

Persistent back pain – why do physical therapy clinicians continue treatment? A mixed methods study of chiropractors, osteopaths and physiotherapists

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Abstract

Aims: (a) To investigate how widespread is the use of long term treatment without improvement amongst clinicians treating individuals with low back pain. (b) To study the beliefs behind the reasons why chiropractors, osteopaths and physiotherapists continue to treat people whose low back pain appears not to be improving.

Methods: A mixed methods study, including a questionnaire survey and qualitative analysis of semi-structured interviews. Questionnaire survey; 354/600 (59%) clinicians equally distributed between chiropractic, osteopathy and physiotherapy professions. Interview study; a purposive sample of fourteen clinicians from each profession identified from the survey responses. Methodological techniques ranged from grounded theory analysis to sorting of categories by both the research team and the subjects themselves.

Results: At least 10% of each of the professions reported that they continued to treat patients with low back pain who showed almost no improvement for over three months. There is some indication that this is an underestimate. reasons for continuing unsuccessful management of low back pain were not found to be primarily monetary in nature; rather it appears to have much more to do with the scope of care that extends beyond issues addressed in the current physical therapy guidelines. The interview data showed that clinicians viewed their role as including health education and counselling rather than a 'cure or refer' approach. Additionally, participants raised concerns that discharging patients from their care meant sending them to into a therapeutic void.

Conclusion: Long-term treatment of patients with low back pain without objective signs of improvement is an established practice in a minority of clinicians studied. This approach contrasts with clinical guidelines that encourage self-management, reassurance, re-activation, and involvement of multidisciplinary teams for patients who do not recover. Some of the rationale provided makes a strong case for ongoing contact. However, the practice is also maintained through poor communication with other professions and mistrust of the healthcare system.

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1. Introduction

Low back pain (LBP) has a large health and social impact (Waddell, 1998). Around 5–10% of those who present to their general practitioner, with a new episode of back pain will develop a persistent problem (Croft et al., 1998).

The majority of people with back pain will learn to live with their pain and cease consulting with their GP, or seek other avenues for treatment (Croft et al., 1998). Advice is commonly sought from chiropractors, osteopaths and physiotherapists (all three termed ‘physical therapy clinicians’ for the purposes of this paper), who carry out 700,000 therapy sessions for back pain annually in the UK (CSAG, 1994).

Randomised controlled trials of manipulation, at best, only show small positive effects compared to some other treatments (Assendelft et al., 2003; Cherkin et al., 2003; Van Tulder et al., 2003; Hagen et al., 2002). However, there is also evidence to suggest that the types of care commonly used by chiropractors, osteopaths and physiotherapists, (such as manipulation and exercise) may be cost-effective for those with sub-acute or chronic back pain (Underwood, 2003). Internationally, evidence-based guidance recommends disengaging from treatment and/or referring back to the General Clinician if there are no signs of improvement within a reasonable time (Koes et al., 2001), although the length of a reasonable time has not been defined. It is thought (Abenhaim et al., 2000) that for patients with sub-acute (4–12 weeks) back pain, persisting with ineffective treatment could increase the risk of patients developing chronic disability, by reinforcing the perception of back pain as an illness, and contributing to the maintenance of illness behaviour, including inactivity, negative beliefs and negative coping strategies.

The popularity of physical therapy among people with low back pain is disproportionate to the evidence of effectiveness from randomised controlled trials. One explanation for this might be in the choice of outcome and the goals of clinicians treating patients with back pain. This study focuses on the physical therapy clinicians’ overt rationale and covert beliefs, described broadly as cognitions, in the treatment of these patients.

In the absence of removal of the lesion causing the back pain or providing a ‘cure’, which is not possible for many patients with back pain, three objective outcome measures could be considered ‘gold standards’: return to normal activities (including work), reduction in medication consumption, and termination of treatment (Fortune et al., 1991). These three aspects/features, conceptualised as termination of sickness (Anderson, 1998) result in a reduction of direct cost. Successful treatment or reduction in health care costs for back pain should also provide change in at least one of these ‘objective’ outcomes. Since guideline implementation is difficult if taken in isolation from the belief systems and motiva-

tions operating in clinical practice (Pincus et al., 2002; Armstrong et al., 1994), we carried out this study to inform future development and implementation strategies.

Our aims were to investigate the prevalence of long-term treatment, and to identify and classify the reasons why physical therapy clinicians continue to treat LBP patients in the absence of objective improvement.

2. Methods

We selected a mixed method approach. We carried out a survey questionnaire to establish, quantitatively, how widespread the reported practice of long-term treatment in the absence of improvement was in each of the professions. We then conducted semi-structured interviews with participants from each profession, using a grounded theory approach (Smith, 1995).

2.1. Participants

Participants were drawn from the statutory registers of UK chiropractors, osteopaths, and chartered physiotherapists.

3. The survey

We sent a postal questionnaire to 200 randomly selected members from registration listings of each profession in the London (UK) area seeking information about gender, age group, years since graduation, working environment; private or National Health Service (NHS); primary or secondary care, and location; inner-city, urban or rural. Additionally, we asked clinicians to indicate if they could recall patients with sub-acute low back pain that they had seen at least eight times over a 12 week period and who showed considerably less improvement than they expected. Finally, we asked whether any of these patients showed no improvement. The possible responses to the last question were ‘none’, ‘one’ or ‘several’. We invited to interview all the consenting clinicians ($n = 30$) who answered ‘yes, several’ to this question (nine declined to be interviewed). Additionally, we interviewed a smaller number of clinicians ($n = 14$, but data only provided from 12) who indicated that they did not continue treating low back pain patients who failed to recover. This group was purposively selected to include a range of age, gender, and private or NHS clinicians.

4. The interview

A telephone call prepared the clinicians for the research interview by asking them to select a patient

matching the target description (a patient with ‘simple’ sub-acute low back pain, treated long term without evidence of improvement). The clinicians were encouraged to read the case notes prior to the full interview, and to have them available during the taped interview. We asked participants to keep all identifying details of the patient anonymous. The study received ethical approval from Trent Multi-Centre Research Ethics Committee.

4.1. Interview schedules – development and changes

A multidisciplinary group (MPCC) developed the interview schedule. It had two sections: Firstly, general questions about the physical therapy clinicians’ caseload and issues around referring patients on to other clinicians and dropping out of treatment. Secondly, questions about the specific patient they had treated, fitting the above criteria described. Clinicians were asked to describe the patient, their relationship with them, the patient’s goals and their own changing goals in treatment. The interview then focused on possible discharge from treatment and the circumstances under which this could/would take place. The smaller group of clinicians who indicated that they did not continue to treat patients who were not responding after the initial first few sessions, were asked to choose a similar type of presenting patient whom they had discharged or referred on. The interview focused on their cognitions around this event.

A single researcher did all the interviews, which interviews took place at the clinicians’ place of work, or in a few cases at their homes. Interviews were audio taped, transcribed verbatim, and anonymised for the analysis. We sent transcripts back to interviewees with a stamped addressed envelope requesting their corrections and clarifications to ensure that the transcript represented their ideas.

4.2. Coding

We used a grounded theory approach to analyse the data by generating explanatory concepts and categories (Smith, 1995). This allowed emerging categories and concepts to be probed in the later interviews. Coding was continued until data saturation was achieved, and new themes were no longer being generated. Preliminary coding included analysis of sentence fragments and the development of a set of themes, which impacted on the more purposeful and specific coding that followed.

Reasons for continuing to treat, and reason for discharge were then coded in each transcript by two researchers working independently (TP and SV), who then discussed and agreed into which theme each verbatim quote would be placed. Proliferation of codes was encouraged, but when saturation was achieved, they presented the entire set of codes with verbatim examples

were presented to the collaborative group members, and themes were collapsed into meta-themes. We combined these meta-themes and compared them to a theoretically based framework we had devised to represent the consensus of evidence-based guidance (Koes et al., 2001). We defined our three ‘objective’ indicators of improvement as return to normal activities, reduction in medication consumption, and reduction or cessation of treatment, as described in the introduction; these definitions formed a framework for our analysis, but were not discussed explicitly with participants. Instead we coded their subjective interpretations of improvement and their narratives of the process of change in treatment goals over time.

5. Results

5.1. Questionnaire

The response rates to the survey were 122/200 (61%) for the chiropractors, 120/200 (60%), for the osteopaths, and 105/200 (52%) for the physiotherapists (Table 1). Overall we received responses from 354/600 (59%) of those approached. Seven spoilt questionnaires were excluded from the analysis. Thirty-nine respondents reported that they treated several patients long term without improvement (nine of these declined to be interviewed). Seventy-eight respondents reported that they treated one such patient long term.

There were no statistically significant differences in age, gender distribution and years in practice between those who treated several patients long term ($n = 39$)

Table 1
Demographic information from the three professions

	Osteopaths ($N = 120$)	Chiropractors ($N = 122$)	Physiotherapists ($N = 105$)
Male (%)	55	50	20
Age			
20–29	3	23	26
30–39	49	51	55
40–49	38	27	11
50–59	20	12	9
60+	8	2	3
Missing data	2	7	1
Primary care	66	70	50
Secondary care	6	8	24
Both	37	36	24
Other	2	1	1
Missing data	9	7	5
NHS only/mainly	5	1	49
Private and NHS	15	7	8
Private only	97	108	46
Missing data	3	6	2
Years in practice	12.7	8.9	12.8
95% CI	(11.1–14.3)	(7.5–10.2)	(11.1–14.5)

and those who reported that they did not treat long term ($n = 212$): Age $p = 0.33$, gender $p = 0.62$, years in practice $p = 0.48$. There were significantly ($p = 0.04$) more clinicians in urban than inner city settings in the group treating long term (64% vs. 40%) in comparison to clinicians who did not treat long term. There were very few clinicians working in rural settings.

The differences in proportion of clinicians in each profession who reported treating several patients long term without improvement was statistically significant (7.5% chiropractors, 9% osteopaths, and 18% physiotherapy, $p = 0.01$). We could not explore this difference fully because nine of the physiotherapists who reported treating long term, all of whom were employed mostly or exclusively in NHS settings declined to be interviewed.

5.2. Interview study

We interviewed all 11 chiropractors, all nine osteopaths, and 10/19 physiotherapists who reported continuing to treat a patient for more than eight times over three months without any evidence of improvement (n across the professions = 30). There were no obvious differences between the physiotherapists who agreed to participate and those who declined to participate in terms of age, gender, and time in practice. However, all nine of the physiotherapists who declined to participate were NHS based, while only four of the physiotherapists interviewed were based exclusively in NHS settings. A further 14 clinicians (four chiropractors, six osteopaths and four physiotherapists) who reported they did not treat long term without signs of improvement were also interviewed. Two of these interviews were not suitable for analysis because of poor sound quality, resulting in a total of 42 interviews for analysis.

Clinicians' reasons for continuing to treat without overt evidence of improvement from patients are presented against an evidence-based approach in Table 2. Meta-themes are underlined in the text below (Table 2).

6. Meta-themes

6.1. The role of the clinician

Clinicians saw themselves as educators, counsellors, and health maintainers. As a problem-solver (a description derived by the research team based on literature and participants responses), the role of the physical therapy clinician is to determine the problem, including exacerbating factors (which could be psychological), and determine whether physical treatment is appropriate. If treatment is not effective, or if patients are non-compliant resulting in treatment being ineffective, the best action is to refer. As a

counsellor and health maintainer, the clinician maintains an open door policy. The aim of treatment is not limited to cure, but extends to education, advice and maintenance.

6.2. The relationship between clinicians and patients

Clinicians reported investing time and effort to create trust and an atmosphere in which patients felt able to discuss their fears. This sometimes resulted in later difficulties. They explained that patients who had become dependent on the support offered by the clinician did not want to discontinue treatment. Several clinicians continued treating to avoid conflict associated with attempting to discharge the patient. However, many clinicians felt it was the patients' choice whether to continue in treatment or disengage, regardless of the effectiveness of the treatment. Within this relationship, non-compliance was not an issue. It was conceptualised as part of the patients' problems, for which the clinician provided on-going support.

A marked difference in the conceptualisation of the health system appeared to exist between the physical therapy clinicians and that implied by an evidence-based approach. Guidelines propose timely referrals, and presuppose a good line of communication between professions. This encourages appropriate discharge/referral when treatment appears ineffective. However, within the groups we interviewed two themes emerged in reference to the health care system. The first was distrust of other professions. Although some clinicians referred, many expressed reservations about other professions' ability to help patients with low back pain. Sometimes this was due to practical issues, such as waiting lists. Other times this was in reference to clinical skill. The second robust theme emerging across the groups was that discharging the patients back to their general practitioner would be letting them down. Since it was unlikely that general practitioner would have any better therapeutic options or access to services superior to those they themselves offered this was, in effect, sending them into a health care void.

Finally, across the groups, clinicians saw their professional expertise as extending that suggested by evidence based guidance. In addition to their skills as counsellors, they continued to treat patients when they had not yet exhausted their 'bag of tricks'

"I've still got a couple of tricks up my sleeve in a chiropractic sense" C507,

or tried out all the various interventions possible. These included holistic approaches, combining mind and body exercises (mainly osteopaths), specific exercises (mainly physiotherapists), and preventive treatment (mainly chiropractors, *vide infra*).

Table 2
Meta themes and verbatim quotes to illustrate them

Theme	Consistent with policy	Verbatim example	Verbatim example	Conflicts with policy
Role of clinician	Limited, specific role	“...I guess I got the point were I couldn't think of anything else to do I had tried everything that I had used and felt comfortable with” (Physio)	“I do a lot of education around lifestyle and I do encourage them to come back once every 6 months to a year for a check over and adjustment or whatever if they need it.” (Chiro)	Educator
	Problem solver	“...he is getting better... at the moment... the other things I have in mind... I will only use if the current treatment is not continuing to improve...” (Chiro)	“I don't really go in for discharging people... you have got to keep up what you are doing” (Physio) “...I am actually going to help her through her time of need...” (Physio)	Maintainer of health Counsellor
Relationship	Probing for psychological factors	“...I feel as if there is a missing link, somewhere in that jigsaw something hasn't fallen into place and... I don't think we should be focusing on the pain” (Physio)	“it will be ok and it will respond, it will respond” (Osteo)	Optimistic outlook
	Avoiding conflict by disengaging	“He didn't want to come in more often because he thought it wasn't working but if you don't come in often enough it's not going to work so it was a bit of a conflict so in the end I sent him on” (Chiro)	“I regard him to some extent as a professional challenge” (Chiro) “You can actually upset patients by try in to get them off treatment.” (Osteo)	Personal curiosity (i.e., see patient as a challenge) Avoiding conflict by continuing treatment
	Discharge/referral/continuation clinicians' choice	“I found that it was counterproductive for me to continue asking him to come in when he was convinced that there were no change” (Chiro) “...he was probably over treated but that was led more by him than me and I think if I'm honest that was when the balance changed and I should have with hindsight sat down and thought no and stuck to it” (Physio)	“...she wants the service and I cannot deny her that service...” (Physio)	Discharge/referral/continuation patient's choice
System	Refer to other professionals	“After 1 or 2 sessions... and going to the group she realised... her problem... she could address and cope with it” (Physio)	“and you know that physios – you wait forever and with respect, sometimes they give so little in the way of treatment” (Osteo)	Suspicion of other professionals

(continued on next page)

Table 2 (continued)

Theme	Consistent with policy	Verbatim example	Verbatim example	Conflicts with policy
	Pressure to terminate/cost to patient/to system	“He wanted a quick fix, why did he want it? Not just because he was having some discomfort or pain but because he didn’t want to spend a lot of money getting fixed and that is probably also one of the motivating factors that helped me to discharge him at that stage” (Chiro)	“I don’t know that anyone else can do it at the moment” (Osteo)	Discharge viewed as into a void
Professional	Discharge non-complaint patients	“I couldn’t help him at the moment because he wasn’t willing to stop doing what he was doing, he wasn’t willing to change his lifestyle.” (Physio)	“a lot of my clients come for preventive health care so there’s always that option for regular maintenance type treatments” (Chiro)	Preventative treatment
	Recognise limitations	“...there is somebody who has 10 years more experience than me, why you don’t go and see them. There are so many therapies about” (Osteo)	“There are no doubts that just the therapy process in itself is a very powerful medicine even if you are not changing physical signs.” (Physio)	Holistic approach
	Complete specific task	“...he felt that and I felt as well that the structural physical problems... had improved... but she needed to get to the next level which was with exercise.” (Chiro)	“Then as time went on I really moved into... trying to stabilise and support the back... I had quite a few sessions where I did no active treatment... teaching him exercises.” (Physio)	Personal training/specific exercises
			“At this stage no because I still think that he has got things to work on” (Physio)	Search for diagnosis/cure/tests/bags or tricks

7. NHS versus private settings

The main difference detected in the analysis of the transcripts from the six clinicians working in NHS settings in comparison to others was in their ability and confidence in referring their ‘stuck’ patients onward within a network. The benefit of working within a multidisciplinary network was particularly apparent in contrast to non-NHS views of the health system. Several clinicians reported that they would not discharge their patients despite their slow progress because in effect, they would be discharging them into a void:

“...because there is nowhere for this patient to go? Yes there is that pressure” (O36).

“...if I don’t treat her she has nothing... that puts a certain amount of pressure on me, if I don’t fix her no one else is likely to do it because she has tried them all before me” (C492).

In NHS settings, workload and waiting times were seen as preventing the option of giving ongoing support and treatment without clear evidence of progress. The private sector facilitated an open door policy and the ability for the patient to pursue treatment in the absence of clear progress.

“there is a yawning gap if they go back to their GP... and there isn’t anywhere else to go with it, they can’t afford to have private tests, which is typical of any NHS cycle” (O85).

However, these differences need interpreting with caution, as the majority of clinicians who reported that they treated long-term without the patient’s improvement in the NHS physiotherapy group declined to be interviewed.

Finally, we reviewed the transcripts of the 14 clinicians who were selected because they reported in the survey that they had no patients that had been treated long term without improvement. The interviewing researcher, who was not part of the coding group, reported informally that, in many cases, it had turned out during the interview that clinicians did in fact treat long term, and indeed could recall a patient who fulfilled the research criteria. Their interview schedule was therefore almost identical to the target group. These transcripts were therefore coded together with the target group. Neither of the independent researchers coding the interviews could tell them apart from clinicians recruited from the original group. Only six of the 14 turned out to be of clinicians who discharged patients at early stages if there was no improvement. These clinicians seemed to view themselves and their role in a similar light to evidence-based approaches, *id est*, as problem solvers who focus exclusively on back pain:

“basically everything which I can do within the power or within the scope of this particular field has been done and if you’re still experiencing this pain or this discomfort its pointless me giving you further treatments, which you’re telling me you’re not responding” (C573).

“Because if they don’t respond within the four treatment regime according to your expectations you would then have to question your diagnosis, you would maybe go into the scan route or refer to someone else, so you would investigate it further” (C490).

8. Discussion

Our findings suggest that some physical therapy clinicians (chiropractors, osteopaths, and physiotherapists) continue to treat some patients with ‘simple’ low back pain over long periods, with little evidence of improvement. Over 10% of respondents reported this explicitly in response to our survey. However, when we interviewed clinicians who reported they had not treated any patient for more than eight times without signs of improvement, we found that they also continued ineffective long-term treatment (10 out of 12). We conclude that the 10% reported overtly is probably an underestimate and that the practice of long-term, apparently ineffective treatment is probably more wide-spread. In part this is due to these clinicians and their patients selecting their own goals for treatment. This, in turn, may be a reason for the high patient satisfaction found in the literature and the limited place that reduced pain and improved function is given in determining improvement (Cherkin and MacCornack, 1989; Breen and Breen, 2003).

A primary rationale for the selection of individual goals appears to be the clinician’s comprehension of their role within the process of care. For example, we noted that most of the clinicians reported that there was some improvement outside of the commonly desired outcomes (pain, disability, and return to normal activities such as work). These other outcomes included stress reduction or mechanical structural changes that had not yet translated into patient pain behaviour and pain perception.

One reason for the discrepancy between evidence-based guidance and the physical therapy clinicians’ approach is that clinicians described different goals to those suggested by the objective measures of recovery outlined above. These goals included health education, emotional support, counselling, and preventive treatment. Most of the clinicians we interviewed rejected the limited role of problem solver (remove the pain, decrease the disability) and regarded themselves in a much broader view. The emphasis across the professions was on personal care (Tarrant et al., 2003) and

support, and most of the clinicians regarded the patient as having a right to treatment if they so choose, regardless of outcome.

The rationale behind this approach is at least in part justified. Current guidelines for acute back pain emphasise the importance of giving accurate information and providing reassurance (CSAG, 1994; RCGP, 1999; ACC, 1997; Kendall et al., 1997). In situations where patients fail to return to normal activities the guideline recommends referral to multidisciplinary teams for rehabilitation at 6 weeks. The ‘consideration’ of psychosocial issues is recommended but little advice is provided as to what intervention primary care clinicians should undertake, or indeed any evidence to show this approach affects outcome. The clinicians in this study clearly understand the psychosocial issues implicated in the development of low back pain disability, and have taken on themselves the responsibility to address them. Their perception of the process of care involves waiting for patients to disclose information, for example, emotional blockage – life style/stress or stressful life events, in order to (1) reassure them (2) build trust by believing them. This is needed for treatment to progress in terms of adherence to advice, body image, increase in exercise and eventually reduction in pain and distress. There is a clear educational component to this process. Effective learning takes place when it is interactive, experiential and reinforced over time and environments. It also requires trust in the teacher. It may be that the opportunity to engage with the patient and engender the type of relationship in which effective reassurance and explanation can be provided may require a larger time frame than current guidelines recommend. It is a plausible hypothesis that all of this involves time, and forms a primary reason to continue treatment.

Effective guidance and education for clinicians will need to take into account both their professional beliefs and perceived voids in care for people with low back pain. In connection with this, we noted that the clinicians referred to gross psychological issues, ‘stress’ rather than specific psychological syndromes associated with maladjusted pain behaviours, such as catastrophising (Sullivan and D’Eon, 1990) or fear avoidance (Vlaeyen and Linton, 2000).

The majority of the clinicians practise in private settings. It is possible that part of the motivation to continue to treat is monetary gain, although this appeared to be relatively minor. The majority of patients were discharged after a few sessions only, and many clinicians were uncomfortable about being ‘stuck’ with the minority of patients who did not improve. Two clinicians were treating long term while charging reduced rates, and others described the issue of payment as added pressure for a ‘quick fix’. It seems unlikely, therefore, that the clinicians have a policy of keeping patients in treatment primarily for income.

Due to the sensitive subject matter and the methodologies utilized, we regard the study as exploratory in its nature, and do not present the findings as representative or generalisable to the population of physical therapy clinicians. Instead we encourage the readers to regard the study as the first step in generating a theory, which will enable the investigation and inclusion of factors relating to clinicians in the research of back pain.

Within the limitations already acknowledged, there were also some methodological shortfalls. The survey yielded a response rate of 59%. This could result in an unknown response bias. In addition, the sampling represented a geographically limited group, who might share attitudes more readily and therefore not be representative of wider populations. Undoubtedly, the survey was also vulnerable to socially desirable responses, so our reported figures may well be an understatement of the phenomenon (see Fig. 1). We purposefully chose to word our main question ambiguously; thus, the phrase ‘no improvement’ was not defined in our survey. This allowed us to explore the meaning of improvement/lack of improvement within our sample. Future research might add to our findings by repeating the survey in larger samples using a definition of improvement.

In the interview stage of the study, we tried to adhere to best known practice in our qualitative approach, including several strategies to achieve triangulation and saturation of information. Furthermore, interviews were carried out by an independent psychologist and interview schedules and analyses carried out by a broad multidisciplinary collaboration. However, the interviewed sample was not representative of physiotherapists in NHS settings, as the majority of those who reported treating long term in these settings declined to be interviewed. We also acknowledge that the selec-

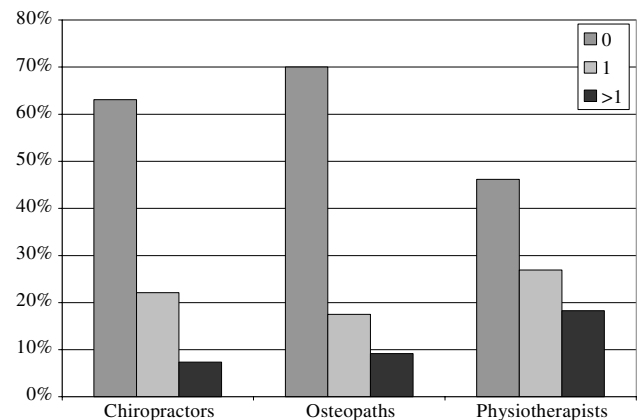


Fig. 1. Percentage of physical therapy clinicians reporting continuing to treat one or more patients with sub-acute low back pain that is not improving.

tion of patients for the interview would be subject to selection/recall bias on the part of the interviewee. However, we ensured that the interview was assisted by contemporaneous case records. All these issues should be addressed by future research, which can be based on confirmatory approaches.

Despite these shortfalls, the concordance of the major themes that emerged across the three professions was persuasive, and we suggest that the expressed views about maintaining treatment as part of a holistic care process merit further research.

In conclusion, if the clinicians reasoning behind extended treatment is accepted, and their formal role enhanced to include counselling, general health education and secondary prevention, specific training is also required to enable them to do so effectively. It may sometimes be more cost-effective in the long run to extend a care episode to achieve patient-specific needs than to rigidly limit its duration or adhere strictly to a standard set of outcomes.

We conclude that our participants had developed a pragmatic understanding of the process of learning within the process of care, and that the scope of their care extends beyond the issues addressed in current guidelines. This is contextualised within a perceived void in effective alternative care pathways, making adherence to guidelines with those low back pain patients who are failing to recover unlikely. There are some data to support the belief that referring these patients back to their general practitioners may mean that they enter a therapeutic void (Underwood et al., 1997; Barnett et al., 1999). Our data suggest that working in the NHS facilitates appropriate onward referral. They also suggest that physical therapy clinicians are willing to take on a wider role within the process of care for patients with low back pain. Future research could build on these findings by examining the current and desired role of physical therapy clinicians within NHS settings. Finally, our findings suggest that evidence based approaches to the treatment of back pain by physical therapy clinicians sometimes contradicts not only current practice but fundamental self-identity of these clinicians' professional role. In essence, this exploratory study suggests that some clinicians understand the evidence behind guidelines, but feel caught between the evidence, their clinical expertise, and their patients' preferences.

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