

ABSTRACT

Background Non-communicable diseases from unhealthy lifestyles account for most preventable deaths in the UK. Physiotherapy training now includes Health Promotion (HP) for the reduction of unhealthy lifestyles such as obesity, smoking, alcohol and inactivity. However, physiotherapists' perceptions of HP in the context of musculoskeletal care in the UK have not been explored.

Objectives To explore musculoskeletal physiotherapists' perceptions of HP. **Design**

Phenomenographic qualitative research **Method** semi-structured interviews with 7

musculoskeletal physiotherapists. **Results/findings** Physiotherapist conceptions of HP were

analysed using phenomenographic analysis and three main categories emerged. These were the concepts of physiotherapists' self, education in the therapeutic alliance and persons' agency for

change. Each category contained a variety of perceptions which were sometimes conflicting, and

each category had scope for influencing the others. **Conclusions** Participants' (physiotherapists)

perceptions of their personal and professional self were entwined with perceptions of persons'

agency when describing health promotion in their practice. Within the therapeutic alliance

concepts of health coaching were discussed but these conceptualisations sometimes contradicted

descriptions of experiences. This research may encourage physiotherapists to reflect on their

perceptions of, and role in HP.

Keywords: health coaching, health promotion, physical therapists, qualitative research, therapeutic alliance

INTRODUCTION

The World Health Organisation (WHO) define health as "physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO, 1946). Health has also been described

as a prerequisite for engaging in the life that an individual wants or needs (Dean, 2009). Health promotion (HP) has been described as 'the process of enabling persons to increase control over, and to improve, their health' (WHO, 1986). Around 60% of global deaths are thought to be preventable by encouraging balanced diet, promotion of active lifestyles, smoking cessation and reducing alcohol consumption (WHPA, 2010). In 2008, a quarter of the English population engaged in three to four unhealthy habits (Buck & Frosini, 2012) and the burden of non-communicable diseases such as type 2 diabetes, stroke, cancers and cardiovascular conditions has been predicted to rise (Littlefield & Wrotniak, 2011; Pang, 2012). The 2014 Public Health Guidelines reflected a shift from treating acute disease to managing lifestyle factors (alcohol, diet, physical activity, sex and tobacco) for the prevention of non-communicable diseases (NICE, 2014). HP has been included in physiotherapist training since 2012 and, as allied health professionals (AHPs), physiotherapists have a responsibility to provide HP interventions (NICE, 2014; WHPA, 2011; Green & Raeburn, 1988; Jackson, 2011).

Although difficult to generalise findings across professions and methodologies, AHPs express varied perceptions of who's role it is to have healthy discussions on which topics (McBride, 1994; McKenna et al, 2004; Ferguson & Spence 2012; Mallinson et al, 2009; Dapp et al, 2005; Gronski et al, 2013; Scott, 1999; Kannenburg et al, 2016). Initiatives such as 'Move for Health' (Hunt, 2009), 'Better Conversations' (NHS, 2016) and Making Every Contact Count (MECC) (NHS England, 2016) encourage AHPs to engage in healthy conversations in every interaction (Dean, 2009; Wolever et al, 2013; Bancroft & Moss, 2016). If every physiotherapist was active in promoting healthy lifestyles then everyone who has physiotherapy could potentially be impacted (Bancroft & Moss, 2016; NHS England, 2016, Dean et al, 2016). HP interventions are 'coordinated sets of activities designed to change specified behaviour patterns' (Michie et al, 2011) and should include 'proven' techniques (NICE, 2014). Advice alone is unproven for eliciting behaviour changes required for HP in many audiences (Michie et al, 2011, Malik et al, 2014) prompting a shift away from health education and health counselling towards health coaching practices. Behaviour change requires

individual opportunity, capability and motivation (Michie et al, 2011) and health coaching identifies the person being coached as an expert in their unique situation while the 'coach' promotes a 'sense of purpose and confidence to act' (Wilson et al, 2018). This is done by coaching people to identify their goals and harnessing their 'willingness to change' (Kivelä et al, 2014) thus encouraging them to identify solutions and tailor their own interventions (Ljunggren & Lund, 2001; Edwards et al, 2004; Wolever et al, 2013; Delany et al, 2015; Mann, 2015). AHPs' use of health coaching has been found to positively impact health behaviours in those with chronic conditions (Kivelä et al, 2014) and a 2019 systematic review deemed that health coaching by physiotherapists might effectively facilitate healthy changes in a variety of populations (Rethorn & Pettit, 2019).

Future optimization of physiotherapists' HP engagement mandates an exploration of current understandings and concepts. Historical emphasis on musculoskeletal prophylaxis was seen in a survey of physiotherapists in 1986; only 7% considered general health advice important in their role (Leithley, 1988). Internationally, perceptions seem conflicting (McMahon & Connolly, 2013) with authors attributing physiotherapist apathy toward HP to low self-efficacy (Rea et al, 2004; Chow et al, 2017). It has been argued that opportunities for prevention are limited because physiotherapists generally interact with those who are already symptomatic (Verhagen & Engbers, 2009). NHS in-patient physiotherapists described doubts about their efficacy in HP citing time and discharge pressures (Walkenden & Walker, 2015). In-patient physiotherapists are more likely to treat those who are medically unwell, thus their perceptions and priorities may differ from out-patient colleagues. The perceptions of musculoskeletal physiotherapists who treat an out-patient population are unknown. A phenomenographic study found that UK student physiotherapists lacked confidence in this area and perceived HP as outside the 'physiotherapy box' (Hebron et al, 2016). However, this was a study of students, whose perceptions of HP may not have yet been developed by clinical experience. The aim of this study is to explore how outpatient musculoskeletal physiotherapists understand and conceptualise HP in the UK.

METHODOLOGY

This qualitative study took an interpretative stance to explore HP as viewed by UK musculoskeletal physiotherapists. Phenomenographic methodology was used to investigate variation in understanding and conceptions (Yates et al, 2012) of HP. Epistemologically this is a 'second order' approach which focusses on 'what' and 'how' a phenomenon is experienced by another party rather than phenomenologically describing the world (Giorgi, 1999; Yates et al, 2012). It employs a non-dualistic ontology where the real and subjective world are not viewed in separation but the relationship between the phenomenon and those experiencing it is of interest (Marton, 1981; Marton & Booth, 1997; Åkerlind, 2005; Yates et al, 2012).

Recruitment

Musculoskeletal physiotherapists were purposefully recruited via emails to postgraduate courses. These were UK courses chosen because they had a musculoskeletal emphasis thus students were likely to satisfy the study inclusion criteria. Volunteers were sought nationally via Twitter and an iCSP noticeboard. (Table 1).

Table 1

Participants initiated contact via email, then the researcher introduced herself and directed volunteers to information and consent forms. Interviews were conducted over two months during Spring 2017.

Data collection

Semi-structured interviews were conducted face-to-face or via Skype™. Participants were interviewed once, individually, at home to put participants at ease and create rapport (Bruce, 1994). The participants were encouraged to speak freely about HP experiences, giving examples from their practice. Interviews followed an interview guide (Appendix 1) and attention was paid to whether participants were describing experiences or conveying their beliefs and

conceptualisations. The 45-60-minutes interviews were recorded using Windows Voice Recorder Application and MP3 Skype Recorder v4.29 then transcribed verbatim using Express Scribe v6.00 transcription software. Participants were anonymised by number allocation.

Analysis

Phenomenographic analysis followed steps outlined by Larsson and Holstrom (2007) (Table 2). After first phase analysis (step 3), transcript data was categorised into 'pools of meaning' (second-phase analysis) while paying particular attention to any change of voice that indicated where participants moved from conveying concepts to describing experiences. Tables 3 and 4 show examples of analysis in phase 1 and 2. This was an iterative process (Åkerlind, 2012) influenced by the rest of that text and the whole data (Åkerlind et al, 2005). The first author (a musculoskeletal physiotherapist with postgraduate training in research) conducted the analysis. The second author (an experienced researcher, academic and musculoskeletal physiotherapist with an interest in HP) critiqued clarity of meaning and researcher assumptions in dialogic checks (Åkerlind, 2012) and reviewed findings to establish credibility.

Table 2: Phenomenographic analysis (Larsson and Holstrom, 2007).

Table 3: Excerpt of phase 1 analysis

Table 4: Section of phase 2 analysis showing part of a pool of meaning pertaining to the physiotherapists' professional self.

FINDINGS

Data analysis formed 9 pools of meaning, with variations within each pool (Table 3). The pools were grouped into 3 main categories of meaning: self, HP education and problem solving within the therapeutic alliance and agency for change. An outcome space was structured to represent the varied conceptualisations of HP among this population of musculoskeletal physiotherapists at this time (Ireland et al, 2009; Yates et al, 2012; Åkerlind, 2012) (Figure 1).

Table 5: Summary of findings

Figure 1: Outcome Space of Findings.

Physiotherapist Self

In this category of description, participants' accounts of HP in practice highlighted distinctions and conflicts between the professional and personal 'self'. Unique HP approaches were attributed to both these selves as a product of a unique combination of experiences.

Professional Roles and Boundaries

HP was widely described as inherent to professional practice, even '*paramount*' (participant 4) but with qualitatively varied meaning. This ranged from the concept of facilitating '*anything that is in our reach*' (participant 4) to those who appeared less reconciled to HP in isolation and conceptualised it in relation to musculoskeletal conditions. e.g. smoking cessation for tissue healing (participant 2). Professional scope was cited both as a reason for and against approaching non-exercise interventions and some noted this contradiction. Participants associated their professional status both with responsibilities and barriers when it came to healthy conversations.

'I see (diet) as not necessarily my role, but then why are the other things my role?' (participant 1)

'what does that say to the patient if a week earlier they have nearly had their head bitten off by the GP (for smoking) ... and it's just brushed over (by the physiotherapist)?' (participant 4)

'They don't admit to it (ante-natal smoking) ...Because I'm a health professional and it's very heavily frowned upon' (participant 2)

Persons' family and significant others were recognised as influential in HP but with varied meaning. While all participant recognised how family can influence, even '*dictate*' (participant 3), persons' health behaviours, most portrayals of HP were targeted at individuals. Only one participant's (participant 4) descriptions, considered HP as targeting family units, communities and policy.

'you have a bigger scope, the family... you do become a bit more cost effective' (participant 4)

'(physiotherapists should) have a greater impact on policy and get ourselves out of our departments' (participant 4)

Personal Values

Participants identified that personal values may influence their approach to HP. Some rhetorically acknowledged their perspective as not having more value than the lifestyle choices of others. Some physiotherapists depicted themselves as role-models and someone who extends a *'kind hand'* (participant 5) to their fellow human by inviting others to imitate their habits. Conversely several participants remarked that this was an individual choice and that colleagues who *'keep their professional self very away from their personal self'* (participant 5) might identify role-modelling as an infringement on their privacy. One participant reported they found it *'really hard'* (participant 6) to quit smoking in the past thus empathised with those who struggled to give up unhealthy habits.

'the family might sit in front of the TV all day ... there's nothing wrong with that' (participant 3)

'I practice yoga myself and I know that helps my stress levels...' (participant 5)

Personal Rewards and Conflicts of HP

Contrasts between personal values and professional responsibilities were described. When discussing sensitive or controversial aspects of HP, participants sometimes attributed their accounts to colleagues. For example, the opinion that HP is *'vital'* (participant 3) and *'interesting'* (participant 7) was attributed to personal values but the concept that HP could be time-consuming and make clinical encounters *'more complex'* (participant 7) was attributed to colleagues.

One participant described the perceived weight of professional duty as having the potential to drive judgmental attitudes in themselves.

'I've been a little bit judgemental (of unhealthy people)... you can't help it in a way because you feel like you're expected to make a change.' (participant 6)

The descriptions of personal reward when persons made positive lifestyle changes contrasted with participants' responses to unknown outcomes of HP. When outcome was unknown, some expressed a pragmatic response, others described low self- efficacy:

'you feed off it then (when persons make healthy changes)' (participant 4)

'(I) never really hold out much hope ...we don't see what happens do we? They go away and that's it' (participant 6)

'you've just got to be comfortable that you've got the ball rolling' (participant 4)

HP Education and problem solving within the Therapeutic Alliance

In this category, education and musculoskeletal problems were used extensively as vehicles to illustrate attitudes towards HP. There were instances where co-ownership of goals and methods were not described, and various factors were perceived as influencing or relying upon the therapeutic alliance.

Physiotherapist led education and problem solving

Participants referred to methods of advising, educating, problem-solving, signposting and role modelling and referred to ideals of mutual agreement during physiotherapist-led problem solving. While one described it as *'arrogance'* (participant 5) for physiotherapists to tell persons that they could solve their problems, others appeared to portray physiotherapists solving persons' problems in a positively related sense. This contradiction was present in participants' descriptions of examples of health promotion in their practice, where rhetoric of person-led problems solving was contradicted by descriptions of repeated (and apparently unsolicited) education and advice: *'I just said the facts (about alcohol) again'* (participant 2).

Participants discussed signposting but with varied meaning. For some, signposting signified discharging their responsibilities, whilst one perceived this as a tick box exercise and questioned whether this met persons' needs. Several illustrations of education strategies were narrated without reference to any discussion pertaining to whether the person had identified changing their health habit as a goal.

'It's like a matter that is dealt with. I'm like, ok, we can manage that with this leaflet (laughs)'
(participant 2)

At times, accounts of successful HP were characterised by compliant behaviour and disappointment recounted when persons only partly adopted physiotherapists advice. Sometimes mutually agreed goals were absent from descriptions of HP and descriptions of conflict ensued between persons and physiotherapist. In the example below, the participant described emphasising physical activity goals to someone who identified pain relief as their goal. Reconciliation of differing goals was attributed to a restoration of collaborative reasoning processes and acknowledgement of goals which were meaningful to the person:

'I explained: it will be easier for her to walk and do physical stuff if she lost some weight and she said, 'I don't really think that (the weight) is the problem.... I tried to explain to her that it would be better for her joints and her knee pain, instead of the benefits of losing weight' *(participant 7)*

Person-led priorities in healthy discussions

One participant identified HP as *'trying to optimise patients'* *(participant 2)* and emphasised person-selected goals. They recalled providing a person suffering from post-natal depression with a support group leaflet and highlighted the irony of implying that *'we can manage that with this leaflet (participant 2)'*. In this instance they felt that information alone was inadequate so prioritised the person's perceived needs by supporting them with the application process rather than completing a planned physiotherapy assessment that day.

'I think we're very good at saying 'you need to do this' ... actually we need to say, 'what are you interested in?'' (participant 3)

Factors Influencing Therapeutic Alliance

Participants in this study alluded to the perceived significance of the therapeutic alliance. Although the therapeutic alliance was not mentioned explicitly, their descriptions referred to the importance of trust, communication and giving time.

All participants accounts illuminated the perceived importance of trust, but with varied meaning. Some characterised HP as a demonstration of physiotherapist benevolence which requires empathy and propagates trust within an alliance. Others depicted trust as a prerequisite of HP and felt that this was evident if persons sought their advice.

'empathy has helped me massively ... until you kind of think what it must be like for them you can't really help them' (participant 4)

'he asked me (about health promotion topic) probably because he trusted me. He could have asked a GP' (participant 7)

The importance of communication was portrayed throughout the therapeutic alliance. Some participants described difficulty initiating conversations about weight management as they perceived it to be a *'very sensitive'* (participant 3) topic and expressed a desire not to make people feel like *'idiots for choosing the wrong choice'* (participant 5). Others identified themselves as *'frustrated'* (participant 2) with persons whose health behaviours were different from their own or alluded to a perception that caseload pressures and short-term therapeutic alliances meant that *'we give people advice, they take it for a short time'* (participant 6).

'I still find it hard, it's not a nice thing to say, to lose weight, even if ... it is obvious' (participant 6)

Other participants believed resistance could be turned into a HP opportunity if *'communication strategies and techniques'* (participant 4) were refined. Time and environments available for

physiotherapists to build therapeutic alliances for HP were sometimes perceived as *'very difficult'* (participant 6) and sometimes superior to shorter GP consultations.

'I find when I'm in hydro ... it is a good place to have more health promotion discussions because it is quite laid back' (participant 1)

Agency for Change

Personal agency for change was sometimes recognised and sometimes omitted from descriptions in the data. Many contextual and internal factors were rhetorically recognised as influential in an individual's HP path but examples of helping individuals to gain agency were sometimes lacking. Healthcare itself was implicated in limiting personal agency: *'we need to start looking at how people can help themselves rather than just taking a tablet'* (participant 3).

Contextual Influences on Autonomy

Participants perceived that socioeconomic factors limited personal agency for healthy behaviours and to ignore this was seen to affect the therapeutic alliance. One example related to a pregnant sex worker with a heroin addiction whom the participant described as unlikely to engage with a professional *'who is going to tell her to stop smoking'* (participant 2). In this instance the therapist described the smoking as a low priority problem in the context of the person's health and social vulnerability, thus revealing an appreciation of the ethics of HP that was absent from other accounts.

Some participants welcomed hypothetical opportunities to remove control from persons by forcing computer shut-down to make office workers take breaks and legislating sugar content in food. Other influences surrounding access to healthy activities were also identified:

'she was very self-conscious about her size (in a swimming costume) so we said you can wear shorts you can wear what you want and she felt a bit more comfortable' (participant 3)

Internal Influences on Autonomy

Motivation was perceived as influential in behaviour change because participants' descriptions often portrayed persons as making knowingly unhealthy choices. One participant perceived that assessment of health literacy was a pre-requisite for establishing health equity alongside motivation, emotions and attitudes that influence engagement with HP. Another suggested that persons display an external locus of control and advocated that they should show resilience and 'take control' (participant 3) rather than displaying 'helpless attitudes' (participant 6) towards health. Others perceived that persons 'fall' (participant 5) into unhealthy lifestyles due to life-stresses.

'he was bored he was just filling the day with smoking' (participant 2)

'It is their choice ... it's whether they want to change, or want to choose to do something' (participant 2)

Healthcare Influences on Autonomy

Cumbersome referral pathways, financially incentivised pharmacology, equipment weight limits and service inequalities were cited as reducing opportunities to engage with healthy habits. Difficulty negotiating health systems were perceived as associated with reduced health autonomy. Rationing elective surgery to those below a certain BMI was controversial and perceived as either a 'pretty extreme' (participant 1) non-person-centred fiscal measure or a successful incentivisation intervention.

'If they can't navigate the health system (attend appointments) how are they going to navigate their own health?' (participant 4)

'GPs are very much funded (to medicate) ...what these people needed is maybe to lose some weight' (participant 3)

DISCUSSION

The aim of this study was to explore how outpatient musculoskeletal physiotherapists understand and conceptualise HP in the UK and the emergent outcome space depicts the interrelationship between physiotherapists' perceptions of self and their conceptualisations of persons' agency within the therapeutic alliance. The therapeutic alliance is considered to encompass conversations related to HP in physiotherapy practice. Within this alliance, physiotherapists' sense of professional and personal self inter-relate with the person, whose agency for change is influenced by multiple influences. The 'personal self' was composed of experiences, emotions and values drawn from life away from physiotherapy. The 'professional self' was portrayed as a product of clinical experience, professional standards and the work environment. The sense of self was further intertwined with the therapeutic alliance, as some participants reported occupying a perceived position of trust and described hesitancy when initiating healthy conversations.

Participants in this study overwhelmingly perceived HP as role compatible, but there was variation in participants perceptions of the scope of this role in physiotherapy practice. Participants' descriptions focused on exercise-based health promotion. Some participants expressed disengagement from non-exercise-based foci of HP by not deeming them to be encompassed by professional scope. Despite advocating health education, most participants reported themselves daunted by conversations relating to some HP components due to perceptions that they lacked specialist knowledge on non-exercise related topics. However, this lack of confidence in HP was expressed in relation to varying aspects of HP, therefore implying that individual factors, not professional-wide standards or training were responsible. This resonates with previous research which found lack of confidence and poor self-efficacy were barriers to physiotherapists' engagement in HP (Rea et al, 2004; Chow et al, 2017; Walkenden & Walker, 2015).

Participants in this study perceived HP as compatible with their personal values and sense of self. However, there was tension within participants' accounts relating to their sense of professional and personal self. Notably, when descriptions of HP in practice aligned with personal values, participants referred to the personal self. Conversely, when concepts were held with less conviction or comments were potentially controversial, they distanced themselves from these by attributing them to the professional self or hypothetical colleagues. This may be an area where physiotherapists identified inconsistency in their practice. This resonated with other parts of the data where healthy conversations were rhetorically of personal import, yet seemingly eclipsed by a professional emphasis on musculoskeletal problems.

The role-modelling narratives in this data resonate with previous studies suggesting that personal health behaviours of health professionals may influence their practice (Abramson et al, 2000; Oberg & Frank, 2009). However, role-modelling may negatively influence the therapeutic alliance, particularly when the personal values or opportunities of the physiotherapist do not align with those of the person. Previous research has found that in the absence of common health beliefs physiotherapists may stigmatise persons receiving care (Synnott et al, 2015). Although two participants in this study expressed a desire not to stigmatise the health choices of others, frustration and struggles to empathise also emerged in the data. These conflicting accounts resonate with medical anthropological and ethical concepts in healthcare. The medical anthropological concept of the body politic (attribution of the body's ill health to an individual's inability to live 'right') aligns with the politically and economically controlled regulation of individuals and populations (Scheper-Hughes & Lock, 1987). Conversely, understanding and recognising the socioeconomic determinants of health and their influences on persons' agency aligns with ethical concepts of healthcare. Ethical HP does not make unrealistic demands on those who lack capability or opportunity in order to avoid discrimination or low self-esteem (Delany et al, 2015).

Participants in this study conceptualised influences on persons' agency (contextual, internal and healthcare). These conceptualisations resonate with the socioeconomic influences on health and related concepts of autonomy, behaviour change and motivation (Dahlgren & Whitehead, 1991; Michie et al, 2011). However, the dominant conception present in the data was that behaviours that clashed with participants' valued outcomes (good health) were largely attributed to persons' (patients) lack of motivation to be healthy rather than lacking capability or opportunity. Uncertainty emerged in operationalisation of HP when participants stated that motivation rather than education was required to elicit behaviour change but then described trying to educate persons regardless. However, variation was present in descriptions of this education; although health coaching was not mentioned explicitly some participants descriptions of education included elements of coaching, e.g. motivational interviewing or exploring barriers to health behaviours. In the context of these educational interactions, participants explicitly emphasised communication skills, assessing health literacy and persons' readiness to change (Ljunggren and Lund, 2001). These less didactic conceptions echo the needs-analysis approach described by the behaviour change wheel (Michie et al, 2011). The coaching techniques were also described as tools to get persons ('patients') 'on board' with solutions devised by the therapist as opposed to coaching persons in finding solutions to their own high priority problems (Kivelä et al, 2014). Participants accounts did not always include descriptions of adapting care or conceptualise ethical HP.

Physiotherapy is concerned with treating the whole person (CSP, 2015) and both the Ottawa Charter (WHO, 1986) and Wheel of Behaviour Change advocate HP from individual to societal level (Michie et al, 2011). However, in this study participants' chosen examples of operationalising HP in practice revealed an individualistic approach to HP. Conceptions of social or environmental HP or population level HP were less dominant in the data, with only one participant advocating family level HP and acknowledging that the profession underrepresented

itself in policy making. Two participants explicitly referred to wider policy categories (e.g. MECC guidelines) or theoretical concepts related to HP (e.g. behaviour change). Despite holistic claims, there were portrayals of reductionist¹ thinking. This reductionist worldview was presented in relation to descriptions of personal versus professional self, 'patients' as being distinct from persons and musculoskeletal symptoms in isolation from general wellbeing. This resonated with other studies highlighting physiotherapists' struggles to address the psychosocial elements of persons' experiences (Sanders et al, 2013), as exemplified by reticence in exploring persons emotional responses and reverting to a biomechanical focus (Josephson et al, 2015).

These study findings have highlighted apparent complexities of HP in musculoskeletal physiotherapy and it is hoped that it will inspire physiotherapists to examine whether any of the identified perceptions influence their clinical practice. It is also hoped that this study can help identify relevant learning outcomes for further training and mentorship in clinical settings.

Physiotherapists may benefit from reflection on their own understanding, beliefs and philosophical position in order to help them navigate contrasting perspectives, avoid conflict and guide persons more confidently to optimise their health.

Table 6: Methodological considerations and limitations

CONCLUSION

This phenomenographic study aimed to explore musculoskeletal physiotherapists' perceptions of HP in the UK. The outcome space arising from the data depicts categories of the physiotherapists' self and persons' agency within the therapeutic alliance. Participants professional and personal 'self' were sometimes portrayed as conflicting, as were their values and those of persons whose health they intended to promote. Although participants expressed a dominant perception that HP is compatible with musculoskeletal practice, there was variation in perceptions of the extent of

¹ Reductionist: conceptualises persons in terms of their individual, constituent parts.

physiotherapists' scope of practice and self-efficacy when promoting healthy lifestyles. A multitude of external and internal factors were perceived as influencing a person's autonomy and agency for change. Within the therapeutic alliance, concepts of education and health coaching were explored. Discrepancies between described concepts and practical examples of health promotion often highlighted challenges in operationalisation of HP in practice. It is hoped that this study will prompt physiotherapists to reflect upon their conceptions and operationalisation of HP. Further research is required to identify how physiotherapist engagement in HP could be optimised.

TABLES

Participants' details			
Participant Number	Area of musculoskeletal practice	Years qualified	Education
1	NHS Outpatients, GP practice, NHS hydrotherapy	Between 5 and 10 years	BSc and M level study
2	NHS Women's health, NHS hand therapy	10+	BSc and M level study
3	NHS occupational health	10+	BSc and M level study
4	NHS outpatients	Not stated	BSc and M level study
5	Private practice and Pilates teaching	10+	BSc
6	Disability claims assessor, private practice and Pilates teaching	Under 5 years	BSc

7	Private practice	Under 5 years	BSc and M level study
* Participants were considered to be musculoskeletal physiotherapists if more than 50% of their caseload was encompassed by the Musculoskeletal Service Framework (DOH, 2006).			

Table 1: Profile of Participants

Steps of the Phenomenographic analysis	
1	Read and re-read to get a sense of the whole
2	Separate text into meaning units ('parts' of the text containing a meaning).
3	Analyse 'what' is the focus of the participant and 'how' they describe it.
4	Categorise and compare to identify 'non-dominant' understandings.
5	Describe the application of metaphors to emergent categories
6	Analyse interaction of how categories in hierarchies or relationships
7	Create an outcome space

Table 2: Phenomenographic analysis (Larsson and Holstrom, 2007).

<p>Analysing the focus of attention (phase 1 analysis) for participant 5 response to the question:</p> <p><i>And can you give any more detail on what (health promotion) might encompass?</i></p> <p>Particular attention was paid to whether the participant was conveying beliefs/conceptualisations or describing lived experience. This is indicated by change of voice e.g. moving from 'I' to "we / physiotherapists" to mentioning a specific person "she/he" to "patient").</p>		
Quote:	What is the focus of the meaning unit?	How do they describe it?
So yep health promotion definitely, as a physiotherapist, I am going to say movement and posture and trying to um reduce people's time being sedentary, to get people more active, to get people um stronger um, more cardiovascularly active	Physiotherapist perspective on health promotion	<p>Within physiotherapy health promotion is physical components of health</p> <p>Being a physiotherapist colours perception of health promotion</p>

and also looking at diet, looking at other health choices, looking at smoking, drinking, generally being the healthiest we can be. Within reason (laughs)	diet, smoking, drinking and health choices as part of health promotion.	The non-physical components are mentioned as adjunct to movement components. Within reason- implies some components of health promotion might not be realistic?
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Table 3: Excerpt of phase 1 analysis

Pool of meaning pertaining to the physiotherapists' professional self (phase 2 analysis)	
How do they describe it? (from phase 1 analysis)	Corresponding quotes
Physiotherapist goal does seem to include patient complying with physiotherapist recommendations and the outcome is described as physiotherapist trying to get maximum out of patient.	I quite liked the outcome although it was not, you know, the maximum I could get out of it but at least she was co-operating with me afterwards (participant 7)
Individual clinicians might discuss weight loss as an adjunct to exercise this is prompted by personal mindset rather than being profession wide. There is no service protocol or standard procedure to prompt all physiotherapists to discuss weight loss	but I suppose we discuss it (weight loss) because it is linked quite closely with exercise. But it depends on the clinicians. Some people might discuss these things less and there is no protocol or um kind of set thing that we should be speaking about with our patients, so we're not prompted on our paperwork to have these discussions. (participant 1)
Does not want to tell other physiotherapists what they should or shouldn't do, no obligation but does feel that it is good for them to try and do something in the context of health promotion	I didn't say they (physiotherapists) should do it or not but for them to try and do something it is always good. (participant 7)
Cites exercise as physiotherapists first choice of treatment. There are effects of exercise on stress and emotion, cardiovascular and strength	Yes physical exercise I don't know, well obviously as physiotherapists that's like our favourite thing isn't it and I think it can help with stress I think that um yeh it can definitely help with stress, and I think that it can help with so many things, obviously strengthening cardiovascular but it can help emotionally as well (participant 6)
Within physiotherapy health promotion is dominated by physical components of health	as a physiotherapist, I am going to say movement and posture and trying to um reduce people's time being sedentary, to get people more active, to get people um stronger um, more cardiovascularly active (participant 5)
Individual feedback reassures that this therapist addresses the physiotherapist role of addressing other problems (which contribute to or impact on or drive the problem that was the focus of the referral)	really reassuring because that's our role, it's not just to sort out a sore ankle and things. (participant 3)
This physiotherapist's job role is one of physiotherapist but has an organisational relationship with health and	my job sits within physiotherapy but actually it is funded and comes under the health and

wellbeing	wellbeing projects so that is the. ok. so that includes myself and the manual handling team there is counselling services and we also have different events and facilities for people <i>(participant 3)</i>
Feel that as physiotherapists they have been told what they should be doing, to offer information on other services that are available	We've been told in our trust that we should... we quite regularly have people come in and say we offer this service, say for example the slimming world service <i>(participant 2)</i>
Sees health promotion as taken for granted as part of physiotherapist role, nb occupational health bias in this participant.	cos obviously health promotion is part of our role <i>(participant 3)</i>
staff physiotherapist service role has an element of health promotion	so within that role there is an aspect of health promotion <i>(participant 3)</i>
The health promotion aspect is seen as important for the service users	it's quite important for our um for our, our customers clients, patients, members of staff and <i>(participant 3)</i>
Other colleagues with research interests in health promotion prompt general staff discussion about use of health promotion. Other colleagues with research interests in health promotion prompt general staff discussion about use of health promotion. Health promotion is described as something to be used, like a tool?	Health Promotion with patients with OA and so that prompts discussions within the department about kind of how we use Health Promotion because it is that general staffroom talking, or within our admin area <i>(participant 1)</i>
The perception that physiotherapists are not expected by people to talk about health is seen as something that physiotherapists need to work on. The CSP is doing a reasonable job of promoting expectations that physiotherapists will talk about health	but I also think they also really don't expect us to talk about health I think that's something we've got to work on I think the CSP are doing a reasonable job in promoting that I think <i>(participant 4)</i>
Also sees physiotherapists collectively as a profession which needs to perceive health promotion as central before they can start making 'inroads' into better managing 'patients'. This physiotherapist sees health promotion to be perceived as more important by the profession because it will have an effect of patient management	to it I think, when we can kind of see that as a collective profession, collectively as a profession, I think we'll start to make gradual inroads into managing patients better <i>(participant 4)</i>
In addition to the profession's perception of health promotion this physiotherapist feels that physiotherapists need to put themselves in positions where they impact policy and perceptions of health promotion.	I think that if we can put ourselves also in positions where we have a greater impact on policy and I think if we can get ourselves out of our departments in a much more collaborative fashion ... <i>(participant 4)</i>
Seeing health promotion as one entity is wrong it needs to be primary secondary and tertiary.	I think that health promotion will move away from being just health promotion it will be seen for what it actually is, and that is like I said; the primary, the secondary, the tertiary of health promotion. <i>(participant 4)</i>
Sees that altering the perception of health promotion is a big challenge. Describes physiotherapy as a profession that is capable of altering perception of health promotion. Describes it as the responsibility of the physiotherapy profession to demonstrate that they have the skills to help public health and 'the public health world'	Yes, it is a big challenge, but I think that as a profession we are definitely capable of doing it. And it's our jobs to show people that we have the skills to really help the public health, the public health world so yeh. <i>(participant 4)</i>

Table 4: Excerpt of phase 2 analysis

Categories	Pools and variations within each category		
Physiotherapist Self	Professional roles and boundaries: <ul style="list-style-type: none"> • HP paramount. • HP in context of MSK. • Professional Responsibility versus scope. • Professional status • HP for individuals, families, policy. 	Personal Values: <ul style="list-style-type: none"> • Influence and merit of own values. • Acceptability of role modelling. • Empathy. 	Personal rewards and conflicts of HP: <ul style="list-style-type: none"> • Conflict between personal values and professional duty. • Physiotherapists' values versus persons' values. • Pressures of expectation and resources on HP. • Rewards of success. • Physiotherapist self-efficacy.
Health Promotion education and problem solving within the therapeutic alliance	Physiotherapist led education and problem-solving: <ul style="list-style-type: none"> • Advising, educating, problem-solving, signposting and role modelling. • Knowledge does not equal change. • Unsolicited advice versus collaborative reasoning. • Arrogant versus positive problem solving. • Striving for compliance. • Collaborative goal-setting. 	Person-led priorities in healthy discussions: <ul style="list-style-type: none"> • Person selected goals. • Persons' needs versus therapist goals. 	Factors Influencing the Therapeutic Alliance: <ul style="list-style-type: none"> • Frustration or guilt versus empathy. • Trust as a pre-requisite or product of the therapeutic alliance. • Communication, time and environments.
Persons' Agency for change	Contextual influences on Autonomy <ul style="list-style-type: none"> • Socioeconomic factors impact on agency and the therapeutic alliance. • Strategic removal of control. • Barriers to healthy choices. 	Internal influences on Autonomy <ul style="list-style-type: none"> • Motivation. • Health literacy. • Resilience. 	Healthcare influences on Autonomy <ul style="list-style-type: none"> • Healthcare systems. • Access to services. • Financial incentives and fiscal measures.

Table 5: Summary of findings

Component of trustworthiness (Lincoln & Gruber, 1985; Korstjens & Moser, 2018).	Measures used to promote trustworthiness in this study	Methodological limitations and other considerations

<p>Credibility: <i>The confidence that can be placed in the truth of the research</i></p>	<ul style="list-style-type: none"> • Prolonged engagement (January 2017 until September 2018) with audio and written transcripts occurred when interpreting meaning (Kvale, 1996). • Open and reflective dialogic checks between authors (Korstjens & Moser, 2018). • Recruitment of physiotherapists working in a range of musculoskeletal specialisms treating a diverse range of persons. 	<ul style="list-style-type: none"> • Only 7 participants were included which may be considered a limitation of this study. It is possible that including more participants would have provided further variation in conceptions (Krem 2017). We accept that these are the variations within these participants at this point in time. We do not claim, not is it the intention of phenomenography to achieve data saturation (Åkerlind et al, 2005, Saunders et al, 2018, Braun & Clarke, 2019). Taking an interpretative approach, we do not believe that it is possible to saturate all possible interpretations or conceptualisations. • Discrepancy between language and meaning has been cited as a flaw of interview data (Sin, 2010) and phenomenographic analysis also attends to discrepancy between rhetoric as opposed to lived-through descriptions. • Member checking was not used as it is incompatible with phenomenography which seeks to focus on participants as a collective rather than as a series of individuals (Åkerlind et al, 2005).
<p>Transferability: <i>The degree to which findings can be transferred to other contexts.</i></p>	<ul style="list-style-type: none"> • In order to facilitate richer (thick) description and prolonged engagement with the data, this study included a small number of participants. • This study seeks to present findings that the reader may find resonance with and consider in the context of their own practice. 	<ul style="list-style-type: none"> • This study presents the conceptualisation of these participants at this point in time and did not aim to saturate the different variations (Åkerlind et al, 2005, Saunders et al, 2018, Braun & Clarke, 2019). It does not seek to claim reality or transferability (Sin, 2010, Myata & Kai, 2009).
<p>Dependability: <i>Stability of findings over time and the extent to which</i></p>	<ul style="list-style-type: none"> • An established methodology and method of phenomenographic 	

<p><i>findings are supported by the data.</i></p>	<p>analysis (Larsson and Holstrom, 2007) was used to promote dependability.</p> <ul style="list-style-type: none"> Enhanced by using quotes to illuminate how the categories of description and variations of meaning within these categories were present in the data. 	
<p>Confirmability: <i>The degree that findings can be confirmed by others</i></p>	<ul style="list-style-type: none"> Clarifying questions from the interview schedule (Appendix 1) used to encourage participants to expand on their answers and promote confirmability of data 	<ul style="list-style-type: none"> Online recruitment and Skype interviews were employed so that geography did not limit participation, but it is plausible that the medium of Skype™ muted subtle nuances of meaning.

Table 6: Methodological considerations and limitations

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