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Published in:
Physiotherapy

DOI:
[10.1016/j.physio.2016.05.005](https://doi.org/10.1016/j.physio.2016.05.005)

Publication date:
2016

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Document Version
Version created as part of publication process; publisher's layout; not normally made publicly available

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):
Cooper, K., Schofield, P., Klein, S., Smith, B., & Mary Jehu, L. (2016). Exploring peer-mentoring for community dwelling older adults with chronic low back pain: a qualitative study. *Physiotherapy*.
<https://doi.org/10.1016/j.physio.2016.05.005>

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Exploring peer-mentoring for community dwelling older adults with chronic low back pain: a qualitative study

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Abstract

Objectives To explore the perceptions of patients, physiotherapists, and potential peer mentors on the topic of peer-mentoring for self-management of chronic low back pain following discharge from physiotherapy.

Design Exploratory, qualitative study.

Participants Twelve patients, 11 potential peer mentors and 13 physiotherapists recruited from physiotherapy departments and community locations in one health board area of the UK.

Interventions Semi-structured interviews and focus groups.

Main outcome measures Participants' perceptions of the usefulness and appropriateness of peer-mentoring following discharge from physiotherapy. Data were processed and analysed using the framework method.

Results Four key themes were identified: (i) self-management strategies, (ii) barriers to self-management and peer-mentoring, (iii) vision of peer-mentoring, and (iv) the voice of experience. Peer-mentoring may be beneficial for some older adults with chronic low back pain. Barriers to peer-mentoring were identified, and many solutions for overcoming them. No single format was identified as superior; participants emphasised the need for any intervention to be flexible and individualised. Important aspects to consider in developing a peer-mentoring intervention are recruitment and training of peer mentors and monitoring the mentor–mentee relationship.

Conclusions This study has generated important knowledge that is being used to design and test a peer-mentoring intervention on a group of older people with chronic low back pain and volunteer peer mentors. If successful, peer-mentoring could provide a cost effective method of facilitating longer-term self-management of a significant health condition in older people.

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Keywords: Chronic low back pain; Peer-support; Peer-mentoring; Self-management; Older adults

Introduction

Chronic pain affects 25 to 76% of community dwelling older adults [1]. Prevalence of low back pain increases with age [2], with many older adults experiencing chronic or recurrent symptoms [3]. Chronic low back pain (CLBP) is

complex and challenging to manage, and the healthcare costs for people with CLBP are double those without [4]. The growing population of older adults will inevitably increase the prevalence and impact of CLBP further; therefore, effective methods of managing CLBP in older adults are required.

A range of methods is recommended for CLBP management [1,5], commonly including physiotherapy and self-management strategies [1,6,7]. Self-management can be challenging given the individual nature of CLBP, and different self-management approaches may suit different people, therefore a range of self-management interventions may be required.

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<http://dx.doi.org/10.1016/j.physio.2016.05.005>

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Self-management can be clinically effective and cost-effective in older adults [8], and adults with CLBP are keen to participate in self-management activities [9,10]. However, several barriers to self-management exist including: time constraints; fear of pain/re-injury, and the absence of a self-management strategy [10–12].

Peer-support might provide a strategy for overcoming some of these barriers, enabling older adults to engage with CLBP self-management. Defined as “. . .the giving of assistance and encouragement by an individual considered equal” [13], the type of assistance offered by peer-support is typically “emotional, appraisal and informational” [13]. Peer volunteers are lay people who receive a moderate amount of training to enable them to deliver an intervention [14], but not to the extent that they would be considered a “paraprofessional” [13].

Peer-support can take many forms, and is commonly delivered in a group format, with chronic pain groups being widespread [15]. However, support groups are not appropriate for or acceptable to all [16], suggesting that alternative forms such as one-to-one peer-mentoring [17,18], should also be explored. Throughout this paper the term peer-support refers to any form of peer-to-peer support, whilst peer-mentoring refers to it being conducted on a one-to-one basis.

Peer-support can enhance the management and outcome of several conditions [13,19–21], including low back pain [22]. To our knowledge, no studies have explored the effectiveness of peer-support specifically as a way of facilitating self-management of CLBP following discharge from physiotherapy, and none has focused on peer-mentoring for older adults with CLBP. The aim of this research was therefore to explore the perceptions of community dwelling older adults with CLBP, physiotherapists, and potential peer volunteers in relation to peer-mentoring for CLBP self-management following discharge from physiotherapy. The knowledge generated will inform the design of a peer-mentoring intervention for older adults with CLBP following discharge from physiotherapy.

Methods

Study design

This was an exploratory, qualitative study on the views of older adults and physiotherapists on the concept of peer-mentoring to facilitate self-management. As the research was applied in nature, the methodology and methods were adopted from applied social policy research to inform the development of an intervention. Rather than adhering to a particular qualitative methodology, this approach is grounded in aspects of both interpretivism and pragmatism, and a key feature is the researcher’s objectivity [23]. The study took place in the Grampian region of Scotland, and ethical approval was

granted by the local committee of the UK National Research Ethics Service (Study No: 13/NS/0094).

Participants

We recruited three convenience samples: (i) Community dwelling older adults with CLBP who were discharged from physiotherapy 3 to 6 months before the study; (ii) Physiotherapists who routinely treat community dwelling older adults with CLBP; (iii) Community dwelling older adults with self-reported experience of successful CLBP self-management, defined as either managing their own condition, or supporting someone with CLBP to self-manage. For clarity we have termed this third group of participants “potential peers”. The potential peers had much in common with the first group of participants. However, the duration of successful CLBP self-management distinguished them from those who had received physiotherapy in the previous 3 to 6 months. In keeping with previous research, older adults were defined as aged 65 years and above and CLBP as 12 weeks duration or longer.

Older adults with CLBP were recruited by their physiotherapist, who identified potential participants from discharge files and mailed the study information packs to them. Interested participants sent a reply-slip to the research team, who contacted them by telephone to discuss the study and confirm eligibility. Eight physiotherapy departments participated. We also recruited participants with CLBP and experience of physiotherapy from a chronic pain support group.

Physiotherapists in one health board area were recruited via an e-mail invitation sent by their lead physiotherapist on behalf of the study team. Interested participants contacted the research team, and were then recruited as for the older adults.

Potential peers were recruited by distributing posters in community venues, circulating study information to voluntary and statutory organisations involved with older people, and speaking directly with older people participating in various groups. All participants provided written, informed consent.

Data collection

Older adults with CLBP and potential peers took part in semi-structured interviews conducted by the research assistant at a location of each participant’s choosing; a public venue or their home. All interviews were audio recorded, and field notes taken during or immediately after the interviews were included in the analysis.

Physiotherapists took part in a focus group or individual interviews, both of which were audio-recorded. Interviews were deemed appropriate for the older people with CLBP and potential peers, as the uniqueness of the CLBP experience may have been lost in a focus group setting [24]. Focus groups were deemed appropriate for the physiotherapists by virtue of their familiarity with discussing and debating clinical issues. Because it was not possible for all physiotherapists to attend

Table 1
Areas explored in semi-structured interviews.

Older people with CLBP	
1. CLBP self-management: Strategies used and how they were developed	
2. Support for CLBP Self-management: Support they are aware of and support they may have found useful on discharge from physiotherapy	
3. Peer-mentoring: Views on peer-mentoring for older people with CLBP	
Physiotherapists	
1. CLBP self-management: What advice do they give to older people with CLBP	
2. Support for CLBP self-management: Support that exists and support they think may be useful for patients following discharge from physiotherapy	
3. Peer-mentoring: Views on peer-mentoring for older people with CLBP	
Potential peers	
1. CLBP self-management: Strategies used and how they were developed	
2. Support for CLBP self-management: What support could they provide to an older person with CLBP	
3. Peer-mentoring: Views on peer-mentoring for older people with CLBP	

Key: CLBP, chronic low back pain.

the focus groups, individual interviews were also conducted, in keeping with the flexible nature of qualitative research.

The interviews and focus groups were informed by the literature and discussion with organisations involved in peer support for people with other long-term conditions and guided by an interview schedule. Table 1 identifies the areas explored with each sample (The full interview schedule for each sample is available on request).

Data processing and analysis

The interviews were transcribed verbatim and checked for accuracy. Reading and re-reading the transcripts allowed the researchers to familiarise themselves with the data. Thereafter they were imported to NVivo 10 (QSR International, Victoria, Australia). A thematic (coding) index was constructed, and applied independently to the first few transcripts by two researchers. Because high levels of agreement were achieved, one researcher subsequently indexed the remaining transcripts. The thematic index was informed by the literature, the interview schedule, and themes arising from the data.

Framework analysis [25] was conducted by two researchers. As a systematic and comprehensive analysis process, it allows within and between-case analysis and provides a clear audit trail [26]. The first three stages have been described (familiarisation, identifying a thematic framework, indexing). The final two stages (charting, mapping & interpretation) were conducted using matrix-based charts within NVivo 10, the raw data being frequently referred back to at this stage. The data for each sample were first indexed and

Table 2
Participant characteristics.

	Older adults with CLBP	Potential Peers	Physiotherapists
<i>N</i>	12	11	13
Female <i>N</i> (%)	9 (75)	7 (64)	11 (85)
Duration of CLBP (years)			
<5	1	0	
5 to 10	0	2	
11 to 20	1	2	
21 to 30	6	2	
31 to 40	2	1	
41 to 50	1	2	
50+	1	2	
NHS grade			
Band 5			4
Band 6			6
Band 7			3

Key: CLBP, chronic low back pain; NHS, National Health Service.

charted separately, then the data set as a whole was charted, mapped and interpreted to identify common themes.

Results

Participants

Thirty-six (27 female) participants took part in the interviews and focus groups (Table 2). Eight older adults with CLBP were recruited from physiotherapy departments and four from the chronic pain support group. Nine physiotherapists participated in two focus groups; four participated in individual interviews. Eleven potential peers participated in individual interviews.

Themes

Numerous dimensions were identified from the data, which contributed to 144 categories. Because several categories were common to each of the three samples, analysis resulted in 21 classes of data, which contributed to four key themes: (i) “Self-management strategies”, (ii) “vision of peer-mentoring”, (iii) “barriers to self-management and peer-mentoring”, and (iv) “the voice of experience”. The first three themes were common to all three samples of participants; the last-named was discussed by the potential peers only. Table 3 details the classes of data that contributed to each of these four themes, which are discussed in detail below with the exception of “self-management strategies” which is summarised, due to the study being focussed on peer-mentoring and not the general concept of self-management.

Self-management strategies

Older people with CLBP and potential peers discussed using a wide range of self-management strategies (Table 4). All three groups discussed the need to take responsibility

Table 3

Classes and themes arising from the data indicating which participants contributed.

Themes	Classes
Self-management strategies	Taking responsibility (PT; OP; PP) Education (PT; OP; PP) Exercise (PT; OP; PP) Other support (PT; OP; PP)
Vision of peer-mentoring	What peer support could provide (PT; OP; PP) What peer support could achieve (PT; OP; PP) Delivery/mode of PM (PP) Added value/credibility of peer (PT)
Barriers to self-management/peer-mentoring	People barriers (PP) Person-specific barriers (PT; OP) Motivation (PT) Age-related barriers (PT) Practical barriers (PP) Location (PT) Pain-related barriers (OP) Need for training (PT) Matching process vital (PT; OP) Potential negative consequences of PM (PP; PT)
The voice of experience	Knowledge/experience of different peer support relationships (PP) Knowledge/experience of different types/modes of peer support (PP) What I might say as a peer-mentor (PP)

Key: PT, physiotherapist; OP, older person with CLBP; PP, potential peer.

for their condition. Table 4 shows that the self-management strategies employed related to education, exercise (general or specific), and other strategies (e.g. medication use, consulting other health professionals, and complementary and alternative medicine).

Barriers to self-management and peer-mentoring

Self-management. Person-specific barriers were discussed by physiotherapists and included: lack of time; low fitness levels; patients' expectations, and the presence of co-morbidities. These barriers were related to older people's ability to adhere to exercise as a self-management intervention. Some physiotherapists related these barriers directly to age, suggesting that older people often had lower expectations of their capacity for exercise, or for symptomatic improvement. These were not suggested by older people or potential peers as barriers to self-management.

Physiotherapists from rural locations discussed the lack of resources, (e.g. exercise classes and walking groups), and the short-term nature of some resources, commonly due to lack of continued funding:

...We do signpost to what's available, but I do tend to find in a small rural area, there's not the same facilities as there might be in [City name]... [Physiotherapist 13]

Peer-mentoring. Rurality was also seen as a potential barrier to peer-mentoring, due to a range of factors such as public transport and poor winter weather:

Table 4

Self-management strategies used by older adults with CLBP and potential peers.

Education	NHS Back Book Pain management Posture Pacing
Exercise	Physiotherapy exercises Strength & balance classes Swimming Walking Wii Yoga/Pilates
Other interventions	Heat/Cold Relaxation TENS Complementary & Alternative Medicine Medication Weight control Acupuncture Chiropractic Massage Osteopathy Adapting beds/seating/other aids
Taking responsibility	Self-motivation Support from peers Support from family

Key: NHS, National Health Service, TENS, transcutaneous electrical nerve stimulation.

“Peer-mentoring would have to be very local, because people, when it comes to winter time, don't want to be going out and things like that” [Potential peer 09 Female]

Internet-based peer-mentoring was viewed by some as a potential method of overcoming this barrier. However, it was acknowledged that it could also impose restrictions due to security concerns, and a general preference for personal contact.

Perceived barriers to face-to-face peer-mentoring included the personal nature of CLBP:

“I think it's quite a personal sort of thing, actually. I mean, what can work for somebody wouldn't necessarily work for me. And I think it's, it's almost like a journey. You have to find out what works for you.” [Potential peer 08 Female]

Physiotherapists expressed concern that mentors may use mentoring as an opportunity to express personal anxieties or demands for attention, and that mentors may dwell on the problem of CLBP rather than facilitating active self-management. Some expressed concern about the lack of control over a peer-mentoring relationship:

“[It's important] that people are getting the right information, and correct information, that they need. It's not just googled and I found x, y, and z...” [Physiotherapist 12]

This concern was mainly that peer-mentors may recommend interventions that were not evidence-based or recommended. However, physiotherapists agreed that none

of these potential barriers were insurmountable and suggested that clear guidelines, adequate training and careful matching of older people to peer-mentors were essential.

Some older people with CLBP expressed the view that support from a peer may not be valued or rated as highly as support from “someone who had an official capacity”. One participant suggested that there may be a sense of obligation to a peer and it may be difficult to elect to discontinue the relationship, whereas with a paid professional:

“...if you feel, if you don't want to do it, you can ignore them.” [Older person 8 Female]

Conversely, several physiotherapists felt the empathy and shared experiences that peers could offer would provide “added value” and impart greater confidence in self-management than could be achieved by professionals alone, thereby breaking dependency on healthcare services:

“...mentors taking the onus away from the hospital side of things, into the real world. It's really trying to break that chain of them being dependent on hospital...it would be really good” [Physiotherapist 12]

One participant felt that if a peer-mentoring intervention was seen as “just for the elderly” then it might put people off, recalling her experience with being recommended to attend an exercise class:

“I felt that was for elderly people and I'm not that elderly” [Older person 5, Female]

Vision of peer-mentoring. Some participants discussed the relative merits of peer-support within a group and one-to-one peer-mentoring. Potential peers had no clear preference, identifying advantages and limitations in both. One participant proffered the following suggestion for one-to-one peer mentoring:

“... Meeting someone over a cup of coffee and getting to know them just a little bit, I think, would be the way forward.” [Potential peer 11 Male].

There was good agreement across all three samples that peer-mentoring should be tailored to the individual's needs.

Despite the internet-based barriers previously discussed, it was felt that the internet may be a useful form of peer-mentoring for those who were confident in its use. Indeed, one participant discussed the importance of not making assumptions about older people and technology:

“Yep, because a lot of older people, I know from walking group, they do have the internet, and for them it's how they keep in touch with you know, their families who've moved away.” [Potential peer 04 Female]

Most participants agreed that sharing information and giving support and advice could be components of a

peer-mentoring intervention, as well as empathising and helping people put things into perspective:

“Knowing somebody else is having the same problems as you” [Potential peer 02 Female]

“They're more likely to listen to another patient, rather than listen to a doctor. Because a doctor doesn't know...doctors don't know the pain you're going through” [Potential peer 10 Male]

Empathy was seen by many as the most important dimension – more important than practical advice or support. Participants used phrases such as “being believed” and “people not understanding how it can really take you down” to illustrate the point.

Similarly, physiotherapists agreed that encouragement and reassurance could be an important role for a peer-mentor, particularly as it would occur in an informal way. They also felt that peer-mentors could provide positive role-modelling, thereby reducing anxiety, and suggested that peer-mentors might accompany older people to exercise classes, which is something a professional is rarely able to do.

Whilst most older people were positive regarding the potential benefits of peer-mentoring this was not the case for all. Two felt that it would not have benefitted them personally. This is in keeping with individualising peer-mentoring, and it not being “one size fits all” or indeed not appropriate for all older people with CLBP.

Finally, all participants agreed that one of the most important practical aspects of a peer-mentoring intervention was the matching process. Age and gender were not seen by many as particularly important attributes to consider, but common interests were.

The voice of experience. Some potential peers already had experience of peer-mentoring or more general peer-support, including: volunteering at support groups; supporting friends or family members; peer-mentoring during academic study, and supporting fellow sports coaches. One participant was asked by his surgeon to speak to patients about his CLBP experience. Several had experience of informal peer-support through their roles as walk leaders, members of groups, and within their social circles.

Potential peers were asked what they felt they might contribute in a CLBP peer-mentoring relationship. They commonly discussed the need to support people to be/become positive and determined:

“Keep going, keep going. Don't let it get you down” [Potential peer 06 Male]

They also discussed supporting people to learn pacing and taking responsibility and the importance of understanding that not all pain could be managed well all of the time. The ability to manage their own pain didn't appear to influence their opinion of others whose pain management strategies may not be as effective:

“Fortunately mine cleared up...but I know that other people’s doesn’t...I can appreciate the problems some people have”
[Potential peer 02, Female]

Overwhelmingly, regardless of the nature of their back pain and personal circumstances, potential peers felt they could provide empathy and understanding to others with CLBP and that despite the individual nature of the pain experience there would be an element of commonality in people’s approaches to self-management. For this reason, all the potential peers felt they personally would have something to offer another person with CLBP in terms of peer support.

Discussion

To our knowledge this is the first study to explore the perceptions of older adults with CLBP, physiotherapists and potential peers in relation to peer-mentoring to support self-management following physiotherapy discharge. Despite some differences among the three samples there was general agreement that; peer-mentoring might be beneficial for older adults with CLBP, and whilst barriers to peer-mentoring and self-management must be acknowledged, it is conceivable that they could be overcome in designing a peer-mentoring intervention.

The older people and potential peers in this study described self-management strategies in keeping with previous literature [9,27], in which medical management, role management, and emotional management are essential elements. The barriers discussed are also in keeping with previous research [11,12]. The sample may therefore be viewed as broadly typical of older people with CLBP.

The findings demonstrated that older people with CLBP, potential peers, and physiotherapists could identify positive and negative aspects of peer-mentoring. Physiotherapists’ concerns that peer-mentors may use the process to express their own anxieties or to recommend non evidence-based treatments for CLBP could be overcome with careful attention to recruitment of peer-mentors and their training, with predetermined criteria that potential mentors must achieve before participating in any intervention. Previous research on peer-mentoring in diabetes has employed this approach effectively [28]. However, the physiotherapists’ concerns may be indicative of their own elevated fear-avoidance beliefs in relation to CLBP [29] and perhaps physiotherapists and peer-mentors working collaboratively to support older people with CLBP might result in a comprehensive approach to person-centred care.

A recent qualitative synthesis highlighting the potential for uneven power relationships between mentor and mentee [30], also suggested that careful design might avoid such negative aspects, and that the relationship may become more balanced with time. Consequently, the duration of a peer-mentoring intervention is important to consider.

That physiotherapists, but not older people, identified age-related barriers to self-management and peer-mentoring may relate to physiotherapists’ perceptions of older people and their capacity for self-management, and/or may be reflective of the age-difference between the groups of participants. In contrast several older people were keen to avoid interventions that would label them as “elderly” and to challenge common misconceptions (e.g. internet use by older people). These findings have wider implications for physiotherapy in general, and may benefit from further research to identify the extent of such perceptions and how they may be altered.

That peer-mentoring was broadly viewed positively by participants, and that suggestions for overcoming potential barriers were forthcoming suggests that peer-mentoring for CLBP may be worth exploring further. Important components of a peer-mentoring intervention, from the perspective of our participants, are in keeping with those delivered in previous studies on other chronic conditions, which have emphasised information-sharing, practical support and advice [17,28].

That empathy was seen as important by both older people and physiotherapists suggests that all three dimensions of peer-support (emotional, appraisal and informational) [13] should be incorporated in an intervention. The importance placed on individualising a peer-mentoring intervention reinforces that any intervention, whether health-professional or peer delivered, should be patient-centred. Thus, an element of flexibility needs to be incorporated into an intervention aimed at facilitating self-management of CLBP.

Peer-mentoring was not perceived as being one particular format; participants discussed one-to-one, internet-based, and one-to-one within group formats, often with no prompting. Whilst peer-mentoring has been successfully delivered in all these formats [20–22], some of the practical barriers discussed in our study might be overcome by the design of a flexible intervention that can be delivered in various formats.

The potential peers discussed experiences that could be termed peer-support, suggesting that some older people may possess relevant knowledge, skills and interpersonal behaviours that are suited to participating in peer-support. It will be important to acknowledge this in any training provided to volunteer peer-mentors, and to tailor training, as well as the design of an individualised peer-mentoring intervention, to individuals’ needs.

Limitations

Our participants were mostly female and our research was conducted in one region of the UK; Consequently, different perceptions of peer-mentoring may exist in the wider population. We used convenience sampling, and recruitment from physiotherapy departments was low. It is possible that purposive sampling would result in a broader range of views. We did not perform member-checking of the transcripts or data analysis. However, focus groups and interviews were recorded and transcribed verbatim, reducing the potential for error, and the data were analysed by more than one researcher, one

of whom was experienced in framework analysis, in keeping with recommended practice [31].

Conclusion

Peer-mentoring appears to be an acceptable concept for older people with CLBP, and a peer-mentoring intervention could be used to provide support, particularly emotional, to older people following discharge from physiotherapy. In designing such an intervention careful attention should be paid to the: recruitment of peer-mentors; provision of appropriate training, and monitoring the mentee-mentor relationship to prevent any negative consequences. Both the training and peer-mentoring intervention should be person-centred and flexible in nature, in order to meet individuals needs and prior experience. These results are being used to inform the design of such an intervention, which will be tested on a group of older people with CLBP and volunteer peer-mentors. If successful, it might provide a cost-effective method of facilitating longer-term self-management of a significant health condition in older people.

Acknowledgements

We would like to thank all the older people and physiotherapists who participated in the study, and the physiotherapists who assisted with participant recruitment.

Ethical approval: Ethical approval was granted by the North of Scotland Research Ethics Committee.

Funding: This work was supported by The Dunhill Medical Trust [grant number: R300/0513].

Conflict of interest: There are no conflicts of interest.

References

- [1] Abdulla A, Adams N, Bone M, Elliott AM, Gaffin J, Jones D, *et al.* Guidance on the management of pain in older people. *Age Ageing* 2013;42:i1–157, <http://dx.doi.org/10.1093/ageing/afs200>.
- [2] Weiner DK, Sakamoto S, Perera S, Breuer P. Chronic low back pain in older adults: prevalence, reliability, and validity of physical examination findings. *J Am Geriatr Soc* 2006;54(1):11–20.
- [3] Global Burden of Disease Study 2013 Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2015;386(9995):743–800 <http://www.ncbi.nlm.nih.gov/pubmed/26364544>.
- [4] Hong J, Reed C, Novick D, Happich M. Costs associated with treatment of chronic low back pain: an analysis of the UK General Practice research database. *Spine* 2013;38(1):75–82, <http://dx.doi.org/10.1097/BRS.0b013e318276450f>.
- [5] Pillastrini I, Gerdenghi I, Bonetti F, Capra F, Guccione A, Mugnai R, *et al.* An updated overview of clinical guidelines for chronic low back pain management in primary care. *Joint Bone Spine* 2013;79:176–85, <http://dx.doi.org/10.1016/j.jbspin.2011.03.019>.
- [6] National Institute for Health and Care Excellence (NICE). Low back pain in adults: early management. Clinical Guideline 2009, May. Available from: www.nice.org.uk/guidance/cg88 [accessed 11.03.16].
- [7] Scottish Intercollegiate Guidelines Network (SIGN). Management of chronic pain. SIGN publication 136. Edinburgh: SIGN; 2013, December. Available from: <http://www.sign.ac.uk> [accessed 11.03.16].
- [8] Boyers D, McNamee P, Clarke A, Jones D, Martin D, Schofield P, *et al.* Cost-effectiveness of self-management methods for the treatment of chronic pain in an aging population: a systematic review of the literature. *Clin J Pain* 2012;29(4):366–75, <http://dx.doi.org/10.1097/AJP.0b013e318250f539>.
- [9] Kawi J. Chronic low back pain patients' perceptions on self-management, self-management support, and functional ability. *Pain Manag Nurs* 2014;15(1):258–64, <http://dx.doi.org/10.1016/j.pmn.2012.09.003>.
- [10] Lansbury G. Chronic pain management: a qualitative study of elderly people's preferred coping strategies and barriers to management. *Disabil Rehabil* 2000;22(1/2):2–14.
- [11] Lukewich J, Mann E, VanDenKerghof E, Tranmer J. Self-management support for chronic pain in primary care: a cross-sectional study of patient experiences and nursing roles. *J Adv Nurs* 2015;71(11):2551–62.
- [12] Mailloux J, Finno M, Rainville J. Long-term exercise adherence in the elderly with chronic low back pain. *Am J Phys Med Rehabil* 2006;85(2):120–6.
- [13] Dennis C-L. Peer support within a health care context: a concept analysis. *Int J Nurs Stud* 2003;40:321–2.
- [14] Tang TS, Ayala GX, Cherrington A, Rana G. A review of volunteer-based peer support interventions in diabetes. *Diabetes Spectrum* 2011;24(2):85–98.
- [15] Dysvik E, Furnes B. Nursing leadership in a chronic pain management group approach. *J Nurs Manag* 2012;20:187–95, <http://dx.doi.org/10.1111/j.1365-2834.2011.01377>.
- [16] Shrestha S, Schofield P, Devkota R. A critical literature review on non-pharmacological approaches used by older people in chronic pain management. *Indian J Gerontol* 2013;27(1):135–61.
- [17] Mental Health Foundation. Peer support in long term conditions: the basics. Edinburgh: Mental Health Foundation; 2012. Available from: <http://www.mentalhealth.org.uk/publications/187654/>.
- [18] Matthias MS, McGuire AB, Kukla, Daggy J, Myers LJ, Bair MJ. A brief peer support intervention for veterans with chronic musculoskeletal pain: a pilot study of feasibility and effectiveness. *Pain Med* 2015;16(1):81–7, <http://dx.doi.org/10.1111/pme.12571>.
- [19] Simmons D, Prevost AT, Bunn C, Holman D, Parker RA, Cohn S, *et al.* Impact of community based peer support in type 2 diabetes: a cluster randomised controlled trial of individual and/or group approaches. *PLOS ONE* 2015;10(3):e0120277, <http://dx.doi.org/10.1371/journal.pone.0120277>.
- [20] Dale JR, Williams SM, Bowyer V. What is the effect of peer support on diabetes outcomes in adults? A systematic review. *Diabetes Med* 2012;29(11):1361–77, <http://dx.doi.org/10.1111/j.1464-5491.2012.03749>.
- [21] Cooper K, Kirkpatrick P, Wilcock S. A comprehensive systematic review of the effectiveness of peer support interventions for community dwelling adults with chronic non-cancer pain. *JBIS Database Syst Implement Rep* 2014;12(5):319–48.
- [22] Odeen M, Ihlebaek C, Indahl A, Wormgoor MEA, Lie SA, Eriksen HR. Effect of peer-based low back pain information and reassurance at the workplace on sick leave: a cluster randomized trial. *J Occup Rehabil* 2013;23:209–19.
- [23] Ormston R, Spencer L, Barnard M, Snape D. The foundations of qualitative research. In: Ritchie J, Lewis J, McNaughton Nicholls C, Ormston R, editors. *Qualitative research practice. A guide for social science students and researchers*. London: Sage; 2014.
- [24] Barbour RS. Focus groups. In: Bourgeault I, Dingwall R, Devries R, editors. *The Sage handbook of qualitative methods in health research*. London: Sage; 2010.

- [25] Spencer L, Ritchie J, O'Connor W, Morrell G, Ormston R. *Analys in practice*. In: Ritchie J, Lewis J, McNaughton Nicholls C, Ormston R, editors. *Qualitative research practice. A guide for social science students and researchers*. London: Sage; 2014.
- [26] Ward DJ, Furber C, Tierney S, Swallow V. Using framework analysis in nursing research: a worked example. *J Adv Nurs* 2013;69(911):2423–31, <http://dx.doi.org/10.1111/jan.12127>.
- [27] Lorig KR, Holman HR. Self-management education: history, definition, outcomes, and mechanisms. *Ann Behav Med* 2003;26(1):1–7.
- [28] Tang TS, Funnell MM, Gillard M, Nwankwo R, Heisler M. Training peers to provide ongoing diabetes self-management support (DSMS): results from a pilot study. *Patient Educ Couns* 2011;85:160–8, <http://dx.doi.org/10.1016/j.pec.2010>.
- [29] Darlow B, Fullen BM, Dean S, Hurley DA, Baxter GD, Dowell A. The association between health care professional attitudes and beliefs and the attitudes and beliefs, clinical management, and outcomes of patients with low back pain: a systematic review. *Eur J Pain* 2012;16(1):3–17.
- [30] Embuldeniya G, Veinot P, Bell E, Bell M, Nyhof-Young J, Sale JE, et al. The experience and impact of chronic disease peer support interventions: a qualitative synthesis. *Patient Educ Couns* 2013;92(1):3–12, <http://dx.doi.org/10.1016/j.pec.2013.02.002>.
- [31] Gale NK, Health G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 2013;13(117), <http://dx.doi.org/10.1186/1471-2288-13-117>.

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