Person-centred care in the physiotherapeutic management of long-term conditions: a critical review of components, barriers and facilitators

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Abstract
Background: In the management of long-term conditions, the role of physiotherapy and the construct of person-centred care are evolving. Though it is discussed thoroughly in some disciplines, theorising about person-centred care is embryonic in the physiotherapy literature, with evidence suggesting ambiguity regarding its conceptualisation and application.

Aim: To critically review evidence for barriers to, and facilitators of, person-centred care in adults living with long-term conditions in a physiotherapy context, and identify its components and outcomes in practice.

Method: A systematic electronic search strategy to identify quantitative, qualitative and mixed-methods studies that collected data relating to the concept of person-centred care and included physiotherapists working with adults (≥18 years) living with long-term conditions in any setting.

Findings: Four quantitative studies, three qualitative and one mixed-methods (a total of eight articles), were selected for critique and synthesis. Outcomes identified by the authors included perceived self-management and ‘patient’-centredness, self-efficacy (assessed using the six-item chronic disease self-efficacy scale, and the pain self-efficacy questionnaire) and quality of life (assessed using the short form-36 quality of life questionnaire). Components of person-centred care were identified as self-management, ongoing care, decision making, individualisation, information sharing and goal setting.

Evidence suggests barriers and facilitators may be influenced by the key stakeholders in processes, outcomes and contexts of care delivery.

Conclusions: There is limited, mixed-quality evidence in relation to person-centred care in physiotherapy practice for management of long-term conditions. This review synthesises concepts described in the physiotherapy literature in a conceptual framework, which is contrasted with existing models and frameworks relating to person-centred care, to trigger further discussion.

Implications for practice:
- There is a need to study physiotherapists’ awareness of the complexity of person-centred care in practice
- Quality of evidence is mixed, highlighting a need for further exploration within physiotherapy contexts
- Evidence suggests person-centred care can be better delivered by physiotherapists if they address barriers and enhance facilitators to its enactment

Keywords: Person-centred care, patient-centred care, long-term conditions, physiotherapy, barriers, facilitators
Introduction

Person-centred care emphasises equal partnerships between healthcare professionals and the persons they care for, in planning, developing and accessing care to ensure it meets the person’s needs (De Silva, 2014). Policy drivers and an overwhelming amount of evidence supporting a person-centred approach have placed it at the core of healthcare for people living with long-term conditions (Institute of Medicine, 2001; Nolte and McKee, 2008; House of Commons, 2014; World Health Organization, 2016). Long-term conditions, defined as health conditions lasting a year or more and impacting on a person’s life by requiring ongoing care (House of Commons, 2014; Healthcare Improvement Scotland, 2014) are currently the leading global cause of mortality and present huge challenges to healthcare (Department of Health 2012; House of Commons, 2014; World Health Organization, 2016). Physiotherapists are increasingly involved in fostering health literacy and self-management of long-term conditions across primary, secondary and tertiary care (Robinson et al., 2014; Turner et al., 2015; Chartered Society of Physiotherapy, 2017). Although person-centred care is thought to underpin high-quality care (Pinto et al., 2012; Coulter et al., 2015; Chartered Society of Physiotherapy, 2017), it is not always implemented, with negative impacts on outcomes (Fredericks et al., 2015). This supports the need to explore the body of evidence in relation to how person-centred care is manifested within physiotherapy practice, and what factors promote or hamper implementation.

Research on the subject in the field of physiotherapy is considered embryonic compared with the long history of discourse in the medical, nursing and mental health literature, where the terms personalised-, patient-, person-, and client-centred care are used synonymously (Kitson et al., 2013). Unless directly discussing previous research, this article uses the term ‘person-centred’ to represent the humanistic underpinning values of mutual respect, understanding for persons and individual rights to self-determination (McCormack et al., 2011; McCormack and McCance, 2017). Currently, there is no standardised definition of person-centred care across disciplines, partially reflecting its complexity. This is problematic for physiotherapists aiming to enact the expectations of the UK Chartered Society of Physiotherapy (CSP) that all members should work in a person-centred way (Owen, 2013).

Existing conceptual models show the development of person-centred care in different contexts and demonstrate ambiguity in relation to its key components (Mead and Bower, 2000; Hobbs, 2009; Morgan and Yoder, 2012; McCormack and McCance, 2017). These four models are discussed below.

Early frameworks used the term ‘patient-centred’ (Mead and Bower, 2000; Hobbs, 2009), but the use of ‘person-centred care/practice’ has increased since (Morgan and Yoder, 2012; McCormack and McCance, 2017). Mead and Bower focus on doctor-patient relationships, while Hobbs, and Morgan and Yoder explore nursing in acute and post-acute hospital settings. McCormack and McCance developed their work from a focus on nursing to address wider healthcare practice. Despite differences in professional contexts, many underlying similarities are evident within these frameworks, emphasising the interaction between the person providing care and the person receiving it. Characteristics and capabilities of care providers are highlighted in relation to their recognition of the ‘patient as person’ (Mead and Bower, p 1089). Repeated emphasis is also placed on the necessity to approach a person’s needs holistically, which means including the biopsychosocial and spiritual aspects of their experience and respect for their beliefs and values (Mead and Bower; Morgan and Yoder; McCormack and McCance). Mead and Bower argue that enacting this care approach requires self-awareness, and interpersonal and intrapersonal abilities. McCormack and McCance develop these concepts further in their model by naming the prerequisites of the practitioner as: knowing self; clarity of beliefs and values; professional competence; commitment; and interpersonal skills. The ability of the practitioner to bring these capabilities together in a caring or sympathetic presence is highlighted by McCormack and McCance as well as by Hobbs, and is reflected in empathy, congruence and positive regard. Hobbs (p 55) cites the ‘rule of orientation’, defining it as ‘the ability to determine when, and how to deviate from the established norms and standards when the patient situation dictates’. Hobbs considers this a critical factor in a patient’s experience of person-centred care. This is important in enabling a practitioner to balance the values of patients and organisation.
These characteristics and priorities of the person providing care are portrayed as influencing engagement and relationships – described by different authors as ‘therapeutic alliance’ (Mead and Bower), ‘therapeutic engagement’ (Hobbs) and ‘engagement’ (McCormack and McCance). Expansion of these terms in the four models underlines the importance of respect, a sharing of power and responsibility, a common understanding of goals, shared decision making, individualising and customising interventions, and supporting autonomy and empowerment.

The outcomes of person-centred care are conceptualised somewhat differently between the four frameworks. Mead and Bower emphasise that the person receiving care should perceive interventions and goals to be relevant, agreed and effective, while Hobbs prioritises the perception that needs are met and suffering is lessened. These may all be reflected in ‘satisfaction with care’, a key outcome for Morgan and Yoder, and for McCormack and McCance. Interestingly, McCormack and McCance include a more positive focus on a ‘feeling of wellbeing’, which goes beyond the experience of illness and related interventions and has resonance for the context of people living with long-term conditions.

The more recent of the frameworks consider the impact of organisational culture and physical environment. Hobbs contrasts the command-and-control leadership style with shared governance in relation to facilitation of person-centred care. Morgan and Yoder consider physical and cultural healthcare environments, emphasising vision and commitment, organisational attitudes and behaviours, and shared governance. They suggest ‘a culture that values respect, empowerment and choice for patients and staff is paramount’ (p 5). McCormack and McCance have developed this aspect of their Person-centred Practice Framework substantially, conceptualising the care environment as including supportive organisational systems, power sharing, potential for innovation and risk taking, the physical environment, appropriate skill mix, effective staff relationships and shared decision making. This model is the only one of the four to address interprofessional skills as a prerequisite – important in relation to allied health professionals working with people living with long-term conditions. McCormack and McCance also focus on healthcare as a whole, rather than on specific contexts or relationships with specific professionals. On initial analysis, theirs is the framework that has the greatest resonance with contexts of physiotherapy and long-term conditions, but further clarification of its relevance and how it might be enacted by physiotherapists would be valuable.

Physiotherapy historically developed and gained validation within the field of science largely as a result of its biomedical view of the body and its dissociation of emotion from touch (Nicholls and Gibson, 2010). In contrast, Hobbs (2009, p 55) notes: ‘A caring presence generated by the nurse and evident manifestations such as touch, being present, and frequent communication with the patient is paramount if the interaction is to be successful in alleviating vulnerabilities experienced by the patient’. Although there is increasing consideration of the biopsychosocial aspects of a person’s life, the body is generally considered the starting point in physiotherapy (Nicholls and Gibson, 2010). This is only one aspect of personhood when considering the philosophical roots of person-centred care. Therefore, it is important to consider carefully how existing models, developed in different contexts, enlighten physiotherapy practice.

There have been some studies of physiotherapy practice that explore concepts evident in models of person-centred care and suggest factors that may form barriers or facilitators in terms of its implementation. For example, research in stroke rehabilitation addresses the importance of goal setting, engagement and self-management, and related barriers and facilitators (MacDonald et al., 2013; Norris and Kilbride, 2014; Plant et al., 2016). Evidence suggests successful goal setting and patient engagement are facilitated by individualisation, effective communication and therapeutic connection, and knowledge sharing (MacDonald et al., 2013; Plant et al., 2016), which are concepts evident in the frameworks discussed above. Norris and Kilbride (2014) evaluated experiences of physiotherapists, mainly in the community and acute care, and found some of the barriers to self-management to be environment, paternalistic views held by therapists and their fear of holding less control. Beyond
stroke rehabilitation, Schoeb and Burge (2012) conducted a narrative synthesis of 11 qualitative studies investigating how patients and physiotherapists perceive patient participation. Barriers included struggles to share power and responsibility on both sides, physiotherapists’ struggles with defining and applying key concepts of person-centred care and with communication skills, and patients’ lack of knowledge about what is expected of them. When language used by physiotherapists was evaluated, it was evident they engaged in a therapeutic relationship from within a biomedical paradigm, addressing patients’ functions and clinical outcomes, but were reluctant to engage in discussions of emotions and self-evaluations (Josephson et al., 2015). These findings highlight fundamental challenges to establishing therapeutic engagement/alliance/relationship, viewed as key in several person-centred care models and as having impacts on treatment outcomes like pain, disability, and patient satisfaction (Mead and Bower, 2000; Hobbs, 2009).

Physiotherapy education strives to include a focus on the necessity of active engagement with persons and their families who interact with the profession, through goal setting, information exchange, decision making and exercise training (Schoeb and Burge, 2012; MacDonald et al., 2013). While some of these aims can be considered person-centred in nature, their enactment may or may not be. Understanding current thinking is crucial to the development of insight and theory into the way person-centred care is practised within physiotherapy (Mudge et al., 2014).

Therefore, this critical review includes quantitative and qualitative studies focusing on concepts aligned with person-centred care in the context of physiotherapists working with people living with long-term conditions. The article aims to identify its components and analyse the evidence for barriers and facilitators that apply in physiotherapy practice. Finally, the article aims to contrast current thinking with relevant models of person-centred care and suggest areas requiring further discussion, exploration and clarification within physiotherapy.

Method
Design
This critical review includes studies using quantitative, qualitative and mixed or multiple methods in order to gather as much evidence as possible. The three-stage framework proposed by Thomas et al. (2004a) and recommended by the Joanna Briggs Institute (2014) is used, whereby qualitative and quantitative data are extracted, analysed separately (stages one and two), and synthesised (stage three) to answer the research question.

Search strategy
An electronic search strategy (see table 1) was completed in June 2016 by one reviewer (SD), using CINAHL, MEDLINE, PsycINFO and Scopus. Keywords relating to common elements and synonyms of long-term conditions and physiotherapy were gathered from the health science literature and, where possible, medical subject headings (MeSH) were used to identify literature with related concepts or near-synonyms of ‘chronic disease’ and ‘patient-centred care’. Selection of keywords relating to person-centred care was challenging due to its complexity and ambiguity. Previous reviews that generated conceptual analysis and theoretical frameworks used words such as patient/person/client/resident-centred/focused care (Hobbs, 2009; Morgan and Yoder, 2012). Similar synonyms were selected here, with further recurring terms from the theoretical frameworks, including: holistic; patient participation; individualised; shared decision making; therapeutic alliance; and communication (Mead and Bower, 2000; Hobbs, 2009; Morgan and Yoder, 2012; McCormack and McCance, 2017). Additional concepts were included that emerged less often in these frameworks but resonated with physiotherapy and people living with long-term conditions: self-management; collaborative care; team-based care; and integrated care. It is acknowledged that these terms are not exhaustive when considering concepts relating to person-centred care.
### Table 1: Search strategy and keywords

| Keywords Combinations                                                                 |
|--------------------------------------------------------------------------------------|
| **Condition**                                                                        |
| 1. “Long term condition*”                                                             |
| 2. “Long term illness*”                                                                |
| 3. “Long term disease*”                                                                |
| 4. “Chronic condition*”                                                               |
| 5. “Chronic illness*”                                                                  |
| 6. “Chronic disease” [MeSH]                                                           |
| 7. “Patient centered care” [MeSH]                                                     |
| 8. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7                                            |
| **Exposure**                                                                          |
| 9. “Patient centered care” [MeSH]                                                     |
| 10. “patient cent*”                                                                   |
| 11. “Person cent*”                                                                   |
| 12. “Client cent*”                                                                   |
| 13. “patient participation”                                                            |
| 14. “patient oriented”                                                                |
| 15. “Individualised care”                                                             |
| 16. “Individualized care”                                                             |
| 17. “Shared decision making”                                                          |
| 18. “Collaborative care”                                                              |
| 19. “self management”                                                                 |
| 20. “therapeutic alliance”                                                            |
| 21. communication                                                                     |
| 22. “Tailored care”                                                                   |
| 23. “Team based care”                                                                 |
| 24. “Integrated care”                                                                 |
| 25. “Holistic”                                                                        |
| 26. #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 |
| **Context**                                                                           |
| 27. Physiotherap*                                                                     |
| 28. “Physical therap*”                                                                |
| 29. rehabilitation                                                                    |
| 30. #26 OR #27 OR #28                                                                 |
| **Combination**                                                                       |
| 31. #8 AND #26 AND #29                                                                |
| 32. #9 OR #10 AND #26                                                                 |

Combinations of keywords were used with Boolean operations in each database. Combination #29 was carried out within the list of databases and combination #30 was carried out within the Scopus database. Study inclusion and exclusion criteria are summarised in table 2. Initially, article titles were screened for inclusion criteria and duplicates were removed. Where unclear, article abstracts were screened using a selection template indicating ‘yes,’ ‘no,’ or ‘undecided’; the latter were read in full.

### Table 2: Summary of inclusion and exclusion criteria

| Inclusion criteria                                                                 | Exclusion criteria                                      |
|------------------------------------------------------------------------------------|---------------------------------------------------------|
| **Population**                                                                      |                                                         |
| • Men and women                                                                      | • Unspecified conditions                                 |
| • Adults ≥18                                                                         | • Acute conditions                                       |
| • Living with long term conditions¹                                                 | • Adolescents and children <18                          |
| **Exposure**                                                                        |                                                         |
| • Physiotherapy in hospitals, community, or primary care                             | • Physiotherapy in palliative care/hospices             |
| **Outcome**                                                                         |                                                         |
| • Measures of components of person-centred care                                     | • Measures of components unrelated to person-centred care|
| **Combination**                                                                     |                                                         |
| • Peer reviewed                                                                      | • Non-English                                           |
| • All study designs including data collection                                       | • Non-methodological design                              |

¹ Long-term conditions included: cancer; cardiovascular disease; chronic musculoskeletal conditions; chronic pain; chronic respiratory disease; diabetes; epilepsy; hypertension; mental health; neurological conditions; and stroke/transient ischaemic attack (Goodwin et al., 2010; Department of Health, 2012)
Quality appraisal
Evaluation of qualitative studies, or components of studies, was conducted using the Critical Appraisal Skills Programme (CASP) tool due to evidence supporting its descriptive and external validity and reproducibility (Dixon-Woods et al., 2007; Hannes et al., 2010). Based on the appraisal, credibility, transferability, dependability, and confirmability were determined. Quantitative studies, or components of studies, used the Effective Public Health Practice Project (Evans et al., 2009) quality assessment tool for quantitative studies due to evidence supporting its content validity and test-retest reliability as well as flexibility of application to different study designs (Thomas et al., 2004b). Study design criteria were graded individually as ‘strong’, ‘moderate,’ or ‘weak’ and the study as a whole given a global rating. If studies had two or more individual weak ratings, the global rating was considered weak. If there was a single rating of weak, the global rating was moderate and if there were no weak ratings, the study received a global rating of strong (Thomas et al., 2004b).

Data extraction and synthesis
One reviewer (SD) extracted and tabulated article information. As proposed by Thomas et al. (2004a), stage one involved thematic content analysis of qualitative findings to group research findings demonstrating similarities in ideas and concepts. These groups were defined as themes and were further differentiated into person-centred care components, barriers or facilitators. Components were considered to be the underlying principles and were identified as the overarching concept or topic of a study if they were congruent with any concepts or dimensions from existing person-centred care models (for example, decision making) or if they were novel (for example, self-management). Barriers were defined as factors hindering delivery, such as organisational constraints, and facilitators as factors fostering it, such as therapeutic relationship. Barriers and facilitators were identified in studies if the authors discussed them as such in the results of the paper. For stage two, quantitative findings relating to the research questions were analysed narratively and used to identify themes. In the final stage, the data from syntheses of quantitative and qualitative findings were combined to address the aims of identifying the components, facilitators and barriers in physiotherapy with people living with long-term conditions.

Results
Figure 1 summarises the process of selection from 1,831 search results from the databases to eight articles, from six studies, selected for review. Three were qualitative, with two of these derived from the same study and participants (Cooper et al., 2008, 2009; Stenner et al., 2015). Four were quantitative, with two based on the same study and participants (MacKay et al., 2012; Peng et al., 2014; Gardner et al., 2015, 2016) and one used mixed methods (Dufour et al., 2015). Table 3 summarises study characteristics and demonstrates there was little consistency between research aims. A total of 439 adults living or diagnosed with long-term conditions who experienced physiotherapy in hospital or the community were included (table 4) and all studies explored person-centred care from the patient perspective. More participants were women (63.3%) and most studies included people living with low back pain in Canada, Australia or the UK.
Figure 1: Schematic representation of the study selection process

CINAHL - 310 • Medline - 851 • PsycINFO - 308 • Scopus - 362

Total hits 1,831

Total hits after filters applied 1,244

Rejected titles 1,011

Selected titles 233

Duplicates removed 26

Selected titles for abstract screening 207

Rejected abstracts 170

Selected abstracts for full-text analysis 37

Rejected full-text articles 29

Articles included for the review 8
## Aims

- **Cooper et al., 2008**
  - To define patient-centredness, in the context of physiotherapy for chronic low back pain (CLBP)
- **Cooper et al., 2009**
  - To explore CLBP patients’ perceptions of self-management following physiotherapy
- **MacKay et al., 2012**
  - To describe patients’ recall of advanced practice physiotherapist (APP) recommendations, use of self-management strategies and barriers to self-management six weeks following orthopaedic consultation, and compare exercise and self-efficacy at baseline and six weeks
- **Peng et al., 2014**
  - To determine if client’s sex, age, or number of chronic conditions significantly influenced the self-management goal-setting behaviour of community physiotherapists
- **Dufour et al., 2015**
  - To evaluate a self-management programme using standardised self-rated and performance measures, pre- and post-intervention

## Design

- **Cooper et al., 2008**
  - Qualitative, unspecified approach
- **Cooper et al., 2009**
  - Qualitative, unspecified approach
- **MacKay et al., 2012**
  - Quantitative
  - Cohort, single group pre- and post-intervention
  - Pilot study
- **Peng et al., 2014**
  - Quantitative
  - Case control
  - Descriptive
  - Longitudinal
  - Retrospective chart review
- **Dufour et al., 2015**
  - Mixed methods: quantitative/qualitative
  - Qualitative – unspecified approach
  - Quantitative – cohort, single group

## Data collection and outcome measures related to person-centredness

- **Cooper et al., 2008**
  - Purposive sampling
  - Semi-structured interviews with patients
- **Cooper et al., 2009**
  - Purposive sampling
  - Semi-structured interviews with patients based on low back pain history, expectations and satisfaction of physiotherapy, needs and current coping mechanisms
- **MacKay et al., 2012**
  - Purposive sampling
  - Self-efficacy for managing chronic disease using six-item scale completed at baseline and at six-week follow-up
- **Peng et al., 2014**
  - Goal characteristics collected: number of goal sets, identification of goal as self-management, non-self-management, or non-goals, and type of goal set
- **Dufour et al., 2015**
  - Convenience sampling
  - Measure of self-efficacy using six-item scale and quality of life using visual analogue scale before and after intervention
  - Participant focus groups conducted in the final session of programme and narrative reflections

## Exposure/intervention

- **Cooper et al., 2008**
  - Physiotherapy sessions: mixed (seven), group (four), individual (14)
- **Cooper et al., 2009**
  - Physiotherapy sessions: mixed (seven), group (four), individual (14)
- **MacKay et al., 2012**
  - Non-surgical patients received intervention of education on conservative management strategies and had telephone follow-up six weeks later
- **Peng et al., 2014**
  - Physiotherapy treatment between July 2009 and July 2010
- **Dufour et al., 2015**
  - Eight-week group-based programme including health coaching, circuit-based exercise and mindfulness-based stress reduction (MBSR)

## Limitations

- **Cooper et al., 2008**
  - Small sample size
  - Physiotherapists as interviewers
- **Cooper et al., 2009**
  - Small sample size
  - Physiotherapists as interviewers
- **MacKay et al., 2012**
  - No control
  - Cannot establish cause-effect between changes and APP recommendation
  - Participants may have seen other health professionals during follow-up
  - Reliance on patient recall of physiotherapist recommendation
- **Peng et al., 2014**
  - Lacking information on severity of conditions, number of involved physiotherapists, level of their experience, amount of goal-setting training
  - Reliance on physiotherapist report accuracy
- **Dufour et al., 2015**
  - High attrition rate (32%)
  - Findings do not demonstrate efficacy
  - Facilitator who conducted health coaching sessions also conducted focus groups

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**Table 3: Study characteristics**

| Author/year | Aims | Design | Data collection and outcome measures related to person-centredness | Exposure/intervention | Limitations |
|-------------|------|--------|---------------------------------------------------------------|-----------------------|-------------|
| Cooper et al., 2008 | To define patient-centredness, in the context of physiotherapy for chronic low back pain (CLBP) | Qualitative, unspecified approach | Purposive sampling | Physiotherapy sessions: mixed (seven), group (four), individual (14) | Small sample size, Physiotherapists as interviewers |
| Cooper et al., 2009 | To explore CLBP patients’ perceptions of self-management following physiotherapy | Qualitative, unspecified approach | Purposive sampling | Physiotherapy sessions: mixed (seven), group (four), individual (14) | Small sample size, Physiotherapists as interviewers |
| MacKay et al., 2012 | To describe patients’ recall of advanced practice physiotherapist (APP) recommendations, use of self-management strategies and barriers to self-management six weeks following orthopaedic consultation, and compare exercise and self-efficacy at baseline and six weeks | Quantitative | Purposive sampling | Non-surgical patients received intervention of education on conservative management strategies and had telephone follow-up six weeks later | No control, Cannot establish cause-effect between changes and APP recommendation, Participants may have seen other health professionals during follow-up, Reliance on patient recall of physiotherapist recommendation |
| Peng et al., 2014 | To determine if client’s sex, age, or number of chronic conditions significantly influenced the self-management goal-setting behaviour of community physiotherapists | Quantitative | Purposive sampling | Physiotherapy treatment between July 2009 and July 2010 | Lacking information on severity of conditions, number of involved physiotherapists, level of their experience, amount of goal-setting training, Reliance on physiotherapist report accuracy |
| Dufour et al., 2015 | To evaluate a self-management programme using standardised self-rated and performance measures, pre- and post-intervention | Mixed methods: quantitative/qualitative | Convenience sampling | Eight-week group-based programme including health coaching, circuit-based exercise and mindfulness-based stress reduction (MBSR) | High attrition rate (32%), Findings do not demonstrate efficacy, Facilitator who conducted health coaching sessions also conducted focus groups |
### Table 3: Study characteristics (continued)

| Author/year | Aims | Design | Data collection and outcome measures related to person-centredness | Exposure/intervention | Limitations |
|-------------|------|--------|---------------------------------------------------------------|----------------------|-------------|
| Gardner et al., 2015 | • To determine the extent of alignment between clinical outcome measures and patient-derived goals for managing CLBP | • Quantitative • Longitudinal cohort, single group • Pilot study | • Convenience sampling • Goal domains and goal attainment acquired from 'participant workbook' | • Five sessions with two monthly follow-ups • Participants given a workbook for goals, progress, issues, barriers, and strategies | • Participants continued other CLBP treatments • Participants were non-care seeking, therefore may not represent primary care population • No measures of psychological distress • Single researcher conducted the intervention |
| Stenner et al., 2015 | • To explore experiences of involvement in treatment decision making, and what support is needed by patients with non-spinal CLBP with exercise in their management plan | • Qualitative • Interpretive phenomenology | • Convenience sampling • Semi-structured interviews with patients investigating barriers to shared decision making | • Physiotherapy with exercise as part of non-spinal CLBP management | • Participants viewed on a single occasion • Potential recall bias • Volunteers as sample |
| Gardner et al., 2016 | • To test the preliminary effectiveness of a patient-led goal-setting intervention on improving disability and pain in CLBP | • Quantitative • Longitudinal cohort, single group • Pilot study | • Convenience sampling • Measurement of self-efficacy using pain self-efficacy questionnaire, and quality of life using short form-36 questionnaire before the intervention and in two follow-ups over two months | • Patient-led intervention with goal setting and education over two months | • Small sample size • Volunteers • Single researcher • Cannot establish cause-effect relationship • Participants were non-care seeking, and may not represent primary care population • High attrition rate (67%) |
| Author/year                  | Population of interest                                                                 | Perspective | Number (N)/% women                                                                 | Age (years)          | Duration of condition       | Nationality | Recruitment location |
|-----------------------------|----------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------|----------------------|-----------------------------|-------------|----------------------|
| Cooper et al., 2008, 2009   | People living with chronic low back pain (CLBP)                                        | Patient     | N = 25 80% women (20)                                                            | Range: 18-65         | CLBP > six months           | Scottish    | Primary care, community |
| MacKay et al., 2012         | People living with hip/knee arthritis: 100% with hip/knee arthritis, 72% with comorbidities | Patient     | N= 73, 67% women (49)                                                            | Range: 19-82 (mean: 58.5) | Not stated                  | Canadian    | Hospital             |
| Peng et al., 2014           | People living with any of multiple specified long-term conditions (LTCs), mean 1.64 chronic conditions | Patient     | N= 296 62% women (184)                                                           | Range: 24-97 (median: 78) | Not stated                  | Canadian    | Community             |
| Dufour et al., 2015         | People living with any of multiple specified LTCs, mean 3.2 chronic conditions         | Patient     | N=17 59% women (10)                                                              | Mean age: 63.3 (+/- 11.6) | Not stated                  | Canadian    | Primary care          |
| Stenner et al., 2015        | People living with non-spinal CLBP                                                      | Patient     | N=8 50% women (4)                                                                | Range: 35-74         | Living with non-spinal CLBP: 1-40 years, mean: 21 years | English     | Hospital, community   |
| Gardner et al., 2015, 2016  | People living with CLBP                                                                | Patient     | N=20 55% women (11)                                                              | Range:18-65 (mean 42 ± 12.24) | CLBP-9.6±9.9 years         | Australian  | Hospital, community   |
Methodological quality
Two qualitative articles demonstrated high quality (Cooper et al., 2008, 2009), one moderate (Dufour et al., 2015), and one low (Stenner et al., 2015), as summarised in table 5. Table 6 presents the results of the component and global methodological ratings of the four quantitative studies and the quantitative component of the mixed-methods study.

Table 5: Critical Appraisal Skills Programme (CASP) tool: analysis of qualitative studies

| Criterion                                    | Study                      |
|----------------------------------------------|----------------------------|
|                                              | Cooper et al., 2008        |
| Clear aims                                   | ✔                          |
| Appropriate methodology                      | ✔                          |
| Appropriate design                           | ✔                          |
| Appropriate recruitment                      | ✔                          |
| Appropriate data collection                  | ✔                          |
| Consideration of relationship between researcher and participants | ✔ |
| Consideration of ethical issues              | ✔                          |
| Rigorous analysis                            | ✔                          |
| Audit trail                                  | ✔                          |
| Triangulation via researcher and methods     | ✔                          |
| Clear statement of findings                  | ✔                          |
| Value of the research                        | High                      |
| Trustworthiness                              |                            |
| Credibility                                  | Good                       |
| Transferability                              | Good                       |
| Dependability                                | Good                       |
| Confirmability                               | Good                       |

Table 6. Methodological assessment of quantitative studies using Effective Practice Public Health Project (EPHPP) quality assessment tool

| Measure                              | Study                      |
|--------------------------------------|----------------------------|
| Selection bias                       | Mackay et al., 2012        |
| Study design                         | Peng et al., 2014          |
| Confounders                          | Dufour et al., 2015        |
| Blinding                             | Gardner et al., 2015       |
| Data-collection methods              | Gardner et al., 2016       |
| Withdrawal and drop-outs             | Moderate                   |
| Global rating                        | WEAK                       |

11
Components of person-centred care in physiotherapy

None of the studies describes exploration or evaluation of person-centred care or concepts within a person-centred care framework as its research aim. Three articles evaluated self-management alone (Cooper et al., 2008, 2009; Dufour et al., 2015), two evaluated self-management and goal setting (Peng et al., 2014; Gardner et al., 2016), one focused on goal setting alone (Gardner et al., 2015) and one evaluated decision making (MacKay et al., 2012).

From the three-stage, mixed-methods synthesis, summarised in tables 7-9, six components of person-centred care within physiotherapy for individuals living with long-term conditions were identified: self-management; individualisation; decision making; information sharing; goal setting; and ongoing care. Self-management is conceptualised as an enabling process whereby an individual manages their health conditions on a daily basis (Cooper et al., 2009). Individualisation is getting to know the individual and tailoring programs to suit them (Cooper et al., 2008, 2009). Decision making is engaging the individual to include their preferences in decisions and respecting when they do not wish to participate (Stenner et al., 2015). Information sharing is providing sufficient information at the level of understanding of the individual (Cooper et al., 2009; Stenner et al., 2015). Goal setting refers to the process of individuals identifying goals important to them (Gardner et al., 2015). Ongoing care is future access to physiotherapy services and may include face-to-face contact or telephone calls to support individuals in self-management (Cooper et al., 2009; Dufour et al., 2015).

The combined synthesis from tables 7 and 8 identifies components, barriers and facilitators. The components are summarised in table 9, and table 10 summarises the barriers and facilitators, categorising them under ‘stakeholders’, ‘process of care’, ‘outcomes of care’ and ‘context of care’. Stakeholders have been defined as people or groups with an interest in healthcare decisions (Agency for Healthcare Research and Quality, 2014) and include the person living with the long-term condition and the physiotherapist. On analysis of findings, the processes of communication and individualisation were identified as key influences on outcomes of person-centred care. Outcomes of interventions or care are the products of the intervention or care delivered (De Silva et al., 2014) and included comprehensive care, goal achievement, self-efficacy, and the therapeutic relationship (figure 2).

The conceptual map (figure 2) was created based on the concepts and inter-relationships found in this critical review, and borrows elements of visualisation from existing models to illustrate relationships and facilitate comparison. It is a simplistic conceptualisation of person-centred care within physiotherapy in its current state. Stakeholders, patient and physiotherapist, emerge from the research as key influencers; the word ‘patient’ is used for clarity but this is within the context of person-centredness. Findings suggest levels of individualisation and effectiveness of communication influence outcomes, which, with the components, show a reciprocal influence on one another. The conceptual map also suggests these relationships take place within the wider contexts of care, including the group dynamic and organisation of therapy – some of which may be more specific to physiotherapy than some other health disciplines.

Figure 2: Conceptual map synthesising concepts relating to person-centred care in relation to physiotherapy with people living with long-term conditions
Table 7: Stage 1 – thematic analysis of qualitative findings

| Author/year     | Main findings                                                                                                                                                                                                 | Additional findings relating to person-centred care                                        | Components                                                                                     | Barriers/facilitators                                                                                       |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Cooper et al., 2008 | • Model of patient-centredness for physiotherapy has two broad dimensions: physiotherapy experience and the process of physiotherapy • Six themes emerged: communication; individual care; decision making; information; the physiotherapist; and organisation of care | • Communication was important and contributes to other themes • Individual care involved getting to know the patient • Physiotherapists should explain and discuss but make decisions • Patients valued physiotherapists’ competence and personality • Patients want more information related to diagnosis | • Individual care • Decision making • Information sharing                                                                                   | • Communication: providing explanations and information • Physiotherapists’ competence and personality • Organisation’s accessibility |
| Cooper et al., 2009 | • Participants were described as: self-managing but wanting future access to physiotherapy; self-managing but not wanting future access; not self-managing but looking for a cure; and not self-managing but awaiting further investigations • The adoption of self-management strategies was not achieved consistently • Physiotherapists did not facilitate self-management | • Physiotherapist-patient therapeutic relationship would enable future access • Formal follow-ups would motivate self-management • Patient belief that physiotherapy treatments would be the same every session • When goals were unmet, patient did not self-manage • Goal achievement and individualised exercises facilitated self-management | • Self-management • Ongoing care                                                                                                       | • Therapeutic relationship • Patient perceptions • Achievement of goals • Individualisation |
| Dufour et al., 2015 | • From evaluating chronic disease self-management programme, six themes emerged: group dynamic; learning versus doing; holism and comprehensive care; self-efficacy and empowerment; previous solutions; and healthcare provider support | • Group dynamic provided social support, motivation and accountability • Patients liked opportunity to discuss other factors like stress • Patients willing to pay for ongoing healthcare provider support | • Self-management • Ongoing care                                                                                                      | • Group dynamic • Comprehensive care • Self-efficacy • Patient’s previous experiences |
| Stenner et al., 2015 | • Four themes identified from patient perspectives: patients’ expectations and patients’ needs are not synonymous; information is necessary but often not sufficient; not all decisions need to be shared; and patients’ wish to be treated as individuals | • Gaining understanding of the cause of pain was important • Information is reassuring | • Information sharing • Decision making • Individualisation • Ongoing care                                                                 | • Patient’s confidence, understanding and trust in the physiotherapist |
Table 8: Stage 2 – analysis of quantitative findings

| Author/year          | Main findings related to person-centred care                                                                                         | Components of person-centred care                                                                 | Barriers/ facilitators to the components                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| MacKay et al., 2012  | • Improvements in self-efficacy after six weeks  
                          • Barriers to self-management: time, cost and other health problems                                                               | • Self-management                                                                                       | • Time  
                          • Cost  
                          • Other health problems                                                                                                           |
| Peng et al., 2014    | • No significant difference of age, sex or chronic conditions on whether self-management or non-self-management goals were set by physiotherapists and clients or on the type of self-management goal set | • Self-management  
                          • Goal setting                                                                                                                        | • None specified. Authors indicate identification of barriers and facilitators to goal setting is complex |
| Dufour et al., 2015  | • Intervention has non-significant improvements in self-efficacy and quality of life (p< 0.05)                                      | • None indicated from quantitative findings                                                           | • None specified                                                                                       |
| Gardner et al., 2015 | • Participants’ goals did not align with common physiotherapy goals                                                                  | • Goal setting                                                                                         | • None specified                                                                                       |
| Gardner et al., 2016 | • Patient-led goal setting intervention has significant improvements in self-efficacy and quality of life  
                          • Goals were set related to physical activity (49.2%), workplace tolerance (14.3%), coping skills (11.1%), relationships (6.4%), and sleep/energy (6.4%) | • Goal setting                                                                                         | • None specified                                                                                       |

Table 9: Stage 3 – synthesised summary of components of person-centred care

| Components of person-centred care | Author and year                                                                 |
|-----------------------------------|-------------------------------------------------------------------------------|
| Self-management                   | Cooper et al., 2009; MacKay et al., 2012; Peng et al., 2014, Dufour et al., 2015 |
| Ongoing care                      | Cooper et al., 2009; Dufour et al., 2015; Stenner et al., 2015               |
| Decision making                   | Cooper et al., 2008; Stenner et al., 2015                                   |
| Individualisation                 | Cooper et al., 2008; Stenner et al., 2015                                   |
| Information sharing               | Cooper et al., 2008; Stenner et al., 2015                                   |
| Goal setting                      | Gardner et al., 2015, 2016                                                   |
Table 10: Stage 3 – synthesised summary of barriers and facilitators of person-centred care

| Stakeholders | Author and year |
|--------------|-----------------|
| The physiotherapist (F) | Cooper et al., 2008 |
| The person (B, F) | Cooper et al., 2008; Mackay et al., 2012; Stennner et al., 2015 |

| Process | Author and year |
|---------|-----------------|
| Communications (B, F) | Cooper et al., 2008 |
| Individualisation (F) | Cooper et al., 2009 |

| Outcomes of intervention/care | Author and year |
|------------------------------|-----------------|
| Comprehensive care (F) | Dufour et al., 2015 |
| Goal achievement (B, F) | Cooper et al., 2009 |
| Self-efficacy (F) | | |
| Therapeutic relationship (F) | Cooper et al., 2009; Stennner et al., 2015 |

| Context of care | Author and year |
|----------------|-----------------|
| Group dynamic (F) | Dufour et al., 2015 |
| Organisation (B) | Cooper et al., 2008 |

Discussion
This critical review aimed to explore components, facilitators, and barriers in relation to person-centred care within the physiotherapy literature, in order to prompt further discussion. Although the selected studies did not explicitly aim to explore these factors, they did address concepts identified in existing models, enabling synthesis of current international thinking. This article acknowledges that the complexity of designing a search strategy around a debated and multifaceted phenomenon means it is unlikely that all relevant literature has been uncovered, but this critical review can represent a valuable step in progressing thinking about how person-centred care is, and could be, enacted within physiotherapy.

A number of factors were highlighted as influencing physiotherapists’ engagement with person-centred care. Physiotherapists were facilitators of it depending on their personality and competence (Cooper et al., 2008). It was facilitated by the process of effective communication and individualisation of treatment, assessment and outcomes by the physiotherapist (Cooper et al., 2008, 2009; Stennner et al., 2015) and hindered by ineffective communication between patients, physiotherapists, and other healthcare providers (Cooper et al., 2008, 2009; Stennner et al., 2015). When the person had increased understanding and confidence relating to long-term management of their condition, more positive outcomes were demonstrated in relation to components of person-centred care. Barriers specific to the patient included their time commitments, health problems, perceptions of physiotherapy as being unhelpful, previous negative experiences of therapy, as well as the cost to healthcare services (Cooper et al., 2009; MacKay et al., 2012; Dufour et al., 2015). Outcomes of interventions included comprehensive care, goal achievement, self-efficacy and a therapeutic relationship. Successfully achieving these outcomes reciprocally facilitated person-centred care, specifically through enabling the person to self-manage and to engage in decision making and goal setting. Not achieving these outcomes hindered the patient’s perception of person-centred care (Cooper et al., 2009; Dufour et al., 2015; Gardner et al., 2016). The context of care also has an influence: findings showed participants highly valued a group dynamic, and felt this facilitated greater self-management by increasing personal motivation and accountability (Dufour et al., 2015). The organisation was described as a barrier due to long waiting times for appointments and short durations of treatment with physiotherapists (Cooper et al., 2008). Many of these factors are identified as key aspects of person-centred care in existing models, including individualisation through working with patients’ beliefs and values, therapeutic relationship and comprehensive care (Morgan and Yoder, 2012; McCormack and McCance, 2017), and
decision making and information sharing implicit within engagement and involvement (McCormack and McCance, 2017). Aspects less clear in existing models that emerged as having potential to clarify person-centred care for physiotherapists working with people with long-term conditions were: self-management; self-efficacy; goal achievement; and group dynamic. Decision making also emerged in our synthesis as requiring further discussion – consistent with the need for engagement and involvement in care (McCormack and McCance, 2017), it is discussed as requiring further facilitation in physiotherapy contexts.

Self-management was the most evaluated construct in this review, with evidence that people do not consistently self-manage and physiotherapists could do more to facilitate this (Cooper et al., 2009; MacKay et al., 2012). Additional support is needed through the option of future access to the physiotherapist with whom the person has already established a relationship; this was found to increase motivation to self-manage (Cooper et al., 2008; Dufour et al., 2015; Stenner et al., 2015). This is supported by a systematic review conducted by Fredericks et al. (2015), who found person-centred care for people living with long-term conditions is only effective where nursing interventions are delivered at multiple timepoints. This adds contextual detail to the Person-centred Practice Framework of McCormack and McCance (2017) in relation to the care environment, as supportive systems are needed to facilitate continuity of access.

Some patients lacked the confidence or understanding to participate in decision making and preferred the physiotherapist to make the decisions, with clear explanations (Cooper et al., 2008; Stenner et al., 2015). There was an appreciation of an individualised approach, as some patients felt care was unhelpfully standardised (Cooper et al., 2009). They wanted to be treated as individuals and perceived the important aspects of individualised care to be the physiotherapist listening, understanding and getting to know them as a person (Cooper et al., 2008). Findings suggested people consider information sharing valuable and reassuring, but the provision of information to be insufficient (Cooper et al., 2008; Stenner et al., 2015). MacDonald et al. (2013) reviewed the literature for barriers and facilitators to engagement in rehabilitation for people who have experienced a stroke and found they valued paternalism versus independence when making treatment-based decisions on admission because of their view of physiotherapists as ‘experts.’ Similarly, Cooper et al. (2008) and Stenner et al. (2015) found people appreciated explanations by physiotherapists but were happy for them to make decisions; they felt more comfortable participating in decision making as their confidence increased. For the physiotherapeutic management for long-term conditions, research suggests patients value the provision of information and may gradually increase their participation in decision making (Bainbridge and Harris, 2005; Cooper et al., 2008; MacDonald et al., 2013). The importance of empowerment and evaluating readiness is apparent here: Morgan and Yoder (2012) link empowerment conceptually through increased autonomy and self-confidence leading to increased self-determination and participation in decision making. Effective communication and negotiation, supporting people to obtain information and learn, and supporting choices were all suggested as mechanisms to increase empowerment, and are worth further exploration in relation to physiotherapy and person-centred care.

Goal setting was found to have positive influences on self-efficacy and quality of life in persons living with long-term conditions (Gardner et al., 2016). This, self-efficacy and goal achievement may be context-specific components and outcomes of person-centred care particularly relevant in relation to the need for long-term behaviour changes in a person who is self-managing. Physiotherapy has a specific remit in relation to optimising self-management (Chartered Society of Physiotherapy, 2017). When considering goal setting, the feeling of capability to achieve a goal is known to be particularly important to success (Bandura, 1997); therefore, self-efficacy may be a link between goal setting and goal achievement – and empowerment through person-centred care principles could support this journey. In the physiotherapy literature, goal setting is seemingly equated to patient- and/or person-centredness. Yet, evidence suggests goals set by physiotherapists are not always aligned with goals set by post-stroke patients; they relate their goals to their life pre-stroke, while the physiotherapist may relate goals to their condition immediately after the stroke (Sugavanam, 2013; Gardner et al., 2015).
The group dynamic emerged as a facilitator of person-centred care, which may also be a context-specific way of enacting care processes within a specific care environment. It is important to note that group-based interventions may or may not be developed and implemented with a person-centred ethos, and are common within physiotherapy with persons living with long-term conditions. Complex interpersonal skills are required in negotiating shared decision making between two people; group interventions can increase this complexity greatly.

When considering recommendations from this review, it is important to note that although the methods aimed for transparency and rigour, the conclusions are based on a small number of studies. Some limitations in the search strategy are acknowledged and following this critical analysis the search could be progressed by including the additional concepts mentioned above in relation to the enactment of person-centred care in physiotherapy, such as self-management, goal achievement, and group dynamic. Further thinking is also emerging in this respect, such as embodiment, which rejects reductionistic views of the body, health and illness, and aims for an holistic view. This widens the viewpoint to the person and their health and wellbeing as they experience and give meaning to both within their wider social, environmental and cultural contexts (Nicholls and Gibson, 2010). As well as the conceptual challenges in a developing area, it also proved challenging to compare and synthesise diverse studies and critical analysis relying on two different appraisal tools. The method for synthesising results can be challenged by the variability of methods and potential for influences of the researcher (Thomas et al., 2004a). Despite these considerations, it is argued that this review can provide useful insights to prompt further discussion in relation to person-centred care within physiotherapy contexts and roles.

This review highlights that people receiving physiotherapy desire person-centred care but do not always feel it is fostered by physiotherapists, supporting the need for further exploration of its enactment within physiotherapy provision. Mudge et al. (2014) and Hall et al. (2018) offer similar conclusions that physiotherapists seem to be struggling with the incorporation of person-centred care principles, are still predominantly functioning from a biomedical paradigm and lack the advanced communication skills needed to address complex emotions and facilitate person-centred goal setting. These authors concur with this review that overcoming this challenge is critical in order to truly put the person at the centre of care.

Conclusion
This critical review sought insight into components, barriers and facilitators to help clarify person-centred care for physiotherapists working with persons living with long-term conditions. Despite the limitations of the included studies, the review findings demonstrate the importance of exploring how it can be enacted and challenged in different contexts. The current evidence is mixed, with some trustworthy qualitative and low-quality quantitative studies. Key components, barriers, and facilitators were identified and generally support the application of insights from other disciplines, enabling tentative recommendations, considering the early stage of physiotherapy research in this area. It would be valuable for physiotherapists in all contexts to be self-reflective in the use of language and negotiation of goals, exploring how this may influence the role of the patient in the therapeutic relationship. Exploring the design of service provision may also enlighten us about how the discharge system can impact on patients, with consideration of ongoing relationships to maintain access for advice or reassurance. Further research should explore understanding of how to enact person-centred care within group interventions, as well as how we can enhance processes like communication and individualisation that promote person-centred outcomes. The field of physiotherapy is likely to benefit from action-oriented research addressing how we can embrace the biopsychosocial approach in practice and further develop skills for effective engagement with person-centred care.
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A commentary by Tobba Therkildsen Sudmann follows on the next page.
COMMENTARY

Tobba Therkildsen Sudmann

This commentary invites a discussion on person-centred care in physiotherapy from a Scandinavian perspective. Physiotherapy in Scandinavia has a 200-year history, which gives the profession a different social standing and content compared with its European or American counterparts. I am grateful for the opportunity to write this commentary; my qualifications for doing so are my affiliations with the practice development network in Norway, and my research on gender and professional relations in physiotherapy.

The commentary brings up three topics. The first is the concept of care, which sits uneasily with many physiotherapists and so can be an obstacle when inquiring into physiotherapeutic management of long-term conditions using person-centred care. This leads to the second topic, a discussion of how person-centred care in physiotherapy can be operationalised to support an effective and productive search strategy for a review study, whether systematic or critical. Furthermore, such operationalisation is necessary but not sufficient to map the terrain of person-centred care in the profession, which leads to the third topic of how person-centred care in physiotherapy fits with emerging trends and healthcare policy: downsizing of institutionalised healthcare, e-health, economic cutbacks, and concentration on self-management, self-determination and short-term community-based healthcare services (private and public); where does person-centred care stand when face-to-face encounters in healthcare are under siege?

Before I elaborate on these three topics, I would like to give the authors credit for introducing physiotherapy to the field of practice development, and for instigating a discussion about the relevance of person-centred care. It is particularly relevant to discuss it in relation to non-communicable diseases, and in particular musculoskeletal disorders, which represent a large part of the global burden of disease (Briggs et al., 2018).

The concept of care

In physiotherapy, the concept of care is seldom spoken of in terms of ‘caring relations’. Care is more often understood as ‘taking care of’ someone and fulfilling their needs. A quick look at the plethora of healthcare journals and their content will quickly convince a lay reader that ‘care’ is done by nurses, which implies addressing basic needs like nutrition, hygiene, rest and wellbeing. In other journals, physiotherapy emerges as a natural science rather than a caring science. Globally, physiotherapists are educated and certified to take on individual responsibility for treatment, which by default is interpreted as closer to curing than caring, even though efficient treatment often goes hand-in-hand with high-quality care. In a recent study, Dahl-Michelsen (2015) showed that the tension between caring and curing is profoundly embedded in the profession’s body of knowledge and identity. Several scholars have shown that the typical caring physiotherapist represents feminine values and practices – that is, working in hospitals and public sector, often with children and older people or psychomotor therapy, whereas the typical curer is more frequently associated with masculine attributes – working in the private sector, sports medicine, manual therapy and electrotherapy. These gendered tensions and conflicts go back to the 19th century in Scandinavia (Bergman and Marklund, 1989; Sudmann, 2009;
Ottosson, 2016a, b). Important driving forces for dichotomising curing and caring in physiotherapy have been, and still are, related to gender and social class. The curing-caring abyss also gains legitimacy and support from the relationship between the medical profession and physiotherapy (Nicholls and Gibson, 2010). As an experienced teacher and supervisor, I can still recognise these tendencies in any new cohort of physiotherapy students at bachelor and masters levels.

Since much of physiotherapy development in Scandinavia has been unable to reach an international audience due to language barriers, few know that we have longstanding traditions in psychomotor physiotherapy, where touch and dialogue are the backbone of the therapeutic alliance. An few would be likely to have any problem with the concept of care set out by Bunkan and Thornquist (1990), in which the psychomotor treatment is always personalised, every session lasts at least an hour, and treatment lasts several months or longer. The relationship between patients and therapists is highly valued by both parties and is credited with enhancing the effect of treatment. From this perspective, person-centred care has always already been a hallmark of physiotherapy. Several authors have conceptualised physiotherapy as communication, micro-interaction and healing relations, which sits perfectly with person-centred care (Ek, 1990; Thornquist, 1998; Engelsrud, 2005; Sudmann, 2009).

However, specialisation in Scandinavian physiotherapy is gendered; women dominate psychomotor treatment and the majority of male physiotherapists specialise in manual therapy. As such, personalisation and individualisation are prone to be associated with femininity more than masculinity, which persists in today’s gendered work division between physiotherapists.

The underpinning methodology of systematic reviews
In any research project researchers are obliged to do a critical appraisal of the existing body of knowledge on their subject matter to justify their endeavours – a systematic review. Sharisse Dukhu and colleagues have not done a full-scale systematic review – but systematic reviews and critical reviews start from the same methodology, where one has to operationalise the research questions, identify key search terms and identify relevant databases. Identifying the overarching key terms might be easy but finding all the relevant synonyms is often a taxing project. The term ‘person-centred care’ is not as distinct as ‘hip fracture’, so finding all the relevant translations or paraphrasing is difficult, independent of fields of inquiry.

I find it strange that several relevant key concepts are not on the list of search terms used by these authors – for example, user participation, patient perspective, individualisation, coping, and patient-reported outcome measures, or PROMs. These concepts are more often than not associated with musculoskeletal disorders, which are at the hub of this critical review. However, to give the wider readership an idea of the scale of this problem as it is faced by all researchers, a selection of recent publications on physiotherapy for musculoskeletal disorders list a range of concepts that, in my view, can be read as a alternative framing of person-centred care: user participation; patient perspective; individualisation; therapeutic alliance; goal setting; client cooperation; client involvement; client perspectives; client-centredness; personalised medicine; personalised recommendations; PROMs; shared decision making; patient care planning; professional-patient relations; collaborative approaches; patient engagement; clinician-patient collaboration; e-health literacy and health communication; self-management; patient activation; patient-centred care; patient empowerment; deliberation; health literacy; risks and options; patient autonomy; patient activation and engagement; coping; and therapeutic alliances (Van Dulmen et al., 2017; Briggs et al., 2018; Fennelly et al., 2018; Fleischmann and Vaughan, 2018; Hinchcliffe and Lavin, 2018; Moore and Kaplan, 2018; Stevens et al., 2018). And this is not an exhaustive list. However, even though it is lengthy, it would suffice to use all these concepts with Boolean operators and a search term for physiotherapy/physical therapy to generate enough hits. Keeping long-term conditions out of the search would have made the number of hits soar. Within the frame of systematic reviews, a large five-digit number of initial hits is expected, and is necessary to be able to map the terrain thoroughly.

If the authors had set out to do a systematic review of the therapeutic effect of person-centred care in
physiotherapy, I would have expected them to start with the databases Center, Embase and Medline, and to use CINAHL, Psych-Info and SCOPUS and open searches in Google Scholar, social media or journal hard copies as supplements. Their paper shows how difficult it can be to identify the best concepts and the necessary concept to produce sufficient search hits. These authors show that a critical review or narrative review probably is relevant for their purposes, although they have included few articles to support their findings and suggestions. To further the discussion on methodology, they could have performed a strategic selection of papers from highly regarded international journals of physiotherapy and analysed the concepts used to describe how the goals, content, effect, professional relations and so forth are described and discussed in light of person-centred care – that is, a narrative synthesis.

The future of person-centred care as face-to-face healthcare encounters decline
The development of e-health, de-institutionalisation and short interventions, either as consultations or reablement programmes, opens up new and exciting ways of establishing therapeutic relations. However, there is also a dark side.

I would like to draw attention to Barry and Edgeman-Levitan’s (2012) seminal work on ‘shared decision making as the pinnacle of patient-centred care’. Their core argument is that patient-centredness starts with a dialogue that systematically enquires ‘What matters to you?’, where both parties may take initiative, exercise agency and negotiate the framing of problems and solutions. Collaboration must be prepared, information about options must be given, patient’s values and preferences must be at the hub of the considerations and deliberations, followed by affirming and implementing the decision or plan. New theories and concepts are entering the field of healthcare, for example, self-determination and social citizenship, which support the core idea of shared decision making. Shared decision making and person-centred care have been developed within a context of face-to-face interaction, with enough time to establish recuperative and healing relations. The development of e-health and economic concerns challenges us to rethink how this can be developed and refined within ever-changing structural conditions. I look forward to a discussion where what has been learned so far can be further developed within e-health, and also kept alive and vibrant with face-to-face care and treatment.

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**A response to this commentary by the authors follows on the next page**
RESPONSE TO COMMENTARY

Sharisse Dukhu and Cathy Bulley

First we would like to thank Professor Tobba Therkildsen Sudman for this rigorous and interesting commentary, which adds richly to the discussion. We also appreciate her affirming the value of this discussion in relation to physiotherapy.

Tobba differentiates between the first three topics and we will respond to each of these in turn, although they are interlinked. First, she raises the concept of ‘care’ within the phrase ‘person-centred care’ as being one that not all physiotherapists would associate with their profession. We also felt this discomfort and spent time working with dictionary definitions to explore whether it was justified. The most relevant definition of ‘care’ on searching the online English Oxford Living Dictionary (2018), which defines ‘care’ as: ‘The provision of what is necessary for the health, welfare, maintenance and protection of someone or something.’ This seems consistent with physiotherapy, and within some healthcare systems physiotherapy interactions are considered to be ‘episodes of care’, defined as ‘all services provided to a patient with a medical problem within a specific period of time across a continuum of care in an integrated system’ (Stedman’s Medical Dictionary, 2012). Despite this, reducing barriers to discussion is valuable and we welcome the inclusive use of the word ‘practice’ in the Person-centred Practice Framework of McCormack and McCance (2017).

We found the discussion of ‘care or cure’, and linkages with gender, provided a fascinating insight into the nature of Scandinavian physiotherapy. We agree that physiotherapy practice can vary greatly when comparing areas of specialism, for example, contrasting critical care with outpatient musculoskeletal physiotherapy. In relation to the question of care or cure, we particularly emphasised in our review that we were focusing on long-term conditions where cure would not be a consideration. We defined long-term conditions in our search strategy (table 1, page 5) using the definition of Goodwin et al. (2010) and the Department of Health (2012) and included cancer, cardiovascular disease, chronic musculoskeletal conditions, chronic pain, chronic respiratory disease, diabetes, epilepsy, hypertension, mental health neurological conditions, and stroke or transient ischaemic attack. We note that in Tobba’s commentary she focused on musculoskeletal disorders and a clear majority of the studies included in our review did focus on these – particularly chronic low back pain – but not all. Where a person has a long-term condition it is possible that a physiotherapist may enter the therapeutic relationship with a focus on a single symptom, such as pain, or on a functional impact such as reduced mobility, with the aim of ‘curing’ this. We value Buetow and colleagues’ (2017) challenge to the emphasis of current rehabilitation models on a return to ‘normal’. They suggest a novel concept of ‘ultrabilitation’, which describes a commitment to human flourishing and moving persons ‘toward, around or beyond recovery of particular functioning’. Illustrating this from the position of their own experiences, Williams et al. (2017, p 737) explain the active collaboration of the Edinburgh Parkinson’s community with clinicians and researchers. They state: ‘We are learning how to develop a quality of living that goes far beyond whatever our physical symptoms – or those of our care partners – might be at any given time, and sharing that knowledge and insight too with our health professionals.’
Considering that the emphasis of our review was on scenarios where people would not expect cure, there are likely to be enormous challenges for physiotherapy in relation to provision of support over the long term. In many healthcare systems this sadly makes the valuable, intense and long-term input provided within approaches such as psychomotor physiotherapy unsustainable. In terms of alternatives, it is valuable to consider the position of the Edinburgh Parkinson’s community, whose members aim to be ‘active collaborators involved in participating with clinicians and researchers’ (Williams et al., 2017). Such collaboration is crucial in stretched healthcare systems, especially for people learning to live with long-term conditions. Williams et al. (2017, p 737) explain that people can journey to a place of assimilating the experiences of their condition and thriving as a person.

Turning to the second topic – the challenges of conceptualising person-centred care for the search strategy – we acknowledge these and discussed our learning journey in the article. We had a basis for our initial search and through our discussion we arrived at conclusions about additional terms we would add in a future search. We could further consider some of the terms suggested in the commentary but we wish to note that the inclusion of long-term conditions was important in the context of our study, as we have discussed above. For the same reason we would avoid a conscious focus on chronic low back pain or musculoskeletal disorders unless deciding to conduct a more focused exploration in this context, which would have its own value.

In her final area of discussion, Tobba raises a very topical and challenging area, which includes the reduction of face-to-face enactment of physiotherapy and the increase of short interventions and e-health in particular. We fully acknowledge these challenges as it is hard to reconcile aspects of person-centred care, such as its emphasis on considering the person’s values and beliefs (McCormack and McCance, 2017), with reduced face-to-face and ‘hands-on’ contact. We feel this is a particularly important time for discussions of person-centred care or practice, and in particular of person-centred cultures (McCormack and McCance, 2017). Physiotherapists need to continue to find creative ways to ensure their dialogue with persons seeking support is meaningful, whatever the medium used to enable this. We also feel it is important to change our mindsets as physiotherapists in relation to the limits of role – this potentially applies to other allied health professionals too. We all have a part to play in facilitating and empowering people to flourish. In the context of working collaboratively with a person with one or more long-term conditions, less emphasis on ‘what a physiotherapist does’ or on ‘physiotherapy-specific goals’ (for example) would open up the potential to consider how to be an asset to the person seeking support, using communication, education and information. For example, allied health professionals already have, and can further develop, knowledge and skills in relation to supporting problem solving, information seeking and use, and assertiveness building. We can provide valuable signposting to other sources of support such as the tertiary sector, and community and health promotion services.

We value Tobba’s discussion of shared decision making in relation to person-centred care and feel McCormack and McCance’s 2017 framework adds to this with its emphasis on the importance of person-centred cultures. Valuable person-centred dialogue would be extremely difficult, if not impossible, where aspects of the context such as processes, systems, staffing, capabilities, skills and self-awareness were not supportive of such interactions and related shared decision making. Creative thinking is needed – in the context of person-centred cultures - to enable new forms of service provision to be empowering, while also as efficient as possible. Discussion should engage policymakers, commissioners, designers and providers of services. It is also crucial to involve students, since it is important to inspire the development of skills not always prioritised or traditionally associated with physiotherapy and other allied health professions, such as innovation and application of new technologies and social media. Educators need to consider how the next generation of physiotherapists, and other allied health professionals, can be empowered to equip themselves in this respect. Crucially, this should be contextualised in deeper thinking about how these skills, services and systems are embedded in person-centred cultures.
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