RESEARCH ARTICLE

Physiotherapists Construction of their Role in Patient Education

Lynne Caladine

University of Brighton, UK

Corresponding author:

Dr Lynne Caladine, Head of School of Health Professions, University of Brighton, 49 Darley Road, Eastbourne BN20 7UR, UK

Email: l.caladine@brighton.ac.uk, Phone: + 44 (0)1273 643773

Abstract

Objective. The purpose of this study was to understand how physiotherapists articulate their role in patient education with a view to generating new perspectives, and informing debate and curriculum development.

Methods. Physiotherapists (16) associated with one higher education institution (HEI) participated in the study and represented a spectrum of educational experience from novice to expert. A qualitative, interpretive study was based on semi-structured interviews which were analysed using a thematic approach to the total data set followed by deeper analysis of key themes drawing on the principles of interpretative repertoire.

Results. Four themes were identified: identification with the patient educator role; preparation for the patient educator role; constructs of teaching and learning; therapeutic relationship. Patient education was constructed as an integral and extensive component of practice. Constructs of teaching and learning included transmission and empowerment. Conflicting repertoires of collaboration and compliance were identified in the therapeutic relationship theme.

Conclusion. The need for physiotherapists (and other healthcare professionals) to be alert to discourses present within their own narrative and that of others was highlighted. It was also seen to be important to be aware of a tension between transmission-based constructs of patient education, a repertoire of compliance and the goal of patient-centred care. Further research could be carried out to determine the relationship between individuals' discursive construction of teaching and learning and the methods they adopt when educating patients.

Keywords: patient education, patient-centred care, constructs of teaching, interpretative repertoire

Introduction

Physiotherapists (and other healthcare professionals) in practice settings have a range of roles, which may include those of clinician, manager, administrator, professional,

researcher and educator (Cross *et al.* 2006). As an academic and physiotherapist the professional development of practitioners for the educator role has been a focus for much of my postgraduate teaching in the last two decades (Moore *et al.* 1997, Cross *et al.* 2006). As a physiotherapist I have had first-hand experience of working with patients who have needed to acquire new knowledge or skills, and as an academic educator have listened to students' stories and reflections about educating patients over the years. In the UK there is no specific formal requirement for proficiency as an educator (of students or patients) in regulatory body guidelines (Health and Care Professions Council 2012). Therefore, my starting point for this doctoral study was a feeling that physiotherapists have a greater role to play in educating a wide range of 'learners' (in this study the emphasis is on patients) than is currently recognised and that this role could require some form of specific pedagogic preparation.

While an educational role with students in the practice setting has been the subject of a growing body of research in recent years (e.g. Cross 1994, Baldry-Currens and Bithell 2000, Bennett 2003, Kell & Jones 2007), there has been little research on an educational role with patients in the practice setting in the UK or on the scope of patient education in contemporary physiotherapy practice. Physiotherapists' attitudes and approach to an educational role with patients and the nature of their discourse as it relates to pedagogic practice with patients are also unknown. The purpose of this study was, as Flyvbjerg has suggested in relation to qualitative research, to illuminate this aspect of healthcare practice that has previously had little attention and to "generate new perspectives" (Flyvbjerg 2001, p166).

Patient education

Patient education is not the preserve of any one health professional group but the development of patient education as a discipline and its foundation in research are relatively new (Hoving *et al.* 2010). A wide range of terms relating to patient education is used in the literature and this can lead to confusion. The terms health education, health promotion and patient education are often used interchangeably. Dreeben (2010) considered patient education to be a significant component of modern health care, which includes clinical teaching and learning and health education. She defined patient education as

'a planned systematic, sequential, and logical process of teaching and learning provided to patients and clients in all clinical settings.' (Dreeben 2010, p457)

She also noted that the health education component "concentrates mostly on wellness, prevention, and health promotion" (Dreeben 2010, p4). This definition opens up patient education to incorporate health promotion, which in the World Health Organization definition (WHO 2009) subsumes health education.

Literature relating to patient education frequently focuses on a range of health behaviours, or on the provision of information. However, there is little consideration of pedagogy. In the United States some reference to pedagogy has been made in a nursing context (Rankin *et al.* 2005, Bastable 2008), and Dreeben (2010) has focused on patient education in rehabilitation.

In relation to physiotherapy, several studies from the US have identified a high level of involvement in patient education but inadequate preparation for the role (e.g. May 1983, Sotosky 1984, Chase *et al.* 1993). Jensen *et al.* (1990, 1992, 1999, 2000) in a series of studies, explored the concept of expertise in physical therapy practice and Resnik & Jenssen (2003) built upon this work subsequently. A theme throughout the studies was that patient education was central to physiotherapy expertise. Much of the available research is quantitative in nature with Sluijs (1991) counting informative statements in therapist–patient

interactions and Kerssens *et al.* (1999) measuring the flow of instructions during treatment sessions. Grounded theory studies in Australia and the US called for further research 'to ensure that physiotherapists become more informed educators and more effective healthcare practitioners' (Trede 2000, p432) and identified patient education as a critical and frequently used component of practice (Rindflesch 2009) but the authors noted the lack of research relating to the practice of patient education in physical therapy.

In a UK practice setting Kell & Jones (2007) research relating to physiotherapy students as learners gave some insight into the pedagogic approaches which their clinical educators (physiotherapy clinicians) adopted. They used Gow & Kember's (1993) 'Lecturers Conceptions of Teaching and Learning Questionnaire' with a large group of physiotherapy clinical educators and referred to Vaughn & Baker (2001) in noting that when they were busy, inexperienced or poorly motivated educators had a tendency to fall back to their 'comfort zone', which might involve drawing on teacher-centred approaches they had experienced as students. This tendency was viewed as potentially problematic by the authors in that it may be at odds with contemporary educational aims, which seek to foster student responsibility for their own learning. Kell & Jones (2007) research was not directly related to physiotherapists educational role with patients but their use of the notion of concepts of teaching led me to consider this in relation to patients in the practice-based setting.

Concepts of teaching

There has been substantial research into school teachers pedagogy and a body of literature from the last two decades (e.g. Dall'Alba 1991, Pratt 1992, Samuelowicz & Bain 1992, Kember 1997) developed the notion of concepts of teaching (CoT). Kember (1997) summarised his review of concepts of teaching under two main headings:

- teacher-centred/content-orientated;
- student-centred/learning-orientated.

There has been discussion for some time about whether changes in conceptions of teaching must come before changes in practice or vice versa. Richardson (2005) illustrated a model in which teachers' conceptions of teaching were influential in the approaches they adopted to teaching while Devlin (2006) called for more research into CoT and the part they play in improving teaching.

Student-centred approaches to teaching and learning noted by Kember (1997) have gained greater prominence in recent years in higher education, including the practice education context (Kell & Jones 2007). In parallel there has also been mounting emphasis on patient-centred care in the UK particularly since the beginning of the last decade (e.g. DoH 2000). This has included an emphasis on health promotion and on ensuring that patients have the necessary understanding and skills to manage or improve their own health. In this regard, Kandiko *et al.* (2011) have highlighted the parallels that can be drawn between student-centred teaching and patient-centred care.

Patient-centred care

The concept of patient-centred care (PCC) is complex and there is no one accepted definition. Mead & Bower (2000) proposed five key dimensions of patient-centred approaches which related to doctors' practice with patients: 'a Biopsychosocial perspective; "Patient-as-person"; Sharing power and responsibility; The therapeutic alliance; The "doctor-as-person" (Mead & Bower 2000, p1088). Stewart (2001) has suggested that 'It may be most commonly understood for what it is not – technology centred, doctor centred, hospital centred, disease centred' (Stewart 2001, p444). Despite its complexity the notion of

PCC is currently seen as a desirable approach in healthcare in a similar way to 'student-centred' approaches to education. This change in emphasis from a traditional, paternalistic, practitioner-centred approach to one in which the patient takes a more active part in self-care has major implications for patient education practice and for physiotherapists' role in patient education.

Methodology

The research question was 'How do physiotherapists articulate their role in patient education?' This qualitative study focused on physiotherapists' approach to patient education and followed a 'relativist' ontology, 'constructionist' epistemology with an 'interpretative' theoretical perspective (Crotty 2003). Semi-structured interviews were carried out with a purposive sample of 16 participants, representing a spectrum of educational experience from novice to expert (Dreyfus & Dreyfus 1986), in one higher education institution in the UK. Participants were recruited by an email request (via an administrator) to four groups (see Table 1): experienced academic staff involved in teaching on a post-graduate education course (PGC); postgraduate physiotherapy students who had participated in the PGC; postgraduate physiotherapy students who had not participated in the PGC; and pre-registration students on the brink of qualification. All were registered physiotherapists (the last group apart). Ethical approval was received from the relevant faculty research, governance and ethics committee in the host institution.

Table 1 Participant group information

Participant groups	Total number of participants and participant number
Final year pre-registration physiotherapy students ('novices')	4 (1–4)
Current MSc students not including PGC Clinical Education	4 (5–8)
Current MSc Physiotherapy students including PGC Clinical Education	5 (9–13)
Academic staff teaching on PGC Clinical Education ('experts')	3 (14–16)

Analysis of data

Data were analysed by the author in two stages. Stage 1 comprised thematic analysis of the total data set using the iterative process described by Braun & Clarke (2006). Identified themes were discussed with the supervisory team. Stage 2 involved exploration of interpretative repertoires (IR), a form of discourse analysis, within each theme. This dual approach has been used effectively by other authors (Hokka et al. 2010). According to Edley (2001, p198) interpretative repertoires are 'relatively coherent ways of talking about objects and events in the world ... providing a basis for shared social understandings'. The repertoires that interview participants have available to draw upon are governed by cultural, historical and social influences, mediated through language. Edley (2001, p198) noted that people usually talk 'in terms provided to them by history' utilising a medley of quotations from various repertoires. In doing so the talk creates a specific position for the speaker and 'produces a certain type of relationship' (Juhila 2009, p131). There may be several, possibly conflicting, discourses in existence in a particular field of knowledge at a certain point in time and 'novel or alternative interpretations emerge as corrections to prior discourses' (Talja 1999, p468). As a consequence conflicting repertoires may be identified within interviews with individual participants, yet similar repertoires may be identified across a range of participants from a particular community of practice or culture.

Interpretative repertoires can be recognised by identifying patterns (including for example metaphors, images and figures of speech) in the way people talk about a topic (Potter & Wetherell 1987). There is variability in how IR is used but this last study by Juhila (2009) and those by Hokka (2010) and Hetherington & Hatfield (2012) provide some parallels for the way that IR has been used in this study. Guidance offered by Talja (2005, p15) was used for the identification of interpretative repertoires.

Consonant with the socially constructed nature of physiotherapy practice, including patient education, the variation in repertoires within each theme, and the underlying constructs they may represent, were key foci for exploring the way participants spoke about their role in patient education, and the way they positioned themselves in relation to patients as learners.

Findings

The four themes indicated in Table 2 were identified through thematic analysis (Braun & Clarke 2006). Repertoires associated with each theme are shown in the columns below the thematic title (there is no horizontal link between repertoires). Participants were identified as P1 to P16 along a novice to expert spectrum (P1 least experienced and P16 most experienced, noted in Table 1).

Themes	Theme 1 Identification with the patient educator role	Theme 2 Preparation for the role	Theme 3 Constructs of teaching and learning	Theme 4 Therapeutic relationship
Repertoire 2	Extensive	Experiential	Interpretation	Collaboration
Repertoire 3		Theoretical	Empowerment	

Table 2 Theme and interpretative repertoire titles

Theme 1 Identification with the patient educator role

The transcripts contained rich description about participants' identification with the patient educator role and two repertoires were evident.

Participants embraced the role of educating patients as being an **integral** and an **extensive** part of being a physiotherapist. A range of descriptors and metaphors was used to express this:-

Patient education for me is **embedded in practice** on a daily basis and it's never been for me anything I've ever thought of as separate aspect of the job. (P12)

Patient education really is at the heart of everything that I do, on a daily basis. (P10)

Terms such as 'embedded in practice' and 'at the heart of everything I do', indicated that participants found it difficult to separate an educational role from other aspects of their clinical role. Participants gave examples of teaching different types of exercise, explaining conditions, giving advice and teaching preventative and health promotion strategies. Patient education was also constructed as involving physiotherapists in an extensive range of educational activity with patients, carers and support workers.

It might be that I teach a carer and then a carer then supports that client to do it when I'm not there. (P6)

I'm in charge of putting together their (support workers) sort of education... you know, their sort of in-service training. (P10)

This last participant was hesitant and a little uncertain as he described his work in teaching support workers, many of whom would have received little formal training to treat or educate patients safely, and his responsibility for their in-service training. What he described was also recounted by other participants.

Theme 2 Preparation for the role

The ways that participants talked about preparation for the role of patient educator was reflected in three repertoires: 'natural', 'experiential' and 'theoretical'. In the first two, physiotherapists were positioned as needing no formal preparation whilst theoretical preparation at pre- and post-registration level was considered in the third. In the **natural** repertoire participants viewed physiotherapists as having varying degrees of innate ability in relation to the skills required by a patient educator.

I think some people are much more natural educators than... than not. It comes more naturally to some people, definitely. (P8)

P8 was a masters' student whose study had not included education development modules and in the extract above expressed a view that it came naturally to some people. That these skills are seen as intuitive and therefore taken for granted was seen as implicit in other people's expectations.

When I went through university, we weren't exactly taught about patient education, it wasn't something that was covered, it was almost just expected that you would know how to do it. (P11)

A second repertoire relating to role preparation drew on situated **experience**. Types of experience varied, with several participants referring to previous roles in teaching or coaching positions to help them in their education of patients. In this repertoire working with more senior physiotherapists and other health professionals as role models and mentors was important as well as a trial and error approach through patient contact.

I think the majority of it has been drawn from being in the clinical work space and kind of watching others. (P4)

The metaphors of 'client mileage' (P6) and 'learning from failure' (P10, P11) were part of this repertoire.

In the **theoretical** repertoire participants recognised a need for formal preparation to carry out the role of patient educator effectively. One participant acknowledged her lack of formal training in education and her awareness that she was missing something, but did not know what exactly it was she did not know:

I've had no formal training in education, but I know there's... there's huge amount of stuff and I'm sure some of that... even just starting with the basic levels of how to approach teaching somebody, would... would be useful. I mean...I don't know what teachers do... (P8)

Several participants had experience of master's level formal preparation. One of these (P12) explained that previously, she had practised in an intuitive way, but in the course of her PGC studies had realised that certain aspects of this practice had a theoretical basis.

And then not until I did my PGC had I looked at the sort of underpinning theory behind a lot of things that I probably just felt were personal. (P12)

Theme 3 Constructs of teaching and learning

The physiotherapists interviewed talked extensively about their educational interactions with patients. Three interpretative repertoires were identified from the data associated with theme 3 and are listed in Table 2. The term construct (rather than concept) was used in this study as it is more aligned with the social constructionist underpinning to interpretative repertoire. There was more emphasis on teacher (therapist)-centred than learner-(patient) centred constructs.

The **transmission** repertoire represented the most common way in which participants talked about their interaction. They positioned themselves as well-informed sources or 'experts' providing or conveying information or knowledge to less well informed passive recipients. Patients needed to 'receive' the available information and knowledge through explanation and advice, both verbal and written (e.g. leaflets). Metaphorical expressions and verbs associated with movement, and the sending and receiving of messages were used frequently. Terms such as 'getting it across', 'getting it through', 'delivery', 'providing', 'giving', 'spoon-feeding', 'drip feeding', were used by several participants.

If you can **get something through** to them in completely layman's terms and very, very simply, they're more likely to understand it and follow your advice'. P1

Patient education means to me **providing** patients with information, resources, um... and knowledge. (P7)

It's absolutely about **getting across** as much as you can as quickly and as easily as you can. (P12)

A repertoire of 'interpretation' was closely related to the transmission of knowledge. Although understanding was the aim in this repertoire there was an additional element suggesting the need to process and adapt information prior to onward transmission. It functioned to show that the physiotherapists felt they were good communicators who held knowledge and understanding and were able to use this to interpret complex information into appropriate layman's language for non-professionals.

I'll try and give them the same understanding that I have in layman's terms. (P5)

Participants use of the language of 'empowerment' reflected the current emphasis in the health workplace. It positioned physiotherapists as helping patients to self-manage through the provision of information and direction they provided. Talk of 'self-help', 'facilitation', 'self-management', promoting 'independence' and helping patients to cope was at the heart of this repertoire. At the same time there was a mentoring perspective (Daloz 1999) to the relationship, evident in the words of one expert participant:

Support them in difficult situations to take the steps they need to take. Help them over the threshold, you know, to... to challenge them to deal with issues and to show them a vision of a future that's worth living. That's really what it's about. (P16)

Her extensive use of graphic metaphorical expression ('support them.... to take the steps they need to take', 'help them over the threshold'), not only in this short passage but elsewhere in the interview, implied a clarity of intention with regard to teaching and learning.

However, references to positive enhancement of patients' lives associated with empowerment appeared to be in tension with those with a more negative connotation relating to the need for rapid discharge ('getting them out of the door'), 'avoiding admission' to hospital, 'dealing with waiting lists' and 'treating themselves'.

...so it's one way of dealing with waiting lists, you know, to discharge clients fairly quickly and sort of have a maybe not as long an intervention with the clients and then sort of lead them on to more a self-management approach. (P13, pp44–48)

Theme 4 Therapeutic relationship

Two repertoires were identified from the data in relation to the therapeutic relationship. In the **collaboration** repertoire patients were partners in learning with a strong emphasis on education as a two-way process. There were frequent references to working 'with' the patient as learning occurs. Not only were patient and therapist learning together, they were learning from each other with a sense of bringing complementary components to that process.

...not just educating them, but them educating us, because of course they're experts on their... you know, their particular illness really. (P1)

However, there was also a repertoire suggesting an expectation of **compliance** from patients. This positioned physiotherapists as having power, authority and superior knowledge in the relationship. They provided the means to achieve healing and expected patients to comply. Patients were placed in a passive role of unquestioning acceptance, respecting the superior position of health professionals who are 'right all along.'

You can tell them as much as you like that they shouldn't be smoking, but it's not until something happens that they're going to think... they were right all along, I shouldn't be smoking. (P1)

Quotes from P1 (a novice educator) are used to illustrate both repertoires and serve to show the variability that can be found within the discourse of one individual.

Discussion

Physiotherapists are prepared to be competent and practice autonomously upon graduation yet, despite statutory regulation by the Health and Care Professions Council, in the UK there is currently no formal requirement for practitioners to demonstrate their competence as educators either at pre-registration or post-registration level.

Participants in this study constructed patient education as an integral and extensive component of their role as a physiotherapist, which extended beyond patients to include carers, other health professionals and support workers. These findings have some resonance with those of Rindflesch (2009), from which he concluded that physical therapists 'could not easily differentiate patient education from other interventions' (Rindflesch 2009, p193). Participants' discourse relating to preparation for an educational role was about natural ability as well as experiential learning and theoretical preparation. These repertoires have parallels with the literature on different types of knowledge e.g. personal or tacit, professional craft and propositional (Higgs *et al.* 2004). The idea of possession of a natural ability (or expectation from others in this regard) in relation to the skills necessary for educating patients was alluded to by several participants. The natural repertoire has parallels with what Torff (1999) referred to as 'folk pedagogy...the intuitive basis by which

individuals not trained in education make judgements about teaching and learning' (Torff 1999, p200).

Development as an educator through experience was also part of the discourse of participants from all of the sub-groups. This experience may have been gained prior to entry to a pre-registration physiotherapy course, perhaps through schooling, sporting activities, music and other lessons, or informally through their experience of observing other practitioners. Experience has been recognised as a key way in which people learn (Dewey 1963, Knowles 1990) and forms the basis for many current educational strategies for adult learners. Jarvis (2006) gave examples of different types of experience and warned of the potential for non-reflective learning when new knowledge, skills and behaviours are accepted without question. While learning from experience was part of the discourse of the participants in this study it may be a challenge for physiotherapists to apply what they have learnt in this way in the education of patients without some form of structured reflective practice. While this can take place on an individual basis, paying attention to opportunities afforded within the workplace such as role-modelling, mentoring, peer-learning and the sharing of experience within communities of practice (Wenger 1999) are fundamental in this facilitation.

A lack of understanding of pedagogical theory and over-reliance on restricted approaches to teaching by physiotherapists and other healthcare professionals may limit the potential of the learners (including patients) with whom they work. There is an additional complication when physiotherapists educational role includes carers, other health professionals and support workers as noted above. This introduces a chain of learning from the physiotherapist to the patient via an intermediary, with potential for adverse patient experience, risks to patient safety and poor self-management unless there has been adequate preparation.

'Transmission' was the predominant construct of teaching and learning, particularly but not exclusively for participants at the novice end of the spectrum. As noted earlier, when busy, inexperienced or poorly motivated educators may have a tendency to draw on teacher-centred approaches they experienced as students. The term transmission has been used previously in the literature relating to educators concepts of teaching with students (e.g. Kember 1997, Richardson 2005, Kell & Jones 2007). Transmission has been regarded as associated with learning and teaching strategies that are teacher-centred rather than student-centred (Richardson 2005). There are obvious parallels between students and patients, and teachers and therapists in the context of patient education. A transmission model suggests that patients are passive recipients of information rather than actively involved in learning with respect to their health. This presents the possibility of a mismatch between transmission-based constructs of patient education and the goal of patient-centred care. At the other end of the spectrum (Figure 1) facilitatory or empowering approaches focus on learning rather than teaching and are more student-centred. If patients are recognised as learners similar principles can be applied in order to enhance learning.



(Therapist-centred) (Patient-centred)

Figure 1 Transmission to empowerment spectrum

Patient-centred approaches to learning may lead to greater patient autonomy and independence in care.

Sfard (1998) has suggested that 'too great a devotion to one particular metaphor can lead to theoretical distortions and to undesirable practices' (Sfard 1998, p4). She argued for the possibility of the peaceful coexistence of competing metaphors in relation to learning. This might suggest the need for educators to be aware of and to access a broad repertoire of metaphors, which might enable them to adapt their approach to patient education to fit the particular learner or group of learners. Over-reliance on a narrow approach may limit a patient's learning potential. Thus physiotherapists and other health professionals should have an understanding of the full spectrum of approaches and associated strategies so that they can select those that are appropriate for individual patients.

A repertoire of collaboration was identified relating to the reciprocal nature of the therapeutic relationship in which patients were partners (and perhaps peers) in learning and in problem solving. Participants saw themselves as educators but also as learners and in this repertoire there was an equal power relationship, which aligned well with the concept of patient-centred care. However, a repertoire of compliance, with its connotations of paternalism, was also present here. The tension between these two repertoires resonates with Edley's (2001, p198) observation that people usually talk 'in terms provided to them by history' utilising a medley of quotations from various repertoires.

Limitations of the study

This was a small-scale qualitative study built on interviews with physiotherapists associated with one higher education institution (HEI) in the UK. Generalisability of the findings is not claimed. Exploration and enhanced understanding of salient issues rather than explanation has been the goal.

Conclusions

Physiotherapists (and other healthcare workers) internationally should be alert to the discourses present within their own narrative and that of colleagues, and the extent to which dominant discourses influence or reflect individuals practice as educators. Awareness of these discourses allow strategies to be put in place to try to achieve a more balanced and research-based approach to the aspects of patient education highlighted here. It is important to be aware of a tension between transmission-based constructs of patient education, a repertoire of compliance and the goal of patient-centred care.

The findings of this study provide enhanced understanding of the integral and extensive nature of physiotherapists role in patient education. They highlight aspects of participants patient educator role and provide a springboard to further research. Such research might include: phenomenographic studies with patients about their experiences of patient education; studies to determine the relationship between individuals discursive construction of teaching and the methods they adopt when educating patients.

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