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Exploring the influence of patient-professional partnerships on the self-management of chronic back pain: a qualitative study

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Abstract

Background

Patients are encouraged to take an active role in self-managing their chronic back pain and functional problems. However research suggested that patients do not self-manage and they expect health professionals to fulfil a comprehensive role. A partnership between patients and health professionals is highlighted, and the self-management works best when they share knowledge and work together towards optimal goals.

Aims

To explore how patients' partnerships with health professionals may influence their ability to self-manage pain, by exploring patients' experiences.

Design

A grounded theory approach with in-depth semi-structured interviews was undertaken. Each interview was analysed using constant comparative analysis. This study was nested within a larger study on patient-professional partnerships and the self-management of chronic back pain.

Settings and participants

Twenty-six patients with chronic back pain were recruited in a community-based pain management service in Northern England, United Kingdom.

Results

Three themes emerged: building partnerships with health professionals; being supported by health professionals to self-manage the pain; and experiencing a change in self-management. Five approaches which underpinned health professionals' self-management support were identified. Facilitators of and barriers to a good partnership were reported.

Conclusions

This study suggests that a good patient-professional partnership has a positive impact on patients' self-management ability. A theoretical model explaining how such partnership may influence self-management was developed. It is necessary for both patients and health professionals to be aware of their partnerships, which may enhance the effect of pain management services.

Keywords

Patient-professional partnership; Chronic back pain; Self-management; Grounded theory

ACCEPTED

Exploring the influence of patient-professional partnerships on the self-management of chronic back pain: a qualitative study

Introduction

People with chronic back pain often experience considerable physical discomfort, psychological distress, and their family and social relationships are often interrupted (Hoogendoorn, van Poppel, Bongers, Koes, & Bouter, 2000). However, for most people there is no permanent cure for the pain (McCracken, 1998; Van Middelkoop, et al., 2011). The self-management of chronic pain, which may be a lifelong task for many patients, has become a commonly accepted addition to medical interventions (Balagué, Mannion, Pellisé, & Cedraschi, 2012).

Self-management has been defined as 'an ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition individually' (Barlow, Wright, Sheasby, Turner, & Hainsworth, 2002, p. 178). It has been recognised as a means through which patients take an active role in reducing and coping with their pain and relevant functional problems (The Centre for Managing Chronic Disease, 2011). Self-management programmes designed for patients focus primarily on patient involvement and patient education. Patients are encouraged by health professionals to use self-management skills and take control of their own health care, whilst they are provided with knowledge (Newman, Steed, & Mulligan, 2004).

Studies addressing pain self-management make clear that a good patient-professional partnership is a key element of chronic pain self-management programmes (Bair, et al., 2009; Lorig & Holman, 2003). A recent systematic review suggested, however, that patients do not self-manage their chronic conditions, and they expect health professionals to fulfil a comprehensive role (Dwarswaard, Bakker, Staa, & Boeije, 2015). A partnership between patients and health professionals is recommended, and the self-management works best

when patients and health professionals share knowledge and work together towards optimal goals. Bodenheimer, Lorig, Holman, and Grumbach (2002) concur, proposing the theory that a patient-professional partnership that involves collaborative care and self-management education enhances patients' ability to self-manage their chronic conditions.

The importance of establishing a patient-professional partnership in the self-management of chronic conditions has been demonstrated in both the literature and practice. For example, a partnership model could enable patients to make shared decisions with health professionals about their treatment and healthcare (Cooper, Smith, & Hancock, 2008; Coulter & Collins, 2011). The Expert Patients Programme was developed based on patient-professional partnerships, with the aim of combining the valuable work of patients and clinical organisations in developing self-management initiatives in the United Kingdom (UK) (Department of Health, 2001). Despite the emphasis on self-management, there is little research that has generated an explanatory theoretical framework to systematically explain how patient-professional partnerships influence the development of chronic back pain self-management (Fu, McNichol, Marczewski, & Closs, 2015). The aim of this study was to explore how patients' partnerships with health professionals may influence their ability to self-manage pain, by exploring patients' experiences. This study is the second phase of a larger mixed methods study which evaluated the nature and the influence of patient-professional partnerships on the self-management of chronic back pain.

Material and methods

Ethics

The study protocol was approved by the National Research Ethics Service Committee Yorkshire & The Humber – Bradford Leeds, UK (13/YH/0413).

Design

A grounded theory approach through semi-structured individual interviews was undertaken to explore patients' perceptions and experiences of how their partnerships with health professionals, influenced their self-management of chronic back pain.

Setting and sample

This study was conducted in a community-based pain management service located in three health centres where health professionals provided pain self-management support and advice. This included information and exercise relating to patients' specific pain and other problems, time where patients practised self-management strategies and individual consultations where they discussed their progress. This clinic did not provide any medical interventions such as medication prescription or spinal injection. A subsample of the larger sample included in the mixed methods study were selected using a maximum variation strategy (Patton, 1990). This was to ensure patients were included with increased, no change, and decreased self-management ability, according to the results of the first phase. Patients under 18 years of age, being unable to communicate in English, or requiring acute medical intervention for pain relief were excluded.

Data collection

A topic guide for the interviews was designed from the findings of a literature review (Fu, et al., 2015) and piloted. This guide ensured that topics were covered consistently whilst being sufficiently flexible that patients could raise issues of personal relevance. The study summary, protocol, patient information sheet and topic guide were taken to an Involvement Advisory Group of patients for review and feedback. A final version of the interview topic guide was then developed (Fig. 1). All interviews were digitally recorded and downloaded into a secure folder on a university computer system, and were transcribed verbatim for analysis (Halcomb & Davidson, 2006).

(insert Fig. 1)

Data analysis

Each interview was analysed using constant comparative analysis (Charmaz, 2006). The aim was to study participants' actions and experiences and generate an explanatory theory about the researched phenomenon (Artinian, 1997; Corbin & Strauss, 2008; Glaser & Strauss, 1967). An iterative process of analysing the transcripts was undertaken, involving initial line-by-line coding, focused coding and theoretical coding. The most significant and/or frequent codes were compared and grouped to synthesise and explain large amounts of data, creating substantive codes and establishing strong analytical directions, which were grouped into 15 categories. The theoretical codes were then developed that conceptualised how substantive codes may relate to each other as hypotheses to be integrated in to a theory. The whole coding structure was then examined to ensure that each code, category and theme added a distinctive contribution to the whole, and the complex relationships between them were thoroughly explored. Theoretical saturation was achieved when no new categories or themes appeared during data interpretation (Charmaz, 2006). Where there was a question about the emergent codes, categories and themes, all authors discussed until consensus was reached. Nvivo 10 software facilitated coding and analysis (QSR International, 2012).

Rigour

Rigour was established using the criteria of an audit trail, dependability and conformability (Denzin & Lincoln, 2011). The interviews were conducted by one interviewer (Britten, et al.) to ensure consistency and reliability in data collection. All the transcribed interviews were reviewed by the authors to ensure their accuracy. The constant comparative analysis of the interview was conducted by the first author and independently checked by co-authors. Pertinent anonymised quotes extracted from the interviews are presented to ensure transparency (Creswell & Miller, 2000). In addition, the inclusion of patients with no improvement in self-management made the emerging themes more realistic and valid (Creswell, 2014).

Results

A total of 26 patients were purposively selected (Table 1), their ages ranging from 27 to 69 years old. All had experienced chronic back pain for at least 12 months. Due to the majority of the patients showing improved self-management in the first phase, 17 patients with improved, seven with unchanged and two with lowered self-management ability were selected. Each interview lasted between 25-90 minutes. Theoretical saturation started to appear after the completion of the 24th interview. Two additional interviews were conducted to ensure that theoretical saturation was reached.

(insert Table 1)

Three main themes emerged during data analysis: building partnerships with health professionals; being supported by health professionals to self-manage the pain; and experiencing a change in self-management. There were 15 categories within these three themes, displayed in Table 2.

(insert Table 2)

Building partnerships with health professionals

All the patients highlighted that it was necessary to establish a good partnership with health professionals. It was a basis for them to be supported to self-manage their condition, enabling them to feel comfortable to discuss about their difficulties and ask for help.

“So it’s critical that you get on with the guys and that they’re more sort of flexible and proactive with the way.” [Patient 5, 29 years female]

Holding desirable attitudes and characteristics

Patients expected health professionals to be: professional and knowledgeable, friendly and sympathetic and willing to spend time with them and help them to solve their problems. Patients recognised the importance of their own attitudes and characteristics, and playing an active role in pain management along with health professionals’ support. They described that

it was necessary for them to accept the nature of the pain, hold positive beliefs about the outcomes, provide accurate feedback on treatment effectiveness, and be willing to practise self-management skills.

"I have to be honest with them. If I give the wrong information, then she's (health professional) gonna give me wrong information, so it doesn't make sense then." [Patient 11, 45 years female]

Having health professionals to listen and talk with

Health professionals were able to identify patients' health priorities and needs and provide advice suitable for their specific situations when they listened to their pain history and talked through their difficulties. For example, one patient commented that health professionals were *"adaptable, they talked and they listened"* [Patient 12, 55 years female]. Patients felt open and relaxed to discuss their concerns, which provided them with psychological benefits as they were less worried and stressed about their back pain.

Being understood by health professionals

All patients stressed that health professionals should be able to understand their condition and situations. Such understandings could produce a sense of safety for patients, which may encourage them to share pertinent wider difficulties.

"I don't know whether they've experienced it personally with back pain and stuff, but I certainly felt like they knew where I was coming from with my back pain." [Patient 19, 44 years female]

Being able to trust health professionals

Patients reported that it was essential to build a level of trust with health professionals. They started to develop that trust when they gained benefit from the treatment. In turn, trust enabled them to be more confident to self-manage their conditions.

“If you trust that person and know what they’re saying is right and that you need to do it [self-management], then you’re more tempted to do it.” [Patient 17, 48 years female]

Being treated as a person rather than a generic patient

Patients preferred to be treated with individualised approaches that were tailored to their life context and preferences. They felt more able to manage their pain and other difficulties in daily activities, leading to a high degree of motivation. Several patients highlighted that *“it is not just one prescription fits all”* [Patient 1, 52 years female]. To promote the use of individualised approaches, patients further suggested that a greater degree of patients’ involvement was needed in the development of their treatment and care plan.

Having continuous care with particular health professionals

Health professionals in the pain clinic worked as a team and provided support needed at different stages. However, patients commented that it would be easier to build a good partnership if they could have visited the same professional throughout the treatment programme, producing continuity of the treatment. This would have made the consultation process simpler as they would not have needed to describe their conditions several times.

“It’s good if you can also see the same person as well because you kind of build up a rapport with that person, and that person knows everything.”
[Patient 17, 48 years female]

Being supported by health professionals to self-manage the pain

Patients reported that self-management support was underpinned by a partnership, in which health professionals provided knowledge and skills and patients were willing to accept the support and practise skills.

Holding patients accountable for pain self-management

Health professionals helped patients to prioritise their health needs and set short, medium and long term goals for their self-management plans. Patients used these goals to monitor the progress of their ability to self-manage. The importance of goal setting went beyond managing pain-related problems. Patients felt they were taken notice of and held accountable by professionals to seek solutions and work together towards their goals.

“... to change my goals just a little bit to try something a bit different. Finally, we came up with the step thing and my partner’s going to do me a step.”

[Patient 12, 55 years female]

Supporting through providing useful information

Accurate and detailed information was perceived as both an essential resource and a form of re-assurance for self-management. Quality information included explaining the cause of the pain and providing a range of accessible materials and reassurance. Patients felt equipped to self-manage as a result of written materials which included a set of skills, strategies and experiences from other patients.

“This is something that everybody needs; it’s all about the information.”

[Patient 11, 45 years female]

Supporting through provision of physical exercise

Health professionals taught physical exercise that provided a practical way for patients to manage their condition. Clear explanations of the potential benefits increased patients’ adherence to exercise practice. Patients were particularly positive when health professionals demonstrated these exercises in person, and printed out the instructions to practise at home. Some patients responded positively to not being given strict direction on the amount of exercise taken daily, enabling them to take control of the exercises and adapt practices to their lives. Patients recognised that short term pain from physical exercise was outweighed by the longer term benefit.

“I felt pain at the beginning, but that pain has made me recover from my injury. If I’d not had that pain I wouldn’t have been able to recover.” [Patient 9, 43 years male]

Supporting through provision of psychological support

Many patients stated that *“depression plays a huge part in pain”* [Patient 18, 37 years female], and appreciated that health professionals supported them to reduce the psychological impact. Psychological support resources, including meditation skills, a relaxation CD and breathing techniques were identified as useful. Patients’ interactions with health professionals made them more positive and optimistic, producing benefits that included having a nice sleep, relaxed muscles and increased concentration. Some described the connection between physical pain and psychological distress, and realised that their pain experience could be reduced by improving their psychological health status.

“Because if you’re feeling really depressed then you just can’t be bothered, you don’t eat, you don’t sleep, you don’t do this, and you don’t do that. So then that sets things off.” [Patient 24, 60 years female]

Supporting through provision of holistic care

The majority of the patients remarked that pain clinics offered a holistic care approach to pain management. The health professionals provided support on both pain self-management and their overall health status, including eating habits, sleep pattern, job management, and financial difficulties.

Pacing was highlighted as an important skill, enabling patients to undertake activities by breaking the task down into bite sized chunks. It allowed patients to practise self-management in a flexible way, and helped them recognise their early warning signs before experiencing escalating pain. Because of their chronic pain, patients’ incapacity and struggles had reinforced their negative and self-critical thinking, and some blamed themselves or felt guilty about their pain. These negative judgments considerably affected

the way in which patients coped with their pain. In this instance, pacing provided them with an opportunity to pursue and achieve their goals in life, with the potential benefit of increasing their confidence and self-esteem.

"We did not just speak about my pain today; it's been about my eating habit, about my sleep pattern, and all of that. It's holistic, it's what's needed."

[Patient 11, 45 years female]

Experiencing a change in self-management

Patients' experiences enabled a shift in their focus from concentrating on and worrying about the difficulties in life, to learning and adapting a new lifestyle towards a better quality of life, living with the pain.

Acknowledging and seeing the influences of a patient-professional partnership on self-management

Many patients linked the progress made on their self-management ability to the support provided by health professionals. They perceived their partnerships with health professionals as an emotional connection, which provided a platform for smooth communication and created a sense of 'safety.' This was particularly important during what patients reported as 'difficult patches'.

"Well I don't think that we have anything productive happen unless you've got a comfortable partnership where you feel relaxed with somebody."

[Patient 2, 58 years female]

Thinking differently about chronic back pain

Patients identified the positive impact on their psychological status as a key benefit gained. They attributed this new mind set to supportive partnership working with health professionals. Some patients, particularly those who had felt improvement in their pain status, reflected

how their mind set had significantly influenced them consistently to attempt and practise self-management.

"I'm going to be able to understand my pain and I'll be able to accept my pain and manage it in the long run, I'm going to be able to manage my pain, and just accept it's going to be there and not just to disregard it." [Patient 23, 28 years female]

Facing the reality and accepting the long term pain

The connection between acceptance, responsiveness and appropriate action was frequently identified by patients. They gradually realised that the acceptance of the nature of their chronic back pain may be the first step towards self-management. Rather than being restricted by pain and other difficulties, acknowledgement and acceptance of the nature of the chronic pain enabled patients to move on from where they were stuck and attempt to proactively manage the pain.

"It (pain) is not going to disappear anytime soon. It is all about managing what's there." [Patient 5, 29 years female]

Making progress on pain self-management

Patients reported being aware of self-management, seeing symptoms improve or stabilise, taking less medication and being able to keep track of early warning signs as results of progress made on self-management. This was particularly recognised by those patients who had achieved certain activities that would not have been possible before their attendance at the clinic. Self-management skills reduced their experiences of pain and other related problems, while expanding a new experience of gaining benefit and living a normal life. These positive changes and confidence drove them to pursue new directions in other parts of life, including education, work and relationships, by valuing positive aspects of themselves and enjoying life again.

“For the last three months I’ve had no pain and when he (health professional) asked me to bend down, I went straight down, brilliant!” [Patient 9, 43 years male]

Discussion

This study explored the influence of patient-professional partnerships on the self-management of chronic back pain, from patients’ perspectives and experiences. Three themes and 15 categories were identified. A theoretical model emerged (Fig. 2), which illustrates the probable associations between these themes and categories, and how patient-professional partnerships positively influenced the self-management of chronic back pain.

(insert Fig. 2)

Facilitators identified by patients enable the development of a good patient-partnership. This may create an interaction-based platform for self-management support, where the individual patient becomes an active participant in taking actions to manage their pain based on the knowledge and skills provided by health professionals. Patients’ perceptions and beliefs are influenced gradually by interacting with health professionals and gaining support on relevant information, exercises and emotion management. This influence may lead to a change in their mind set, from pursuing a permanent cure to ‘facing the reality’, accepting their long term back pain and being willing to manage the pain. This pivotal change in their beliefs contributes to the development of their capability and capacity, enabling them to make progress on self-management and realise that it is possible to live a normal lifestyle with their pain. When patients gain benefit in self-managing their condition, their trust in health professionals is highly likely to increase, helping to strengthen the partnership which in turn influences patients’ self-management perceptions and behaviours. The findings and themes are presented as cyclic process, but it is worth noting that this does not imply a linear progression, nor is it a ‘one-off’ process in patients’ experiences. Instead, they are a set of connected features of patients’ experiences that may cycle round repeatedly at different stages. During the early stage of treatment in pain clinics, the interactions between

partnerships and health professionals' support may need to be focused. As treatment continues, the changes in patients' perceptions and beliefs may be worth exploring by health professionals, enabling improvement in self-management. Hence it is important to understand the priorities by assessing patient-professional partnerships and patients' self-management ability at different stages, in order to accelerate the process.

A good patient-professional partnership may produce a sense of safety for patients. This was reported as one essential psychological benefit, enabling patients to feel safe and free from pain and threat. Patients with chronic conditions, particular when lacking diagnosis, may be likely to feel 'unsafe'. A good partnership could create a sense of belonging for patients, as they consider professionals who understand fully about their conditions and life situations being one of their groups 'sharing similar experience'. A sense of safety is experienced not only as a result of a good partnership with professionals, but may also be underpinned by their carers, family and friends, as well as religion and faith (Hupcey, 2000). Future studies may be needed which consider the impact of the interaction between health professionals and other parties involved in caring for patients with chronic back pain.

The findings of this study also echo the Chronic Care Model (Wagner, et al., 2005), in which patients are encouraged to become more knowledgeable and more actively involved in decisions about their health care. A more systematic and planned approach should be developed to support patients, on the basis of partnerships between engaged patients and proactive health professionals (Wagner, et al., 2005). Many studies have made suggestions about health professionals' roles in a partnership (Barton, 2009; Dwarswaard, et al., 2015). This study further identifies the role of patients, including accepting the nature of the pain, holding positive beliefs about the outcomes, providing accurate feedback on treatment effectiveness, and being willing to practise self-management skills. Moreover, a combination of different management strategies should be accessible for patients. Self-management strategies were widely reported in this study, including knowledge, written materials, physical exercise, pacing, breathing, and relaxation skills. However many of these are not commonly

used. Previous studies identified physical strategies (Cooper, Smith, & Hancock, 2009; Liddle, Baxter, & Gracey, 2007; May, 2007), with physical exercise being the primary intervention as opposed to cognitive strategies. Adequate and individualised support from health professionals are needed which may strengthen this process by suggesting appropriate self-management skills.

Five approaches through which health professionals provided their self-management support were identified. It is worth noting that the success of the five supportive approaches is influenced by the facilitators of a good patient-professional partnership. However, difficulties in establishing a patient-professional partnership still exist, mainly due to the gap between the policy ideals and routine practice in reality (Cribb, 2011). Patients do not feel as involved in their health care as they expected (Richards & Coulter, 2007; Sizmur & Redding, 2010). This may be due to a lack of clear guidance for health professionals on how to involve patients, compounded by insufficient consultation time. Research has shown that patients feel more satisfied with the consultation length when health professionals are willing to listen and understand their situations (Ogden, et al., 2004). This suggests that smooth communication and mutual understandings are more important and would increase patients' satisfaction within limited consultation time.

Patients' experiences of positive changes in their psychological and physical status were frequently reported. However the extent of these changes varied. Some reported a more gradual and cumulative process while others experienced rapid benefits. Interestingly, patients whose level of pain was reduced also gained benefits in their emotional health, but not all patients whose emotional health improved had a reduction in pain level. This suggests that it may be useful to treat patients' emotional health and mind set prior to mitigating the physical pain, given the fact that debate continues on whether psychiatric comorbidities precede the onset of chronic pain (Fishbain, Cutler, Rosomoff, & Rosomoff, 1997; Knaster, Karlsson, Estlander, & Kalso, 2012). The interconnection between thoughts, feelings, behaviours and resultant consequences has been recognised as the core of the

Cognitive Behavioural Therapy (CBT) (Meichenbaum, 2009). CBT is a bio-psychosocial approach which has been suggested to be an effective treatment for chronic pain (Sveinsdottir, Eriksen, & Reme, 2012). A good patient-professional partnership as an important component of CBT forms a collaborative approach, which facilitates them to identify explicit goals and break them down into manageable subgoals in their self-management behaviours. In this study, patients felt more confident and competent to self-manage their condition when they were supported by health professionals in a partnership. Hence CBT approaches concentrating on developing a patient-professional partnership may be worth promoting in pain clinics.

Limitations

As with any research, this study has limitations. The sample size was limited to 26 patients of 103 who had received pain management support in the pain management clinics. Because the majority of them showed increased self-management, only two out of three patients with slightly lowered self-management after the first phase were included. Therefore patients with negative or indifferent experiences may be underrepresented in this study. However, the poor response of patients with no improvement or negative experiences was unsurprising, as they were unlikely to continue their treatment, and would not be motivated to take part in research. Future studies could compare the experiences and characteristics of patients with extreme increased and decreased self-management ability, in order to identify the characteristics of responders to self-management programmes and predictors of response in patients with chronic back pain. A further limitation was that the patients only had three-month experience of pain management programmes, more studies are needed to investigate whether patient-professional partnerships may have a long term influence on their self-management. Additionally, the findings of this study are based on patients' perspectives; therefore future research should concern health professionals in order to understand their views on this topic.

Practice implications

The findings of this study suggest that there is a need to shift from a paternalistic culture in healthcare, to a paradigm that is about promoting partnership working between the health professionals and the patient in the management of chronic back pain. Although self-management programmes may vary in different health care settings, the theoretical model developed in this study can be a useful guide for health professionals in practice to identify the key factors of building a partnership, which may enable them to better empower patients and provide individualised care for patients. It is also worth realising that the patient-professional partnership is a necessary component of a successful self-management programme. Patients' experiences in this study also demonstrate that a good patient-professional partnership has a positive impact on patients' perceptions and behaviours. This may require health professionals to improve their communication skills to collaborate with patients and motivate them to think about and respond to pain with different approaches. Rather than relying almost exclusively on taught physical exercise, it is important for health professional to support patients using an individualised approach where the patient may effectively improve their ability to self-manage. For patients with chronic back pain, it may be beneficial to be active and concentrate on managing the emotional distress and negative mind set prior to making progress on pain relief. For healthcare organisations, it would be useful to shift the focus of interaction to maximising the positive attributes of the partnerships between patients and health professionals.

Conclusion

This study suggests that a good partnership between patients and health professionals positively influences patients' self-management ability for chronic back pain. Factors influencing partnerships and approaches underpinning professionals' support for self-management were identified. A theoretical model is produced, explaining how patient-professional partnerships may positively influence self-management and patients' experiences of their condition. Based on this, a guideline on building a good patient-

professional partnership should be developed in practice. Both patients and health professional should be aware that not only are pain self-management support and education useful, but also their partnerships is essential to improved health outcomes.

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Conflicts of Interest

None.

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Table 1 Characteristics of interviewees (n=26)..... 24

Table 2 Themes and categories relating the influences of patient-professional partnerships
on the self-management of chronic back pain 25

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Table 1 Characteristics of interviewees (n=26)

Patient no.	Age	Gender	Pain history	Self-management ability	Occupation	Educational level	Marital status
1	52	Female	1-4	No change	Full time	Other qualifications	Spouse or partner
2	58	Female	≥8	Increased	Full time	Degree or equivalent	Spouse or partner
3	29	Female	≥8	No change	Full time	Degree or equivalent	Spouse or partner
4	54	Female	≥8	Increased	Unemployed	No qualifications	Single
5	29	Female	≥8	Increased	Full time	Degree or equivalent	Spouse or partner
6	40	Male	≥8	Increased	Unemployed	Below 'A' level	Spouse or partner
7	68	Female	1-4	Increased	Retired	No qualifications	Spouse or partner
8	49	Female	1-4	Decreased	Part time	Below 'A' level	Spouse or partner
9	43	Male	1-4	Increased	Full time	Other qualifications	Spouse or partner
10	59	Female	1-4	Increased	Unemployed	Other qualifications	Spouse or partner
11	45	Female	5-7	No change	Full time	Below 'A' level	Single
12	55	Female	≥8	Increased	Unemployed	No qualifications	Single
13	56	Female	1-4	Increased	Part time	Other qualifications	Spouse or partner
14	57	Male	≥8	Increased	Off sick	Below 'A' level	Spouse or partner
15	49	Female	≥8	No change	Unemployed	A' level and above	Single
16	44	Female	≥8	No change	Unemployed	Below 'A' level	Spouse or partner
17	48	Female	1-4	Increased	Full time	Below 'A' level	Spouse or partner
18	37	Female	≥8	Increased	Full time	Degree or equivalent	Spouse or partner
19	44	Female	1-4	Increased	Part time	Other qualifications	Spouse or partner
20	35	Female	≥8	No change	Full time	Below 'A' level	Single
21	69	Male	1-4	No change	Retired	No qualifications	Spouse or partner
22	49	Female	≥8	Increased	Part time	Below 'A' level	Spouse or partner
23	28	Female	5-7	Decreased	Unemployed	A' level and above	Spouse or partner
24	60	Female	≥8	Increased	Unemployed	No qualifications	Widowed/divorced/separated
25	27	Male	≥8	Increased	Full time	Below 'A' level	Single
26	63	Female	≥8	Increased	Self-employed	Degree or equivalent	Spouse or partner

Table 2 Themes and categories relating the influences of patient-professional partnerships on the self-management of chronic back pain

Themes	Categories
Building partnerships with health professionals	Holding desirable attitudes and characteristics Having health professionals to listen and talk with Being understood by health professionals Being able to trust health professionals Being treated as a person rather than a generic patient: individualised care Having continuous care with particular health professionals
Being supported by health professionals to self-manage the pain	Holding patients accountable for pain management Supporting through providing useful information Supporting through provision of physical exercises Supporting through provision of psychological support Supporting through provision of holistic care
Experiencing a change in self-management	Acknowledging and seeing the influences of a patient-professional partnership on self-management Thinking differently about chronic back pain Facing the reality and accepting the long term pain Making progress on pain self-management

ACCEPTED

Fig. 1 Interview topic guide..... 27

Fig. 2 Theoretical model of how patient-professional partnerships may influence the self-management of chronic back pain 28

ACCEPTED

Fig. 1 Interview topic guide

Interview Topic Guide

- Personal background and circumstances;
- Experiences of relationships with the health professionals in pain clinics;
- Views on factors that may facilitate of a good patient-professional partnership;
- How patients managed your back pain before attending pain clinics;
- How patients managed your back pain after attending pain clinics;
- Whether patients' partnerships with the health professionals influenced their ability to manage back pain and why;
- Patients' suggestions and recommendations to improve patient-professional partnerships in order to manage back pain better;
- Any other questions they have about this study.

ACCEPTED

Fig. 2 Theoretical model of how patient-professional partnerships may influence the self-management of chronic back pain

