

What Do Patients with Chronic Spinal Pain Expect from Their Physiotherapist?

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ABSTRACT

Purpose: Evidence has suggested that patients' expectations influence the clinical course when they present with low back pain (LBP). However, little empirical evidence has outlined the nature of these expectations. The aim of this study was to describe LBP patients' expectations of physiotherapy. **Method:** Seventy-nine adult patients who had LBP for more than 16 weeks and were referred for physiotherapy at two hospital physiotherapy departments in St. John's, Newfoundland and Labrador, were included. They filled out a questionnaire detailing their expectations of treatment. **Results:** Before treatment, more than 90% of patients expected a physical examination, tests or investigations, a diagnosis, reassurance and advice, and clear explanations of causation, symptom management, and benefits and risks of treatment. Approximately half hoped for a prescription or referral to a specialist, and about 60% hoped to discuss problems in their life. **Conclusions:** The findings of this study indicate that patients attend physiotherapy with clear expectations about what information should be provided. Most expected tests or investigations leading to diagnosis and an explanation of causation; this presents a challenge for clinicians, given the current understanding of LBP reflected in international practice guidelines. The fact that more than half of the patients wanted to discuss problems in their life points to the need for physiotherapists to consider LBP from a bio-psychosocial perspective.

Key Words: back pain; cognition; survey.

RÉSUMÉ

Objectif : selon certaines données probantes, les attentes des patients influencent l'évolution clinique lorsqu'ils consultent pour des douleurs lombaires (DL). Cependant, peu de données empiriques exposent la nature de ces attentes. La présente étude visait à décrire les attentes des patients ayant des DL vis-à-vis de la physiothérapie. **Méthodologie :** au total, 79 patients adultes atteints de DL depuis plus de 16 semaines, qui avaient été dirigés vers l'un des deux départements de physiothérapie des hôpitaux de St. John's, à Terre-Neuve-et-Labrador, ont participé à l'étude. Ils ont rempli un questionnaire détaillant leurs attentes en matière de traitement. **Résultats :** avant le traitement, plus de 90 % des patients s'attendaient à subir un examen physique, des tests ou des investigations et à recevoir un diagnostic, des paroles rassurantes et des conseils ainsi que des explications claires sur la cause de leur douleur, la prise en charge des symptômes et les avantages ou les risques du traitement. Environ la moitié espérait recevoir une prescription ou être dirigée vers un spécialiste, et environ 60 % souhaitaient parler de leurs problèmes personnels. **Conclusion :** d'après les résultats de cette étude, les patients ont des attentes claires quant à l'information qu'ils devraient recevoir en physiothérapie. La majorité s'attendent à subir des tests ou des examens qui permettront de poser un diagnostic et d'expliquer la cause de leurs problèmes. Compte tenu des connaissances des DL énoncées dans les lignes de pratique internationales, c'est un défi pour les cliniciens. Puisque plus de la moitié des patients souhaitaient parler de leurs problèmes personnels, les physiothérapeutes devraient aborder les DL d'un point de vue biopsychosocial.

Patients seeking health care usually present with a set of expectations about the care they will receive. For example, they tend to have expectations regarding the nature of their treatment and may possibly have expectations about their role in the treatment process. In addition,

they are likely to have expectations regarding the outcome of their treatment. Researchers¹⁻³ have defined two broad categories of patient expectations: (1) process expectations, which refer to what the treatment will entail, and (2) outcome expectations, which refer to how

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much better or worse a patient expects to be at some point in the future.

There is also some evidence to suggest that expectations influence the actual course of a condition⁴—that is, what people expect is going to happen may affect what actually does happen. Although this represents an exciting prospect because working with patients' expectations might improve treatments, at present we are a long way from understanding how and why patient expectations affect outcomes.

Marketing and services-based theories, including expectancy confirmation theory, have hypothesized that satisfaction with a service or product is the result of a comparison between the prior expectation and the perception of the actual product or service.⁵ Authors have made a further distinction between ideal expectations (what is hoped for ideally) and predicted expectations (what is expected in reality).⁶ Satisfaction occurs when a product or service meets the predicted expectation, and it is maximal when the level of ideal expectation is reached.⁷ These theories have been applied in elective health care settings such as plastic surgery and orthopaedic surgery.^{8,9} Assessment of individual patients' expectations on the basis of such theoretical models enables health care practitioners to recognize patients who have unrealistic expectations and address their issues early.

As many as 80% of people are likely to experience low back pain (LBP) in their lifetime.¹⁰ The condition is responsible for a greater disability burden in all countries than is any other condition,¹¹ and annual costs are estimated to be in the billions of dollars per country.¹² Although the prevalence and burden of LBP are great, available treatments are only modestly effective, particularly for chronic pain.¹³ Most of the research conducted into the expectations of people with LBP has focused on outcome expectations,⁴ and little work exploring process expectations has been published. Given that process expectations have a potential link to outcome, understanding them in patients with LBP may help clinicians better address their patients' needs and beliefs. The research that has been done in this area has used qualitative methods or single questions of unknown reliability and validity;¹⁴ further data are needed to support or refute the hypotheses generated by this preliminary work.

The aim of this study was to describe the type of treatment patients expect from their physiotherapist when they present for care for chronic LBP and to draw conclusions about the implications of these expectations for treating clinicians.

METHODS

Study design

We performed a survey of the process expectations of patients with chronic LBP presenting for physiotherapy. We obtained ethical clearance from the Health Research Ethics Authority of Newfoundland and Labrador (reference

no. 13.058), and all patients provided informed consent before participating.

Participants and setting

All participants were referred by their general practitioner for physiotherapy care at either of two hospital clinics in St. John's, Newfoundland and Labrador. These clinics provide the only completely publicly funded outpatient physiotherapy services for patients with chronic LBP in St. John's.

The population consisted of patients aged 18–80 years with non-specific, chronic LBP, as diagnosed by their general practitioner. *Non-specific* refers to pain that cannot be attributed to an underlying serious spinal pathology, and *chronic* in this case refers to pain that has persisted continuously for more than 16 weeks. Patients with a suspected serious spinal pathology or a diagnosis of mental illness, as diagnosed by their general practitioner, were not eligible because the recommended treatment for these individuals differs from that for non-specific LBP.

Typical physiotherapy services

The typical treatment plan for patients with non-specific, chronic LBP follows a format based on evidence reported in clinical practice guidelines.¹⁵ All patients with chronic LBP receive an initial group-based treatment session, which includes standardized advice and education about chronic LBP and an overview of the role of physiotherapy treatment services. Subsequent treatment sessions are individual and include a physical assessment followed by tailored treatments that aim to progress patients into a long-term exercise program to improve their physical activity level and self-management. Specific treatment plans to achieve these goals are based on the physiotherapist's clinical judgment.

Recruitment

Recruitment began in September 2013 and finished in June 2015, and procedures were integrated into the usual patient booking process at both sites. As per usual practice, an administrative assistant contacted approximately 20 patients from the waiting list to book them for one of the monthly group education and advice sessions 1–2 weeks before it was due to be held. The administrative assistant also informed patients about the study and asked for permission for a research assistant to contact them with more information. When such permission was granted, patients were sent an information letter and an informed consent form. The letter was followed by a phone call from a research assistant to answer any questions about the study and ask whether they would like to participate. Patients who agreed to participate and who brought a signed consent form to the group session were included in the study. It should be noted that not all patients were informed about the study during the recruitment period; they were informed only at the times at which trained administrative staff were available.

Table 1 Expectations of Process and Outcome (N = 79)

	No. (%) of respondents*			Missing data, no. (%)
Expectation	Agree	Neither agree nor disagree	Disagree	
Process				
Physical examination	67 (94.3)	3 (4.2)	1 (1.4)	8 (10)
Tests or investigations	63 (91.3)	5 (7.2)	1 (1.4)	10 (13)
Diagnosis	67 (94.4)	3 (4.2)	1 (1.4)	8 (10)
Prescription	35 (51.5)	18 (26.5)	15 (22.0)	11 (14)
Referral	34 (50.0)	19 (28.8)	14 (21.2)	12 (15)
Reassurance	68 (97.1)	1 (1.4)	1 (1.4)	9 (11)
Advice about condition	68 (97.1)	1 (1.4)	1 (1.4)	9 (11)
Cause of condition	62 (89.9)	5 (7.2)	2 (2.8)	10 (13)
How to manage condition	69 (95.9)	1 (1.4)	2 (2.8)	7 (9)
Side effects and risks of medication	63 (87.1)	8 (11.5)	1 (1.5)	7 (9)
Discuss problems in my life	40 (59.1)	16 (24.2)	10 (15.2)	13 (16)
Outcome				
Improved quality of life	68 (95.8)	2 (2.8)	1 (1.4)	8 (10)
Reduction in symptoms	66 (93.0)	4 (5.6)	1 (1.4)	8 (10)
Improvement in health	64 (92.8)	4 (5.8)	1 (1.4)	10 (13)

*Within rows, percentages for agree, neither, and disagree are based on the available data.

Outcome measures

The patients' expectations and health status variables were assessed using self-report questionnaires. Average pain during the previous 7 days was assessed using an 11-point numerical rating scale,¹⁶ on which 0 = *no pain* and 10 = *the worst pain possible*. Disability was measured using the Roland Morris (RM) Disability Questionnaire,¹⁷ a list of 24 activity-related items rated on a scale on which 0 = *no* (no difficulty performing an activity) and 1 = *yes* (having difficulty performing the activity); the total score is a sum of the scores on the 24 items, with higher scores indicating a greater level of disability. Both of these measures are commonly used in LBP research and have evidence to support their reliability and validity.^{16,17}

Expectations were assessed using relevant subscales from the Questionnaire for Patient Expectations of Health Care (QPEHC).⁶ This questionnaire was developed in the United Kingdom to meet the need for robust measures of patient expectations; it measures various aspects of expectations, both before and during an episode of care. The QPEHC is a very extensive questionnaire; it consists of 103 questions divided into pre-visit and post-visit surveys. To meet the aims of this study and minimize the burden on participants, we used only two sections of the questionnaire's pre-visit survey: the Consultation and Treatment and Treatment Outcomes sections (Questions 16–29). The psychometric analysis conducted during the development of the QPEHC showed that none of the questions in these sections were redundant, and there was good evidence to support the questionnaire's validity.⁶

For questions that referred to the components of treatment, the participants were asked to rate the extent to which they "hoped for this ideally." All answers were

scored on a 5-point Likert scale: *strongly agree*, *agree*, *neither agree nor disagree*, *disagree*, and *strongly disagree*.

Questionnaire administration

The research assistant gave the questionnaires to the participants when they arrived at the clinic before their first group session, and the participants completed them independently before the session began.

Data analysis

Two research assistants entered the data into IBM SPSS Statistics, version 18 (IBM Corporation, Armonk, NY). To ensure patient confidentiality, all patients were assigned a unique identifier when the data files were coded. No names or medical numbers that could identify a patient were stored in the research database. Process and outcome expectations were coded in SPSS for descriptive reporting.

RESULTS

A total of 147 patients were sent an information letter, and 79 consented and participated in the study; 73% of the participants were women, with a mean baseline pain intensity of 7.0 (SD 2.1) and an RM Disability Questionnaire score of 12.4 (SD 5.6). This is indicative of a population moderately disabled by their condition. Missing data varied between 10% and 15% for all items.

For simplicity of presentation, the participants' responses were grouped into three categories: *agree* (*strongly agree* + *agree*), *neither* (*neither agree nor disagree*), and *disagree* (*disagree* + *strongly disagree*). Of the 11 questionnaire items, 8 were endorsed by more than 85% of participants—that is, nearly all participants ideally hoped that they would receive that particular element of the intervention. The other three questionnaire items were endorsed by 50%–60% of participants (see Table 1). With

regard to outcome expectations, nearly all participants (>90%) hoped that their quality of life, symptom severity, and health would improve.

DISCUSSION

General findings

The expectations of the patients in our study were quite consistent regarding many of the elements of their care: More than 85% ideally hoped that they would receive 8 of the 11 elements of care specified in the survey. Unsurprisingly, nearly all patients also hoped that their clinical status would improve as a result of their treatment.

Patients' expectations that align with international clinical practice guidelines

Patients' expectations that they would receive a physical examination; reassurance; advice about their condition; information about how to manage their condition; and information about the benefits, side effects, and risks of treatment align with international guidelines.¹⁵ Thus, attending to these elements should result in optimal patient benefit and fulfilment of their expectations. Delivering these components of care also falls within the professional expertise and training of physiotherapists and, as such, can be confidently recommended.

Patient expectations that do not align with international clinical practice guidelines

The fact that 90% of patients expected tests or investigations, a diagnosis, and information about what caused their condition may be problematic for clinicians. Evidence has suggested that referring patients for tests or investigations is responsible for a substantial portion of the economic burden of these conditions, does not provide useful diagnostic information, and is, in fact, associated with worse outcomes.¹⁸ International guidelines recommend a triage system because approximately 85% of patients are classified as having non-specific, or idiopathic, back pain.¹⁵ Thus, most patients' diagnosis is one of exclusion (of serious and systemic pathology and of nerve-root pathology) and provides little more than a description of their symptoms. As a result, patients' expectations that clinicians will give them a diagnosis and explain the cause of their pain present a considerable challenge.

Patient expectations less widely endorsed

At present, clinical practice guidelines recommend simple analgesic medications;¹⁵ however, in most countries, physiotherapists are not certified to prescribe, or even recommend, medications. Approximately half of the patients in the sample hoped for a new, changed, or repeat prescription. It is not clear whether this expectation reflects misunderstanding of physiotherapists' scope of practice, and unfortunately data to explore this question were not available. Similarly, data regarding the use

of medications by the patients in the study were not available. The patients' expectation of medication prescription may explain their expectation of referral if they are aware that physiotherapists are not able to prescribe medication.

Close to 60% of the patients hoped to discuss problems in their life, an expectation that may be considered congruent with the bio-psychosocial model of spinal pain. Recognizing the influence of psychological and social factors is self-evidently key to that model.

Comparison with other studies

The current study partly confirms the findings from previous qualitative studies in primary LBP care settings in the United States and the United Kingdom^{3,19} as well as in a mixed population that consulted general practitioners in the United Kingdom.²⁰ This study provides quantitative information necessary to support the hypotheses generated using qualitative data, and it demonstrates generalizability to the population of people with LBP who present for physiotherapy. It, and the US and UK studies,^{3,19,20} found that patients both hoped for and expected to receive a clear diagnosis or explanation for their complaints. Kenten and colleagues²⁰ also found that patients hoped for (referral to) diagnostic tests, prescriptions, and medication. However, this expectation may be more realistic in a population seeking care from a general practitioner than from a physiotherapist.

Those qualitative studies also emphasized that patients expected clear, kind, and empathetic communication from their doctor or physiotherapist. As a result, future quantitative studies should consider including items about the expectations for communication between patient and practitioner because they relate to patient satisfaction and adherence to treatment. High-quality studies on this topic would provide information about the effectiveness of specific interventions addressing these factors, and this would assist clinicians to provide effective, patient-centred care.

Clinical implications

In accordance with international clinical practice guidelines and the best available evidence, we recommend that clinicians perform a physical examination, provide reassurance and advice about a patient's condition, and give patients information about managing their condition and the benefits and risks of any treatment they provide. Evidence from this study provides additional reasons for including these elements in the therapeutic encounter: It is likely to satisfy some very reasonable patient expectations.

We also recommend that clinicians address the issues and present the best available evidence regarding the diagnosis and pathology of chronic spinal pain. This may require a careful explanation of the current knowledge of the biomechanical, psychological, and social influences on LBP. As part of this conversation, clinicians should

give clear information about the risks and benefits of tests and investigations and explain how the results will influence treatment decisions. They should also initiate a discussion about the role and effectiveness of analgesic medication for spinal pain; if the patient chooses to follow such a course, a clinician will need to make the appropriate referral.

The current conceptualization of chronic spinal pain takes a bio-psychosocial approach, as reflected in contemporary clinical practice guidelines for the condition.²¹ The findings of this study demonstrate that this approach aligns with patients' expectations. A bio-psychosocial explanation of pain may be helpful in framing the advice and information recommended, and it can be presented along with evidence showing that a multidisciplinary approach is likely to be effective.²² More important, this approach can also help meet the expectations of the large group of patients who hope to discuss the problems in their life.

This study has certain limitations. The fact that it was embedded in day-to-day practice allows its findings to apply directly to clinicians, and its use of a validated instrument to collect information about expectations increases confidence in the reliability of the data. However, the data came entirely from one jurisdiction (St. John's, Newfoundland and Labrador), with the result that we cannot be sure that our findings reflect the expectations of patients with LBP in other locations or of individuals seeking care from other health care professionals. In particular, given that the study was conducted within the public health care system, it is unknown whether the views of the study sample reflect those of patients presenting to private practice physiotherapists whom they pay out of their own pocket.

Another limitation of the study is that only approximately half of the patients who were sent letters about the study agreed to participate. This indicates the possibility of bias in the findings because we do not have information about whether the demographic and clinical characteristics of the non-participating patients matched those of the study participants. Finally, the three least-endorsed items on the questionnaire also had the most missing data (see Table 1); this means that we are less sure that our estimates for these items are precise.

CONCLUSION

The findings of this study indicate that many patients with chronic LBP attend physiotherapy with clear expectations about what information should be provided by the treating clinician. Most expect tests or investigations leading to a diagnosis and an explanation of causation, and given the current understanding of LBP, this presents a challenge for clinicians. In addition, the desire that half of the patients had to discuss problems in their life points to the need for physiotherapists to consider LBP from a bio-psychosocial perspective.

KEY MESSAGES

What is already known on this topic

Patients present to their physiotherapist with certain expectations about the sort of care they will receive. Understanding these expectations enables the clinician to identify and correct aberrant beliefs, and it may help improve patient satisfaction.

What this study adds

Many of the treatment-related expectations that patients with chronic low back pain hold are intuitively obvious and align well with best-practice care. However, some commonly held expectations such as referral for tests and investigations and confirmation of a precise cause of pain present challenges for physiotherapists. A substantial proportion of patients also expect to discuss other problems in their lives.

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