**Perceived acquisition, development and delivery of empathy in musculoskeletal physiotherapy encounters**

Millie V. Allena and Lisa C. Robertsa,b

*a Faculty of Health Sciences, University of Southampton, Highfield, Southampton, Hampshire, UK*

*b Therapy Services Department, University Hospital Southampton NHS Foundation Trust, Southampton, UK*

**Millie Allen (Corresponding Author)**

[Millie.Allen@wales.nhs.uk](mailto:Millie.Allen@wales.nhs.uk)

Tel: 07746933654

Physiotherapy Unit,

Aneurin Bevan University Health Board,

Royal Gwent Hospital,

Cardiff Road,

Newport,

NP20 2UB

**Lisa Roberts, PhD**

[L.C.Roberts@soton.ac.uk](mailto:L.C.Roberts@soton.ac.uk)

**Disclaimer statements**

***Contributors*** MA was responsible for the study design, data collection, data analysis and production of the final article. LR assisted with the planning of the study, the data analysis and proof reading the final article.

***Funding*** No specific funding was sought for this research however the senior researcher (LR) is funded by a National Institute for Health Research senior clinical lectureship (round 3).

***Conflicts of interest*** The research supervisor has links with the department in which the data were collected. She had no involvement in the recruitment or data collection process.

***Ethics approval*** Ethical approval was gained from the University of Southampton Ethics Department (ID: 13960)

**Acknowledgements**

The authors are grateful to Charlotte Steinbrecher for her assistance observing during the focus groups, and to all of the participants who volunteered their time. This study was presented at the Society for Back Pain Research Annual Conference in Bournemouth, United Kingdom, November 5-6th 2015.

**Abstract**

**Background:** Empathy is considered essential to creating a positive clinician-patient relationship, along with improving patient experience and adherence to treatment. It is not clear how physiotherapists acquire their empathic skills.

**Method:** This study explored physiotherapists’ perceptions of empathy during musculoskeletal clinical encounters. Seventeen participants attended three focus groups separated by clinical employment grade. The definition of empathy, its acquisition and impact on a clinical encounter were discussed, audio-recorded, transcribed verbatim and analysed thematically.

**Results:** Six key themes and 48 sub-themes were identified. Empathy was defined similarly in all three focus groups. There was divergence on its acquisition and the extent to which it can be taught, however participants agreed that empathy is an innate characteristic. Senior physiotherapists placed greater emphasis on the importance of empathic communication than student physiotherapists, whilst student and junior physiotherapists considered limited clinical experience to be a barrier in delivering empathic communication, anticipating this to improve over time.

**Conclusions:** This study identified a mismatch between the perceived importance of empathic communication in the literature and by clinicians, compared with the time spent acquiring and developing these skills. Clinicians need to place a greater emphasis on enhancing their empathic communication skills throughout their career to help create a positive patient experience and enhance clinician-patient relationships.

**Keywords:** Communication; Education; Empathy; Physiotherapy

**Introduction**

Physiotherapists take a ‘whole person’ approach to patient care, ensuring that each patient is involved in their own recovery through raising awareness, educating and empowering the patient [1,2]. One core component deemed necessary for this approach is the clinicians’ ability to effectively communicate with their patient, helping to create a positive patient-clinician relationship [3-6]. Empathy, a facet of communication, is often described as the understanding and communication of another person’s situation [7]. Communicating this understanding to the patient can not only help create a positive patient-clinician relationship, but has been shown to create a positive experience for both the patient and clinician, improve adherence to therapy, increase patient satisfaction, create trust and result in more accurate diagnoses [3,8-12]. Empathy is considered essential in a therapeutic relationship [13], however little is known about whether and how physiotherapists acquire these empathic skills, and how empathy can impact on a musculoskeletal clinical encounter.

Whilst empathy has been difficult to define, it is considered within medicine to be the understanding and communication of a patient’s experience [14]. Cox et al[15] define empathy as the ‘ability to understand and identify with the feelings or emotional states of others… comprising both affective and cognitive aspects’ [15,p727]. Affective empathy, (the ability to share an emotional experience with another) and cognitive empathy, (the ability to process that experience) result in the clinician consciously coming to a conclusion about the situation [14,16]. Misch and Peloquin [4] however, describe healthcare professionals as ‘having empathy’ and ‘showing empathy’. A close link between empathy and sympathy has been identified: [17] Sympathy has been defined as becoming emotionally involved in a situation, with this emotional involvement and the possibility of ‘losing sight of neutrality’ in a clinical encounter being where sympathy and empathy differ [17,18]. In addition, pity has been described as a feeling of wanting to relieve a persons suffering [17]. Consequently, sympathy and pity are often discouraged in healthcare [5].

Many authors [19-21]have attempted to research the development of empathic skills during medical, nursing and healthcare education and considerable variation exists in how healthcare training is thought to influence ‘levels of empathy’. There is very little research available on development of empathy in clinical practice. Batt-Rawden et al [21] reviewed the available literature, concluding that a variety of educational interventions, including communication skills training, have been shown to increase empathic levels among medical students. Whilst role-play has been shown to directly increase empathic communication, it is unclear how often this approach is used in the development of empathy in healthcare students [5,16,20,22]. In contrast, Bombeke et al [20] found empathic levels decreased in medical students who received communication skills training integrated throughout their education, whilst those who received no training maintained a similar level of empathy at the end of their medical training [20]. This is similar to Sherman and Cramer[23] who observed that empathy levels decreased in dental students in their second year of studying. In addition, Hojat et al [19] identified a significant decrease in empathy levels, measured using the Jefferson Scale of Empathy, in students in their third year of medical training, whilst Nunes et al [6] monitored a decrease in empathy levels in the first year of nursing, dental and medical training using the Jefferson Scale of Empathy.

In a review of the literature,Neumann et al [24]found thatdistress, (for example,depression, lack of self worth and burnout) was the main cause of a decline in empathy during medical school. They considered the cause of this distress to be a lack of social support from their families and peers, increased workload due to long placement hours, a reduction in relaxation time, mistreatment by seniors and exposure to clinical reality, resulting in decreased emotional involvement during clinical practice.

Misch and Peloquin [4] suggest that student clinical experience however, does not always result in learning, stating that emotional involvement is required for beneficial learning. Their review of the literature identifies that a confluent education involving role-play, experiential learning, case studies and educator feedback are methods to facilitate the development of empathy in physiotherapy students prior to qualifying, however the effectiveness of these approaches has not been measured [4].

To date, the majority of literature in developing empathy is focused on medical, dental and nursing students, and literature looking at the acquisition of empathic skills in allied health students such as physiotherapists, is sparse. This study aimed to explore physiotherapists’ understanding of empathy, their perceptions of its impact on a musculoskeletal clinical encounter and their perceptions of teaching empathy and its role in physiotherapy training.

**Methods**

***Design and setting***

A qualitative approach was used to explore participants’ perceptions of empathy in a group setting. Three semi-structured focus groups were conducted in [City], United Kingdom, in May and June 2015. Approval for the study was gained from the University of [City] Ethics Department (ID: 13960).

***Sampling and recruitment***

Purposive sampling was used to identify participants with a range of clinical experience in a musculoskeletal setting; students, junior and senior physiotherapists. The researchers aimed to recruit eight participants for each focus group. Physiotherapists working within [City hospital], with experience of working within the musculoskeletal outpatient service were invited to participate in the study. Students studying the BSc(Hons) or MSc (Pre-Registration) in Physiotherapy at the University of [City] were also included in the study. Physiotherapists without musculoskeletal experience were excluded from the study, as were physiotherapists who had previously led research in communcation, as the researchers did not want their increased knowledge to potentially dominate the focus groups.

Physiotherapists were invited via email by their departmental manager to participate in the study. Students were invited via email through the university email database. Those who expressed an interest were provided with information about the study, given the opportunity to question the researchers and invited to attend the relevant focus group, dependant on employment grade (student, Band 5/6 and Band 7/8). The focus groups were divided by employment grade to allow physiotherapists with similar levels of experience to share their perceptions of empathy throughout their career thus far.

In the UK, Band 5 is the entry point into employment for newly qualified physiotherapists with a bachelor degree. These posts are usually rotational (4 – 6 monthly) through different specialisms of physiotherapy. Band 6 is an experienced or specialised position with some clinical and theoretical experience in a musculoskeletal speciality. These posts can be rotational (6 – 9 monthly) or static (permanently based in one department). Band 7 and 8 are advanced practitioner posts that are static within the musculoskeletal physiotherapy department.

The student focus group acted as an internal pilot to evaluate the scope and content of the topic guide and delivery of the focus groups. Data from the pilot were included in the analysis as the data served as a pre-qualifying comparator, outlining how empathic skills may be acquired during pre-registration training.

Eleven qualified and six student physiotherapists were recruited for this study. All invited participants attended the appropriate focus group. Ten participants were female and seven male. Mean time since qualifying was 8.57 (SD 6.48) years. Mean time spent working in a musculoskeletal environment since qualifying was 77.18 (SD 78.63) months. Table 1 provides a breakdown of the demographics of the participants:

Table 1: Demographic characteristics of participants

|  |  |
| --- | --- |
| Variable | Number of  participants (%) |
| Age, years  21-30  31-40  41-50  51-60  Sex  Female  Male  Employment Status  Student  Band 5  Band 6  Band 7  Band 8 | 8 (47%)  7 (41%)  1 (6%)  1 (6%)  10 (59%)  7 (41%)  6 (35%)  3 (18%)  2 (12%)  5 (29%)  1 (6%) |

***Data collection***

Each focus group was set in a teaching room either at the university or hospital site, with the researcher and participants seated in a circle. Demographic information was collected prior to each focus group via a simple questionnaire. The participants were assigned pseudonyms to maintain participant anonymity. Once the focus groups started, discussion was created using a bespoke semi-structured topic guide (Table 2) based on the explorative aims of the study. The primary researcher (MA) encouraged further discussion on topics raised by participants that were pertinent to the study, but not covered in the topic guide. The primary researcher and an observer were present for the duration of all three focus groups. The observer noted the timing of key topics of discussion by each participant to assist the primary researcher during the transcription process and provided field notes of any particular behaviours of the researcher or participants that appeared to impact upon the discussions. Each focus group was audio-recorded and transcribed verbatim. The mean duration of each focus group was 49 minutes (range 39 to 74 minutes).

|  |
| --- |
| Table 2: Topic guide for focus group |
| Questions |
| 1. Can you tell me what you understand by the term empathy?  2. How do you think clinicians acquire an ability to show empathy?  3. How do you feel empathy can affect a clinical encounter?  4. Was empathy something you considered in your physiotherapy training? Do you think it should be included in current training?  5. Is there anything outside of physiotherapy that helps physiotherapists develop their ability to show empathy?  6. Based on your experience, how would you encourage students or other staff to develop their skills in demonstrating empathy? |

***Data analysis***

Transcripts were analysed thematically by the primary researcher (MA) and key themes were derived from the data. Sub-themes were assigned to each theme, with new sub-themes being added as the analysis progressed. The use of a Framework approach allowed for a flexible and systematic approach to qualitative data analysis, also allowing for the data to be coded, with similarities and differences in the data being identified, whilst providing a transparent interpretation of the participants’ views [25,26]. Having identified key findings within the coded data, the primary researcher (MA) highlighted links between themes and compared the data to the aims of the study. This process was interrogated by the second researcher (LR), and the themes relating to factors that influence the impact of empathy during a clinical encounter were identified. A model was developed from this stage of the analysis process and the emerging model was then presented to and discussed with the study participants to assist with respondent validation. Following discussion with the participants, the model was modified and the penultimate version of the model was produced. This model was then presented at the annual scientific meeting of the Society for Back Pain Research in Bournemouth (November 2015) and further refined to produce the final model (Figure 1).

**Results**

From the three focus groups, 149 minutes of data were collected. Six key themes and forty-eight sub themes were identified (Table 3). The key findings are related to the research aims below:

|  |  |  |  |
| --- | --- | --- | --- |
| Table 3: Themes and sub-themes identified during thematic analysis | | | |
| 1. Empathy | | 1.1 Definition of Empathy  1.2 Similarities/Differences to Sympathy  1.3 Involvement of Pity  1.4 Teaching of Empathy  1.5 Teaching of Communication Skills  1.6 Undergraduate Training  1.7 Post-Graduate Training  1.8 Innate Characteristic  1.9 Skill Acquisition  1.10 Factors Affecting Empathy in the Workplace  1.11 External Factors in Developing Empathy  1.12 Difference Between Professionals  1.13 Influence on Career  1.14 Impact on Consultation  1.15 Coping Mechanisms  1.16 Awareness of Empathy  1.17 ‘Scale’ of Empathy  1.18 Link with Psychology | |
| 2. Communication | | | 2.1 Feeling Empathy  2.2 Showing Empathy  2.3 Doing Empathy  2.4 Pretending Empathy  2.5 Verbal  2.6 Non-Verbal  2.7 Active Listening  2.8 Classified as ‘a body part’  2.9 NHS Frameworks |
| 3. Clinician-Patient Relationship | | 3.1 Building Rapport  3.2 Dependency vs Self Management  3.3 Reading the Patient  3.4 Educating the Patient  3.5 Understanding  3.6 Outcome  3.7 Patient Perceptions  3.8 Patient Expectations | | |
| 4. Experience | | 4.1 Clinical Experience  4.2 Student-Educator Relationship  4.3 Student Experience  4.4 Job Role and Responsibilities  4.5 Progression Through Career  4.6 Compromise of Integrity  4.7 Life Experience | | |
| 5. Personality/ Character | | 5.1 Patient  5.2 Student  5.3 Clinician | | |
| 6. Time | | 6.1 Positive  6.2 Negative  6.3 To Reflect | | |

***Definition of empathy***

Empathy was defined similarly in each focus group, with the following definitions being proposed:

*‘Try and understand where they’re coming from and their experience’ (Mary, Student)*

*‘Understanding what’s going on in their situation from their point of view’ (Rupert, Band 6)*

*‘Being able to put yourself in their shoes’ (Amber, Band 7)*

The terminology relating to empathy varied depending on the participant. Participants referred to either ‘doing’, ‘showing’ or ‘feeling’ empathy, with the experienced clinicians also discussing whether ‘pretending’ empathy was feasible during a clinical encounter.

*‘Like communication, you don’t attempt to do it’ (Keith, Student)*

*‘And that’s where the skill comes in doesn’t it to show some empathy’ (Amber, Band 7)*

*‘You either feel empathetic towards somebody or you don’t’ (Britt, Student)*

*‘But I think if you’re gonna be effective in this sort of job you’ve gotta at least learn how to at least pretend you’re empathising’ (Rupert, Band 6)*

The participants’ definitions of empathy were similar to the existing literature [7,15,16,22,27,28], and whilst they did not display a direct knowledge of affective and cognitive empathy, an indirect understanding was identified from their description of ‘feeling’, ‘showing’ and ‘doing’ empathy. The researchers considered participants’ description of ‘feeling’ empathy as an indirect understanding of affective empathy, whilst the terminology ‘showing’ and ‘doing’ empathy was considered as the participants’ indirect understanding of cognitive empathy. This terminology is similar to that of Misch and Peloquin [4] who describe physiotherapists as ‘having’ or ‘showing’ empathy, relating to affective and cognitive empathy respectively. Misch and Peloquin [4] do however highlight that not all clinicians will be able to combine the two components, with some clinicians feeling empathy, but not having the ability to communicate this feeling, whilst others may be able to portray empathy, but may not feel consciously empathic towards the patient.

Both the clinicians and students agreed that understanding the patient was essential, however the clinicians focused more on how that understanding may alter their empathic approach to the patient, referring to a ‘scale of empathy’, with one participant commenting:

*‘Definitely on a continuum I think isn’t it? You can say are you empathetic, yes or no? But then how much empathy do you have? … Kind of gauging and assessing how you need to respond [to the patient]’ (Tabitha, Band 7)*

There was some crossover of the definition of sympathy and pity. Participants felt that allowing emotions to affect a clinical encounter was indicative of both sympathy and pity, with both terms being perceived negatively during a clinical encounter. Mathiasen [29], however, states that there is a place for both empathy and sympathy in medical practice, suggesting that different patients will prefer different communicative approaches. The participants’ views, particularly the experienced clinicians, were similar to more contemporary research [1,5], in which sympathy and pity are actively discouraged.

*‘Whereas sympathy for me has almost a little bit of a negative connotation’ (Tabitha, Band 7)*

*‘I wouldn’t say I’d ever want to be pitying the patient’ (Will, Band 7)*

***Impact of empathy on a clinical encounter***

Building rapport, listening to and understanding the patient along with both verbal and non-verbal communication were factors considered to influence the outcome of a clinical encounter throughout all three focus groups.

Participants identified a variety of factors that may influence the delivery of empathy during a clinical encounter. These factors were related to the clinician, the patient or the workplace. Examples of these impacting factors were; the patient and clinicians’ life experience, upbringing, religion, maturity, clinician personality, clinical experience, patient personality, patient experience, patient expectations, patient perceptions, occupational pressures and time pressures.

Factors affecting empathy were discussed in all three focus groups, with student participants focusing on time being a key restricting factor in its development, stating that workplace pressures would affect the amount of time that they were able to spend interacting with a patient, particularly in a musculoskeletal outpatient setting.

Student participants also reported that whilst empathy was essential, there were many aspects that they needed to focus on whilst on clinical placement, such as patient assessment and treatment skills and impending formal assessments. This is similar to Neumann et al [24] who identified external pressures that impacted medical students’ empathy levels. The student participants in this study anticipated that their empathic skills would become more apparent post qualifying. This was reiterated by the qualified physiotherapists, who reported that the importance of empathy and communication skills was increased once working in clinical practice:

*‘Until you actually see patients, you don’t really appreciate kind of actually how much of an impact it can have’ (Claire, Band 5)*

*‘You don’t value it, I don’t think, until you start needing it’ (Amber, Band 7)*

It was suggested in all three focus groups that empathy was an innate characteristic to a clinician. These views matched Shapiro’s study findings in which participants felt empathy was “a part of who I am” [30,p324] Some participants felt more strongly about this, as demonstrated by Britt:

*‘It’s an innate characteristic… From what I’ve seen it’s a personality trait’ (Britt, Student)*

Compared with:

*‘I think that there’s a certain amount of it that is kind of innate to who you are as a person’ (Tabitha, Band 7)*

***Teaching of empathy***

Participants agreed that empathy is a facet of communication and reported no formal empathy teaching at undergraduate level, agreeing that it was incorporated into communication teaching. One participant did not feel he was trained effectively, stating that empathy was close to *‘dabbling in the realms of psychology’ (Patrick, Band 8).* Current research supports these findings, reporting that empathy teaching is embedded into communication teaching [4,5,18].

Raising an awareness of empathy through teaching communication skills at undergraduate level was considered premature by the experienced clinicians due to perceptions of student immaturity, a lack of clinical experience and students’ expectations of a focus on teaching practical skills:

*‘I wasn’t ready for it, it wasn’t right for me and I, I sort of switched myself off’ (Hamish, Band 6)*

*‘And it does depend on your stage, how old you are when you [go] into training, your life experience up to date, I was probably more ready three years after qualifying to learn that side of it’ (Will, Band 7)*

Whether or not empathy can be taught was discussed at length in each focus group. The majority of participants stated that empathy could not be taught as they considered it an innate characteristic. However, a handful of participants reported that whilst teaching empathy was difficult, raising awareness and the development of empathic skills was possible.

*‘It’s not something that you can just go on a course and learn, accept that it is something that will probably get better and better over time … accept that it is there as something to be developed as part of your practice’ (Amber, Band 7)*

Participants suggested a variety of approaches to increase awareness of empathy, such as, in-service training, peer review, continued professional development courses focusing on empathy and mentoring throughout their clinical career. However, they considered the best way of developing empathic communication skills to be through clinical experience and ‘patient mileage’. None of the participants reported devoting time to further develop their own communication skills.

***Model of acquiring, developing and delivering empathy***

The model (Figure 1) was created during the analytical process, highlighting the specific factors participants identified that may affect the acquisition, development and delivery of empathy during a clinical encounter. From the coded data, these factors were synthesised into four categories; the knowledge and understanding of empathy; the clinician; the patient; and external factors influencing the delivery of empathy.

The inner circle identifies the components that may affect the clinicians’ knowledge and understanding of empathy that should be considered during communication skills in-service training in a clinical setting. The second circle identifies factors specific to how a clinician may alter their delivery of empathy, with the third circle identifying factors that may affect a patient’s receptiveness to empathy, affecting both the patient-clinician relationship and clinical outcome. The outer circle identifies external factors that may facilitate or limit the delivery of empathy. The authors anticipate that this model will add to the literature available relating to empathic communication, and that it may assist in the development of an empathic communication programme that can be implemented within a clinical setting.

**Figure 1:** Model of acquiring, developing and delivering empathy within the constraints of clinical practice



**Discussion**

Empathy is a much-studied concept, yet there is little agreement on its acquisition and development, and little has been reported on its impact within allied health professions, such as physiotherapy. This study explored physiotherapists’ perceptions of empathy during a musculoskeletal clinical encounter, focusing on their understanding of the definition of empathy, how these skills are acquired or taught and the impact on clinical practice.

The experienced clinicians had a detailed discussion about the effectiveness of empathic communication and their opinions differed on whether it was possible to display genuine empathy during a clinical encounter, as opposed to displaying a lack of sincerity when communicating with a patient. Whilst teaching medical clinicians methods of portraying empathy has been shown to be effective in clinical practice, it has been discouraged in medical settings, as patients often perceive the clinician as being inauthentic, which was detrimental to the patients’ experience [4,21,27,31].

In addition, sympathy and pity were perceived negatively within all three focus groups, with participants discouraging their presence during a clinical encounter. The participants’ views were similar to those of Boyle et al [5] and Adams [1], who state that emotional involvement is what distinguishes empathy from sympathy, with clinicians losing neutrality when emotionally involved in a situation. It has been suggested that clinicians feeling empathy and sympathy have the potential to develop a feeling of pity, with contemporary literature reporting that pity is considered as condescending [17]. This is akin to the views of the participants who considered pity to have a negative connotation in clinical practice, resulting in a negative impact on a clinical encounter.

Whilst this study intended to explore participants’ perceptions of the impact of empathy on a clinical encounter, participants focused their discussion on how the attributes of both the clinician and patient, as well as external factors, could affect the delivery of empathy during a clinical encounter. Participants identified building rapport, active listening, verbal and non-verbal communication to be factors that could influence the patient-clinician relationship, which is supported in the literature, alongside empathy which has been shown to affect the patient-clinician relationship, improving clinical outcomes, diagnoses and adherence to therapy [3,8-12].

Furthermore, participants identified many factors that may influence the delivery of empathy during a clinical encounter that were similar to existing literature [32]. Factors specific to the clinician such as age, personality, gender, clinical experience, culture and religion have been identified in the literature [32], meanwhile participants in this study also identified factors relating to the patient and external factors that may affect empathy delivery during a clinical encounter including patients’ previous clinical experiences, patients’ personality and educational level. Participants suggested that time restrictions within clinical schedules may limit the amount of empathy they are able to deliver, whilst ensuring they adhere to their appointment times in a busy outpatient setting. The factors reported by the participants helped to design the proposed model of acquiring, developing, and delivering empathy in clinical practice (Figure 1).

Brunero et al [16] report that further research is required relating to the factors that affect empathy, to allow for an improved educational programme. Misch and Peloquin [4], however state that empathy is ‘more than a set of techniques or communication skills’ (p.42),and that whilst this is the case, empathy is often taught with a prescriptive approach. Participants in this study could not identify specific empathy teaching whilst in education, but identified that empathic teaching was incorporated into communication skills teaching. Verbal and non-verbal communication skills, professional behaviour, taking social and medical history and building rapport are areas in which empathy has been reported to be covered in undergraduate teaching [4,5,18]. More research is needed in this field to establish a suitable approach to developing empathic communication skills both in education and clinical practice.

Participants accepted that whilst education of empathy exists within communication teaching at undergraduate level, they felt that empathy cannot be taught per se. This view conflicts with the literature, which has shown the following interventions to increase empathic communication skills; drama ‘how to act in role’ workshops, communication skills training, reflective practice workshops, communication lectures, patient simulation scenarios, case studies, peer feedback and specific empathy teaching [4,16,20,21,27,31,33-37]. Whilst participants were in agreement that empathy could not be taught, they did suggest similar methods to develop empathic skills in a postgraduate environment, which may appear contradictory. It is possible that the participants’ apparent lack of awareness of affective (basic) and cognitive (trained) components of empathy may have influenced their perceptions that empathy could not be taught[4,32].

Comparison of the methods of teaching empathic communication skills proves challenging due to the wide range of reported methods of delivering communication skills training. The authors anticipate that Figure 1 will help to guide the planning and delivery of empathic communication skills training programmes in clinical practice.

The key finding from this study indicates that teaching empathy per se, may be best done when working in a clinical setting, as clinicians are able to draw on their clinical experience and immediately take new ideas into their clinical encounters to further enhance their skills. Whilst methods of developing empathy in students have been shown to be successful [16,20,21,27,31,33-36], the increase in empathy levels has not been shown to have a carry over longer than 7 days following the intervention,[16,35]. Multiple studies, however, have identified a decrease in empathy levels in medical and healthcare students over the duration of their education [6,16,19,20,23], and in a review of these studies [24], the authors identified four possible reasons for this: negative experiences with clinical supervisors; a feeling of vulnerability as a student, resulting in reduced self-confidence; a lack of social support and increased workload combined with long clinical placement hours [24]. The student physiotherapists in this study stated that there were multiple factors to focus on whilst on clinical placement, and that their focus was more on their personal development and academic grades rather than their focus being on empathising and communicating with patients. Students did however acknowledge the importance of empathic communication during clinical encounters, but deemed other aspects of their education to be a priority. Neumann et al [24] report similar findings, with medical students’ empathy levels showing a significant decline at the point that they enter clinical practice during their educational programme, due to their focus on academic work, improving clinical skills and lack of time to relax and de-stress.

***Clinical implications***

Empathic communication is essential within clinical practice, and awareness of these skills is important at all stages of any clinician’s career. This study has identified many factors that may influence the delivery of empathic communication, however the best approach to physiotherapists acquiring and enhancing empathic communication skills remains unclear and worthy of further research. The model produced during this study should help to increase clinicians’ awareness of the many factors that may influence a clinical encounter and it is anticipated that the model will contribute to the current literature, and aid awareness of empathy in clinical practice.

Physiotherapists agree that it is possible to develop empathic communication skills, but disagree as to whether empathy can be directly taught. Participants agreed that the optimal time to develop empathic communication skills was once working in a clinical setting, therefore emphasis should be placed on continued development of empathic communication skills throughout a clinician’s career.

***Limitations***

Whilst this project recruited musculoskeletal physiotherapists, there are many different specialities of physiotherapy. This may therefore affect the transferability of the results across the profession. In addition, the data were also collected within one university and institution, possibly affecting the transferability between institutions.

***Recommendations for future research***

Further research looking at the acquisition of empathy within physiotherapy is needed. Previous research has found that medical and healthcare students’ self-perceived empathy levels decrease during education. Therefore, a longitudinal study monitoring physiotherapy students over the duration of their education and into clinical practice may provide more information on trends of empathy levels, helping to identify the optimal time to implement empathic communication teaching.

Exploring physiotherapists’ perceptions of the impact of empathy within a wider clinical spectrum, for example neurology, paediatrics, cancer care and cardiorespiratory, would allow for better transferability of results within physiotherapy practice.

**Conclusion**

Whilst empathy remains difficult to define in healthcare, it is considered essential to creating a positive experience for the patient and clinician. This study identified a mismatch attributed to the time spent acquiring empathic skills, compared with the perceived importance of empathy in clinical practice. The importance of timing of teaching empathy is critical, with development of empathic communication skills to be continued across the duration of a physiotherapist’s career.

**References**

1. Adams R. Clinical empathy: A discussion on its benefits for practitioners, students of medicine and patients. J Herb Med. 2012;2:52-7.
2. Chartered Society of Physiotherapy. What is physiotherapy? [Internet]. Csp.org.uk. 2015 [cited 10 January 2015]. Available from: <http://www.csp.org.uk/your-health/what-physiotherapy>.
3. Hojat M, Mangione S, Kane G et al. Relationships between scores of the Jefferson Scale of Physician Empathy (JSPE) and the Interpersonal Reactivity Index (IRI). Med Teach. 2005;27(7):625-28.
4. Misch D, Peloquin S. Developing empathy through confluent education. Journal of Physical Therapy Education. 2005;19(3):41-51.
5. Boyle M, Williams B, Brown T, et al. Levels of empathy in undergraduate health science students. The Internet Journal of Medical Education. 2009;1(1):1-8.
6. Nunes P, Williams S, Sa B, et al. A study of empathy decline in students from five health disciplines during their first year of training. International Journal of Medical Education. 2011;2:12-17.
7. Shapiro J. Walking a mile in their patients' shoes: empathy and othering in medical students' education. Philos Ethics Humanit Med. 2008;3(1):10.
8. Beck R, Daughtbridge R, Sloane P. Physician-patient communication in the primary care office: A systematic review. The Journal of the American Board of Family Medicine. 2002;15(1):25-38.
9. Hojat M, Gonnella J, Nasca T, et al. Physician empathy: Definition, components, measurement, and relationship to gender and specialty. American Journal of Psychiatry. 2002;159(9):1563-69.
10. Shapiro J, Morrison E, Boker J. Teaching empathy to first year medical students: Evaluation of an elective literature and medicine course. Education for Health: Change in Learning & Practice. 2004;17(1):73-84.
11. Stepien K, Baernstein A. Educating for empathy. J Gen Intern Med. 2006;21(5):524-30.
12. Rakel D, Barrett B, Zhang Z, et al. Perception of empathy in the therapeutic encounter: Effects on the common cold. Patient Education and Counselling. 2011;85(3):390-97.
13. Reynolds W, Scott B, Jessiman W. Empathy has not been measured in clients' terms or effectively taught: a review of the literature. J Adv Nurs. 1999;30(5):1177-85.
14. Pedersen R. Empathy: A wolf in sheep’s clothing?. Med Health Care Philos. 2007;11(3):325-35.
15. Cox C, Uddin L, Di Martino A, et al. The balance between feeling and knowing: affective and cognitive empathy are reflected in the brain's intrinsic functional dynamics. Soc Cogn Affect Neurosci. 2011;7(6):727-37.
16. Brunero S, Lamont S, Coates M. A review of empathy education in nursing. Nurs Inq. 2010;17(1):65-74.
17. Gerdes K. Empathy, Sympathy, and Pity: 21st-Century definitions and implications for practice and research. J Soc Serv Res. 2011;37(3):230-41.
18. Williams B, Boyle M, Howard S. Empathy levels in undergraduate paramedic students: A three-year longitudinal study. Nurse Educ Pract. Forthcoming 2015.
19. Hojat M, Vergare M, Maxwell K, et al. The devil is in the third year: A longitudinal study of erosion of empathy in medical school. Acad Med. 2009;84(9):1182-91.
20. Bombeke K, Van Roosbroeck S, De Winter B, et al. Medical students trained in communication skills show a decline in patient-centred attitudes: An observational study comparing two cohorts during clinical clerkships. Patient Educ Couns. 2011;84(3):310-18.
21. Batt-Rawden S, Chisolm M, Anton B, et al. Teaching empathy to medical students. Acad Med. 2013;88(8):1171-77.
22. Kliszcz J, Nowicka-Saur K, Trzeciak B, at al. Empathy in health care providers – validation study of the Polish version of the Jefferson Scale of Empathy. Adv Med Sci. 2006;51:219-25.
23. Sherman J, Cramer A. Measurement of changes in empathy during dental school. J Dent Educ. 2005;69(3):338-45.
24. Neumann M, Edelhäuser F, Tauschel D, et al. Empathy Decline and Its Reasons: A Systematic Review of Studies With Medical Students and Residents. Acad Med. 2011;86(8):996-1009.
25. Smith J, Firth J. Qualitative data analysis: the framework approach. Nurse Res. 2011;18(2):52-62.
26. Gale N, Heath G, Cameron E, et al Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Med Res Methodol. 2013;13(1):117-25.
27. Fernández-Olano C, Montoya-Fernández J, Salinas-Sánchez A. Impact of clinical interview training on the empathy level of medical students and medical residents. Med Teach. 2008;30(3):322-24.
28. Marsden A. Empathic consultation skills in undergraduate medical education: A qualitative approach [PhD]. University of East Anglia; 2014.
29. Mathiasen H. Empathy and sympathy: voices from literature. Am J Cardiol. 2006;97(12):1789-90.
30. Shapiro J. How do physicians teach empathy in the primary care setting? Acad Med. 2002;77:323-328.
31. Lim B, Moriarty H, Huthwaite M. “Being-in-role”: A teaching innovation to enhance empathic communication skills in medical students. Med Teach. 2011;33(12):e663-69.
32. Alligood M, May B. A. Nursing theory of personal system empathy: interpreting a conceptualization of empathy in king's interacting systems. Nursing Science Quarterly. 2000;13(3):243-47.
33. Bayne H. Training medical students in empathic communication. J Spec Group Work. 2011;36:316-29.
34. Norfolk T, Birdi K, Walsh D. The role of empathy in establishing rapport in the consultation: A new model. Med Educ. 2007;41:690-97.
35. Das Gupta S, Charon R. Personal illness narratives: Using reflective writing to teach empathy. Acad Med. 2004;79:351-56.
36. Tiuraniemi J, Läärä R, Kyrö T, et al. Medical and psychology students’ self-assessed communication skills: A pilot study. Patient Educ Couns. 2011;83:152-57.
37. Van Winkle K, Fjortoft N, Hojat M. Impact of a workshop about aging on the empathy scores of pharmacy and medical students. Am J Pharm Educ. 2012;76:9.