# Research paper

# Back pain management in primary care: patients' and doctors' expectations

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### **ABSTRACT**

**Background** Expectations may be a key element for improving quality of health care, yet several barriers interfere with understanding and optimising expectations in back pain primary care.

**Objective** To review the literature related to expectations, back pain patients' and doctors' expectations and sources of unmatched expectations.

**Methods** Review of qualitative and quantitative studies investigating back pain management in primary care settings, and eliciting patients' and/ or doctors' pre-visit or post-visit expectations.

Results Reviewing the literature reveals that expectations are defined and conceptualised in various ways, with several terms used interchangeably, which suggests a lack of clear definition and conceptual framework. Patients have a wide range of specific expectations for care, which can be measured, and may play a vital role in their satisfaction: doctors also seem to have their own expectations.

However, studies of such expectations are scarce and there is a lack of valid measurement tools to capture such aspects.

**Discussion** Shortcomings in literature included the use of different meanings and definitions for expectations, which interfered with understanding the results of previous research. Previous studies focused on patients' general rather than condition-specific expectations; no study explored doctors' expectations or the congruency between patients' and doctors' back pain-specific expectations.

**Conclusions** There is a need for standardisation of definition in expectations research and a valid measurement tool that is condition specific. Understanding patients' and doctors' expectations may be a key factor for improving quality of care, in terms of both process and outcome.

**Keywords**: back pain, expectations, primary care

#### How this fits in with quality in primary care

#### What do we know?

Fulfilment of expectations is one measure of the quality of health care. Understanding patients' and doctors' expectations could improve the clinical process of care and health services research; yet several barriers interfere with optimising expectations in back pain primary care. The research in this area has been growing, but is still relatively sparse and encounters some difficulties. Among these are the nature and great diversity of expectations, the various ways of communicating them, and the disagreement in the literature about methods to elicit and monitor expectations.

#### What does this paper add?

These difficulties are addressed in this review article; gaps in the literature are identified, recommendations for further research are suggested and some grey areas are discussed and clarified.

## Introduction

Back pain is seen as one of the difficult and unrewarding conditions that doctors have to deal with in primary care. Biopsychosocial management of back pain in general practice has been problematic. Although most back pain patients adopt self-management strategies back pain is still a leading reason for consultation with a doctor, hospitalisation and other care service utilisation.

Patient involvement in decision making and the partnership between health organisations and patients are currently important issues for back pain management in primary care. Patients' expectations for care may play a vital role in their concordance with the treatment or advice given. Doctors also have their own expectations related to consultations. Agreement between doctors and patients regarding diagnostic and treatment plans is thought to be associated with higher satisfaction, better health outcomes and an overall perception of improvement.

The essence of primary care for back pain is the consultation, which is viewed as a process of negotiation between the patient and doctor, geared towards information, advice or specific care. Patients have a wide variety of expectations for care that extend to both technical and interpersonal management.<sup>7</sup> The last decade has witnessed growing research around expectations in various contexts and in relation to a variety of medical conditions; nevertheless, compared to patients' expectations, doctors' expectations have not been adequately studied. Specifically in relation to back pain, few studies have focused on exploring the expectations of doctors as well as patient-doctor agreement regarding different aspects of care. Understanding patients' and doctors' expectations could improve the clinical process of care, health services research and delivery systems.<sup>8</sup> Back pain care will benefit from research that critically looks at patients' and doctors' expectations. From a policy perspective, it is important that patients' as well as doctors' expectations are recognised, understood and satisfied, which prompted this analysis. Based on a review of the literature, this article aims to discuss different definitions of expectations suggested in previous studies, to reach a consensus about a concise standardised definition. Patients' and doctors' back pain-specific expectations and sources of unmatched expectations are also investigated and recommendations for further research are suggested.

# Methodology

## Search strategy

All qualitative and quantitative studies that investigated patients' and doctors' expectations relating to back pain management in primary care were reviewed (Figure 1). Different keywords, including physician, general practitioner (GP), doctor, patient, expectation, desire, preference, request, agreement, concordance, primary care, general practice and back pain, were used in different combinations to search the MEDLINE. PSYCHINFO, AMED, Science Citation Index, CINAHL and COCHRANE databases. All relevant articles published in English from the start of each database until January 2008 were identified, reviewed and subsequently delimited to those investigating back painspecific expectations. Thirteen potentially relevant studies were identified; these were conducted in the primary care setting, focused on back pain and elicited patients and/or doctors' pre- or post-visit expectations.

## Study characteristics

Thirteen studies met the inclusion criteria for this review (Table 1). A range of academic and clinical settings, including general practice (n = 8), university (n=2), health centre (n=1), community (n=1) and walk-in hospital clinic (n = 1), as well as on the street (n = 1), were included. Seven studies were qualitative in nature, while six adopted a quantitative approach. Eight studies were conducted in the UK, three in the USA, one in Israel and one in the Netherlands. Eight studies elicited expectations through interviews, whereas the remainder used focus groups (n =3) or questionnaires (n=3). Most studies (seven out of 13) measured general expectations, three measured post-visit expectations and one only measured both pre-visit and post-visit expectations. In all studies, expectations were measured within the context of a single visit. Aspects of interest in these studies included exploring patients' expectations and satisfaction (n = 3), patients' perceptions (n = 2), doctors' perceptions and attitudes (n = 4), patients' experiences and expectations of specific aspects of care (for example, information and education) (n = 4), and finally, patient-doctor agreement or concordance (n = 2). All studies were concerned with aspects related to the process of care (service provision); in addition, six studies also aimed to explore the outcome of the service.

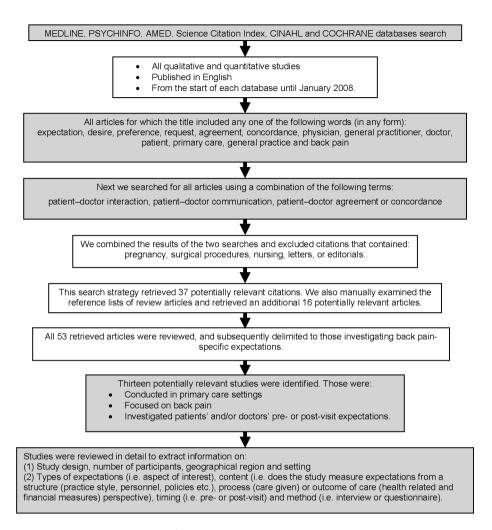


Figure 1 Diagrammatic representation of the search strategy

In this paper we attempt – based on the reviewed literature – to clarify the concept of 'expectation' and to reach a well-defined meaning of this. An important further distinction is made between three important variables: expectations, desires and requests; this distinction is an essential prerequisite for better understanding of the research findings in this field. We present the range of patients' and doctors' expectations and sources of unmet expectations. Finally, we identify gaps in the literature and finish the discussion with some recommendations for further research.

# **Findings**

# Expectations: definition and concept

The literature revealed that expectations are defined in various ways. <sup>10</sup> Studies which considered the nature of expectations adopted various meanings when exploring expectations. Broadly speaking, in terms of health

services, expectations are formulated by patients about services they think they are to receive. <sup>10</sup> Uhlmann *et al* defined expectations as anticipation that given events are likely to occur during or as a result of the service. <sup>11</sup> Kravitz *et al* stated that expectations were anticipations or desires that acted as indicators of the expected standard of care. <sup>8</sup> Similarly, Zemencuk *et al* defined expectations as patients' perceptions of the likelihood of receiving a given element of care. <sup>12</sup>

Some studies reported two types of expectations: value and probability. <sup>13</sup> While probability expectations represented the patient's anticipation about the likelihood of an event, value expectations were expressions of what the patient wanted. <sup>13,14</sup> Thompson and Sunol provide a more refined approach by proposing four main types of expectations: <sup>10</sup> ideal, predicted, normative and unformed. They defined ideal expectations as an idealistic state of beliefs reflecting an aspiration or preferred outcome. In contrast, predicted expectations were the realistic or anticipated outcomes that reflected what individuals actually believed would

 Table 1 Studies identified from literature review

Study	Reference	Year	Design	Country	Population	Setting	Measure- ment tool	Content	Timing	Aspect of interest
Deyo and Diehl	(20)	1986	QN <sup>a</sup>	USA	140 BP <sup>c</sup> patients	Walk-in hospital clinic	Questionnaire	Process Outcome	Pre- and post-visit	Patients' expectations and satisfaction
Cherkin and MacCornack	(25)	1989	QN	USA	457 BP patients	Medical health centre	Questionnaire	Process Outcome	General	Satisfaction with aspects of chiropractic and GP care
Skelton et al	(1)	1995	$QL^b$	UK	12 doctors	General practice	Semi-structured interview	Process	General	GPs' perceptions
Skelton et al	(37)	1995	QL	UK	52 BP patients 10 doctors	General practice	Semi-structured interview	Process	General	Patients and GPs' perceptions of patients' education
Skelton et al	(28)	1996	QL	UK	52 BP patients	General practice	Semi-structured interview	Process Outcome	General	Patients' views and experiences
Hermoni et al	(38)	2000	QN	Israel	100 BP patients 16 doctors	Family practice	Telephone interview	Process	Post-visit	Doctor-patient concordance
Klaber Moffett et al	(22)	2000	QN	UK	507 subjects (40% BP patients)	On the street	Survey	Process	General	Public's and patients' perceptions
Pincus et al	(34)	2000	QN	UK	60 BP patients	General practice osteopath clinic	Questionnaire	Process Outcome	Post-visit	Satisfaction with management
Schers et al	(9)	2001	QL	The Nether-lands	20 BP patients 20 doctors	General practice	In-depth interview	Process	Post-visit	Patients' expectations and GP adherence to guidelines
McIntosh and Shaw <i>et al</i>	(27)	2003	QL	UK	37 BP patients 15 doctors	General practice	Semi-structured interview and focus group	Process Outcome	General	Patients' and doctors' expectations of information
Staiger et al	(4)	2005	QN	USA	380 BP patients	Academic and community clinics	Telephone interview	Process Outcome	General	Doctor–patient agreement about aspects of care
Breen et al	(2)	2007	QL	UK	21 doctors	General practice	Telephone interview and focus group	Process	General	GPs' attitudes
Liddle et al	(26)	2007	QL	UK	18 BP patients	University setting	Focus group	Process	General	Patients' experiences, opinions and treatment expectations

 $<sup>^{\</sup>rm a}$  QN – quantitative study;  $^{\rm b}$  QL – qualitative study;  $^{\rm c}$  BP – back pain

happen. Normative expectations were thought to represent what individuals were told or led to believe should happen; while unformed expectations occurred when users were unable or unwilling to articulate their expectations.

The growing literature on expectations suffers from definitional confusion and lacks a clear conceptual framework.<sup>13</sup> A critical review of the different definitions of expectations used in the above mentioned studies showed that desires, requests and expectations were used interchangeably. Williams et al, 15 for example, consider expectations as needs, requests or desires formed before the doctor's consultation. Similarly, Kravitz<sup>16</sup> and Perron et al<sup>17</sup> define patient expectations as wishes. The distinction between these terms is important if we are to understand expectations. Desires are perceptions of wanting a given element of care; 12 therefore, patients' desires are wishes regarding medical care and, in contrast to expectations, primarily reflect a valuation.<sup>11</sup> Patients may expect to receive an undesired service, or conversely a specific service may be desired but not expected. On the other hand, requests are defined as desires transmitted verbally to the clinician. 16

## Patients' expectations

Patients seem to have a specific agenda when visiting their doctors, which usually reflects concerns and problems they want the doctor to address during the consultation. It might also include their desires for specific services. <sup>18</sup> Many studies were concerned with measuring patients' expectations in different contexts, ranging from general expectations about facilities and accessibility to specific expectations related to doctors' clinical and interpersonal skills.

Most patients' expectations were reported to be of a general nature, concerning receiving information or the doctor listening to them and showing interest.<sup>19</sup> Being given an accurate diagnosis and adequate explanation of the problem were the most valued expectations for most patients; 15,20,21 two-thirds of the patients expected doctors to be able to tell them what the problem was with their back.<sup>22</sup> Other studies suggest that the most common expectations were doctors expressing understanding, showing interest and discussing problems or doubts. 19,21 Other expectations were related to receiving information on pain management and advice on how to return to normal life,23 or information about prognosis and prevention.<sup>24</sup> Therefore, although it might seem that technical interventions (for instance, tests or prescriptions) were a high priority for patients, the evidence suggests that a desire for information or support were more valued than medical interventions. <sup>15,19</sup> Most patients recognised that reassurance and advice were the main

things doctor could offer to help them return to normal activity.<sup>22</sup>

Different studies used a range of measurement tools for investigating patients' expectations, including questionnaires, <sup>20,25</sup> and checklists, <sup>7</sup> however, most questionnaires were neither validated nor tested for reliability. Surveys, <sup>22</sup> focus groups <sup>26,27</sup> and interviews <sup>27,28</sup> were also used in previous studies. The Patients' Intentions Questionnaire is one valid measurement tool used to measure patients' expectations. <sup>29</sup> This consists of 42 statements about what patients want from their doctor during the given visit.

## Doctors' expectations

Literature related to doctors' expectations of a consultation for back pain is scarce. In spite of the importance of understanding doctors' expectations for improving the overall satisfaction with consultation, no studies investigated doctors' expectations, nor is there a valid measurement tool. Previous studies were concerned with doctors' perceptions, 1 attitudes<sup>2</sup> and treatment preferences rather than expectations. Diagnosis came at the top of the doctors' list of expectations, but unlike patients' expectations of obtaining a sound diagnosis (based on a desire to find an explanation for their pain), doctors' expectations of an accurate diagnosis was mainly concerned with managing clinical uncertainty and maintaining their relationship with patients.30 Other doctors' expectations were educating patients and providing information,<sup>31</sup> as well as expectations of straightforward communication and being believed within the consultation.<sup>30</sup> Doctors' expectations of prescribing effective treatment and avoiding unnecessary tests or referrals might yet be jeopardised by pressure for specific services being imposed by patients.

## Sources of unmet expectations

Whether expectations are verbalised or implicitly communicated to doctors, they impose pressure on doctors' actions. Doctors often feel they ought to order tests or prescriptions in order to respond to patients' expectations; however, evidence suggests that patients' main expectation is receiving information. <sup>18</sup> Patients are generally dissatisfied with doctors' communication skills and understanding, <sup>32</sup> and often report having received little or no information from their doctors. <sup>27</sup> Doctors may use jargon not readily understood by patients, which will affect communication.

Conversely, unmet expectations may be due to patients' unjustified expectations;<sup>8</sup> doctors may not give in to pressure from patients for specific services that they see as unnecessary. Furthermore, previous experience with the healthcare system may affect ex-

pectations, <sup>13</sup> and at times may lead to the formation of unrealistic expectations. Managing such unjustified expectations is another challenge for doctors; it is essential that doctors recognise such expectations, negotiate them and educate patients to help shape future expectations appropriately. Nevertheless, a recent study showed that 94.7% of the time unmet expectations were satisfactorily addressed by doctors with acceptable alternatives. <sup>33</sup>

In addition, changes in management strategies and the development of care guidelines may challenge patients' traditional beliefs, <sup>22,27</sup> creating feelings of dissatisfaction and discordance with the doctor's management. Negative beliefs also exist among patients; patients may ask for referral assuming that GPs cannot help. <sup>27</sup> Some believe GPs can only offer referrals, or order tests to be done. Others see GPs, despite their sympathy and interest, as unable to help when it comes to back pain, as they lack the qualifications to give massage or manipulation. <sup>27</sup>

Patients' unmet expectations might be related to perceived omissions in the doctor's preparation for the visit, history taking, physical examination, communication, test ordering, referral or prescribing behaviour. Other reasons for unmatched expectations are failure to establish a trusting relationship, when the doctor fails to diagnose and treat the pain or the patient feels that the doctor did not believe they were in pain. Other contributory factors to unmatched expectations are time constraints, as shorter consultation time is believed to affect satisfaction. Financial constraints may play a role as well.

## Discussion

This review article sought a better understanding of the concept and definition of expectations, the range of expectations of patients with back pain, their doctors' expectations and sources of unmet expectations. A review of the literature revealed that expectations were defined and conceptualised in various ways and suggested that a standardised definition and a clear conceptual framework were lacking. Previous studies suggested that back pain patients' specific expectations for care were common and had a crucial effect on the outcome of the consultation. Psychosocial aspects of care and information provision were more valued by patients than technical clinical interventions. On the other hand, doctors' expectations of back pain consultations were not adequately studied, and there is a need for future studies to investigate this aspect and develop appropriate measurement tools. The literature suggests various reasons for unmet expectation; predominantly, a lack of recognition of what the other

party might expect during a consultation seems to be a principal source of unmet expectation among patients and doctors.

Meeting patients' expectations is one measure of the quality of healthcare systems. The research in this area has been growing, but is still relatively sparse and encounters some difficulties. Among these are the nature and diversity of expectations, ways of communicating them and the disagreement in the literature about methods to identify, elicit and monitor expectations. Few studies have been conducted to explore patients' and doctors' expectations and reviewing the literature revealed several shortcomings in these studies.

First, some studies used the terms requests, desires and expectations interchangeably, with no precise definition of these terms. Most studies failed to acknowledge the conceptual difference between desires, requests and expectations.<sup>35</sup> We define expectations as anticipations or predictions formulated by patients about specific interventions they are likely to receive during a consultation. These expectations are influenced by knowledge, previous experiences and information received from other sources. Desires are wishes or preferences, which reflect the value an individual places on a specific service. Requests are defined as wishes or preferences that are verbally communicated to doctors, and thus in contrast to expectations and desires they can directly be observed and monitored during the encounter. A precise definition of expectations seems to be a minimal prerequisite for developing a valid measurement tool for such a concept. Efforts to understand and measure expectations will only succeed when a clear distinction between expectation and its associated terms is fully addressed in further research.

Second, the majority of studies which looked into expectations were concerned with studying patients' expectations in general and not in relation to the specific symptom of back pain; however, expectations might be influenced by the specific problem. Relatively little is known about the specific expectations that patients with back pain bring when they seek a primary care consultation. The current trend of looking into expectations in general has to be challenged in favour of studying expectations in relation to specific conditions. Eliciting condition-related expectations may help reduce unmet ones, improve satisfaction and promote better communication. Second conditions are studying expectations.

Among the early research exploring back painspecific expectations, Deyo and Diehl looked into sources of dissatisfaction among patients with back pain. <sup>20</sup> Although they did not initially define the range of expectations they wanted to investigate, nor did they adopt a standardised approach for measuring unfulfilled expectations, this study was useful for later research as it showed that patients did not only desire tests or other clinical interventions but valued being given an adequate explanation of the problem. Later, Skelton et al conducted two studies focusing on back management in primary care, in terms of doctors' perceptions and patients' views. 1,28 Public perceptions about back pain management in primary care were also studied using surveys on the street<sup>22</sup> and focus group discussions.<sup>26</sup> On the other hand, doctors' attitudes to managing back pain in primary care were investigated,2 giving a better understanding of doctors' perspective of back pain management in general practice (mainly revealing their preferences, perceived difficulties and relationship with patients). However, lack of a consistent definition and the use of the terms 'perceptions' or 'views' in these previous studies interfered with obtaining a clear representation of patients' and doctors' expectations.

A previous systematic review of patients' expectations of treatment<sup>32</sup> provided better understanding of patients' expectations for the care of back pain; however, it was not purely focused on patients' expectations in primary care. In this review, all studies of patients' expectations, drawn from a wide range of contexts as well as a variety of service providers, were included; accordingly, expectations of chiropractors', osteopaths' and physiotherapists' management were also included. Moreover, the authors did not precisely define what they meant by expectations, therefore, studies seeking to investigate views, perceptions or attitudes were also included.

Third, there has been no consistency in the measurement strategies used in previous studies, nor are there valid and reliable measurement tools. Several studies have suggested that some instruments are better than others in eliciting patients' expectations. Heterogeneity of measurement tools might be attributed to lack of a clear taxonomy and conceptual framework for expectations. There is a need for a standardised definition and a consistent measurement procedure that considers the specificity (overall versus visit specific), scope (general versus condition specific), focus (process or outcome), and timing (pre- or post-visit) of the instrument, as well as well-designed, purpose-specific measurement tools rather than generic ones.

Finally, better service outcome, greater improvement and higher satisfaction are reported to be associated with higher patient–doctor agreement;<sup>4,5</sup> therefore, harmony and congruence of patients' and doctors' expectations would lead to higher concordance and a better outcome. However, no previous study has been conducted to explore the matching of patients' and doctors' expectations,<sup>8</sup> nor is there a valid measurement tool for capturing such an aspect. A state of matched (and not just fulfilled) patients' and doctors' expectations seems to be a critical prerequisite for improving management of back pain in primary care.

While many previous studies have focused on patients' unmet expectations, none sought to explore prevalence or sources of unmet expectations among doctors, possibly due to the lack of valid measurement tools. Although we agree that meeting patients' expectations and achieving patient satisfaction are key elements for improving management of back pain in primary care, we believe that if we are to improve the clinical encounter and patient—doctor communication we also have to consider doctors' expectations and satisfaction with the consultation. Matching patients' and doctors' expectations may improve the quality of patient—doctor communication as well as the quality of the care service provided; a study is needed to test this hypothesis.

Understanding the role of expectations is important for several reasons. Firstly, doctors' recognition and acknowledgment of patients' expectations will promote more effective communication and better clinical outcomes. Secondly, doctors' ability to elicit and address patients' unrealistic expectations, whether by negotiation, explanation or education, will prevent feelings of dissatisfaction and will result in well-formulated future expectations. Thirdly, considering doctors' expectations and facilitating a state of matched patientdoctor expectations will create a higher overall level of satisfaction and better communication, as well as better patient concordance. Finally, recognising and understanding patients' and doctors' expectations may help tackle possible barriers to the application of care guidelines.

It is worth noting that while it might be assumed that patients request referrals to secondary care in order to get specialised treatment, a better health outcome or greater improvement, the literature suggests that differences in satisfaction with doctors and other primary care professionals' management were not related to aspects of effectiveness or perceived usefulness.<sup>34</sup> Patients' satisfaction with chiropractors' management was three times higher than that with GPs for aspects of information provision and personal caring.<sup>25</sup> Satisfaction with osteopaths' management for aspects of diagnosis, thoroughness of examination, communication, listening and caring was also higher than with GPs.<sup>34</sup> Patients valued personal relationships and communication, which were offered more often by chiropractors and osteopaths; this explains why other primary care professionals may have an advantage over doctors resulting in higher patient satisfaction. Management of back pain in primary care might benefit from implementing specific facilitators that can help improve patients' experiences in general practice, specifically, time spent on a visit, listening, communication, empathy and addressing patients' emotional needs.

## Conclusion

Research relating to expectations adopted different meanings and definitions for this term. Previous studies focused on patients' general expectations rather than condition-specific ones and, to date, none explored the congruence of patients' and doctors' expectations. The more that is known about back pain-specific expectations, the greater will be the ability to improve the quality of care and promote patient satisfaction. Research is needed to address such issues by exploring the feasibility of designing valid measurement tools for capturing patients and doctors' back pain-specific expectations. Further research is needed to investigate how well matched these expectations are and the significance of this for patients and doctors.

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#### PEER REVIEW

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#### **CONFLICTS OF INTEREST**

None

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