Learning from patients: students’ perceptions of patient-instructors
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OBJECTIVES Prior research on the use of patients as teachers has focused on testing the effectiveness of this practice and exploring its benefits for students. However, very little is known about the added value of patient teaching and how it relates to patient-centred learning. The aim of this study was to explore whether there is added value in using patients as instructors in health professions education and, if there is, to examine how it is constituted.

METHODS Group interviews were conducted with physiotherapy and occupational therapy students who had attended a 3-hour optional class entitled ‘Thoughtful joint examination and respectful patient contact’. This class was delivered by patient-instructors (PIs), who were patients with rheumatism certified to teach. A semi-structured interview guide was used. Interviews continued until data saturation occurred (seven interviews). The interviews were recorded and transcribed verbatim. Data were analysed using content analysis.

RESULTS The main finding of this study is that PI sessions facilitate a learning environment in which the content matter is complemented by the provision of realism and individual perspectives on rheumatism, the pedagogical format is characterised by authenticity and intimacy in the style of instruction and feedback, and the PI–student relationship is characterised by balanced teacher–student power relations that support the legitimacy of learning and make space for the asking of questions and the making of mistakes.

CONCLUSIONS This study indicates that, in terms of power relations, the PI–student relationship differs from those between faculty teachers and students, and students and patients in the clinic. The formation of a professional identity by students may clash with the fulfilment of their learning tasks in the clinical environment. The study indicates that patient-centredness can be fostered in the PI–student relationship. This is probably supported by the absence of faculty staff involvement in PI teaching sessions. However, further empirical research is required on what, how and why students learn from patients in different learning contexts.
INTRODUCTION

Historically, the discourse of medical education has moved from doctor-led, through student-centred to, finally, patient-centred approaches to education. A range of roles are available to patients in medical education. Traditionally, students have learned from patients in the clinical environment. However, the evolution of the patient’s role in medical education has included patient involvement in curriculum development, early patient contact in which students meet and talk with chronic patients on a regular basis, patient involvement in assessments of students’ clinical and communication skills, and the patient as an active teacher or instructor.2–5 However, the extent to which patient-centredness is reflected in medical education practice is questionable.1 Usually the role of the patient in the clinical environment is restricted to that of a medium for learning in a context in which the primary learning relationship is that between the student and supervisor and no active working relationship exists between the patient and student.1 Bleakley and Bligh1 suggest a conceptual, theoretical model in which the student and patient collaboratively produce knowledge through dialogue in order to promote patient-centredness in work-based learning. Another approach to increasing patient-centredness involves using patients in formal instructional sessions.3 Using real patients as instructors is probably the least applied method of involving patients in education. In this concept, patients use their own bodies and experiences to teach clinical and communication skills. Rationales for using patients as teachers refer to shortages of faculty resources and the notion of the ‘patient as expert’.3 Prior research into the use of patients as teachers has focused on the description of such programmes and the role of patient-teachers, and has tested evidence of the effectiveness of this practice, explored its benefits for students as well as patient-teachers, and discussed issues relating to the development and implementation of patient-teacher programmes.2–9 However, little is known about the added value of patient teaching with respect to patient-centredness. When patients act as teachers and instructors, they play a more active part in the learning relationship with students and hence this practice has the potential to support a greater degree of patient-centredness. The aim of this study was to explore whether there is added value in using patients as instructors in this respect and, if there is, to establish how this value is constituted. The research question was: What are students’ perceptions of how and why they learn from sessions taught by patients compared with sessions in which they learn from faculty-led teaching and patients in the clinical environment?

METHODS

This was an explorative study which used a qualitative approach to probe deeper into the concept of learning from patients. Group interviews were used to ascertain students’ perceptions of learning from patient-instructors (PIs). Interviews are well suited to in-depth exploration of unknown phenomena.10,11 We chose to interview students in groups because we anticipated that discussion within the group would allow participants to reflect together and would generate a broader and richer set of data than individual interviews. However, the interview format differed from that applied in traditional focus groups in that balanced statements, contrasting views and group interaction were not pursued.10

Context of the study

This study was conducted in the context of teaching performed by PIs. In this study, PIs were patients with rheumatism who were prepared for a teaching role. The PIs used their own joints to demonstrate and instruct in physical examination, and their own experiences to address issues associated with living with a chronic disease and the relationships between patients and health professionals.

The rheumatology PIs used in our context belonged to a nationwide PI group that includes 15 patients. This PI group was established in 1996. Since 2007, the group has been affiliated with the Centre for Clinical Education, Copenhagen. The affiliation was established to allow for administrative support and to support the initiation of pedagogical research into and development of the concept of using PIs. Specialists in rheumatology prepare the PIs for their teaching role in terms of content knowledge and physical examination skills. The PIs independently plan and run stand-alone teaching sessions. In addition, in some instances PI sessions are integrated into wider courses on rheumatology planned by rheumatologists. Once a year all PIs meet at a conference, during which staff from the Centre for Clinical Education provide pedagogical support on issues raised by the PIs.

This study concerns a 3-hour teaching session independently designed and run by PIs. The teaching
session, entitled ‘Thoughtful joint examination and respectful patient contact’, is offered to schools of physiotherapy and occupational therapy (OT).

This optional session is meant to complement the schools’ theoretical and clinical education. The sessions are offered free of charge and those schools that accept the offer typically place the session in the first year of student education at a point by which students have had some faculty-led teaching in rheumatology and have gained some clerkship experience.

The goal of the PI session is to exemplify and personify aspects of joint examination and issues concerning the approach taken to the rheumatic patient. Students are taught in small groups and typically meet three different PIs during a session. Teaching is loosely structured to make space for dialogue between PIs and students. Student satisfaction with the sessions is evaluated. However, there is no evaluation of learning outcomes and PIs are not included in any of the formal assessments. On average the PI group runs 21 teaching sessions each year in five schools across the country. Student satisfaction with these sessions is always high, at 6–7 on a scale of 1–7 (7 = highly satisfied).

Sample

Physiotherapy students and OT students, who had participated in a PI session 2–3 weeks previously, were interviewed. Three different schools in different parts of the country were invited to participate in the study in order to provide a geographical spread of respondents. Faculty members at the schools were contacted by e-mail and telephone and asked to distribute written information and invitations to students regarding participation in the study. Around 140 students were invited. Interested students signed up directly with the research group and were included on a ‘first come, first served’ basis. Participants gave written informed consent and were ensured anonymity. Participants received a nominal amount of money to cover transportation expenses.

Interviews

The interviews were conducted by the first author (A-HH) using an interview guide that included the following general questions:

- What did you learn?
- What reflections have you had since the session?
- What did the PI session contribute compared with training in clinical rotations?
- What did the PI session contribute compared with training in clinical rotations?

Interviews lasted 1–1.5 hours and were recorded and transcribed verbatim. Data were continuously checked for saturation, which emerged after seven interviews. Four of these interviews were conducted with physiotherapy students and three with OT students.

Analysis

Data were analysed in an iterative process. A-HH conducted the initial analysis, coding and categorisation. Both authors read the transcripts of all seven interviews and took part in the iterative analytical process, during which evolving themes were discussed and subsequently categorised using a coding procedure. The authors continuously discussed the appropriateness of coding and interpretation according to the research question and revised the themes until they reached agreement. In the final coding of the dataset, the authors checked for differences in the responses of physiotherapy and OT students.

RESULTS

A total of 40 students participated in the interviews; 23 were physiotherapy students (10 men, 13 women) and 17 were OT students (all women). Table 1 shows the interviewees’ distribution. The final coding did not reveal any differences between physiotherapy and OT students with respect to statements referring to the general themes identified.

Although students expressed great satisfaction with the PI-led session, they did not make specific learning outcomes explicit. Nonetheless, a number of perceived values of the PI sessions emerged from the interviews. These related to three overall and complementary themes: (i) content matter; (ii) pedagogical format, and (iii) power relations. Although the three themes are highly inter-related (Fig. 1), they are presented in separate sections below and are illustrated by student quotations. Each quotation is identified by a number indicating the group interview and a letter representing the student.

Content matter: issues of realism and individual perspectives

The added value of the PI sessions compared with faculty-led teaching was especially evident in terms of
content matter. One highlighted aspect concerned the greater degree of realism provided by patients compared with that generated by reading books or attending lectures. Students stressed the benefits afforded by being able to see and touch sick joints and to listen to individual personal perspectives on living with rheumatism. This aspect related to the format of small-group, hands-on teaching:

‘Now I know that what is written in the books – not that it is wrong – can be very black and white. When you meet the PIs you realise the huge interpersonal differences. Professional teachers cannot convey that, because they don’t have the disease.’ (4, S)

‘Teachers tell us about what happens with the body, but all the important personal matters can only be told by someone who has actually experienced it themselves.’ (1, Ce)

‘All my senses were stimulated – I listened, I watched, and I touched. It’s very different from traditional teaching, where one struggles to understand.’ (7, C)

‘I learn much better by seeing a real-life patient instead of reading in a book and looking at a picture. Here you can touch, so now I know the difference of hot and cold and know what different deformities look like.’ (3, Ka)

**Pedagogical format: issues of authenticity and intimacy**

The pedagogical format of PI instruction was contrasted with those of both faculty-led teaching and learning from patients in the clinical environment. The format of the PI session was valued for its authenticity and intimacy. Authenticity related to opportunities to examine patients with real signs and symptoms and to obtain authentic feedback on physical examination performance including the pain or discomfort experienced by the patient. Pedagogical characteristics of the sessions included their openness, the provision of a safe learning environment in which space was allowed for mistakes and ‘stupid’ questions, and opportunities to learn by trial and error. This was seen to contrast with the experience of learning from patients in the clinical environment. Intimacy was facilitated by the fact that students were able to ask questions about living with chronic rheumatic disease and how it affects life. The authenticity and intimacy facilitated by the PI format were valued for their contribution to preparing students to meet real patients. Some students reported having overcome issues regarding touching

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**Table 1 Distribution of 40 participants in seven group interviews**

<table>
<thead>
<tr>
<th>Interview</th>
<th>Date of interview, city of school</th>
<th>Physiotherapy students n (men : women)</th>
<th>Occupational therapy students n (men : women)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14/09/09 Næstved</td>
<td>5 (3 : 2)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>16/09/09 Næstved</td>
<td>6 (3 : 3)</td>
<td>7 (0 : 7)</td>
</tr>
<tr>
<td>3</td>
<td>11/11/09 Odense</td>
<td></td>
<td>5 (0 : 5)</td>
</tr>
<tr>
<td>4</td>
<td>07/12/09 Copenhagen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>10/12/09 Copenhagen</td>
<td>6 (4 : 2)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>14/12/09 Copenhagen</td>
<td>6 (0 : 6)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>20/04/10 Odense</td>
<td></td>
<td>5 (0 : 5)</td>
</tr>
<tr>
<td>Total</td>
<td>n = 40 (10 men, 30 women)</td>
<td>23 (10 : 13)</td>
<td>17 (0 : 17)</td>
</tr>
</tbody>
</table>

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**Figure 1** The added value of learning from patient-instructors derives from the characteristics of an inter-related combination of content matter, pedagogical format and patient–student power relations.
sick joints and a few described having become aware of their own boundaries:

‘They [PIs] sense it on their own body, and are able to explicitly tell [us] the consequence of a specific touch or movement – our teachers can’t do that.’ (2, B)

‘I got answers to a lot questions that I would never dare ask patients in the clinic, where I have to appear professional.’ (6, S)

‘It has taken the mystery out of it. I’m sure that it will be visible next time we meet a patient, that we have no fear of contact, because we have already tried it.’ (5, K)

‘I reacted very spontaneously because it was very frightening and boundary-exceeding for me to have to touch them. Actually now I fear the clinical period and [wonder] whether I can cope with the touching and the intimacy – I didn’t see that coming before…’ (7, P)

**Power relations: issues of authority and legitimacy**

The students’ relationship with PIs was contrasted with their relationships with patients in the clinical environment and with faculty staff and supervisors. In the clinical environment students wish to appear competent and professional and feel a huge burden of responsibility to contribute to the treatment of patients. Students perceive themselves as being in authority in the professional–patient relationship in the clinic, which makes it difficult for them to take on the role of learner. In the student–PI relationship, students found they accepted the PI’s role as teacher and authority as ‘expert’ and felt free of the responsibility of the role of ‘professional’. This legitimised the student’s role as a learner who is able to ask all sorts of questions and can make the most of the learning situation. However, PIs are not faculty members and do not exert the kind of authority teachers normally do. Therefore students felt more able to ask any ‘stupid’ question and to make mistakes in physical examination. Students considered that their experiences with PIs not only prepared them for meeting patients in the clinical environment, but also prepared them to learn from patients in the clinic as they became more aware of the patient’s status as an individual, rather than as a member of a ‘disease group’:

‘The big difference is that we can relax and don’t have to be anxious and responsible professionals. We are calm and have the energy to concentrate on how the joints feel. I think it is because of the relationship: they are teaching us, while in the clinic, we are there for the sake of the patients.’ (1, Ni)

‘In the clinic you want to appear competent, but in this [PI] teaching situation you can ask any stupid question. In the clinic you are aiming to help the patient. But here [in PI sessions] you learn instead of treating patients.’ (5, T)

‘It was very nice that they made us active: “Come and touch – what do you feel?” …and it was still alright to make mistakes, because we were students. When I’m in the clinic in front of my supervisor I feel that I have to know a lot more, and I have much more responsibility in front of the patient.’ (4, E)

‘I think I will feel more professional in the clinic because I know something about how some patients feel about their rheumatism. I will feel calmer talking to them and feel more free to ask “How does this feel?” without feeling unprofessional, because now I know it differs from patient to patient.’ (6, Li)

**DISCUSSION**

The main finding of this study is that PI sessions provide a learning environment in which the principal contributions to content matter are realism and individual perspectives on rheumatism, the pedagogical format is characterised by authenticity and intimacy in instruction and feedback, and the PI–student relationship is characterised by a balance in teacher–learner power relations that provides legitimacy for learning and makes room for questions and mistakes.

In particular, this study indicates that PI–student power relations differ from those between faculty teachers and students and between students and patients in the clinic. Authority and power relations in the educational context influence what can and cannot be learned from a specific situation. The frame in which a teaching situation is set influences the power relations that unfold and hence regulates the behaviour of the learner. Clinical clerkships are situated in a hospital setting and hence are framed within a health care system in which the task involves the treatment of patients. This task affects the behaviour of students in the clinical learning environment. Our study suggests that students wish to appear more competent than they actually are. This is influenced in part by their desire to live up to supervisors’ expectations and in part by students’
sense of professional responsibility. Both factors may influence what can and cannot be learned from patients in the clinical setting. In our study, it appeared that the activation of students’ professional identity in the clinical environment requires them to act as members of the profession in which their supervisors serve as role models.

This requirement results in a clash between students’ fulfilment of their learning task and the task of professional identity formation. Identity formation is an ongoing complex and intertwined psychological and sociological process involving individual, interactional and institutional factors. Our results suggest that the presence of a supervisor in the clinical patient encounter may distract the student’s focus from learning with and from the patient to perceived supervisor expectations of the student’s competence. Bleakley and Bligh suggest a patient-centred learning model in which supervisors and their team support students’ learning as opposed to shaping it. In this model, the primary learning resource is constituted by the student–patient relationship rather than the relationship between supervisor and student.

Students in this study highly valued the realism, individual perspectives and authentic feedback provided in the PI teaching session. Bell et al. reported that the realism of meeting patients in their first clerkship is highly valued by medical students. However, they also found that some students were concerned about invading patients’ privacy. This corresponds to findings in our study, in which students expressed reluctance to ask patients in the clinical environment the same questions they had asked the PI. The semi-professionalisation of PIs widens the student’s opportunity to learn from patients. Our students valued the authentic feedback given by the PIs. This contrasts with results reported by Bokken et al. from a study comparing the instructiveness of real patients and simulated patients (SPs). Although students considered the authenticity of real patients an advantage, they preferred the feedback given by SPs. It is important to note that only the SPs were trained in giving feedback. It is possible that in contexts in which patient teaching sessions are part of a formal curriculum, this frame-setting leads to specific expectations related to curriculum goals, formats and, eventually, assessment. That the PI teaching sessions in our study were not part of the formal curriculum or assessment process allowed students to embrace the authentic feedback provided by the PIs without connecting it with any type of assessment of their learning.

Our study indicates that patient-centredness can be fostered in the PI–student relationship. It is possible that this reflects the lack of interference by faculty staff in PI teaching sessions. Moreover, empowering patients as teachers in PI-led sessions may help to better prepare students to learn from patients in the clinical context. However, further empirical research on what, how and why students learn from patients in different learning contexts is required.

This study investigated physiotherapy and OT students taught by PIs with rheumatological disease. Our findings may be transferable to other fields of health care education and other types of patients. Student satisfaction findings accord with those of studies in other fields. However, whether the process of professional identity formation is equally significant in other health care professions remains to be shown.

The strengths of this study lie in the breadth of sampling of interviewees and its in-depth approach coupled with an iterative process and analysis of results. However, it has some potential limitations. That the interviews were conducted by the first author, who is a staff member at the Centre for Clinical Education, may potentially introduce bias. However, the PI sessions in this study were planned and executed without any influence by the authors. Moreover, student attendance at the PI sessions was optional and the interviewer was not a member of faculty at any of the participating schools. Hence, we are confident that the students were able to speak freely without fear of reprisal. Several of the statements were rather personal and support the notion of openness in the interviews. The data source was confined to group interviews and student perspectives. The triangulation of observations of different types of learning situation, such as faculty-led, PI-led and learning from patients in the clinical environment, might have strengthened the results. Nonetheless, the results of this study should lead to future explorative research into how elements of the ‘hidden’ curriculum impact on students’ learning from patients. Finally, this study was based on one group of PIs. Whether the results are generalisable to other PI groups and other contexts is questionable. This particular PI organisation has more than a decade of experience, although group membership changes constantly as some members leave and others are recruited. However, this study’s generalisability is supported by the consistently high satisfaction with PIs reported in the international literature.

This study focused primarily on learning processes related to PI sessions. Interestingly, students were
not able to explicitly describe their learning outcomes. Although prior studies have demonstrated positive effects on learning outcomes, it is important to stress that PIs can only convey content matter to a certain extent and that faculty-led teaching is necessary for general and wider aspects of content matter. Hence, PI sessions should be considered as complementary to faculty-led teaching and not as a substitute.

Contributors: both authors contributed to the study conception and design. A-HH was responsible for the acquisition of data. Both authors contributed to the analysis and interpretation of data, the drafting and revision of the article and approved the final manuscript for publication.

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REFERENCES


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