



'Power to the People, to the people': Training for social prescribers improves support of persistent pain

British Journal of Pain 2023, Vol. 17(3) 281–292 © The Author(s) 2023

Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/20494637231152979 journals.sagepub.com/home/bjp



Alex Corline¹, Frances Cole², Louise Trewern³ and Chris Penlington¹

Abstract

Introduction: Supported self-management is an important aspect of managing pain, however widely held beliefs about the biomedical nature of pain and limited time availability can make it a tricky concept to introduce to patients. Social prescribers are in an ideal position to support self-management of pain if appropriate training is available to support them. This study aimed to evaluate training for social prescribers and experiences about providing self-management support.

Methods: This was a mixed methods study. Repeated measures t-tests were used to compare the reported confidence of attendees in supporting different facets of self-management before and after the training. Thematic analysis of interviews was used to develop a deeper understanding of how participants related the training to their work with patients.

Results: Average confidence improved in all aspects of supporting self-management, and particularly with regard to supporting understanding pain, acceptance, pacing, setting goals, sleep and managing setbacks. Challenges were identified around explaining pain in an accurate and accessible way in order to provide a meaningful rationale for self-management.

Conclusion: Training for social prescribers in self-management support is feasible and leads to improvements in self-reported confidence. Further research is needed to determine the impact on patients and over a longer period of time.

Keywords

Persistent pain, chronic pain, self-management support, social prescriber, healthcare professional, e-health training, mixed methods

Introduction

Persistent (also known as chronic) pain conditions refer to pain that remains after normal physiological healing timeframes of 3–6 months.¹ Conditions comprising persistent pain are highly prevalent, affecting one-third to one-half of UK residents.² The cost of persistent pain is equally large with chronic back pain alone costing upwards of £1 billion a year in reduced productivity and resulting in more than 4.6 million GP appointments annually.³ Supporting patient self-management (self-management support, SMS) has been shown to improve the experience of people who live with pain.^{4,5} NICE guidelines suggest that it is important to discuss self-management during an assessment,⁶ although they do not specify any particular form of self-management. Self-management support varies in definition but is recognised as collaborative support by professionals to help patients to understand their condition and encourage the uptake of behaviours and lifestyles that

Service Volunteer Torbay and South Devon

Corresponding author:

Chris Penlington, Department of Dental Sciences, Newcastle University, Newcastle, UK. Email: chris.penlington@ncl.ac.uk

¹Faculty of Medical Sciences, Newcastle University, Newcastle, UK
²Clinical Lead, Live Well with Pain, York, UK
³Lead Lived Experience Trainer, Live Well with Pain, NHS Pain

reduce the impact of symptoms.⁷ Self-management for persistent pain shares similarities but also differences compared to other chronic conditions. Unlike conditions such as diabetes and COPD people with persistent pain are not typically kept under review by medical services. Medication for pain is for symptom relief only (not disease modification) and there is a recognition that medication is often not a good strategy for long-term pain.⁶ Supporting patients to understand pain is key to successfully introducing self-management,⁸ providing the 'why' alongside the 'what' of specific techniques.

Part of the NHS long-term plan⁹ to deliver care of long-term conditions is the expansion of the social prescribing link worker role. Social prescribing aims to address the wider determinants of health by linking people with long-term conditions to relevant community resources¹⁰ to address a wide range of individual needs. Engagement in such interventions may be effective in supporting people to managing their persistent pain and physical symptoms, which are likely to be influenced by a wide range of social and lifestyle factors. Early research into social prescribing is promising¹¹ although studies have lacked methodological rigour. Indeed, some studies have found positive results for the use of social prescribing in persistent pain.¹² Social prescribers thus have a distinct and highly relevant role in addressing health determinants. That said, barriers to engagement in activities presented by persistent pain include physical discomfort, uncertainty and beliefs about engaging in physical activity.¹³ Training in pain self-management, while not central to the role of social prescriber, may be important in helping social prescribers to support people to overcome these barriers in order to engage in valued activities.

A Cochrane review of personalised care found that increased provider-patient contact commonly lead to better outcomes.¹⁴ Social prescribers are well placed to offer such care.

Supporting self-management is difficult and communication problems frequent.^{15,16} Patients in Scotland have reported feeling unsupported by clinicians, believing that their healthcare provider lacked knowledge about painful persistent conditions and often came across as insensitive.¹⁷ This may be due to a lack of education about SMS, which has also been identified as another issue in pain treatment.^{16,18} For example, both patients and providers in one study identified that the lack of provider's knowledge about the rationale for non-pharmacological interventions presented a barrier to patients engagement in such strategies.¹⁹ Clinicians also lack confidence in treating persistent pain, identifying it as a particularly difficult, even mysterious condition to manage.²⁰ This finding is in keeping with a meta-ethnographic study of healthcare professionals'

experience in treating persistent pain, which identified communication problems and a lack of trust from patients, as well as lack of trust among clinicians having to assess if patient's pain was 'real' and feeling unskilled.²¹

It is likely that differences in understanding about persistent pain could also prove to be a barrier to engagement with social prescribing. A review of important features of social prescribing interventions indicated that in order for patients to engage with social prescribing they need to believe that it will do them good and matches their needs.²² The attitudes and beliefs of the referrer about benefits of social prescribing and their understanding about barriers to engagement are likely to be important influences on these beliefs. The same is true for self-management of pain. In fact, although social prescribing and self-management of pain are different things, they share an emphasis on the importance of individualised plans and engagement in valued activities. Equally, both approaches rely on patients challenging themselves within their limits.

A UK guide for pain assessment in older people²³ highlights that persistent pain communication is worsened by brief consultation length. Time constraints can limit meaningful discussion and cause patients to feel their pain is seen as 'all being in the head'.¹⁷ Patient-professional bond is repeatedly listed as a facilitator of effective selfmanagement^{7,19,24,25} and relates to an outcome of improved ability to self-manage pain.²⁶ There is therefore a potential tension between the importance of a trusting relationship and the difficulty that healthcare staff have in allocating the time to develop such a relationship. There can also be issues with the availability of useful resources or staff awareness of these. Nearly 50% of healthcare professionals (HCPs) currently do not provide online material for persistent pain,²⁷ due to a perceived lack of evidence-based resources.²⁸ More widespread use of online resources could provide an alternative to the need for transport to appointments, which is a barrier to success of social prescribing.²⁹

There is little literature on SMS training for chronic conditions, but previous SMS training programmes have shown positive effect. Self-management support training has: increased confidence and knowledge of self-management;³⁰ helped physiotherapists to develop better patient-centred care plans;³¹ and improved nurses' delivery of preventative primary care programmes.³² No studies so far have focused on training non-medical healthcare professionals, and previous findings have been inconclusive due to the wide range of delivery and course content defined as 'self-management'. A recent review of online training programmes for HCPs concluded that the best practice for SMS learning currently remains unclear.³³ The review highlighted the importance of context in training, as

many programmes were effective or ineffective because of their delivery format,³⁴ such as short sessions being beneficial in training for GP registrars due to concern over time constraints. We aim to address this gap with the training programme described below.

Theoretical models have been observed as providing a 'strong base' for SMS interventions,³⁵ so our training programmes, the '10 Footsteps to Pain Self-Management' was structured around individual steps linked to theory such as pacing and relaxation (behavioural theory) and those that have been typically applied in various combinations in self-management support programmes.³⁶ The 10 Footsteps approach was developed and successfully piloted as part of a successful project to promote nonpharmacological management of pain and reduce opioid prescribing.³⁷ They provide an interactive online tool providing information about self-management skills for persistent pain and providing resources. They are freely available online and have also been used to structure an online programme of self-management support.³⁸

The Ten Footsteps training programme for social prescribers was developed to elaborate on the content of Ten Footsteps, and aid the delivery of resources provided on the my.livewellwithpain website. Following Lawn et al.'s³³ recommendations and literature on effective social prescribing,^{29,39} the programme has been designed to be especially accessible for social prescribers and to overcome the comparative lack of pain education for social prescribers. An online format of 2 long online sessions with 10-min breaks so the 2 clinical networks undertaking the training could all attend at the same time and maintain focus.

NICE guidelines recommend further research into social interventions with persistent pain (ng193). In addition to confirming the absence of research on training for healthcare professionals with chronic illness (as one review found⁴⁰) Research into SMS training for social prescribers may form a useful part of this research. Thus, an exploratory study was designed to assess early impact of the 10 Footsteps to pain self-management programme on the use of resources and the confidence of social prescribers in supporting persistent pain. To contextualise findings and identify ongoing training needs, the difficulties and experiences of social prescribers in supporting persistent pain self-management was explored.

Methods

Participants. Ethical approval was sought and obtained from Newcastle University Ethics Committee Ref: 15165/2021. Health and social care staff, (who were predominantly social prescribers and also included wellbeing coaches, GP's, a pharmacist and a paramedic) attended the 10 Footsteps programme and gave

informed consent to answer study questionnaires. Questionnaire participation was incentivised with an evaluative chart of personal confidence scores to direct participants' learning at baseline and a certificate for completing the training programme at follow-up. Incomplete results (unless the specific measured section was completed) and data from participants who did not complete the mandatory part of programme were discarded. Interview participants volunteered after being contacted by the clinical lead for their area requesting participation. Interviews were incentivised with a handbook for persistent pain written by one of the study authors.

Design. The study was a parallel mixed methods design, which was completed alongside the training programme. A study flow diagram is illustrated in Figure 1. The quantitative element comprised a questionnaire measuring confidence scores in key skills for supporting self-management of persistent pain at baseline and three-month follow-up. The qualitative element involved semi-structured interviews evaluating the 10 Footsteps programme and its' impact on attendees' experience working with persistent pain patients. Qualitative interviews thus served to contextualise quantitative results. The results were integrated during theme formulation.

10 Footsteps training programme. The 10 Footsteps programme consisted of two mandatory four-hour online workshops and three optional two-hour sessions which aimed to answer questions from participants on difficulties with the training or its use in clinical practice. The two mandatory sessions were delivered fortnightly, and optional question sessions were over the following 2 months. Content covered the 10 Footsteps to pain self-management, patient resources related to course content, experience of selfmanagement and guidance relating to supporting selfmanagement. All content is accessible on the Live Well with Pain website.⁴¹ The programme, developed as part of the Gabapentin and Opioid Tapering Toolbox,³⁷ was delivered by a multidisciplinary team including a general practitioner, clinical psychologist and person with pain lived experience. Delivery was designed to inform trainees about supporting self-management of persistent pain alongside common patient experiences with selfmanagement. Programme content and resources remained the same across the two training groups.

Procedure

Participants were emailed requesting participation in an optional questionnaire before each programme begun.



Figure 1. Study flow diagram.

Questionnaires were designed for this survey and delivered online via Qualtrics.⁴² Baseline questionnaires collected profession, years of experience supporting persistent pain and potential trainings completed which relate to persistent pain or self-management. Participants rated their confidence in supporting aspects of self-management on 5-point Likert scales from 'least confident' to 'most confident' (Table 1) before and after the programme. Responses between conditions were paired with an anonymous code. After 3 months, participants were requested to answer a follow-up questionnaire. Programme evaluation and clinical use of training education was obtained in free text answers.

Questionnaire participants were invited to optional 30–60-min interviews evaluating the training programme they had received and discussing their experience treating persistent pain. These participants received a consent form and scheduled interviews. Semi-structured interviews were conducted by the first author on zoom and recorded for transcription. Interviews consisted of three sections, participant's background with persistent pain, programme evaluation and use of the 10 Footsteps programme in clinical practice. Interviews were recorded and transcribed verbatim by lead researcher.

Data analysis

Confidence ratings for each element of selfmanagement support were grouped according to the Ten Footsteps. Where multiple statements referred to the same 'Footstep' the mean score was used. Confidence ratings in supporting each of the ten Footsteps were compared pre and post-training using paired t-tests.

Qualitative data were analysed using thematic analysis following guidelines from Braun and Clarke's guide.^{43,44} Codes were verified and final themes were formulated by research team (AHC, CP) for consistency and methodological rigour.

Results

Results

A total of 53 participants answered the pre-trial questionnaire and 25 answered the three-month follow-up. Attrition at follow-up was partly accounted for by a COVID-19 outbreak. Quantitative study data are available from the authors on request. Seven participants participated in individual online semi-structured interviews to provide additional details of their experience of and response to the training.

Quantitative results

Anonymous codes matched 22 pairs. Experience working with persistent pain ranged from 1 week-24 years, (mean = 4.35, SD = 6.41). Respondents were 31 social prescribers, 17 wellbeing coaches, 3 general practitioners, one paramedic and one

10 Footsteps to pain self-management	Self-management statement
Footstep 1- Building Knowledge about Pain Information of Pain as a warning to the body and how life behaviours affect pain intensity	'Understanding pain and thus how self-management can be effective'
Footstep 2-Acceptance The recognition that persistent pain cannot be immediately resolved and changing focus onto factors that can be influenced	'Accept that their pain may remain and they can actively manage their condition'
Footstep 3-Pacing	Recognise the potential problems arising from the impact of pain on their health and wellbeing and how they can be managed'
Avoiding negative cycle of overworking and adopting balanced level of activity	'Use pacing skills to balance their daily activities'
Footstep 4- Setting Goals Creating structured and realistic health behaviour targets to improve pain experience	'Set goals and reward themselves as needed'
Footstep 5-Getting Active	'Improve their physical fitness and health'
Footstep 6-Managing Moods Recognise and be mindful of daily mood changes	'Manage their stress/anxiety' 'Manage their low mood' 'Manage their anger/frustration'
Footstep 7-Sleep Understand how sleep interacts with pain experience	'Improve/manage their own sleep patterns'
Footstep 8-Food and Relationships How diet and social support interact with pain	'Inform close relationships to understand their condition' 'Maintain a healthy diet'
Footstep 9-Relaxation and Mindfulness Engage in mindful and/or relaxing practice to improve capability with other footsteps	'Engage in mindfulness and/or relaxation techniques to aid their condition'
Footstep 10- Managing Setbacks Accept and Expect difficulties in self-management to maintain progress	'Prepare a setback plan in case things go wrong'

Table 1. Description of the 10 footsteps to pain self-management and corresponding questionnaire statements which participants would rate how confident they felt supporting people with persistent pain to perform.

pharmacist. Attendance was lowered in York follow-up due to a COVID-19 outbreak. Participants attended an average 1.0 additional optional sessions. Before training 71.7% of trainees declared using no self-management resources specific to persistent pain.

Mean confidence scores of the 10 self-management domains (Footsteps) were significantly different between baseline (M = 3.02, SD = 0.79) and 3-month follow-up (M = 4.06, SD = 0.56), t(20) = 5.012, p <.001. Cohen's effect size value (d = 0.951), 95% CI [0.6, 1.47] was large. Significant differences were observed for individual confidence scores, listed in Figure 1. Confidence and significance for each footstep are listed in Figure 1.

Qualitative results

Thematic analysis (Figures 2 and 3) identified four major themes constituting how social prescribers' understanding in self-management developed with the programme, which were (1) Requirements for Figure 3 Self-management education (2) Programme Evaluations, (3) Development into Practice and (4) Confidence in Supporting Persistent Pain Self-Management. Participants' experience working with persistent pain is described as new (under 6 months), experienced (6 months to 5 years) or highly experienced (5 years plus).

Description of themes

Requirements for self-management education. Two factors were described as necessary for engagement with self-management for both patients and trainees. Most interviewees declared little/no expectations of the training programme, but more experienced participants requested further material to help with these facets.

Accessibility of information. Participants were wary of the potential complexity of persistent pain information frequently mentioning that understanding persistent



Figure 2. Spider diagram of participant mean scores at baseline and 3 month follow-up in the 10 domains covered in the programme. ** represents significance at p < .001, * represents p < .05.



Figure 3. Thematic map of education in self-management and the 10 footsteps programme.

pain is inaccessible for many people. A wide range of understandable information was requested. Participants expressed a view that patient resources presented in the training were high quality but may need to be further simplified for patients.

'I'm not saying there will be a barrier, but a possible barrier will be the ability of the clinician or practitioner to translate [persistent pain] back to a more accessible language for people' [Participant 1, Senior Health Connector, highly experienced]

Understanding of pain. The understanding of how persistent pain interacts with health behaviours emerged as a separator for people who felt most positive

about a particular self-management behaviour and those who were not. Participants reporting greatest programme engagement had more knowledge of longterm conditions. Participants recognised understanding of pain and acceptance as a starting point for selfmanagement. Most felt that an accurate understanding of pain would provide an important context that would help their patients to engage in selfmanagement.

'I think [understanding pain] is more technical than the rest. (...) I think it's the main footstep to look at with somebody to give them an understanding of how other factors will affect their pain, with it being the primary "in" for people' [Participant 7, Social prescriber, new to working with persistent pain]

Programme evaluations

Overall opinions of the programme were positive. The 10 Footsteps model was described as comprehensive and appropriate. Content was viewed as relevant for social prescribers but may be challenging for primary care professionals due to greater time constraints.

'I can't understand why everybody isn't given this training' [Participant 2, Social prescribing coordinator, new to working with persistent pain]

'This is the first time I've received any resources [about self-management]. No, I've never had anything

like this before' [participant 5 Health Connector, experienced]

Participants were particularly satisfied with the patient materials that were delivered alongside course content; with many positing that their improvement was due to the materials shown in course acting as support for their growth in confidence over the programme.

Presentation. Programme presentation was received favourably, with many citing the training lead 'triadic' interactions (between lived experience representative, GP and clinical psychologist as trainers) as the main reason.

'I think having [lead with lived pain experience] talking was the most effective stuff. Having someone with personal experience talking and communicating was more significant than a lot of the other material' [participant 1, Senior Health Connector, highly experienced]

Amount/length of programme. The training commitment was noted as large by all participants but some reasoned that the depth was to their benefit. Less experienced trainees were more overwhelmed by the amount of material.

'It's a long training but it's worth doing (...) because there's so much information and so much to cover. I don't feel like it was unnecessary (...) I felt it was all useful, just obviously over quite a long space of time'. [Participant 5, Health Connector, experienced]

Development into practice

How the programme has been adapted for patients. Participants described frequently now using patient resources introduced on the training to help introduce self-management to patients or be used as evidence or lend credence to the practice, whereas previously giving 'generic' advice. All participants mentioned that specific elements of self-management, or 'Footsteps' would vary in importance with patients and would therefore adapt their approach according to individual factors. Patients who had persistent pain for an extended period or had a negative experience with medication were described as most suitable for selfmanagement. Participants reported that the training helped in presenting individual aspects of selfmanagement but believed covering all of the content listed would be difficult due to time constraints.

'I think before [my advice] would have been more generic, (...) from my gut instincts. Now I've got something, you know, "concrete" to be able to show, "Hey, these [resources], this is the evidence, this is what I can leave with you". [Participant 5, Health Connector, experienced)

Encouraging patients to believe persistent pain is its own condition. Interviewees suggested that frequently their patients saw pain only as a symptom, not as a condition. This was worsened by reported difficulties isolating pain from other conditions in practice, and over reliance on medications by healthcare professionals. Participants mentioned Footstep 2(Acceptance) frequently, often discussing it as essential for selfmanagement, listing education on patient experience and expecting the necessity of repeating this idea as helpful.

'[I would] explore how different factors can affect somebody's pain and how looking at the "medical model" solely isn't going to make a difference if somebody's got persistent pain (...) people have, I supposed listened to it more knowing that they've (...) got medical support alongside [self-management]'. (Participant 7, Social prescriber, new to working with persistent pain)

'I think they definitely see pain as a medical issue. So they know that their lack of exercise or activity is increasing their pain, but I don't think they would look at diet, sleep, you know? They would see those as separate. I think it all stems from that'. [Participant 6, Social prescriber, new to working with persistent pain]

Confidence in supporting persistent pain self-management

Poor confidence was a barrier before the training for more inexperienced participants (defined as those with less than 2 years experience in role who also declared that the information about pain and self-management presented in the training was unfamiliar to them), believing that their lack of knowledge might come across as ignorant of the patient's experience. Participants felt that they needed more experience or to further improve their confidence, wanting to use the training more with patients, or discuss approaches with other social prescribers, or revisit the programme. When unconfident, participants described 'understanding' parts of the programme, where it 'highlighted the importance or relevance' of a footstep but still did not feel that this knowledge gave them confidence to present the concepts to patients.

'I think it's probably just the confidence with having a basic understanding myself, the confidence with having a basic understanding myself (...) I feel like I can explain it, but then when people start asking me questions because my knowledge is basic it starts to trip me up' [Participant 7, Social prescriber, new to working with persistent pain].

While confidence might take time to develop, the ability to signpost and provide patient resources gave increased security.

Discussion

Supporting patient self-management is important; however, healthcare professionals have faced difficulty in this task.²¹ The role of social prescriber is relatively new and there is currently only a small amount of research into recommended modes of practice.

Current self-management support training programmes' effectiveness has so far been inconclusive, and best training practice is unclear.³³ These reasons motivated the development of the 10 Footsteps programme.³⁷ This study aimed to evaluate whether the 10 Footsteps training would improve social prescribers' confidence in self-management support of persistent pain and explore the difficulties they faced in doing so.

This exploratory study found that the 10 Footsteps to pain self-management programme was effective for improving social prescriber confidence to support persistent pain self-management. In the semistructured interviews, participants explained why persistent pain treatment was difficult and explored how the programme affected these difficulties. Training reception was positive, with most trainees saying they would revisit the content in the future, but some made recommendations regarding accessibility to improve session engagement whilst present. The reported improvements in social prescribers' knowledge, persistent pain communication and their ability to tailor treatment for patients are more generally demonstrated to be indicators of social prescribing success,^{29,39} which suggests that the improvements reported are likely to be of practical benefit. Although supporting selfmanagement may not be the central focus of a social prescribing role, difficulties in managing symptoms are likely to present significant barriers to engagement in a wide range of activities. This may explain why those interviewed believed the training to be relevant to their needs.

Persistent pain tended to be viewed as a symptom rather than a condition in its own right. Interview participants described this as their own pre-training view and also the view most commonly expressed by their patients. This is consistent with commonly held views about pain in the population, illustrated by the results of international surveys regarding views held about back pain within the general population.^{45–48} Viewing pain as a symptom of a medical condition leads to the natural conclusion that medical treatment

(for example surgery or medication) will make the pain disappear completely, rendering self-management unnecessary. However, people with persistent pain will have experienced the limitations of this expectation, and qualitative research indicates that empathic, collaborative relationships are very important to people living with pain.⁴⁹ Interviewees acknowledged that they were aware of biopsychosocial factors influence on persistent pain experience, as were their patients. They nevertheless continued to experience difficulty in applying this understanding in a way that would support a rationale for self-management of pain. The 10 Footsteps programme aimed to be accessible in explaining persistent pain, and participants found this helpful. However, some believed that explanations should be simplified even further.. Social prescribers have less medical expertise than other primary care professions (i.e. nurses, GPs) and have mentioned being ill-equipped with the training they do have in some circumstances.⁵⁰Therefore, social prescriber understanding of pain pre-training may be different to that of health professionals. This finding supports the importance of promoting greater awareness of persistent pain in the general population, similar to the Flippin' Pain campaign in the UK,⁵¹ a public information campaign which is providing early indicators of success.⁵²

Use of materials

Nearly three quarters of participants reported not using any self-management resources related to persistent pain before the training, whereas more than 8 out of 10 would/had used the materials after the training. Almost all of those who had used these resources expressed positive experiences of doing so. Our finding concurs with previous research^{27,28,53} on lacking materials for persistent pain self-management, and suggests that the resources on the 10 Footsteps website (www. livewellwithpain.co.uk/ten-footsteps) are beneficial. Patient materials which reinforce key messages and give credibility to verbal explanations would explain how HCPs can be seen as 'educators', even despite some participants perceived lacking knowledge of pain. This is consistent with research with fibromyalgia patients who believed that the provision of good quality information facilitates good social prescribing⁵⁴) and this also increases programme adherence.²²

The boost in confidence and increased accessibility provided by the materials suggest future social prescribing training should provide patient resources. Accessibility of resources is of particular importance given that chronic pain has been shown to affect more people from lower socioeconomic groups and with more intensity compared to those from more affluent backgrounds.⁵⁵

The presentation was regarded very positively and this made up for the length of the programme for some participants. Some would have preferred the training to be in-person. Reviewing elements of online training success listed by Caroll et al.,⁵⁶ the 10 Footsteps programme was reviewed positively in most aspects and is likely an effective online programme. The freely accessible resources were a strength, not only for accessible training but also to improve a consistent and replicable message, which is missing in much online training.⁴⁰ Although some participants felt it would be difficult to include all of the elements in the time available with a patient, the comprehensive nature of the training was generally valued and is consistent with research that shows more comprehensive programmes are usually more effective for self-management.⁵⁷

Limitations

The study design was developed parallel to the education programme creating time constraints which resulted in several potential limitations. One limitation was the study sample size. The second group suffered high attrition due to a COVID outbreak three-month during follow-up, which impacted total the amount of paired data available. Low attendance in interviews occurred due to difficulties in participant communication, and potential perceived lack of adequate participation incentive, heightened by time constraints. This means that the results of the study should be taken with caution. The use of t-tests to measure change in multiple variables increases the possibility of a significant finding occurring by chance which is another reason for caution. However, the consistency of the improvements indicated and triangulation by the interview data increase security in the findings. A further limitation was that it was not possible within this study to review the long-term impact of the training as follow-up was conducted at 3 months when social prescribers were only just starting to see patients with persistent pain.

Future trainings should benchmark inclusion of patients with lived experience in delivery and the combination of experts of varying roles in pain treatment to capitalise on the beneficial nature of this type of collaboration. Future online programmes would likely be better in short bursts to become more accessible. However, many participants explicitly mentioned that the training would have been better in-person and perhaps the recommended online/in-person blended approach would have been better (Lawn et al.; McCabe et al., 2021). This would maximise synchronous engagement whilst providing accessible, online resources.

Further research should aim to track changes in social prescribers' confidence and training needs over a longer timeframe. Patient-facing research, using mixed methods and testing the experience of patients allocated to receive self-management support from trained social prescribers against alternative or no treatment control is also important to explore. Additional research into public and lay perceptions of persistent pain, methods for updating these perceptions and the impact of doing so on persistent pain is also warranted, given the importance of this topic

Conclusion

This exploratory study on self-management support training for social prescribers provides preliminary evidence that training in self-management training is feasible for social prescribers and improves their selfreported confidence in supporting self-management. Qualitative data from interviews indicated that at least some social prescribers value developing skills to support self-management and consider that they fit well within their role. Longer-term research will be important to determine how social prescribers are able to integrate these skills within their roles for the benefit of people with persistent pain.

Acknowledgements

With thanks to Patrick Hill, Laura Hissey and Kirsty Jackson for their role in the development and delivery of the training programme.

Declaration of conflicting interests

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: The second, third and last authors are part of the live well with pain team, who provide the ten footsteps training to NHS and community front-line staff. All evaluations and interviews were undertaken by the first author who is not a member of the LiveWell team. Of the authors, Louise Treweren receives a modest payment for facilitating the training, the other two authors do not receive payment from Live Well with Pain.

Contributorship

CP, AC and FC developed the study protocol. FC and LT provided the training and led on participant recruitment. AC researched literature and wrote the first draft of the manuscript. All authors reviewed and edited the manuscript and approved the final version of the manuscript.

Ethical approval

Ethical approval was sought and obtained from Newcastle University Ethics Committee Ref: 15,165/2021

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Informed consent

Written (online) informed consent was obtained from all subjects before the study.

Guarantor

CP. The guarantor is the person willing to take full responsibility for the article, including for the accuracy and appropriateness of the reference list. This will often be the most senior member of the research group and is commonly also the author for correspondence. Please use initials only: $B\mathcal{J}P$ operates a double-blind peer review process so full names of authors should not be listed on this form

ORCID iD

Chris Penlington D https://orcid.org/0000-0002-2695-7041

References

- Treede R-D, Rief W, Barke A, et al. A classification of chronic pain for ICD-11. *Pain* 2015; 156: 1003–1007.
- Fayaz A, Croft P, Langford RM, et al. Prevalence of chronic pain in the UK: a systematic review and metaanalysis of population studies. *BMJ Open* 2016; 6: e010364.
- Phillips CJ. The cost and burden of chronic pain. *Rev* Pain 2009; 3: 2–5.
- Geraghty AWA, Stanford R, Stuart B, et al. Using an internet intervention to support self-management of low back pain in primary care: findings from a randomised controlled feasibility trial (SupportBack). *BMJ Open* 2018; 8: e016768.
- Geraghty AWA, Maund E, Newell D, et al. Selfmanagement for chronic widespread pain including fibromyalgia: a systematic review and meta-analysis. *PLOS ONE* 2021; 16: e0254642.
- Recommendations | Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain | Guidance | NICE, 2022 https://www.nice.org. uk/guidance/ng193/chapter/Recommendations#managingchronic-primary-pain (accessed April 15, 2022).
- Bodenheimer T. Patient self-management of chronic disease in primary care. JAMA 2002; 288: 2469.
- 8. Mehlsen M, Heegaard L and Frostholm L. A prospective evaluation of the chronic pain self-management

programme in a danish population of chronic pain patients. *Patient Educ Couns* 2015; 98: 677-680.

- 9. NHS. The NHS long term plan, 2019.
- Mossabir R, Morris R, Kennedy A, et al. A scoping review to understand the effectiveness of linking schemes from healthcare providers to community resources to improve the health and well-being of people with longterm conditions. *Health Soc Care Community* 2015; 23: 467–484.
- Costa A, Sousa CJ, Seabra PRC, et al. Effectiveness of social prescribing programs in the primary health-care context: a systematic literature review. *Sustainability* 2021; 13: 2731.
- Pescheny JV, Pappas Y and Randhawa G. Facilitators and barriers of implementing and delivering social prescribing services: a systematic review. *BMC Health Serv Res* 2018; 18: 86. DOI: 10.1186/s12913-018-2893-4
- 13. Vader K, Doulas T, Patel R, et al. Experiences, barriers, and facilitators to participating in physical activity and exercise in adults living with chronic pain: a qualitative study. *Disabil Rehabil* 2021; 43: 1829–1837.
- Coulter A, Entwistle VA, Eccles A, et al. Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database Syst Rev* 2015; 2015: CD010523. Epub ahead of print. DOI: 10.1002/ 14651858.cd010523.pub2
- Liddy C, Blazkho V and Mill K. Challenges of selfmanagement when living with multiple chronic conditions: systematic review of the qualitative literature. *Can Fam Physician* 2014; 60: 1123–1133.
- Brown D. A literature review exploring how healthcare professionals contribute to the assessment and control of postoperative pain in older people. *J Clin Nurs* 2004; 13: 74–90.
- Gordon K, Rice H, Allcock N, et al. Barriers to selfmanagement of chronic pain in primary care: a qualitative focus group study. Br J Gen Pract 2017; 67: e209–e217.
- Zwakhalen S, Hamers J, Peijnenburt R, et al. Nursing staff knowledge and beliefs about pain in elderly nursing home residents with dementia. *Pain Res Manag* 2007; 12: 177–184.
- Becker WC, Dorflinger L, Edmond SN, et al. Barriers and facilitators to use of non-pharmacological treatments in chronic pain. *BMC Fam Pract* 2017; 18: 41. DOI: 10. 1186/s12875-017-0608-2
- Durham J, Exley C, Wassell R, et al. 'Management is a black art'-professional ideologies with respect to temporomandibular disorders. *Br Dent J* 2007; 202: E29.
- Toye F, Seers K, Tierney S, et al. A qualitative evidence synthesis to explore healthcare professionals' experience of prescribing opioids to adults with chronic nonmalignant pain. *BMC Fam Pract* 2017; 18: 94. DOI: 10.1186/s12875-017-0663-8

- Husk K, Blockley K, Lovell R, et al. What approaches to social prescribing work, for whom, and in what circumstances? a realist review. *Health Soc Care Community* 2020; 28: 309–324.
- 23. Schofield P. The assessment of pain in older people: UK national guidelines. *Age Ageing* 2018; 47: i1–i22.
- Slade SC, Molloy E and Keating JL. 'Listen to me, tell me': a qualitative study of partnership in care for people with non-specific chronic low back pain. *Clin Rehabil* 2009; 23: 270–280.
- Bair MJ, Matthias MS, Nyland KA, et al. Barriers and facilitators to chronic pain self-management: a qualitative study of primary care patients with comorbid musculoskeletal pain and depression. *Pain Med* 2009; 10: 1280–1290.
- Fu Y, Yu G, Mcnichol E, et al. The association between patient-professional partnerships and self-management of chronic back pain: a mixed methods study. *Eur J Pain* 2018; 22: 1229–1244.
- Devan H, Godfrey H, Perry M, et al. Current practices of health care providers in recommending online resources for chronic pain self-management. *J Pain Res* 2019; 12: 2457–2472.
- Areli E, Godfrey H, Perry M, et al. 'I think there is nothing . . . that is really comprehensive': healthcare professionals' views on recommending online resources for pain self-management. *Br J Pain* 2021; 15: 429–440.
- Wildman JM, Moffatt S, Steer M, et al. Service-users' perspectives of link worker social prescribing: a qualitative follow-up study. *BMC Public Health* 2019; 19: 98. DOI: 10.1186/s12889-018-6349-x
- Yank V, Laurent D, Plant K, et al. Web-based selfmanagement support training for health professionals: a pilot study. *Patient Educ Couns* 2013; 90: 29–37.
- Munro V, Morello A, Oster C, et al. E-learning for selfmanagement support: introducing blended learning for graduate students – a cohort study. *BMC Med Educ* 2018; 18: 219. DOI: 10.1186/s12909-018-1328-6
- 32. Massimi A, De Vito C, Brufola I, et al. Are communitybased nurse-led self-management support interventions effective in chronic patients? Results of a systematic review and meta-analysis. *PLOS ONE* 2017; 12: e0173617.
- Lawn S, Zhi X and Morello A. An integrative review of e-learning in the delivery of self-management support training for health professionals. *BMC Med Educ* 2017; 17: 183. DOI: 10.1186/s12909-017-1022-0
- 34. Sassen B, Kok G, Schepers J, et al. Supporting health care professionals to improve the processes of shared decision making and self-management in a web-based intervention: randomized controlled trial. *J Med Internet Res* 2014; 16: e211.
- 35. Dineen-Griffin S, Garcia-Cardenas V, Williams K, et al. Helping patients help themselves: a systematic review of self-management support strategies in

primary health care practice. *PLOS ONE* 2019; 14: e0220116.

- Du S, Yuan C, Xiao X, et al. Self-management programs for chronic musculoskeletal pain conditions: a systematic review and meta-analysis. *PATIENT Educ Couns* 2011; 85: E299–E310.
- Cole F, Kinchin B, Johnson L, et al. Gabapentinoids and opioids tapering tool box (GOTT): early findings. *British Journal of Pain* 2021; 15(2): 1–22.
- Penlington C, Ashmore J, Agathangelou M, et al. Ten footsteps 2021. An online course to support selfmanagement of pain. *Pain Rehabil - J Physiother Pain* Assoc 2022; 2022: 34–41.
- Moffatt S, Steer M, Lawson S, et al. Link Worker social prescribing to improve health and well-being for people with long-term conditions: qualitative study of service user perceptions. *BMJ Open* 2017; 7: e015203.
- Mccabe C, Patel KD, Fletcher S, et al. Online interprofessional education related to chronic illness for health professionals: a scoping review. *J Interprof Care* 2021; 35: 444–453.
- Home. Live Well With Pain, 2022 https://livewellwithpain. co.uk/ (accessed 21 July 2022).
- 42. Qualtrics Provo and UT USA. *Qualtrics XM*, 2020, https://www.qualtrics.com
- 43. Braun V and Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
- Thematic analysis. In P Rohleder & A Lyons (eds) Qualitative Research in Clinical and Health Psychology (pp95 – 113). basingstoke: Palgrave MacMillan.
- Munigangaiah S, Basavaraju N, Jadaan DY, et al. Do "Myths" of low back pain exist among Irish population? a cross-sectional study. *Eur J Orthop Surg Traumatol* 2016; 26: 41–46.
- Gross DP, Ferrari R, Russell AS, et al. A populationbased survey of back pain beliefs in Canada. *Spine* 2006; 31: 2142–2145.
- Goubert L, Crombez G and De Bourdeaudhuij I. Low back pain, disability and back pain myths in a community sample: prevalence and interrelationships. *Eur J Pain* 2004; 8: 385–394.
- Darlow B, Perry M, Stanley J, et al. Cross-sectional survey of attitudes and beliefs about back pain in New Zealand. *BMJ Open* 2014; 4: e004725.
- Farin E, Gramm L and Schmidt E. The patient-physician relationship in patients with chronic low back pain as a predictor of outcomes after rehabilitation. *J Behav Med* 2013; 36: 246–258.
- Frostick C and Bertotti M. The frontline of social prescribing

 how do we ensure link workers can work safely and effectively within primary care? *Chronic Illn* 2021; 17: 404–415.
- 51. Ryan C. Flippin' pain: a little less medicalisation a little more action, please! *Pain News* 2021; 19.

- 52. Livadas N, Martin D, Ryan C, et al. Health care professionals' beliefs about persistent musculoskeletal pain following an online pain science education based public health event. *Physiotherapy* 2022; 114: e138.
- Varsi C, Ledel Solem IK, Eide H, et al. Health care providers' experiences of pain management and attitudes towards digitally supported self-management interventions for chronic pain: a qualitative study. *BMC Health Serv Res* 2021; 21: 275. DOI: 10.1186/s12913-021-06278-7
- Chen AT and Swaminathan A. Factors in the building of effective patient–provider relationships in the context of fibromyalgia. *Pain Med* 2020; 21: 138–149.
- 55. Mills SL, Pumarino J, Clark N, et al. Understanding how self-management interventions work for disadvantaged populations living with chronic conditions: protocol for a realist synthesis. *BMJ Open* 2014; 4: e005822.
- 56. Carroll C, Booth A, Papaioannou D, et al. UK healthcare professionals' experience of on-line learning techniques: a systematic review of qualitative data. J Contin Educ Health Prof 2009; 29: 235–241.
- Jonkman NH, Groenwold RHH, Trappenburg JCA, et al. Complex self-management interventions in chronic disease unravelled: a review of lessons learned from an individual patient data meta-analysis. *J Clin Epidemiol* 2017; 83: 48–56.