GP attitudes and self-reported behaviour in primary care consultations for low back pain

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**Background.** The implementation of guideline recommendations in primary care has become widespread. The treatment of low back pain (LBP) has followed suite. Research shows that the use of LBP guidelines is influenced by the believability of the underlying evidence, the GPs consultation style and uncertainties surrounding diagnosis and treatment.

**Objective.** To qualitatively examine the attitudes and self-reported behaviour of GPs in relation to guideline adherence for patients with LBP.

**Method.** A mixed-method design combining a national UK-based survey of GPs and physiotherapists with an embedded qualitative study. This report focuses only on the GP interviews. We explored GPs’ experience of managing LBP patients and the rationale for treatment offered to a patient described in a written vignette. All interviews were digitally recorded, fully transcribed and analysed using the constant comparative method.

**Results.** GPs encountered difficulties adhering to guideline recommendations for LBP patients. They experienced particular tensions between recommendations to stay active versus the expectation of being prescribed rest. GPs expressed that chronic LBP often poses an intractable problem requiring specialist advice. The perception that guideline recommendations are ‘imposed’ may create resistance, and the evidence base is not always considered believable.

**Conclusions.** GPs acknowledge guideline recommendations but divergence occurs in implementation. This is due to GPs focussing on the whole person—not just one condition—and the importance of maintaining the doctor–patient relationship, which relies on effective negotiation of mutual perceptions and expectations. Further exploration on how consultation processes can be constructed to effectively combine evidence with patient-centred care is needed.

**Keywords.** Doctor–patient relationship, evidence, guideline recommendations, low back pain, qualitative research.

**Introduction**

The growth of research evidence and its translation into clinical guidelines continues and exerts its influence on everyday clinical practice. Health policy in England has shaped primary care by adopting a Quality and Outcomes framework that uses guidelines to diagnose and treat patients. Arguably, guidelines present a particular dilemma because their existence means that they have to be applied, causing pressure for patients and GPs. Moreover, not applying guidelines evokes anxiety about failing to act on evidence, which can obscure the contextual aspects that GPs are particularly keen to take into account.¹

Available low back pain (LBP) guidelines²³ emphasize the importance of primary care management and prevention of chronicity, shifting from a traditional biomedical model of injury towards a biopsychosocial model of pain and disability. An approach that recommends activity and return to normal function, in line with...
with most back pain guidelines, leads to better pain and function outcomes, less bed rest, medication and imaging and is safe and cost-effective. Despite the plethora of guidelines, their use in practice reflects the complexities associated with embedding evidence in routine clinical practice. Furthermore, chronic low back pain (CLBP) represents a degree of uncertainty as to its cause and progression. Precisely because the guidelines combine medical and psychological knowledge with occupational and social risk factors, CLBP becomes a complex problem that is shaped by individual characteristics. The increased awareness of the active role of the patient, empowering them to manage their back problems within everyday life, means that the patient’s own agenda has to be part of the therapeutic encounter. Consultations with CLBP patients have been characterized as a meeting of GP and patient models that are incommensurate with the patient using a physical model of pain causation versus the GP’s model drawing on psychosocial factors and this further complicates the application of guideline recommendations.

In this paper, we present an analysis of GPs’ knowledge, based on combined evidence from personal experience, peer advice and national and local guidelines and we focus specifically on the attitudes and self-reported behaviour of these GPs and how they use applied knowledge, such as guideline recommendations.

Methods

The qualitative research reported in this paper was part of a larger study aimed at understanding the attitudes, beliefs and behaviours of GPs and physiotherapists about LBP in the UK. The research comprised of a national survey and an embedded qualitative interview study. Ethical approval was obtained from the West Midlands Multi-Centre Research Ethics Committee. The qualitative study involved semi-structured interviews with practitioners, exploring their personal experiences of managing patients with back pain, their approaches to diagnosis and explanation of their treatment of a ‘vignette patient’ (included in the survey questionnaire). Interviews were carried out by M.C. between September 2005 and February 2006, lasted between 15 and 30 minutes, were digitally recorded and were fully transcribed.

Sample

The nationwide postal survey to GPs used a random sample from a national database (n = 2000). The questionnaire included a Pain Attitudes and Beliefs Scale and a clinical vignette. Accompanying the questionnaire were a cover letter, information sheet and a reply-paid envelope. Twenty-two per cent (n = 443) of GPs responded to the questionnaire, and 442 reported treating at least one patient with LBP in the previous 6 months. Consent was given for further contact by 109 GP responders from whom the sample for the embedded qualitative study was drawn.

Initial analysis of questionnaire data allowed us to distinguish between GPs with a more biomedical orientation from those with a more behavioural orientation. Seventeen GPs were purposively sampled for interview, reflecting a mixture of both orientations. Ten GPs agreed to participate. Two were interviewed face-to-face and eight by telephone (Table 1).

Analysis

B.N.O. coded two transcripts in order to develop a coding frame for discussion with M.C. and independent validation. B.N.O. coded the remaining transcripts using the constant comparative method to identify similarities and differences between the data and to determine fit and relevance. Thereafter, focused coding was used to categorize the data allowing conceptual linkages to be made. Further analysis ascertained whether and how the GPs appeared to be using guideline recommendations. Being a very focused study with a limited number of emerging themes, we are confident that saturation was achieved with 10 interviews. Here, we report on interview material relating to guideline adherence.

Results

Key themes emerging from our analysis relate to GPs’ definition of LBP, the application of guidelines to individual patients and subsequent treatment options and the way primary care is organized and operates in practice.

Making sense of guidelines in everyday clinical practice

When GPs diagnose and make decisions about treatment, they have to address the following: first, the framing problem, that is, to construct a set of options that simultaneously frames their decision making and is the product of that decision making and second, the

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| Participant number | Gender of GP | Years in practice |
|--------------------|--------------|-------------------|
| 658                | Female       | 4                 |
| 710                | Male         | 38                |
| 711                | Male         | 28                |
| 1049               | Female       | 31                |
| 1417               | Male         | 14                |
| 1509               | Male         | 31                |
| 1666               | Male         | 23                |
| 1707               | Female       | 30                |
| 1785               | Male         | 23                |
| 1883               | Male         | 32                |

All GPs worked in a group practice.
reasoning problem, which requires them to attend to the question of how decisions should be made and communicated to the patient. These issues are relevant with regard to the treatment of CLBP because GPs have guidelines that need to be interpreted as to their appropriateness for individual patients and that define the active participation of patients in their own treatment. Most GPs distinguish between different types of back pain. By subdividing the condition, GPs gain more clarity about framing their treatment options and how these are shaped by their own paradigmatic orientation, guidelines and their interpretations.

While our survey could distinguish between the biomedical and the behavioural (psychosocial) orientations, the interviews uncovered the complex interplay between framing the problem, the treatment and the interpretation of individual patient’s needs. The GP who was most in line with the guidelines, according to the questionnaire responses, explained this adherence resulted from her interest in musculoskeletal conditions, while the two GPs who acted broadly in line with guidelines emphasized acceptance and a positive attitude in patients and the maintenance of independence. The other GPs were aware of the guidelines and used them to frame the problem in general but found it difficult to be consistent at the level of different categories of patients. For example, the use of further investigations may be influenced by patient demand, avoidance of risk or giving a patient ‘peace of mind’ rather than clinical need.

Nearly all GPs categorized patients, some more explicitly than others. For example:

Patients who are very keen to keep on moving, to keep working, are those patients who are also quite motivated, and they’ve already been to the chemist and they’ve tried a week of Paracetamol or a week of Ibuprofen […]. You tend to feel encouraged that, yeah, they’ll be fine […]. If they say: ‘I couldn’t possibly be doing this and that and the other’, then you have to work with that and encourage them. (658).

The distinction between people who are self-motivated and engage in self-care alongside GP support and those who may become chronic pain sufferers is most commonly adopted. An extension of this categorization are patients who ask for sick notes and who may be deemed ‘malingers’ because they either do not want to work or who are seen to somatize their problems. For one GP, this coloured the way he viewed back pain and consequently overemphasized the psychological framing:

He [patient] had huge deficits internally, but couldn’t accept any psychological help and he is a bit of a sort of paradigm for … for many other people I’ve got, with chronic back pain, who are again, constantly looking for something and are kind of saying to you, you know: ‘you’re not doing enough for me …’. (1883).

Although this GP focused more than the others on the psychological aspects, this resonates with a feeling of powerlessness by GPs that has been documented and shapes the reasoning problem of how decisions should be made and how to communicate with patients. Most GPs outlined their ‘hierarchy’ of decision making following a diagnosis of LBP, combining analgesics with advice to stay active and if pain persists more than 2 weeks to refer to a physiotherapist. Simultaneously, nearly all provided examples of divergence from guideline recommendations. First, GPs quoted patient demand as a factor in decision making and how this is negotiated:

… although I am saying that ‘I don’t think you need an investigation, I think everything is going to be o.k.’, from their past experience, maybe in the family or their friends, they’re actually more anxious. So, sometimes, they may insist on having other tests. (1707).

This example represents the trade-off between providing evidence-based care and responding to patients’ expectations or could be seen as some form of ‘collusion’. GPs tended to refer for further tests if they wanted to minimize anxiety and maintain the doctor–patient relationship (see Salmon et al.13).

Second, the tension between guideline recommendations of staying active versus rest proved to be an area of uncertainty. GPs reported that they felt patients perceived physical activity as counter-intuitive to the ‘warning sign’ that pain signified stress to the body, and therefore, one needed to rest. Some GPs responded by focussing on the doctor–patient relationship:

… to encourage them, again, to sort of work through their symptoms and, er, it’s very difficult to actually directly challenge people and say ‘well, I know you can do that, ‘cos look what you just did’ and … and they get quite defensive. So, you just have to do things in a … a measured way really. (658).

This GP advocated a return to normality and the need to educate patients in managing their pain. Yet, she realized that validating people’s own interpretation of their condition was essential to maintain the therapeutic relationship and she did not want patients to feel ‘threatened’ by an alternative view. Her pragmatic approach meant that she allowed herself some flexibility and tailored her responses to the patient.
Most GPs realized that bed rest was detrimental and advised patients against this. However, they recognized that patients wanted to save their back, and thus, they supported avoidance strategies like signing people off work for short periods of time or advocating modified rest:

I don’t think there is any point in trying to make people do activities that cause them pain because you just reinforce the pain/muscle spasm cycle ... so she needs to be comfortable and ... of course, it depends on what her situation is. (1501).

His advice about physical activity was contrary to the guideline recommendations, but his justification was both biomedical (countering muscle spasm) and biopsychosocial (ability to look after herself if living alone). GPs have to balance evidence-based practice with patient perspectives and the maintenance of effective therapeutic relationships. May et al. highlight that these tensions must be recognized as factors in the uptake of new interventions in routine practice.

Third, pain control is a key objective for GPs. Nearly all GPs mentioned this as core to the consultation. Most GPs acted in line with guidelines using analgesics and/or referral to physiotherapists, with quite a few being happy that patients consult chiropractors and osteopaths. This course of action seemed straightforward for acute episodes, but CLBP was seen as more problematic:

I think chronic pain, because it’s such a ... erm, internal thing and very often doesn’t have a great deal externally to show for it. It’s quite difficult and there’s an awful lot of psychological factors tied-in with those people who have chronic back pain. But there’s a lot of other tensions that are ... that are around, some of which are very difficult to address and very reluctant to address. (1883).

This quote illustrates the invisibility of pain and recognizes the biopsychosocial framework underlying the guidelines, but these do not appear to provide sufficient help in real life because the psychosocial aspects make ‘disposal’ of the patient more difficult. GPs pride themselves on being ‘family doctors’ who understand the patient within their context, and they demonstrate considerable awareness of the psychological impact of CLBP. Yet, when they discuss the chronic nature of back pain and its perceived intractability many GPs express sentiments such as the need for specialist knowledge. This may be exacerbated by feelings of hopelessness, which some GPs voiced with regard to specific patients:

I think he’s frightened that he can’t live without his pain. [...] And I ... you know, I ... I don’t know what to do about this man. (1049).

This GP had referred his patient to a neurologist and a pain clinic in order to access the expertise that GP 1883 mentioned. Even those experts could not prevent the patient asking for increasingly strong pain relief, causing his GP to conclude that he was psychologically dependent on his pain, and therefore beyond help.

The organization of care

There has been a dramatic increase in the number of clinical practice guidelines, not only for the management of LBP but also for all aspects of medical care. GPs as generalists are increasingly feeling overwhelmed with the publication of guidelines for all the disease categories that they encounter and may consider them as a burden. This is a more generic point about the proliferation of guidelines and protocols that can be audited, leading to the measurement of care processes rather than focussing on the relationship between GP and patient. Or to put it differently, the more information collected about adherence to guidelines, the less trust there is in professional discretion in decision making resulting in a culture of suspicion. Some resistance may be due to the perceived threat to medical autonomy and tacit knowledge, reducing clinical practice to following codified instructions, imposed by, for example, government agencies. In our research, this aspect was not considered problematic, but the main organizational issue mentioned was the pressure of work. Some GPs felt that they did not have sufficient time to explore the complexities of the experience of back pain (especially when interacting with mental health issues) and motivating patients to function as normally as possible required considerable input. They considered access to physiotherapy as the main facilitating factor, and most GPs felt that this alleviated pressure on themselves. If they needed to refer for investigations, the limited availability of diagnostic facilities was regarded an impediment to timely progress.

The GPs who confidently implemented the guideline recommendations about the provision of self-care advice and information recognized that resistance might come from patients:

I don’t think they necessarily come in expecting me to say how long it’s going to go on, give an explanation of what they’ve done, give them advice about work, hobbies, sport, exercise. I may ... I may give them more than they expected. (1666).

This raises the interesting question as to whether implementing evidence-based care fits with patient expectations and is an issue that warrants further exploration.

It has been argued that clinicians feel that research evidence is robust at the level of general or trial...
populations but that it does not necessarily resolve their dilemma of how this evidence would affect individual patient care. This was also raised in a study pertaining to common mental health disorders.\textsuperscript{16} When discussing the vignette, the GPs who deviated from the recommendations about physical activity, work and bed rest mentioned the discretion needed for individual patients (seven out of 10), and in particular with regard to the guideline of return to normal work:

...to give her some time off work, if that’s what she would need... 'cos I think if you’ve got back pain and you’re trying to cope with your work, sitting and standing and being busy... erm, she’s an office worker, so when she’s lifting and stuff like that... yeah, I’d sign her off for a... (1707).

In general, this GP agreed with the guideline recommendation to advise patients with non-specific LBP to stay at or return to work, but in this case, he felt uncertain that this was appropriate because of the nature of the work. It could be argued that this is what guidelines are meant to do, namely, making decision making explicit and providing an explanation for not adhering to recommendations.

**Conclusions**

This investigation suggests that GPs have largely accepted the relevance of LBP guideline recommendations for everyday practice. Simultaneously, our study shows that actual implementation is uneven, ranging from full adherence across the areas of physical activity, work and bed rest to considerable deviation. Other researchers have provided explanations for this variability in terms of complexity, personal and professional orientations,\textsuperscript{17} the specific nature of their professional practice\textsuperscript{1} and the parallel processes that need to be understood and integrated for normalization to take place.\textsuperscript{11} We built on the analysis of others\textsuperscript{6,12} and elaborated on the way GPs define the condition and treatment, in general and when applied to individuals, and placing them within the broader psychological and social contexts.

While our survey was able to distinguish between GPs' biomedical or behavioural treatment orientations,\textsuperscript{5} the interviews revealed a more fine-grained picture. The majority of GPs displayed substantial awareness of guideline recommendations—the need to advise patients to remain active and the interplay between the physical, psychological and social risk factors for chronicity. This knowledge was applied at the population level, but when considering individual patients, through the use of a vignette, more diversity and non-adherence emerged. This was related to the uncertainty of the applicability of the recommendations to individuals and exacerbated by the inherent indeterminacy of CLBP.

At a 'theoretical' level, the GPs in our study accepted the guideline recommendations, but the 'practical' implementation at the level of the individual patient was variable. They did not appear to perceive the guidelines as contrary to their normal practice because GPs claimed to take the whole person into account and increasingly focused on patient self-management. When discussing individual patients, the interpretation of the guidelines became more idiosyncratic, drawing on GPs' own beliefs of effectiveness, their prior experience with treating LBP and the pre-eminence of the doctor–patient relationship.

In conclusion, it is important to recognize how GPs interpret and deal with potential tensions between guidelines that specify processes and outcomes, and the particular circumstances within which they apply these to individual patients if a more consistent approach to implementation in routine practice is to be supported. Because this study has been limited to what GPs say about the use of guidelines rather than studying actual consultations, further research on the GP consultation could be useful in determining how best practice guideline recommendations for LBP can be used to guide decision making for individual patients. The key issue from this study is the need to define the appropriate balance between consistency of management approaches and allowing professional discretion in decision making. The value of tacit knowledge has to be recognized within the context of evidence-based medicine because that ensures the delivery of patient-focused care and recognizes the contribution of the patient–GP relationship to the overall outcome.

**Declaration**

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