



# Physiotherapy Theory and Practice

## An International Journal of Physical Therapy

ISSN: (Print) (Online) Journal homepage: [informahealthcare.com/journals/iptp20](https://informahealthcare.com/journals/iptp20)

# Learning from clinical placement experience: how do undergraduate physiotherapy students approach person-centered practice?

Per Koren Solvang & Marit Fougner

**To cite this article:** Per Koren Solvang & Marit Fougner (2023) Learning from clinical placement experience: how do undergraduate physiotherapy students approach person-centered practice?, *Physiotherapy Theory and Practice*, 39:12, 2609-2624, DOI: [10.1080/09593985.2022.2089609](https://doi.org/10.1080/09593985.2022.2089609)

**To link to this article:** <https://doi.org/10.1080/09593985.2022.2089609>



© 2022 The Author(s). Published with  
license by Taylor & Francis Group, LLC.



Published online: 16 Jun 2022.



Submit your article to this journal [↗](#)



Article views: 4082



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

# Learning from clinical placement experience: how do undergraduate physiotherapy students approach person-centered practice?

Per Koren Solvang PhD and Marit Fougner MA

Department of Physiotherapy, Oslo Metropolitan University, Oslo, Norway

## ABSTRACT

**Introduction:** It is now widely accepted in physiotherapy and in other health professions, that involving patients in the design, planning and implementation of services is best practice. Little is, however, known about how physiotherapy students perceive their professional development in applying person-centered practice.

**Objective:** To analyze how undergraduate physiotherapy students experience the process of learning to work in a person-centered way in clinical practice.

**Method:** Five focus-group interviews of final-year physiotherapy students.

**Results:** It is important that students communicate in ways that accommodate the sociocultural characteristics of their patients. Students, where they experience that mutual understanding is not possible to achieve, tend to resort to the biomedical model and take on an expert instructor role that is met with acceptance from the patients. Some practice contexts were also found to strongly promote person-centered practice, others tightly restricting it.

**Conclusion:** In the educational setting, attention should be paid to the practice learning context, to the improvement of the ability of students to grasp the lived world of patients, and to activate their own identities and experiences as a relational tool in practicing person-centered care.

## ARTICLE HISTORY

Received 15 October 2021

Revised 01 June 2022

Accepted 7 June 2022

## KEYWORDS

Undergraduate  
physiotherapy students;  
practice placement; person-  
centered practice

## Introduction

It is now widely accepted in physiotherapy and in other health professions that involving patients in the design, planning, and implementation of services is best practice (Caladine, 2013; Gibson et al., 2020; Håkansson Eklund et al., 2019; Louw, Marcus, and Hugo, 2017; Wijma et al., 2017). Research furthermore shows that patient-centered practice enhances patient involvement, and that shared decision-making makes healthcare delivery more effective. Implementing the service-user perspective in clinical practice can however be less than straightforward (Dellenborg, Wikström, and Andersson Erichsen, 2019; Fix et al., 2017; Jesus, Bright, Kayes, and Cott, 2016; Killingback, Tomlinson, Stern, and Whitfield, 2022; Moore et al., 2017; Sobolewska et al., 2020). Patient participation is encouraged through person centered and through patient or client centered approaches, terms that are often interchanged in the literature which leads to some confusion. The Håkansson Eklund et al. (2019) review study furthermore showed that many of the attributes of person-centeredness are also relevant to patient and client centered care. Håkansson Eklund et al. (2019) main point was that the differences between the approaches are reflected in their inherent goals. The goal

of patient-centeredness is a functional life for the patient. The goal of person-centeredness is the creation of a meaningful life for the person.

Physiotherapy practice is expected to focus on patients' individual needs, preferences, and experiences (Killingback, Tomlinson, Stern, and Whitfield, 2022). Person-centered approaches cannot be defined in terms of the performance of sets of tasks, and the associated metrics and box-ticking. Person-centered practice is a multidimensional approach that includes principles that relate to the patient's psychological, psychosocial, and physical needs (Constand, MacDermid, Bello-Haas, and Law, 2014; Dukhu, Purcell, and Bulley, 2018; Gibson et al., 2020; Terry and Kayes, 2019). Naldemirci et al. (2018) suggested that person-centered care addressed the interpersonal relationship as a therapeutic engagement to develop an ongoing partnership.

Physiotherapy students are in the clinical reasoning process continually pushed and encouraged to use scientifically valid research evidence to justify chosen approaches to patient treatment methods and modalities. These approaches are anchored in biomedical understandings and in psychosocial understandings of health and illness (Farre and Rapley, 2017; Vranceanu,

Barsky, and Ring, 2009). Nevertheless the clinical environment is acknowledged as being an important setting, and as being the most powerful influence in learning about professional behavior in healthcare professional education programs (Liljedahl, Boman, Björck, and Laksov, 2015; Ryan and Higgs, 2008; Thomson, Nguyen, and Leithhead, 2016). Practice placements that enable students to better understand theoretical knowledge and apply it in practice, therefore remain a high priority in the educational quality agenda. Little is, however, known about how physiotherapy students perceive their professional development. A study by Kurunsaari, Tynjälä, and Piirainen (2018) indicated that graduate physiotherapy students have a general idea of mastering skills, have a theoretical understanding, and maintain a holistic patient perspective, but have little specific perception of what professional competence consists of. No formal review has to the best of our knowledge been undertaken of physiotherapy students' perceptions, attitudes, and self-confidence in applying person-centered approaches in a variety of clinical practice contexts. This paper therefore contains reports from an interview study, in which we asked how undergraduate physiotherapy students in their final year, experience the process of learning to work in a person-centered way in clinical practice.

## Theoretical framework

A growing body of research indicates that the development and persistence of patients' problems can be due to a complex interaction between biological, psychological, social, and environmental factors. This relationship is clearly reflected in chronic pain, several of the identified traits, consequences and mechanisms being psychosocial in nature (Booth et al., 2017; Edwards et al., 2016). A person-centered practice therefore requires a holistic understanding of the patients' lifeworld. This understanding includes biophysical mechanisms, but also the handling of a patient's thoughts, beliefs, practices, and preferences as assets in the clinical process (Booth et al., 2017; Håkansson Eklund et al., 2019; Naldemirci et al., 2018).

Communication between the practitioner and the person receiving treatment is an important trait in person-centered practice. The communicative relationship, despite the intention of mutuality, however, implies an uneven power relationship in health professional and patient interaction (Harrison and Williams, 2000; Protheroe, Nutbeam, and Rowlands, 2009). One perspective on this is to ensure that health communication is adjusted to the patient's health literacy level (Smith et al., 2009). It is further argued that physiotherapists

have difficulty giving up power and encouraging patients to share knowledge, which implies passive and active roles in the patient-therapist relationship (Mudge, Stretton, and Kayes, 2014). Students, however, need to understand that social inequalities are manifested in clinical interaction, and can facilitate or hinder the person-centered approach (Dubbin, Chang, and Shim, 2013). Health professionals must therefore be able to actively reflect on a patient's health literacy skills, if the patient's autonomy, empowerment, and involvement in decision-making are to be facilitated (Nutbeam, 2008). An important feature of the linguistic facilitation of health communication is that it enables all patients to actively participate in interaction on their treatment program, regardless of background (Muscat et al., 2019; Naldemirci et al., 2018).

A framework for studying person-centered practice, which recognizes the holistic understanding of patient lifeworld is the sociological concept of cultural health capital (Shim, 2010). This concept concerns "the specialized collection of cultural skills, attitudes, behaviors, and interactional styles that are valued, leveraged, and exchanged by both service providers and patients during clinical interactions" (Dubbin, Chang, and Shim, 2013). This social structuring of clinical interaction also elaborates on the relation between the person-centered practitioner and patient diversity.

The concept of cultural health capital is based on the work of sociologist Pierre Bourdieu who introduced the dual concepts of economic and cultural capital to understand social inequality (Bourdieu, 1984; Pinxten and Lievens, 2014). Economic capital is determined by the amount of money, real estate and goods people have at their disposal. Cultural capital is determined by the types of knowledge possessed, and by the ways of speaking, presenting oneself, and behaving (Pinxten and Lievens, 2014). Cultural capital is dependent on context, different social settings valuing different abilities. The concept of cultural capital has, however, typically been applied to the analysis of the forms of social dispositions that ease access to higher education and powerful social positions.

The healthcare field is a context in which certain forms of cultural capital are valued (Shim, 2010), the clinical setting rewarding knowledge of key concepts of analyzing the body through the lens of science. The ability to understand what health personnel need to know and the ability to communicate this information efficiently is valued. The ability to take an outsider's perspective of your own body and treat the body as a project to be managed is also considered to be important. Finally, self-discipline and the capability to act in accordance with future goals are greatly emphasized (Shim, 2010). These abilities together enable

a physiotherapist client to interact in a way that ensures the greatest possible effect of the services provided. Tensions can arise in the practice of physiotherapy and in the patient-therapist relationship if the patient and therapist have different perceptions of what is in the best interests of the patient. These perceptions are based on their attitudes and values (Bastemeijer, van Ewijk, Hazelzet, and Voogt, 2021).

Professionals are in the literature on person-centeredness encouraged to acknowledge the patient as an equal partner. The focus is therefore on recognizing the patient's experience-based knowledge (Harrison and Williams, 2000; Jesus, Bright, Kayes, and Cott, 2016; Moore et al., 2017; Wijma et al., 2017). The concept of cultural health capital therefore adds substance and depth to the analysis of the practice of person-centered care, as it enables the student to uncover ways in which the patient's and provider's cultural resources, assets, and interactional styles influence their abilities to achieve person-centered care and how the physiotherapist can transfer this learning into their practice. This perspective allowed this study to gain an elaborated grip on the reports provided by students of the activation of sociocultural frames for fostering good relations between therapist and patient. The concept of health literacy also informed the analysis of student reflections in situations in which patients did not adhere to what the therapist suggested.

## Method

### Study context

Person-centered reflective practice is an attribute that the competent practitioner is required to have assumed according to the National Guidelines for Physiotherapy Education in Norway (Kunnskapsdepartementet, 2019). In the bachelor of physiotherapy program at Oslo Metropolitan University (2021) person-centered practice is taught in different ways and at different levels throughout the course of study. This is emphasized in the skills training courses and in practice placements. Competence in practicing a person-centered physiotherapy that is informed by research, experiential knowledge, and the patient's perspective is one of the skills students aimed to achieve. The first step in the program plan is to include skills training in pre-clinical teaching. Supervised skills training is a central part of the teaching and usually takes place in small groups. The students treat each other and alternate between being 'patient' and 'therapist.' In addition to training on fellow students the student practices examination and movement analysis of children, working age adults, and older people

who offer to act as 'patients/service users.' Through these activities students experience and reflect about their own and others' body experiences and reactions. The students share such experiences in order to gain insight in other people's lived experiences and gain insight in the meaning of the body in communication and relationship building. Students through the type of skills training indicated gain experience in observing and being observed, touched, instructed, and assessed by others, and so experience the patient position. Exchanging experiences with fellow students is expected to provide increased body awareness of one's own and others' bodily experiences and reactions, but these activities are of course a limited learning resource compared to practice placement.

Becoming a certified physiotherapist in Norway requires a bachelor's degree in physical therapy (three years), followed by one year of mandatory practice (Norwegian Physiotherapy Association, 2022). As outlined in Table 1 the first year of study begins with the teaching of a theoretical basis in the course "Physiotherapy, Communication, and Ethics." A four-day observational placement is included in this course. The observation includes aspects such as: noticing the uniqueness of different contexts for practice; the whole person; body and body movements; behavior; and the characteristics of the interaction between patient and physiotherapist. The students conduct an interview with the physiotherapists they have observed during the observation practice, on their understanding of illness and health. The students also acquire knowledge on building relationships and communication in the "Movement, Function, and Assessment" course held in the following spring semester. This process is part of the

**Table 1.** Bachelor's degree programme in physiotherapy 180 ECTS\*, student cohort 2019.

	Fall	Spring
1st year	Physiotherapy, Communication, and Ethics 10 ECTS Anatomy 15 ECTS Physiology 15 ECTS	Anatomy (continues) Movement, Function, and Assessment 20 ECTS
2nd year	Prevention and Treatment of Muscle and Skeletal Injuries 15 ECTS Pathology 10 ECTS Prevention, Treatment, Rehabilitation, and Habilitation in Musculoskeletal Injuries – Specific Patient-/service User Groups 35 ECTS	Prevention, Treatment, Rehabilitation, and Habilitation in Musculoskeletal Injuries – Specific Patient- / Service User Groups (continues)
3rd year	International Public Health 15 ECTS Bachelor Thesis 15 ECTS Knowledge Based Practice in Physiotherapy 30 ECTS	Bachelor Thesis (continues) Knowledge Based Practice in Physiotherapy (continues)

\* A full-time study year is 60 ECTS

core learning objective: to apply anatomical and biomechanical theory to the analysis of function, posture, and movements.

The course “Prevention and Treatment of Muscle and Skeletal Injuries” in the second year of study provides students with practice skills in establishing alliances with patients through interaction and communication. The students work on gaining insights into patients’ life history, perspectives, experiences, and resources to facilitate patient participation and knowledge sharing in a person-centered approach. The continuation course “Prevention, Treatment, Rehabilitation and Habilitation in Musculoskeletal Injuries” addresses the strategies applied when working with patients with different cultural and socio-economic backgrounds, patients with complex problems, and patients with negative body experiences. The clinical practice for both courses is a supervised full-time practice at the outpatient clinic of the physiotherapy department, municipal health care services, and rehabilitation institutions and hospitals, and includes 60 hours of supervised practice and 30 hours of practice preparatory work in each of the three settings. The teaching in the preparatory work for these practice placements alternates between lectures and skills training that is based on individual work, student collaboration, and seminars. Students treat each other in skills training and alternate between being patient and therapist.

Students spend a proportion of the third academic year in supervised practice placements, in the municipal health services (9 weeks full time) and specialist health services (10 weeks full time). Students experience the requirements for professional practice in physiotherapy, in the placement periods, by participating in the day-to-day activities of the placement site. The practice placement programs include interprofessional collaborative learning, self-study, and supervised clinical practice, and students are exposed to a plethora of patient categories, and to challenges and problems of different levels of complexity.

The university’s student outpatient clinic is a social classroom context for communication with authentic patients. The presence of authentic patients helps create an informal and relaxing learning environment, that can also evoke student emotions by hearing about patients’ challenges (Killingback, Tomlinson, Stern, and Whitfield, 2022). Patients who have previously been treated by students at the clinic volunteer by sharing their experiences of coping with one or more musculoskeletal disorders. Previous patients also share their opinions of health professional approaches to treatment, interaction, and communication. This learning context represents an incentive for enhancing the biopsychosocial analysis of functioning as a vehicle for implementing person centered practice.

## Study design

The method used in this qualitative study, is based on the interpretative traditions of hermeneutics and phenomenology (Langdridge, 2007; Wilson and Hutchinson, 1991). An important aspect of the study was to gain insight into the subjective experiences of the research participants in the physiotherapy clinical learning processes. An understanding of this process is reached through the participants and the researchers cooperating in the sense making of the issues articulated during the interview (Gadamer, 2004).

The data was collected from five focus groups, the use of interaction and group dynamics being a distinguishing feature of focus group discussions (Flick, 2006). Interacting with members of a community of practice, and speaking openly about a topic, can stimulate participants to share experiences and perceptions that they normally would not share in everyday conversation (Krueger and Casey, 2000). Focus groups were therefore used to achieve the study objective of exploring how undergraduate physiotherapy students experience the process of learning to work in a person-centered way.

## Researchers

The first author holds a PhD in Sociology and teaches rehabilitation and conducts research in the field of rehabilitation service provision. The second author is a certified physiotherapist, holds an MA in Pedagogical Sciences, and teaches pedagogical approaches and cultural competences in physiotherapy. She also manages the supervision of bachelor theses and conducts research in the field of pedagogy, cultural diversity, aging, and physical activity. Both authors are employed at the department in which the study was carried out. The first author had not met the students before the study was begun. The second author had met the students as course manager for the bachelor thesis course with students in this course being individually supervised by staff. The second author had not supervised any of the study informants.

## Participant recruitment

Students were after completing the third-year final clinical examination, invited to participate in focus groups to provide data to the project. The invitation to participate was sent by the second author one week after the clinical exam. Work on the bachelor thesis had at this point in time just begun. The inquiry was sent as a group mail to 62 students. Caused by course organization and practice placement logistics they made up the half of the



student cohort that were present at campus at the time of the study fieldwork. A total of 36 students accepted the invitation and they were emailed a list of five time-options across a two-week period. The study topic was introduced in an information letter; the letter also informing students that the two interviewers would not be involved in subsequent teaching modules. Our starting point was that physio-therapy students have common professional interests have their own opinions and views on the topic of person-centered care, and are comfortable sharing their experiences in a group of fellow students. However 20 students withdrew from the project during the interview scheduling process and did not disclose their reasons for this. We believe based on our knowledge of the students in this phase of the study program that many withdrew because they felt they had completed the practice placement part of the curriculum, and because they traveled out of town to work on the bachelor thesis. All 16 students who participated in the focus groups provided their written consent that their anonymized data could be used in publications and for teaching purposes. Results have been presented in a way that ensures the anonymity and confidentiality of participants. This study was evaluated by the Data Protection Official at the Norwegian Center for Research Data.

### Participants

The material is drawn from group interviews of 16 final year students, that were conducted immediately after their clinical exam. Ten females and six males, 25–29 years of age participated in the groups which varied in size from 2 to 5 students. This age range reflects the usual cohort at OsloMet. One group, due to the late withdrawal of some participants, had only two participants. Three groups were made up of both males and females, one group was made up of only females and one of only males. We took great care to provide an arena that was clearly differentiated from the setting of the oral exam, to facilitate reflection on clinical experience.

### Focus group process

A short semi-structured interview guide with open-ended questions was prepared and was used to steer the issues discussed in the focus group interviews (Table 2). The students were encouraged to express themselves in their own rather than academic terms to stimulate their free expression of their experiences, assumptions, attitudes, and perceptions. The interviews took place in a classroom which the students were familiar with. Questions were modified depending on the

**Table 2.** Interview guide.

---

Introduction: This conversation addresses your experience of the provision of person-centered approaches in physiotherapy practice.
(1) Could one of you start by describing the treatment situation of a recent patient? Preferably someone who made an impression on you.
(2) What promoted or inhibited communication with this patient?
(3) Could you describe some of the practical approaches taken in delivering person-centered treatment to this patient?
(4) Could everyone elaborate further on the clinical experiences addressed in question 1–3?
(5) In what ways did the pre-clinical courses prepare you for applying patient centered practice?

---

development of the conversation as argued by Morgan (1996) and in such a way that differing opinions and experiences could be voiced. Students were to encourage their involvement in the discussion and asked to recall incidences that had made an impression upon them (Boud and Walker, 1998; Brookfield, 1990). Participants were also asked to describe how they encouraged patients to become active participants in the recovery process and how they built mutual relationships with their patients. They were furthermore asked to describe and to reflect on patient feedback, role-taking, and ways of participating in therapist-patient interactions. The interviews lasted about an hour and were audio recorded and then transcribed by the second author. The transcriptions were only read by the authors. The authors concluded that data saturation was reached after the first round of recruitment.

### Analysis

The data from the five focus groups was analyzed to provide knowledge and understanding of the phenomenon under study. This data was therefore analyzed as individual studies, to preserve the integrity of all group interactions and the data that emerged from them (Flick, 2006). The analytical process included four steps and followed the strategy for qualitative analysis inspired by Malterud's (2012) systematic text condensation method (Table 3). In the first step transcripts were read independently by both authors several times to gain a contextualized impression of the text and preconceptions being highlighted. In the second step units of meaning were identified and coded. The complex relations between the codes and subcodes being clarified in the third step which was quite challenging. The authors have different academic backgrounds. Some differences in the coding of the data material therefore emerged (Cornish, Gillespie, and Zittoun, 2013). One example was the importance of cultural health capital as a sensitizing concept. A more in-depth discussion between the authors was therefore called for to increase

**Table 3.** Overview of analysis.

Units of meaning	Themes	Codes	Subcodes	Categories
<p>Group (G)3 Student (S)3: I'm trying to get a picture of who the patient is, whether it is a patient who is motivated for treatment, or not, how much knowledge the patient has about his own pain or diagnosis, whether they really want to be treated or if they come because they are referred by someone else.</p> <p>G2S2: We always get to know the patients' resources in relation to their goals and wishes based on what they think makes sense for them. And we must take care not to overrun, at least I think so.</p> <p>G3S2: You must be able to take different roles depending on the type of patients you have. For example, I talk differently when the patient is an elderly lady of 70 years from the finest part of western Oslo from how I talk with a 22-year-old with cruciate ligament damage.</p> <p>G5S5: I think maybe it's about how much you go into your own story, although it should not be the focus. But you may mention something, for example, such experiences, or "I have also felt like that," or know that I would react in the same way. So, just a few small nuances then . . . yes, just to let them know that you are a human being.</p> <p>G1S1: In terms of patient involvement . . . , or the patient perspective, I have a migraine patient with a complex pain syndrome. She has difficulty relaxing. And she is very keen to get a lot of massage as she thinks helps her. She wants more focus right here (pointing to the neck muscles), but based on my knowledge about theory and research, I try to make her understand that it implies activity for the entire body to be able to really feel the tension and relaxation and to become conscious about the relationship. We have worked a lot with just that, but as said, it is not what she wants. Because she is so little familiar with her own body, she does not fully understand the relationship, even though I try to explain it. It's a dilemma, because then it's . . . Because I have that background and know a little about it and can help her. It's hard because she really loses some of her motivation, since she does not understand. Therefore, she does not master, hence she does not want to continue.</p> <p>Out-patient clinic</p> <p>G4S4: I think it is perhaps difficult from our perspective to understand how they perceive everything we say, as we have a basic understanding of the body and for us it's very like that for granted all along. But I think many of the patients we treat here comes with very little experience of the body and what is good and what is not good, how it works. So, when we tell them that they may not have such good contact with their own body, and telling them how breathing works, it is a whole new experience for them, because no one has told them before.</p> <p>.....</p> <p>Hospital</p> <p>G5S3: User involvement becomes more a dilemma at the hospital compared to here [outpatient clinic], where it is a matter of course and very central and it's like . . . , it just can't be ruled out. But at the hospital it will be a little more like that . . . it's not really the patient's wishes, but it must nevertheless be like that because of scarce time. It's very unfavorable.</p> <p>.....</p> <p>Home care services</p> <p>G5S1: I tried to get the old lady to understand the risk factors of sleeping in a chair every single night. We had to talk about it and I really wanted to force her to get up in bed and sleep in it. Of course, I would not have bound her tightly in bed, but I would have liked to have used words like you should, must, you absolutely must, etc., until she realized that we know best how it works.</p>	<p>Getting an idea of who the patient is</p> <p>Identifying with patients</p> <p>Conflict between the patients' concerns and professional interests</p> <p>The physiotherapy profession stronghold</p> <p>The person is lost behind the diagnosis.</p> <p>At home the patient is a private subject.</p>	<p>Promoting sense of coherence</p> <p>Patients' attitudes and preferences</p> <p>Students' social adaptability</p> <p>Empathy</p> <p>Clinician-centered interaction</p> <p>Discipline's core of professional practice</p> <p>The body as an object</p> <p>.....</p> <p>The patient as the object of clinical attention</p> <p>The patient's incoherent lifeworld</p>	<p>Adapting behavior to the patients' social characteristics</p> <p>Balancing between closeness and distance</p> <p>Self-insight</p> <p>Breaking the ice</p> <p>Convincing the patient</p> <p>Student-led communication</p> <p>Dissemination of knowledge</p> <p>Patient recipient of care and expert knowledge</p> <p>.....</p> <p>Regular routines and tight schedule</p> <p>Patient involvement not inherent in the context</p> <p>.....</p> <p>Coming to see the whole person</p> <p>Disregarding the principle of patient self-determination</p> <p>Conviction and persuasion</p>	<p>Building partnerships</p> <p>Learning to apply the expert role</p> <p>Clinical context matters</p>

the nuancing of codes and subcodes, and to achieve high inter-coder agreement. Preliminary findings were informally discussed with colleagues in the department in which the study was carried out, and in which the authors are employed.

The theoretical frameworks of patient lifeworld, health literacy, and cultural health capital were used as sensitizing concepts in the analysis (Bowen, 2019). This approach which is not strictly deductive allowed the analysis to precisely grasp how the students dealt with the social relations between physiotherapist and client. These relations include patient strengths and potentials, power-inequalities in the relation between practitioner and patient, and shared cultural traits. Such relations lie at the core of person-centered practice and play an important role in determining how the students reflected on their experiences in practice placement.

## Findings

A general finding reflected in the data is that the students experienced the stimulation of the active consideration of patients' needs, preferences and patient involvement in goal setting and intervention selection to be challenging. This appears to be related to the varying levels of patient cultural health capital, and to student levels of adaptability when providing professionally tailored physiotherapy in the fields of practice they were exposed to. Three themes crystallized when students talked about practice: 1) building partnership; 2) learning to apply the expert role; and 3) that clinical context matters.

### Building partnership

This theme frames students' efforts to find a balance between leading and following the patient. The students recognize themselves, when reflecting on how to facilitate the building of a partnership with the patient, as novices. One way in which this recognition was formulated was in their uncertainty about the kinds of behavior that reflect professionalism (i.e. how to act with professional authority rather than with an authoritarian attitude).

*Focus group 4 (G4), student 2 (S2): I need more practical examples. I need to learn something about balancing between me – as an authority, as a professional, as an expert – and the patient, and must learn at the same time to show humility. To just be completely compliant to satisfy the patient, it is not . . . I'm inexperienced, and how much should I push the patient, and how private and personal should I be when I relate to the patient?*

The students experienced difficulties in defining an appropriate balance between closeness and distance in patient encounters, this being based on their preconceived notions of the therapist-patient relationship. They in this context were aware that they must relate to the patient as a potentially active participant in the sharing of knowledge, goal formulation, and in personalized actions based on the patient's life world, and avoid falling into the active-passive model. An awareness of the active role of patients in rehabilitation encourages students to invest time in mapping patients' engagement.

The need to create meaning for patients in exercise activities was elaborated by another group. A student shared a story about a patient whose goal in treatment was to regain the ability to write by hand. A discussion of their shared interest in rock music initiated a collaboration for achieving this goal, a step which also helped break the ice.

*G3S2: My patient and I had many common interests in addition to the writing exercises that were part of the treatment. We hit it off by talking about rock music, which provided the opportunity for him to write the name of his favorite band, a progressive, experimental rock band, and which was part of the exercise training. We got along well, and the treatment measures were easy to carry out. All the measures I proposed he accepted, and never unwillingly. I also understood that he was not always fully involved in what I planned to do. As I got to know him, I learned how to get a tired guy on the right track. I was, in this, facilitating on the donor side.*

A recurring theme when sharing suggestions for building trust and for creating a safe environment was the adaption of communication styles to the specific psychosocial characteristics, cultural preferences, and level of health literacy of the patient-therapist encounter.

*G2S2: You can use more specialized vocabulary with a patient who has a lot of physical training experience, [than] with a person who is not used to training, when trying to enable the person to understand the different approaches. The instructions [for] and explanations of why you do things can be completely different, depending on the type of background of that person.*

*G2S1: I cannot treat everyone in the same way, because people are different. I use a different kind of body language and different words and phrases with different people. It's a way of getting a little under their skin and getting to know each other.*

A sense of commonality is an important vehicle in the alliance and is very important to the achievement of successful therapy. Being familiar with dialects, sociolects, and local customs is also important in the creation of the therapeutic alliance and allows professional practice to be adapted to a patients' social characteristics.



G1S3: *I have a patient from the western part of Norway, who was very pleased to finally meet someone who understood what she was saying. She had previously not talked much in treatment, because she felt she had to change her dialect. She became very happy, and told me, "I can talk freely, now you understand me." I felt that she was comfortable with me.*

G1S4: *I have experienced the advantage of coming from the same place as the patient, for example, that we have the same favorite football team or other things. It's a great way to get to the right mood and to start the conversation.*

Some students refer in the framework of patient engagement to their experiences with soft-tissue injuries as a vehicle to identify with some of the issues a patient presents.

G3S3: *One of my patients was suffering from a head injury and concussion, and was told by a hospital doctor that they had two damaged head ligaments, and had to be careful or very serious conditions [head and neck ligament laxity and instability], could develop. The patient said he was afraid about this for many years. I then showed him my foot which I broke and told him I have almost no intact ligaments. I can still do whatever I want, even if some [anatomical structure] is damaged. It [the damage] does not have a major impact, it [my foot] can still work well. He seemed to be happy to hear that my body was not perfect either. Now he has begun to challenge himself to do different activities.*

G3S2: *Or, when it comes to pain, expressing empathy by communicating that we have something in common. Not by telling in depth about my own pains, but that we have ailments in common.*

Students through such reflections about their body pain wish to identify with the patient to create a closeness and to normalize pain in order to encourage patient involvement. Students are involved to varying degrees when sharing in-depth information about their ailments.

Other topics of conversation that reflect shared interests have led to students being requested by patients to be included in the patient's social media networks. The students must, in such circumstances, enter into negotiations to balance closeness and distance.

G4S1: *One of my patients asked if we could be Facebook friends. I became a little confused, even though she said she just thought it was fun to be able to follow me in my career. I didn't want to [accept her friend request] and replied that I had to clarify guidelines with my supervisor on the patient-student relationship. The next time she came I didn't mention it and she didn't ask me about it.*

Students suggest that a modest amount of information about personal experiences can be shared without this undermining professionalism. Students find that establishing a personal relationship is useful in the treatment process, but there are boundaries that should not be

crossed. Locating these boundaries is an important skill that must be learned in the mastering of person-centered practice.

### **Learning to apply the expert role**

Students are well acquainted with the concept of patient involvement, its purpose and some of the principles of the approaches involved. It seems that students struggle with promoting empowerment and self-responsibility in patients. Students who do not have the skills necessary to encourage patient participation, seem to assume the mediating role of conveying factual objective knowledge that they are familiar with. This is an expert role that can have authoritarian elements that limit the patient's autonomy.

G2S1: *Sometimes I choose to understand user participation as being my suggestions for action which, by virtue of my expertise, I assume the patient will agree to. User involvement can however, in some cases, go beyond what I as a professional believe is most appropriate for the patient.*

Students refer explicitly to research when trying to convince the patient of the right measures where conflicts between personal and professional interests arise.

G1S2: *One thing is to hear what we as students think they should do; we are however not fully trained and experienced physiotherapists. Bringing in some research, which is true knowledge, might help convince them that it is true, that there might be something in what I say.*

Patient diversity seems to be a phenomenon that violates student expectations of patient adherence. Many students take it for granted that their patients can relate to the usual treatment principles, and to instructions given in the context of physiotherapy practice.

G1S2: *Some people only need to be instructed, and then they do the rest themselves, they just do it, especially athletes . . . who are motivated. Others need to be followed up with constant instruction. You notice this at the first session. They say yeah, they've done their homework, but the next time they say that they forgot to do it, or they have not had time, or they are uncertain about how to do the exercise that we practiced together. It is, however, essential that they master the exercises, and are motivated. They should not come to me forever, they must master it themselves [i.e. the exercise].*

Here we see the frustration of not being able to positively engage patients in the treatment regime and to enable them to understand that they must take responsibility for their own healing process. The therapist is an instructor and they therefore expect that they can enable patients to take care of the treatment themselves.

Students are aware of their own strategic use of professional terminology to establish a trustful patient relationship. Students sometimes, however, experience that their message may appear alienating to some patients.

*G3S1: We have acquired a professional language and a lot of professional knowledge, which can lead us to use concepts and explain things in a bit too advanced way, even though we have learned that we should explain things simply. We, however, forget [what we learned] when we meet patients who do not speak Norwegian well, or have little schooling. My experience is that most patients nod to show that they understand. However, major shortcomings are revealed if you ask them to see how much they remember after treatment. We may not have understood each other, and then it's easy to think they have not understood, even though it is more likely I have not expressed myself clearly.*

The student expresses an awareness of the challenges posed by low levels of health literacy and admits that he is not able to follow the guideline of using simple language. Using professional terminology is an inherent part of the student's expertise in physiotherapy practice and communicating concepts using language other than everyday language seems to be a part of applying professional knowledge. However, using specialized professional terminology hinders patient participation on his or her own terms. Students use the most accessible knowledge base. This typically relates to examination and treatment procedures that follow a traditional biomedical model. Effective communication is hindered where both participants lack comprehension.

### **Clinical context matters**

Clinical education provides physiotherapy students with different learning environments in which they can integrate knowledge and skills, and then apply them. We find when comparing the diverse clinical settings (i.e. outpatient wards, in-patient wards, and home-based physiotherapy services) that the challenges students experience in promoting user participation differ with context.

The outpatient clinic is a central section of the campus building and is the section in which most of the teaching rooms are found. A relatively large proportion of patients who visit the clinic to be examined and treated suffer from musculoskeletal disorders, rheumatology conditions, respiratory disorders, or are admitted for post-stroke follow-up rehabilitation. Patient groups are referred by a physician or contact the outpatient clinic on their own initiative. Patients also show a willingness to undertake treatment and training and are largely receptive to instruction and guidance.

*G1S3: Those who are motivated, do attend their [out-patient] treatment appointments. They are willing to try out things, show that they are a little involved and carry out the home training program. So, I notice they are motivated. They do not come here just to be seen by us, and then not continue this on their own at home.*

Students demonstrate and reinforce their expertise through communication and, through this, position the patient as the recipient of care and knowledge. Clinical activities take place in the campus context, an arena that reflects the discipline's core professional practice.

Students when comparing practice at hospitals with practice in the campus outpatient clinic, find the promotion of user participation at hospitals to be significantly different from promoting user participation in the outpatient clinic. The difference is especially prominent in encounters with old and frail patients. Students do not seem to be able to adapt their knowledge of user participation in ways that create a sense of meaning for patients.

*G4S2: I was in the geriatric acute setting and . . . it could be very difficult to get the patients involved in anything. They were not hospitalized to receive physical therapy; they were there because they were sick and hospitalized. Patients at the outpatient clinic first and foremost come there to receive physical therapy. So it's a bit easier to . . . they show greater willingness to try what we suggest. I also asked what they [hospital patients] wanted or what they were hoping for. Most of them just wanted to go home and not end up in a nursing home or similar.*

Student promotion of user participation knowledge seems to be less useful with hospitalized patients. Regular routines and tight schedules dominate in the hospital setting, and the medical ward has no special accommodation of or a team of providers to address the unique needs of older patients, beyond providing the medical treatment and follow-up care services required to get them back home. Patient involvement is not inherent to this context, students experiencing that they are therefore faced with a dilemma in encouraging patients to express their wishes and make their own decisions on rehabilitation.

Students' experiences of the home-service treatment context also seem to reflect a sense of that there are shortcomings in constructive knowledge sharing in the patient relationship. Municipal health services endeavor to provide the lowest level of effective care to let recipients remain at home if possible instead of moving them to a nursing home. Care recipients are provided with care in their own homes and must accept outsiders physically entering their private sphere. The student is therefore a guest in the patient's home. Inequalities

more clearly emerge in views on what is most appropriate and justifiable for users, to allow them to continue living in their own home. One student referred to a home service situation in which he had argued that the client who had edema in her legs should sleep in a bed and not in the chair in which she had slept for the last 20 years:

*G5S1: I asked her, "You say that you have for the last 20 years been sleeping in that chair, but can't sleep in it. But why don't you sleep in a bed?" But in a way . . . she is not ready to hear it. She just wants to hear that it's okay to sleep in a chair if she wants to. I said to her, "I am not going to force you to do anything, but I'm here for 30 minutes. After that you can do what you want. This is the knowledge we have. These are the risk factors you can do something about. It's your choice, and you control your life."*

The hospital bed placed in the living room emerges as a foreign element among personal belongings, one that is so far unused. The patient and the student built up at the beginning of the encounter a picture together of the true nature of the problem by delving into its meaning from the patient's perspective. Facing the patient's practice in the home setting, how and where she slept is perceived to be irrational from the student's viewpoint. However, the student can balance giving evidence-informed advice by simultaneously emphasizing the patient's autonomy when giving it.

The data shows that the clinical context is important to the student-patient relationship. The outpatient clinic is an environment that is run by department teachers and is part of the skills training teaching rooms. Context sensitivity therefore seems to be most pronounced in learning environments located in external institutions because they represent real-life practice situations and do so to a higher degree than the outpatient clinic environment.

The final question in the interview guide addresses how the pre-clinical courses prepare the students for applying person-centered practice. The students on reflecting on the question point out that the teachers strongly emphasized the importance of person-centered practice. Teaching and the reading of course literature did not in their opinion really prepare them for working in a person-centered way. The first step of qualifying took place according to the students during practice placements in the second study year. This way of formulating skills development does not necessarily implicate that teaching and course literature on person-centered practice is irrelevant. The students when reflecting on the learning process found that the practice placements were an important turning point in their skills development.

## Discussion

Our ambition has been to gain a deeper understanding of how physiotherapy students, when transitioning from student to practitioner, experience the process of learning to work in a person-centered way. The analysis of our discussion with students on the topic of user participation in physiotherapy practice shows that some students work on building a partnership with patients. It is important for them to communicate in ways that accommodate patients' sociocultural characteristics, and to find a balance between listening to patients and executing the expert role. The expert gap is according to a review article (Rose, Rosewilliam, and Soundy, 2017) one of several factors that indicate a perceptual gap between staff and patients, in patient involvement on decisions on their respective goals. A major barrier in this is a patient's experience of not having enough knowledge to be able to participate in decision-making (Joseph-Williams, Elwyn, and Edwards, 2014; Protheroe, Nutbeam, and Rowlands, 2009; Vahdat, Hamzehgardeshi, Hessam, and Hamzehgardeshi, 2014). Studies also show that clinicians claim that they do not possess the skills necessary to involve patients in determining goals (Vermunt et al., 2019). The consequence of this is that treatment goals end up being largely therapist-led (Bright et al., 2018; Hammond, Stenner, and Palmer, 2020; Rose, Rosewilliam, and Soundy, 2017). The data shows that students strive to accomplish the goal of involvement through applying a variety of tools and interaction styles. Students tend to rely on the biomedical model in situations in which they experience mutual understanding is impossible (Hammond, Stenner, and Palmer, 2020). They then take on the expert role as instructor, building on their professional authority. How students work with accomplishing person-centered practice also depends upon context. Some contexts, such as a geriatric hospital setting, can hinder person-centered practice. Other contexts such as the home of the patient can facilitate person-centered practice (Moore et al., 2017).

The out-patient clinic located on campus, typically presents students with a well-suited setting for developing their person-centered practice skills. They find themselves in a stronghold of physiotherapy profession knowledge, skills, and evidence-informed intervention in which patients actively seek expertise. The relationship between environment and status maybe why students seem to feel at home (Doran and Setchell, 2018). The students are familiar with the treatment rooms in which they move comfortably and know how to operate the equipment. Different patient groups visit the clinic. Most are self-referring, which is a group that according

to a Scottish trial is more supportive of physiotherapists making decisions about their fitness for work or activities (Webster, Holdsworth, McFadyen, and Little, 2008). This makes the adoption of person-centered approaches possibly easier. Another impact on students' well-being in the out-patient clinic may be easy access to teachers when requiring assistance and guidance. This differs from the two other contexts described (i.e. a hospital ward and a home-based municipal health service).

According to Doran and Setchell (2018) physiotherapists' sense of well-being and status can be seen in the context of territoriality. A private home therefore represents an unknown territory, thus affecting the physiotherapist's status. A study by Öresland et al. (2008) showed that health workers who practice in patient's homes may find it challenging to balance between the two positions they take (i.e. a guest and professional). Such a shift in context, combined with unfamiliar values and preferences of patients is likely to challenge a clinician's ability to act according to the relational aspects of clinical reasoning and decision-making (Greenfield et al., 2015). The home context provides easier access to patients' norms and values and calls for greater attention to a person-centered approach aspects which are in the best interests of the patient (Greenfield et al., 2015).

Inequality in health is recognized as being a major concern in the delivery of health services. Studies have demonstrated that a homogeneity between therapist and patient improves communication and adherence to treatment programs (Shim, 2010). The students that were interviewed expressed their entire repertoire of cultural competences and abilities to relate to patients in their working in a person-centered way. They elaborated in detail on how they can use cultural competences such as knowledge of Norwegian dialects and districts, personal styles of the upper middle classes, and progressive rock music as contact-making approaches to patients. The students even brought up their own stories of illness and recovery to make patients feel safe. However, this bonding with patients does have its limits. The physiotherapy students who are learning to practice cannot be the patient's friends. They must carve out a role that combines friendship and professionalism through the way in which they bond. This practice of bonding has been identified in previous studies of professional physiotherapy practice and has been labeled: "relational matching" (Solvang and Fougner, 2016); "the personal manner of communication" (Rutberg, Kostenius, and Ohrling, 2013); and recognizing "the unique character of the person" (Nicholls and Gibson, 2010).

These patient hindrances arise where students experience obstacles in establishing an alliance with patients who convey low levels of health literacy in different ways. Students in such cases assume a role in which they supervise the patient in deciding appropriate goals and refer to research to convince the patient about the relevance of measures (Sjöberg and Forsner, 2022). Studies on similar issues for experienced physiotherapists shows therapists acknowledging that they are the presenter of suggestions, from which that the patient can choose (Rose, Rosewilliam, and Soundy, 2017). Time constraints mean that physiotherapists often take the lead and prioritize the physical rehabilitation process rather than spend time on argumentation and negotiation. The therapists therefore tend to take a biomedical approach rather than a biopsychosocial one which represents a challenge to the fulfillment of a person-centered practice. The imbalance in the power relationship that emerges through the student's role taking, may seem to be nurtured by the "professional prestige and situational authority" of the health agent (Harrison and Williams, 2000). The findings of this study not unlike the findings in the study conducted by Lindquist et al. (2006) showed that the students take on the role as the better-knowing therapist. This is one of the professional identity categories that physiotherapy students identify with when transitioning to work life. We in this study align the tendency to adopt paternalistic attitudes with the context in which the physiotherapist carries out practice. Other studies suggest that the personal attitude of the physiotherapist is key to accomplishing person-centered practice (Killingback, Clark, and Green, 2021).

The quality of the practitioner-patient relationship is an issue that relates to the practitioner personally. It will therefore depend on the practitioner's ability to capture "a clear picture of what the patient values about their life" (Håkansson Eklund et al., 2019). However, it is important to note that several studies of service users who are immigrants from non-Western to Western countries emphasized that many seem to expect a traditional expert role in which the patient wants to be cared for and told what to do (Dobler, Spencer-Bonilla, Gionfriddo, and Brito, 2017). A comparable preference for a paternalistic approach is observed in the geriatric ward. Older people may in some instances be socialized to expect a traditional expert role (Joseph-Williams, Elwyn, and Edwards, 2014) a context which is easily associated with treating patients as objects of clinical attention. This is an approach which is inherent to a biomedical model, in which the patient is the recipient of treatment (Josephson, Woodward-Kron, Delany, and Hiller, 2015).



Making patients feel respected or valued as persons in their own homes appears to be a multifaceted task involving more than recognizing ethical principles of autonomy (Olsen et al., 2019). Integrating patients' values, beliefs and preferences in clinical decisions is a challenge that requires the professional to discuss evidence-informed treatment options with patients (Veras, Kairy, and Paquet, 2016). It is suggested that emotional intelligence (EI) is important in effective practice, particularly in the delivery of person-centered care (Birks and Watt, 2007; Hafskjold et al., 2015; Van Rooy and Viswesvaran, 2004). There are several definitions of EI. Van Rooy and Viswesvaran (2004) believed that the best and most cautious definition of EI is "the set of abilities (i.e. verbal and non-verbal) that enable a person to generate, recognize, express, understand, and evaluate their own, and others, emotions in order to guide thinking and action that successfully cope with environmental demands and pressures." This study found that students' approaches to supporting patients in making good choices, involve convincing and persuading patients based on clinical evidence rather than understanding the situation from the patient's perspective. A similar trend applies to professional practice this being referred to as "benevolent manipulations" (Gibson et al., 2020). The therapist is responsible for communicating what the research-based recommended treatment is, which supports the expert role. However, such communication may involve overriding patient autonomy.

### Limitations

This study provides insight into undergraduate students' learning as they begin their working lives. Interviews that were instead conducted one year after graduation, after students had completed their mandatory practice, would have yielded more information. No interaction between students and patients was observed. Observational methods could, however, also have provided access to unmediated emotional experiences. We can argue that five group interviews in which retrospective accounts of the significant experiences of students were collected, should provide an in-depth understanding of the learning process as experienced by the participants.

### Implications

Our study suggests four arenas of improvement in preparing students for practicing person-centered care and in assisting their process of learning through practice. First, greater attention should be paid to the importance of context. Different contexts contribute differently to the learning architecture this influencing the

opportunities for learning person-centered practice (Sheehan et al., 2017). Accomplishing person-centered care is from the student perspective easier in some contexts (i.e.) the outpatient clinic. The hospital setting is one in which time strain and hierarchical organization hinder person-centered practice. Physiotherapists are generally task-oriented and concentrate on treatment goals and measures. They are also often self-led. A study of physiotherapy students' assignments found that students have a need to demonstrate some form of expertise, which can easily lead to students basing their expertise on a biomedical model and communicating to patients rather than with patients (Bright et al., 2018). Students therefore need to receive support in handling the different contexts that they can expect to encounter in practice placements. We suggest that the curriculum should, to a greater extent, highlight person-centered physiotherapy. This should not just be a learning goal of the curriculum, but also include learning activities that advance the promotion of user participation. Presentations of patient-centered approaches can be performed as role-plays by teachers, students, patients, and actors. They can also be presented by applying simulation-based education (SBE) which enables learners to interact with virtual patient cases (Pritchard, Keating, Nestel, and Blackstock, 2020). The goal is to engage students in the application of both the biomedical and psychosocial approaches in person-centered physiotherapy.

Second, a phenomenological approach should be applied to improve the students' ability to grasp the lived world of patients (França et al., 2019; Naldemirci, Britten, Lloyd, and Wolf, 2020; Nicholls, 2017). Person-centered practice must, however, be illuminated in a more nuanced way, and through using different methodological approaches (Moore et al., 2017; Mudge, Stretton, and Kayes, 2014). Several studies argue the potential of using narratives as a pedagogical tool in the analysis and making sense of the personal communication between patients and physiotherapists which in turn can help ensure a patient-centered approach (Ahlsen and Solbrække, 2018; Caeiro, Brazete Cruz, and Pereira, 2014; Greenfield et al., 2015; Killingback, Clark, and Green, 2021). Some narratives may challenge previously accepted norms, or force physiotherapists to consider alternative perspectives (Ahlsen and Solbrække, 2018; Greenfield et al., 2015). However, we believe that meeting patients with diverse illness histories and people with disabilities is a valuable curricular tool (Killingback, Tomlinson, Stern, and Whitfield, 2022). The goal is to overcome the boundaries that separate worlds, and to provide the opportunity to enter the patient's world (Greenfield et al., 2015).



Third, cultural learning is also necessary (Kurunsaari, Tynjälä, and Piirainen, 2018) with the arts, literature, and reflective writing having a significant potential to develop students' consciousness of their own lived world. This is an asset that can be used "to promote narrative reasoning capabilities among physiotherapy students" (Caeiro, Brazete Cruz, and Pereira, 2014). Patients belong to different cultures. Students can therefore activate their own identities and experiences as a relational tool. Professional reflexivity therefore helps students and clinicians recognize that their personal biography can be an asset in the application of person-centered practice in clinical encounters. Introducing students to the use of their personal biography as a tool in patient dialogue, seems to be a valuable element of the pre-clinical part of the curriculum, and in practice placement supervision.

Finally, there is a need to reflect on the application of evidence-informed and experimental studies of larger populations in the person-centered practice context (Kerry, 2018). Simple rule-following based on scientific evidence can be the easy way out for a beginning practitioner. The ambition must, however, be to assist students in their implementation of person-centered care in its full complexity. We believe that it is important to address the situation when students in practice placements find achieving mutual understanding impossible. Preparing students well for practice placement helps them avoid the temptation of resorting to the biomedical model and taking on a narrow instructor expert role.

## Conclusion

This study has explored how physiotherapy students reflect on learning to work in a person-centered way. Practice placements seem to be an important arena for learning person-centered skills. These placements are an arena where students work to find the balance between professional and personal friendship in alliance-building. However, students when they experience that they do not have the skills necessary to meet a patient's needs tend to resort to the role of the instructor; a role founded on a biomedical approach to physiotherapy practice. The curriculum should actively support students through perspectives derived from the classroom teaching of psychology and sociology, and through reflective supervision in clinical practice placements. It is furthermore important to recognize the major influence clinical context has upon learning to work in a person-centered way and support students in this. Some settings provide few opportunities for person-centered practice, such as geriatric hospital wards. Other contexts provide ideal conditions such as the university in-patient clinic. Students when learning

how to work in a person-centered way seem to welcome well-informed support on the challenges involved in alliance building, and on the importance of institutional frameworks; aspects that are described in this study.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

The author(s) reported there is no funding associated with the work featured in this article.

## References

- Ahlsten B, Solbrække KN 2018 Using narrative perspectives in the clinical settings of physiotherapy, why and how? In: Gibson BE, Nicholls DA, Setchell J, Groven KS (Eds) *Manipulating practices: A critical physiotherapy reader*, pp. 356–377. Oslo, Norway: Nordic Open Access Scholarly Publishing.
- Bastemeijer CM, van Ewijk JP, Hazelzet JA, Voogt LP 2021 Patient values in physiotherapy practice, a qualitative study. *Physiotherapy Research International* 26(1): e1877. doi:10.1002/pri.1877.
- Birks YF, Watt IS 2007 Emotional intelligence and patient-centred care. *Journal of the Royal Society of Medicine* 100(8): 368–374. doi:10.1177/014107680710000813.
- Booth J, Moseley GL, Schiltenswolf M, Cashin A, Davies M, Hübscher M 2017 Exercise for chronic musculoskeletal pain: A biopsychosocial approach. *Musculoskeletal Care* 15(4): 413–421. doi:10.1002/msc.1191.
- Boud D, Walker D 1998 Promoting reflection in professional courses: The challenge of context. *Studies in Higher Education* 23(2): 191–206. doi:10.1080/03075079812331380384.
- Bourdieu P 1984 *Distinction: A social critique of the judgement of Taste*. London, UK: Routledge and Kegan Paul.
- Bowen GA 2019 *Sensitizing concepts*. London, UK: SAGE Research Methods Foundations.
- Bright FA, Cummins C, Waterworth K, Gibson BE, Larmer P 2018 Physiotherapy students' conceptualisations of clinical communication: A call to revisit communication in physiotherapy communication. *Open Physiotherapy Journal* doi:10.14426/art/509.
- Brookfield SD 1990 Using critical incidents to explore learners' assumptions. In: Mezirow J (Ed) *Fostering critical reflection in adulthood*, pp. 177–193. San Francisco, CA: Jossey-Bass Publishers.
- Caeiro C, Brazete Cruz EB, Pereira CM 2014 Arts, literature and reflective writing as educational strategies to promote narrative reasoning capabilities among physiotherapy students. *Physiotherapy Theory and Practice* 30(8): 572–580. doi:10.3109/09593985.2014.928919.
- Caladine L 2013 Physiotherapists construction of their role in patient education. *International Journal of Practice-based Learning in Health and Social Care* 1(1): 37–49. doi:10.11120/pblh.2013.00005.

- Constand MK, MacDermid JC, Bello-Haas VD, Law M **2014** Scoping review of patient-centered care approaches in healthcare. *BMC Health Services Research* 14(1): 271. doi:[10.1186/1472-6963-14-271](https://doi.org/10.1186/1472-6963-14-271).
- Cornish F, Gillespie A, Zittoun T **2013** Collaborative analysis of qualitative data. In: Flick U (Ed) *Handbook of Qualitative Data Analysis*, pp. 79–93. London, UK: Sage.
- Dellenborg L, Wikström E, Andersson Erichsen A **2019** Factors that may promote the learning of person-centred care: An ethnographic study of an implementation programme for healthcare professionals in a medical emergency ward in Sweden. *Advances in Health Sciences Education* 24(2): 353–381. doi:[10.1007/s10459-018-09869-y](https://doi.org/10.1007/s10459-018-09869-y).
- Dobler CC, Spencer-Bonilla G, Gionfriddo MR, Brito JP **2017** Shared decision making in immigrant patients. *Cureus* 9(7): e1461. doi:[10.7759/cureus.1461](https://doi.org/10.7759/cureus.1461).
- Doran B, Setchell J **2018** Performative acts of physiotherapy. In: Gibson BE, Nicholls DA, Setchell J, Groven KS (Eds) *Manipulating practices: A critical physiotherapy reader*, pp. 125–149. Oslo, Norway: Nordic Open Access Scholarly Publishing.
- Dubbin LA, Chang JS, Shim JK **2013** Cultural health capital and the interactional dynamics of patient-centered care. *Social Science & Medicine* 93: 113–120. doi:[10.1016/j.socscimed.2013.06.014](https://doi.org/10.1016/j.socscimed.2013.06.014).
- Dukhu S, Purcell C, Bulley C **2018** Person-centred care in the physiotherapeutic management of long-term conditions: A critical review of components, barriers and facilitators. *International Practice Development Journal* 8(2): 2. doi:[10.19043/ipdj.82.002](https://doi.org/10.19043/ipdj.82.002).
- Edwards RR, Dworkin RH, Sullivan MD, Turk D, Wasan AD **2016** The role of psychosocial processes in the development and maintenance of chronic pain disorders. *Journal of Pain* 17(9 Suppl): T70–92. doi:[10.1016/j.jpain.2016.01.001](https://doi.org/10.1016/j.jpain.2016.01.001).
- Farre A, Rapley T **2017** The new old (and old new) medical model: Four decades navigating the biomedical and psychosocial understandings of health and illness. *Healthcare* 5(4): 88. doi:[10.3390/healthcare5040088](https://doi.org/10.3390/healthcare5040088).
- Fix GM, Lukas C, Bolton RE, Hill JN, Mueller N, LaVela SL, Bokhour BG **2017** Patient-centred care is a way of doing things: How healthcare employees conceptualize patient-centred care. *Health Expectations* 21(1): 300–307. doi:[10.1111/hex.12615](https://doi.org/10.1111/hex.12615).
- Flick U **2006** *An introduction to qualitative research*. Los Angeles, CA: Sage Publications.
- França AA, Dos Santos V, Filho R, Pires K, Lagoa K, Martins WR **2019** “It’s very Complicated”: Perspectives and beliefs of newly graduated physiotherapists about the biopsychosocial model for treating people experiencing nonspecific low back pain in Brazil. *Musculoskeletal Science and Practice* 42: 84–89. doi:[10.1016/j.msksp.2019.04.011](https://doi.org/10.1016/j.msksp.2019.04.011).
- Gadamer HG **2004** *Truth and Method*. (2nd ed). London, UK: Continuum.
- Gibson BE, Terry G, Setchell J, Bright FA, Cummins C, Kayes NM **2020** The micro-politics of caring: Tinkering with person-centered rehabilitation. *Disability and Rehabilitation* 42(11): 1529–1538. doi:[10.1080/09638288.2019.1587793](https://doi.org/10.1080/09638288.2019.1587793).
- Greenfield BH, Jensen GM, Delany CM, Mostrom E, Knab M, Jampel A **2015** Power and promise of narrative for advancing physical therapist education and practice. *Physical Therapy* 95(6): 924–933. doi:[10.2522/ptj.20140085](https://doi.org/10.2522/ptj.20140085).
- Hafskjold L, Sundler AJ, Holmström IK, Sundling V, van Dulmen S, Eide H **2015** A cross-sectional study on person-centred communication in the care of older people: The COMHOME study protocol. *BMJ Open* 5(4): e007864. doi:[10.1136/bmjopen-2015-007864](https://doi.org/10.1136/bmjopen-2015-007864).
- Håkansson Eklund J, Holmström IK, Kumlin T, Kaminsky E, Skoglund K, Högländer J, Sundler AJ, Condén E, Summer Meranius M **2019** “Same same or different?” A review of reviews of person-centered and patient-centered care. *Patient Education and Counseling* 102(1): 3–11. doi:[10.1016/j.pec.2018.08.029](https://doi.org/10.1016/j.pec.2018.08.029).
- Hammond R, Stenner R, Palmer S **2020** What matters most: A qualitative study of person-centered physiotherapy practice in community rehabilitation. *Physiotherapy Theory and Practice* 1–12. doi:[10.1080/09593985.2020.1825577](https://doi.org/10.1080/09593985.2020.1825577). Online ahead of print.
- Harrison K, Williams S **2000** Exploring the power balance in physiotherapy. *Journal of Therapy and Rehabilitation* 7(8): 355–361. doi:[10.12968/bjtr.2000.7.8.13862](https://doi.org/10.12968/bjtr.2000.7.8.13862).
- Jesus TS, Bright F, Kayes N, Cott CA **2016** Person-centred rehabilitation: What exactly does it mean? Protocol for a scoping review with thematic analysis towards framing the concept and practice of person-centred rehabilitation. *BMJ Open* 6(7): e011959. doi:[10.1136/bmjopen-2016-011959](https://doi.org/10.1136/bmjopen-2016-011959).
- Joseph-Williams N, Elwyn G, Edwards A **2014** Knowledge is not power for patients: A systematic review and thematic synthesis of patient-reported barriers and facilitators to shared decision making. *Patient Education and Counseling* 94(3): 291–309. doi:[10.1016/j.pec.2013.10.031](https://doi.org/10.1016/j.pec.2013.10.031).
- Josephson I, Woodward-Kron R, Delany C, Hiller A **2015** Evaluative language in physiotherapy practice: How does it contribute to the therapeutic relationship? *Social Science & Medicine* 143: 128–136.
- Kerry R **2018** Reconceptualizing causation in evidence-based physiotherapy. In: Gibson BE, Nicholls DA, Setchell J, Groven KS (Eds) *Manipulating practices: A critical physiotherapy reader*, pp. 78–100. Oslo, Norway: Nordic Open Access Scholarly Publishing.
- Killingback C, Clark C, Green A **2021** Being more than “just a bog-standard knee”: The role of person-centred practice in physiotherapy: A narrative inquiry. *Disability and Rehabilitation* 1–8. doi:[10.1080/09638288.2021.1948118](https://doi.org/10.1080/09638288.2021.1948118). Online ahead of print.
- Killingback C, Tomlinson A, Stern J, Whitfield C **2022** Teaching person-centered practice in physiotherapy curricula: A literature review. *Physical Therapy Reviews* 27(1): 40–50. doi:[10.1080/10833196.2021.2000287](https://doi.org/10.1080/10833196.2021.2000287).
- Krueger RA, Casey MA **2000** *Focus groups: A practical guide for applied research*. Thousand Oaks, CA: Sage.
- Kunnskapsdepartementet **2019** Forskrift om Nasjonal Retningslinje for Fysioterapiutdanning. [Regulations on National Guidelines for Physiotherapist Education] <https://lovdata.no/dokument/SF/forskrift/2019-03-15-410> Accessed 15 March 2022
- Kurunsaari M, Tynjälä P, Piirainen A **2018** Graduating physiotherapy students’ conceptions of their own competence. *Vocations and Learning* 11(1): 1–18. doi:[10.1007/s12186-017-9177-8](https://doi.org/10.1007/s12186-017-9177-8).
- Langdridge D **2007** *Phenomenological psychology: Theory, research and method*. Harlow, UK: Pearson Education.

- Liljedahl M, Boman L, Björck E, Laksov K 2015 Participation in a clinical learning environment. *Clinical Teacher* 12(4): 284–285. doi:10.1111/tct.12305.
- Lindquist I, Engardt M, Garnham L, Poland F, Richardson B 2006 Physiotherapy students' professional identity on the edge of working life. *Medical Teacher* 28(3): 270–276. doi:10.1080/01421590600605272.
- Louw JM, Marcus T, Hugo JFM 2017 Patient- or person-centred practice in medicine? - A review of concepts. *African Journal of Primary Health Care and Family Medicine* 9(1): 1455. doi:10.4102/phcfm.v9i1.1455.
- Malterud K 2012 Systematic text condensation: A strategy for qualitative analysis. *Scandinavian Journal of Public Health* 40(8): 795–805. doi:10.1177/1403494812465030.
- Moore L, Britten B, Lydahl D, Naldemirci Ö, Elam M, Wolf A 2017 Barriers and facilitators to the implementation of person-centred care in different healthcare contexts. *Scandinavian Journal of Caring Sciences* 31(4): 662–673. doi:10.1111/scs.12376.
- Morgan DL 1996 Focus groups. *Annual Review of Sociology* 22(1): 129–152. doi:10.1146/annurev.soc.22.1.129.
- Mudge S, Stretton C, Kayes N 2014 Are physiotherapists comfortable with person-centred practice? An autographic insight. *Disability and Rehabilitation* 36(6): 457–463. doi:10.3109/09638288.2013.797515.
- Muscat DM, Morony S, Trevena L, Hayen A, Shepherd HL, Smith SK, Dhillon HM, Luxford K, Nutbeam D, McCaffery K 2019 Skills for shared decision-making: Evaluation of a health literacy program for consumers with lower literacy levels. *Health Literacy Research and Practice* 3 (3 Suppl): S58–S74. doi:10.3928/24748307-20190408-02.
- Naldemirci Ö, Lydahl D, Britten N, Elam L, Moore L, Wolf A 2018 Tenacious assumptions of person-centred care? Exploring tensions and variations in practice. *Health* 22 (1): 54–71. doi:10.1177/1363459316677627.
- Naldemirci Ö, Britten N, Lloyd H, Wolf A 2020 The potential and pitfalls of narrative elicitation in person-centred care. *Health Expectations* 23(1): 238–246. doi:10.1111/hex.12998.
- Nicholls DA, Gibson BE 2010 The body and physiotherapy. *Physiotherapy Theory and Practice* 26(8): 497–509. doi:10.3109/09593981003710316.
- Nicholls DA 2017 *The end of physiotherapy*. London: Routledge.
- Norwegian Physiotherapy Association 2022 <https://fysio.no/English> Accessed 15 March 2022
- Nutbeam D 2008 The evolving concept of health literacy. *Social Science & Medicine* 67(12): 2072–2078. doi:10.1016/j.socscimed.2008.09.050.
- Olsen CF, Bergland A, Debesay J, Bye A, Langaas AG 2019 Striking a balance: Health care providers' experiences with home-based, patient-centered care for older people - Meta-synthesis of qualitative studies. *Patient Education and Counseling* 102(11): 1991–2000. doi:10.1016/j.pec.2019.05.017.
- Öresland S, Määttä S, Nordberg A, Winther Jørgensen M, Lützén, Lützén K 2008 Nurses as guests or professionals in home care. *Nursing Ethics* 15(3): 371–383. doi:10.1177/0969733007088361.
- Oslo Metropolitan University 2021 Physiotherapy programme. Program Description. Accessed 15 March 2022. <https://student.oslomet.no/en/studier/-/studieinfo/programplan/FUTB/2018/H%C3%98ST>
- Pinxten W, Lievens J 2014 The importance of economic, social and cultural capital in understanding health inequalities: Using Bourdieu-based approach in research on physical and mental health perceptions. *Sociology of Health & Illness* 36(7): 1095–1110. doi:10.1111/1467-9566.12154.
- Pritchard SA, Keating JL, Nestel D, Blackstock FC 2020 Physiotherapy students can be educated to portray realistic patient roles in simulation: A pragmatic observational study. *BMC Medical Education* 20(1): 471. doi:10.1186/s12909-020-02382-0.
- Protheroe J, Nutbeam D, Rowlands G 2009 Health literacy: A necessity for increasing participation in health care. *British Journal of General Practice* 59(567): 721–723. doi:10.3399/bjgp09X472584.
- Rose A, Rosewilliam S, Soundy A 2017 Shared decision making within goal setting in rehabilitation settings: A systematic review. *Patient Education and Counseling* 100(1): 65–75. doi:10.1016/j.pec.2016.07.030.
- Rutberg S, Kostenius C, Ohrling K 2013 Professional tools and a personal touch – Experiences of physical therapy of persons with migraine. *Disability and Rehabilitation* 35(19): 1614–1621. doi:10.3109/09638288.2012.748838.
- Ryan S, Higgs J 2008 Teaching and learning clinical reasoning. In: Higgs J, Jones M, Loftus S, Christensen N (Eds) *Clinical reasoning in the health professions* (3rd ed), p. 379–387. Amsterdam, Netherlands: Elsevier.
- Sheehan D, Jowsey T, Parwaiz M, Birch M, Seaton P, Shaw S, Duggan A, Wilkinson T 2017 Clinical learning environments: Place, artefacts and rhythm. *Medical Education* 51 (10): 1049–1060. doi:10.1111/medu.13390.
- Shim JK 2010 Cultural health capital: A theoretical approach to understanding health care interactions and the dynamics of unequal treatment. *Journal of Health and Social Behavior* 51(1): 1–15. doi:10.1177/0022146509361185.
- Sjöberg V, Forsner M 2022 Shifting roles: Physiotherapists' perception of person-centered care during a pre-implementation phase in the acute hospital setting - A phenomenographic study. *Physiotherapy Theory and Practice* 38(7): 879–889. doi:10.1080/09593985.2020.1809042.
- Smith SK, Dixon A, Trevena L, Nutbeam D, McCaffery KJ 2009 Exploring patient involvement in health care decision making across different education and functional health literacy groups. *Social Science & Medicine* 69(12): 1805–1812. doi:10.1016/j.socscimed.2009.09.056.
- Sobolewska A, Byrne AL, Harvey CL, Willis E, Baldwin A, McLellan S, Heard D 2020 Person-centred rhetoric in chronic care: A review of health policies. *Journal of Health Organization and Management* 34(2): 123–143. doi:10.1108/JHOM-04-2019-0078.
- Solvang PK, Fougner M 2016 Professional roles in physiotherapy practice: Educating for self-management, relational matching, and coaching for everyday life. *Physiotherapy Theory and Practice* 32(8): 591–602. doi:10.1080/09593985.2016.1228018.
- Terry G, Kayes N 2019 Person centered care in neurorehabilitation: A secondary analysis. *Disability and Rehabilitation* 42(16): 2334–2343. doi:10.1080/09638288.2018.1561952.
- Thomson K, Nguyen M, Leithhead I 2016 Peer mentoring for clinical educators: A case study in physiotherapy. *Focus on Health Professional Education* 17(3): 30–44. doi:10.11157/fohpe.v17i3.175.

- Vahdat S, Hamzehgardeshi L, Hessam S, Hamzehgardeshi Z **2014** Patient involvement in health care decision making: A review. *Iranian Red Crescent Medical Journal* 16(1): e12454. doi:[10.5812/ircmj.12454](https://doi.org/10.5812/ircmj.12454).
- Van Rooy DL, Viswesvaran C **2004** Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior* 65(1): 71–95. doi:[10.1016/S0001-8791\(03\)00076-9](https://doi.org/10.1016/S0001-8791(03)00076-9).
- Veras M, Kairy D, Paquet N **2016** What is evidence-based physiotherapy? *Physiotherapy Canada* 68(2): 95–96. doi:[10.3138/ptc.68.2.GEE](https://doi.org/10.3138/ptc.68.2.GEE).
- Vermunt N, Elwyn G, Westert G, Harmsen M, Rikkert MO, Meinders M **2019** Goal setting is insufficiently recognised as an essential part of shared decision-making in the complex care of older patients: A framework analysis. *BMC Family Practice* 20(1): 76. doi:[10.1186/s12875-019-0966-z](https://doi.org/10.1186/s12875-019-0966-z).
- Vranceanu A, Barsky A, Ring D **2009** Psychosocial aspects of disabling musculoskeletal pain. *Journal of Bone and Joint Surgery (Am)* 91(8): 2014–2018. doi:[10.2106/JBJS.H.01512](https://doi.org/10.2106/JBJS.H.01512).
- Webster VS, Holdsworth LK, McFadyen AK, Little H, Scottish Physiotherapy Self Referral Study Group **2008** Self-referral, access and physiotherapy: Patients' knowledge and attitudes - Results of a national trial. *Physiotherapy* 94(2): 141–149. doi:[10.1016/j.physio.2007.11.003](https://doi.org/10.1016/j.physio.2007.11.003).
- Wijma AJ, Bletterman AN, Clark JR, Vervoort SC, Beetsma A, Keizer D, Nijs J, Van Wilgen CP **2017** Patient-centeredness in physiotherapy: What does it entail? A systematic review of qualitative studies. *Physiotherapy Theory and Practice* 33 (11): 825–840. doi:[10.1080/09593985.2017.1357151](https://doi.org/10.1080/09593985.2017.1357151).
- Wilson H, Hutchinson S **1991** Triangulation of qualitative methods: Heideggerian hermeneutics and grounded theory. *Qualitative Health Research* 1(2): 263–276. doi:[10.1177/104973239100100206](https://doi.org/10.1177/104973239100100206).