to know who does what ... it feels like you could go to which one of you ... because you have communication (nurse student focus group 3)

The fourth and last organizing theme emerges from the two basic theme *collaboration* and *unclear boundaries*.

Organizing theme: Relationships across professions

All professions express an understanding that other professions are needed and that they complement each other. They need to contribute their expertise to others. It appeared both clear and unclear boundaries across the professions

Global theme; a plethora of professional perceptions

This overall and summative global theme illustrates that the students have many views and beliefs about their own profession and others professions. These manifold perceptions include the different students expectations, values and descriptions in the relation to the relationship to the patient, across professions, the leadership in the team. The theme includes both patient related perspective as the relationship to the patient, an organizationally perspective as leadership but also a team related perspective as relationship across professions and a individual perspective like professional expectations.

Discussion

The global theme *a plethora of professional perceptions* shows how the students have a variety of perceptions and thoughts on their own and other professions. It seems like the students have acquired these different views without much contact through the educations.

At the CEW it is the first time the students are learning together by working together in a realistic care environment. The students in the present study were at the end of their education and most of the students had experience from caring work either before they started or in the meantime of their education. That implies that the students have formed their views on their own profession and the professions of others in other care contexts or during their education. Hawkes et al (2016) raises the aspect that attitudes within a profession, or between professions are not just a result of one-off encounters it also the culmination of many interactions between professionals. Furthermore Hall (2005) expresses the idea that each health care profession has a different culture with includes values, beliefs, attitudes and behaviours. Educational experiences and socialization processes that occur during the training of each professional, reinforce the common values and jargon of each profession. How and individual selects a specific health care profession is strongly affected who that person is and the goals the person seeks. It can take several years before a professional recognized as an autonomous professional. These experiences can affect how professionals come to view themselves, their profession, and the other professions they interact with (Garman et al, 2006).

All health professionals should be educated to deliver person-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics. This five core competencies that all health clinicians should possess, regardless of their discipline, to meet the needs of the patient to deliver a safe and quality care (Cronenwett et al 2007). The three student groups representing PT, OT and nurse students expressed a person-centered care as an attitude towards the patient and a holistic perspective. This approach is lacking in the medical students description of the relationship to the patient. It may be explained by the emergence of bioethics has brought issues of patient autonomy to the foreground for physicians. The main outcome valued by physicians is to save patient lives (Hall, 2005). As physician and nurses differ in the degree of their professional goals, where the physicians focus on diagnosis and clinical care delivery while nurses focus on caring, patient care and advocacy (Garman et al, 2006). The five core competencies, outlined, above are not discipline-specific and each profession will have its own way of operationalizing such competencies in practice and based on patient perspectives and needs, there are certain competencies that all health professionals should possess, regardless of their title or discipline (Greiner&Knebel, 2003).

It emerged that the students focused on different aspects of the particular profession related to the professional doing, in terms of tasks. It correlates with Lidskog's (2007) findings which presents that the focus was on which tasks were performed within the profession. In the same way the nurse students in the present study and in Lidskog's study (2007) related the tasks in a purpose of patients' needs and wellbeing. At the core of nursing lies historical will to ensure quality and safety for patients (Cronenwett et al 2007). Furthermore the descriptions of others profession tasks in both simply way and in more complex level harmonized with Lidskog's (2007) study, within the own profession the students described all from simplistics in term of tasks to a more complex conceptions. In the present study the PT and OT describes plentiful of actions and performances in their framework for their profession.

In other way the nurse students did more scanty and not depth descriptions of their tasks and actions related to nursing. In an interprofessional team all profession have their area of knowledge and expertise. In this study, it appears that OT and PT can describe their area of knowledge appeared more comprehensively, which appeared in the basic theme *different area of doing*. The members of an interprofessional team have their own contribution and unique skills to bring to patient care, what makes the professions unique and valuable. Professional's competency will change over time. Indeed, professionals will likely progress from novice, the stage of their initial academic preparation, to expert, the stage toward the end of their career when they have learned to do their work intuitively (Batalden et al, 2002).

Every nurse students highlighted that they had a coordinating role in team. In a study by Persson & Carlson (2018) this picture are shared by registered nurses (RN) who perceive themselves as the interconnecting chain that unites the team around the patient. The coordinator role are important to guarantee that the patient receives the right competence. In the present study all other students shared the conception of the nurse and the coordinator role. The nurses keep a track on the situation around the patient and in the organization, dependent on the closeness to the patient. None of the OT, PT and medical students described nurses' work with specific nursing content. In addition, it emerged under the theme *unclear boundaries* that they had difficulty separating who of the nurse and the nurse who had nursing responsibility.

In the theme *leadership* it was pronounced that there were different professions had split opinions regarding issues of leadership in the team. The medical students insisted that the

leadership belongs to them. The conception harmonized with Hall (2005) idea that physicians in particular are trained to take charge, and to assume a role of leadership in many settings. In the present study OT and PT students were keen to give the nurse the role of leadership. However, it does not correlate with the assertion that other team members expected the physicians to take responsibility of the leadership role (Hall, 2005). In the basic theme *explanation of images* emerged the conception that the physicians are responsible for decision making which also correlate to Hall (2005) idea that physicians are trained to assume responsibility for decisions. The physicians in this present study were attributed differently by the other students, as being respectful and that their role is perceived as a heavy burden. Furthermore, in the organizing theme *leadership* it appeared that one PT student and one medical student reflected about their own leadership regarding their area of knowledge. Collaborative leadership is one domain of the competency to be an interprofessional. This domain supported shared decision-making as well as leadership but also implies individual accountability for one's own actions and responsibility as explicitly defined within ones professional scope of practice (CHIC, 2010).

The competency interprofessional communication arrived in the organizing theme *relationship across profession* as an important tool of the collaboration. All professions expressed an understanding that other professions are needed and that they complement each other. They need to contribute their expertise to others. In the theme unclear boundaries appeared the difference for example between the PT and the OT area of knowledge and expertise. This can be explained by the essences of being able to understand and explain others professionals roles and responsibilities are more difficult when individual roles cannot be clearly articulated (Core Competencies for interprofessional collaborative practice, 2011).

Limitations

The first author has a wide experience of CEWs and IPL at the medical ward of the university hospital. This may contribute to an understanding of the professions and what the students were describing and this preunderstanding may have affected the analysis. However, a discussion with the second author regarding the transcribed material, analysis and the result was held, which could be considered to accentuate the objectivity of the analysis enhancing the credibility. Similarly, the fact that the first author is a clinical teacher, may have affected the students willingness to participate in the study. However the first author pointed out that

their participation was voluntary without affecting their placement at the CEW. The students in the focus group were in the same setting as they should work in the next two weeks. In some of the focus groups lacked any professionals. This may have influenced the group dynamics and the students' answers during the interviews. The focus groups were interprofessional and there become dialogues between the students and every participant speak up and more or less expressed rich descriptions. However it was scanty of disagreements and the students did not oppose over other students descriptions, except some dialogues in focus group 1. They students already had two days placement together at the CEW, but hopefully their perceptions of the profession of others had not been affected. There were no observer under the focus groups, who can offers another set of ears and eyes and can be valuable in picking up non-verbal nuances. There were just one interview session. Follow-up interviews can explore initial responses or experiences of participants and may include report back the outcomes of the first interview. The result is based on four focus groups interviews and saturation of data occurred around the third interview when no new information was submitted from the OT, PT and the nurse students to the analytical material. To be able to get a deeper and broader content of the medical students views and perspectives it is desirable that another medical student had participated.

Concluding comments

The aims of the CEW is to developing the students' professional roles and enhancing their understanding of others professions and the importance of good communication for teamwork and patient care. It tend to be that students have a lot of perception about their own and others profession which are needed to discuss and reflect during the CEW and allowing the student, together rather than silos, to develop professional identities as well as the knowledge, skills and attitudes. The supervisors can give the students opportunity to recognize and appreciate both the similarities and their differences with the intention to enhance future collaborative working.

References

- Attride-Sterling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405.
- Batalden, P., D. Leach, S. Swing, H. Dreyfus, S. Dreyfus (2002). General competencies and accreditation in graduate medical education. *Health Affairs*, 21(5),103-11
- Begley, C. (2009). Developing interprofessional learning: tactics, teamwork and talk. *Nurse Education Today* ,29 (3), 276-283.
- CIHC (Canadian Interprofessional Health Collaborative). (2010). *A National Interprofessional Competency Framework*. Retrieved from http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf
- Caipe (2002) *Center for advancement of interprofessional education*.
[http://caipe.org.uk/resources/defining-ip, e/](http://caipe.org.uk/resources/defining-ip_e/) (2018-12-12)
- Core Competencies for interprofessional collaborative practice, May 2011.
<http://www.aacb.nche.edu>
- Coster S., Norman I., Murrells T., Kitchen S., Meerabeau E., Sooboodoo E., & Avray L. (2008). Interprofessionals attitudes amongst undergraduate students in the health professions: A longitudinal questionnaire survey. *International Journal of Nursing Studies*, 45, 1667-1681.
- Gilbert, J., Yan, J. J., & Hoffman, S. (2010). A WHO report: Framework for action on interprofessional education and Collaborative Practice. *Journal of Allied Health Vol 39, No 3*.
- Grumbach, K & Bodenheimer, T. (2004) .Can health care teams improve primary care practice? *JAMA*, 291(10), 1246–1251.
- Hall, P. (2005). Interprofessional teamwork: Professional cultures and barriers. *Journal of Interprofessional Care*, 19(1), 188-196.

Hallin, K., Kiessling, A., Waldner, A., & Henriksson, P. (2009). Active interprofessional education in a patient based setting increases perceived collaborative and professional competence. *Medical Teacher*, 33, 151-157.

Hawkes, G., Nunney, I., & Lindqvist, S. (2013). Caring for attitudes as means of caring for patients-improving medical, pharmacy and nursing students' attitudes to each other's professions by engaging them in interprofessional learning. *Medical Teacher*, 35(7), 1302-1308.

Garman, A N., Leach, D C., & Spector, N (2006) Worldviews in collision: conflict and collaboration across professional lines. *Journal of Organizational Behavior*, 27(7), 829-849

Greiner, A C., & Knebel, E. (2003) *Health Professions Education: A Bridge to Quality* Washington (DC)

Jacobsen, F., Fink, A. M ., Marcussen, V., Larsen K., & Hansen, T.B . (2009). Interprofessional undergraduate clinical learning: results from a three year project in a Danish Interprofessional Training unit. *Journal of Interprofessional Care* 23(1), 30-40.

Jacobsen, F & Lindqvist, S. (2009). A two week stay in an interprofessional Training unit changes students attitudes to health professionals. *Journal of Interprofessional Care* 23(3), 242-250.

Kitzinger, J (1995). Qualitative research: Introducing focus groups. *BMJ* 311, 299-302.

Lapkin, S., Levett-Jones, T., & Gilligan C,. (2011). A systematic review of the effectiveness of interprofessional education in health professional programs. *Nurse Education Today*, 33(2), 90-102.

Koppel, I., Barr, H., Reeves, S., Freeth, D. & Hammick, M. (2001). Establishing a systematic approach to evaluating the effectiveness of interprofessional education Issues in Interdisciplinary Care. *Issues in Interdisciplinary Care*, 3(1), 41-49.

Lapkin, S., Levett-Jones, T., Gilligan, C., (2013) A systematic review of the effectiveness of interprofessional education in health professional programs. *Nurse Education Today*, 33,90–102.

Lidskog, M., Löfmark, A., & Ahlström, G. (2007). Interprofessional education on a training ward for older people: Students conceptions of nurses, occupational therapists and social workers. *Journal Interprofessional Care*, 21(4): 387-399.

Lidskog, M., Löfmark, A., & Ahlström, G. (2008). Learning about each other. Students conception before and after interprofessional education on a training ward. *Journal of Interprofessional Care*, 22(5), 521-533.

Morison, B., Boohan, M., Jenkins J & Moutray J. (2003) .Facilitating undergraduate interprofessional learning in healthcare: comparing classroom and clinical learning for nursing and medical studentes. *Learning in Health and Social Care*, 2(2), 92-104.

Mogensen E, Elinder G, Widström A-M, Winbladh B. (2002). Centers for Clinical Education (CCE): Developing the Health Care Education of Tomorrow - A Preliminary Report. *Education for Health* 15: 10-18.

Persson, U., & Carlson, E. (2019). Conceptions of professional work in contemporary health care-Perspectives from registered nurses in somatic care: A phenomenographic study. *Journal of Clinical Nursing*, 28, 201–208.

Ponzer, S., Hylén, U., Kusoffsky, A., Lauffs, M., Lonka, K., Mattiasson, A.C., & Nordström, G. (2004). Interprofessional training in the context of clinical practice: goals and students perceptions on clinical education wards. *Medical Education*, 38(7), 727-736

Reeves, S., Freeth, D., McCrorie, P., & Perry D. (2002). ‘It teaches you what to expect in future, interprofessional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students. *Medical Education*, 36, 37–344.

Stalmeijer, E. R., Mcnaughton, N., Walther, N. K. A & Van Mook. (2014) Using focus groups in medical education research: AMEE guide No 91. *Medical Teacher*,36 (11), 923-939

WHO (2010) World Health Organization: *Framework for Action on Interprofessional Education and Collaborative Practice*. Geneva, WHO, 2010. Available at: http://www.who.int/hrh/resources/framework_action/en/.