Patients' Perceived Needs of Health Care Providers for

Low Back Pain Management: A Systematic Scoping Review

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BACKGROUND CONTEXT: Optimal management of low back pain (LBP) involves patients' active participation in care, facilitated by positive interactions with their health care provider(s) (HCP). An understanding of patients' perceived needs regarding their HCP is, therefore, necessary to achieve such outcomes. Therefore, the aim of the present study is to review the existing literature regarding patients' perceived needs of HCP managing LBP.

METHODS: A systematic scoping review of publications in MEDLINE, EMBASE, CINAHL, and PsycINFO (1990-2016) was performed. Descriptive data regarding study design and methodology were extracted, and risk of bias was assessed. Aggregates of patients' perceived needs of HCP for LBP were categorized.

RESULTS: Forty-three studies (30 qualitative, 12 quantitative, and 1 mixed methods) from 1,829 were relevant. Four areas of perceived need emerged: (1) there are several characteristics of HCP that patients desire, such as good communication and shared decision-making; (2) patients wanted HCP to provide information, including a cause of their LBP and legitimization of their symptoms; (3) patients' valued holistic, individualized care, and continuity of care; and (4) patients perceived long waiting times, difficulties with access to treatment, cost, and personal effort to be obstacles to care.

CONCLUSIONS: Patients with LBP want patient-centered care, to be actively involved, and they have identified characteristics of HCP that foster a good provider-patient relationship. They noted areas of dissatisfaction with HCP and perceived obstacles to care. Given limited health care resources, HCP and policy makers need to implement novel methods of health care delivery that address these issues to facilitate improved patient satisfaction and achieve better patient and health system outcomes.

KEYWORDS: Health care provider; Health personnel; Low back pain; Need; Patient perspective; Preference; Systematic review

From the FULL TEXT Article:

Introduction

Low back pain (LBP) is common, affecting 8 in 10 adults during their lifetime. [1–3] It is one of the most common reasons for seeking healthcare. [4, 5] The impact of LBP is substantial, not only on the individual, but also on communities and health systems. [1, 6, 7] LBP is costly, amounting to an estimated $88billion in the United States in 2013. [8]

Successful management of LBP requires active patient involvement to seek accurate advice from health professionals and to maintain physical activity. For chronic and disabling LBP a multi-disciplinary approach, combining medical, allied health and psychological therapies, may be required. [9–13] Therapeutic interventions rely on ongoing collaborative relationships between patients and healthcare providers [13]; patient engagement may be less likely if they are dissatisfied with aspects of clinical care. [14, 15] Prior studies have reported high levels of patient dissatisfaction among those with LBP. [16, 17] Dissatisfied patients are also more likely to utilize healthcare resources and seek care from multiple providers. [14]

To address patients’ dissatisfaction with LBP management, healthcare providers have been advised to adopt a patient-centred model of care. [18–20] This requires an understanding of patients’ goals, preferences and expectations. Currently, areas of mismatch between the patients’ and providers’ expectations of LBP management exist. [21–24] Previous studies have demonstrated that healthcare providers are frequently unable to estimate the preferences of patients during clinical encounters. [25, 26] Furthermore, patient-centred care focuses on shared-decision making, yet patients perceive they have limited involvement in their own healthcare. [27] Thus, there has been a call to focus research on improving patient-centred care and better aligning the patient perspectives and expectations with that of healthcare providers. The purpose of this review was to systematically examine the current literature to identify patients’ perceived needs of healthcare providers managing LBP as reported in the existing published literature.

Methods

This review was conducted within a larger project examining the patients’ perceived needs relating to musculoskeletal health. [28] Given the breadth of the topic and to allow a comprehensive exploration and identification of the patient perspective, a systematic scoping review was performed based on the framework proposed by Arksey and O’Malley. [29] Systematic scoping reviews are aimed at mapping key concepts, reviewing different types of evidence and identifying gaps in the current literature. [30, 31]

 Search strategy and study selection

The literature search was performed by electronically searching relevant databases (MEDLINE, EMBASE, CINAHL and PsycINFO) between January 1990 to June 6 2016. This time period was chosen to include studies relevant to current patients’ perspectives. The search strategy was developed iteratively by a multidisciplinary team involving a senior academic librarian, patient input and clinician researchers General Practitioner, Rheumatologists and Physiotherapists). It combined both MeSH terms and text words to capture information regarding patients’ perceived needs of healthcare providers managing LBP. We have used the term “patients’ perceived needs” to encompass a broad concept involving patients’ capacity to benefit from services, including their expectations of, satisfaction with, and preferences for, various services. [32] LBP was defined as non-specific LBP, with or without leg pain, excluding back pain from fractures, malignancy, infection and inflammatory spinal disorders. Studies were not excluded based on their study design to capture all the dimensions of the patients’ perspective regarding healthcare providers and LBP. The detailed search strategies are provided in the Supplementary Appendix.

All articles were reviewed by 2 reviewers trained in epidemiology. LC (Consultant Rheumatologist) reviewed all of the identified articles, and the second review performed by either TR (Physiotherapist) or WP (PhD Candidate), half each. Three further articles were identified by the second reviewer 3/1628, 0.18%). The results of the search strategies were reviewed independently and in duplicate for relevance. The initial screening was set to be open-ended to retain as many relevant studies as possible. Studies were included if they met the following criteria:

(1) concerned patients older than 18 years,

(2) reported on patients’ perspectives regarding “needs”, as defined by the definition above and

(3) concerned patients with non-specific LBP.

Studies were limited to human studies in the English language and full-text articles. No restrictions were applied to the prevalence of LBP and studies concerning acute, subacute and chronic LBP were included. Those that appeared to meet inclusion criteria were retrieved and the full text was assessed for relevance. A manual search of the reference lists of the obtained studies was conducted to identify further studies for inclusion in the review. Any disagreements in the inclusion of studies were resolved through consensus or reviewed by the senior author (AW).

 Methodological quality assessment

To assess the methodological quality of the included studies, the first author reviewed all of the included studies (LC) and the second review performed by either (TR) or WP), half each, to independently assess all the studies in duplicate. For qualitative studies, the Critical Appraisal Skills Programme (CASP) tool was used. [33] Risk of bias tool was utilised to assess the external and internal validity of quantitative studies: low risk of bias of quantitative studies was defined as scoring 8 or more “yes” answers, moderate risk of bias was defined as 6 to 7 “yes” answers and high risk of bias was defined as 5 or fewer “yes” answers. [34] The reviewers discussed and resolved disagreements through consensus. Any disagreements in scoring were reviewed by a third reviewer (AW).

 Data extraction and analysis

A standardised data form specifically developed for this scoping review was used by one investigator (LC) to extract the data from relevant studies.

The following data were systematically extracted:

(1) primary study aim,

(2) study population (patient age and gender, population source, population size and definition of LBP, where available),

(3) description of the study methods and

(4) year of publication.

Included studies were examined using principles of meta-ethnography to synthesise qualitative data. [35] In the first stage, one author (LC) read each study included in the review and generated themes from the study. This process involved reading the text, identifying emergent themes from the primary data and any pertinent points raised by the authors, and then iteratively developing a coding structure to ensure a standard approach to data extraction. Identified themes were then organised and grouped into logical higher-order themes and tabulated for ease of interpretation. Reciprocal translational analysis was then undertaken to compare the concepts and themes from the included studies and overarching themes across the studies were gradually developed. From this process, a framework of concepts and underlying themes was then developed. In the third stage, two senior authors (FC and AW) with over 15 years of clinical rheumatology consultant-level experience and a senior physiotherapist (AB) independently reviewed the framework of concepts and themes to ensure clinical meaningfulness across disciplines and face validity.

Results

 Overview of articles

The search returned 1,829 articles, of which 43 studies explored LBP patients’ perceived needs of healthcare providers (Figure 1 and Table 1).

Of these studies,

17 were from the United Kingdom [22, 24, 36–50],

9 from North America [51–59],

7 from Australasia [60–66],

8 from Europe [23, 67–74], and

2 from Africa [75, 76].

The duration of back pain was either undefined or mixed (acute and chronic) in 35 studies [22–24, 36–45, 47–54, 56–58, 60–62, 67–69, 72–76] and 8 studies reported on only chronic back pain (>12 weeks duration) [46, 55, 59, 63–66, 71]. There were no studies on acute back pain only (<6 12 weeks duration).

Thirty studies used qualitative methods [24, 36–43, 46–49, 54–56, 59, 61–69, 72–74,76] and 12 quantitative methods [22, 23, 45, 50, 52, 53, 57, 58, 70, 71, 75].

Of the qualitative studies,

21 used interviews [24, 36, 37, 42, 43, 46, 47, 49, 59, 60, 62, 66, 74],

8 used focus group discussions [48, 55, 63–65, 69, 73, 76],

5 used questionnaires [22, 50, 54, 61, 68],

1 used surveys [56] and 1 used testimonials. [72]

The number of participants of the qualitative studies ranged from 9 to 133, with a median of 23.

Of the quantitative studies,

8 used questionnaires [22, 44, 45, 50, 52, 53, 70, 71],

3 used interviews [23, 57, 75] and

2 used surveys [23, 57, 58].

The number of participants of the quantitative studies ranged from 100 to 1555, with a median of 538.5. There was one mixed-methods study [51] with 4 participants in the study.

 Quality of studies

Quality assessments of the included studies are presented in the Supplementary Appendix (Figures 1 and 2). The reviewers were in agreement for 77.5% of quantitative and 80% of qualitative assessment criteria. The overall quality of qualitative studies was poor (Figure 2), especially for CASP criteria 4 to 6. The quantitative studies were of low quality: 10 studies were at high risk of bias and 3 studies were at moderate risk of bias (Figure 3). For both qualitative and quantitative studies, these scores reflected potential biases with recruitment strategy and data collection.

 Results of review

Four areas of need emerged from the included studies relating to patients’ perceived needs of healthcare providers (table 2). These include; (1) desirable characteristics of healthcare providers (2) the need for information regarding LBP, (3) the need for certain aspects of care and (4) perceived barriers to care.

 Desirable characteristics of healthcare providers

The need for good communication skills Twelve studies explored the patients’ perceived importance of good communication skills [40, 41, 49, 52, 55, 63–65, 68, 70–72]. Open, patient-centred communication was important and patients wanted to be given an opportunity to discuss their problems [40, 55, 70, 71]. Patients also valued healthcare providers that communicate well and provide clear explanations without medical jargon [49, 63, 64, 68, 72]. Furthermore, patients preferred the communication style of the healthcare provider to be encouraging and personalised to the individual [49, 52, 63, 65, 70]. However, Farin reported that older patients had less preference for patient-centred communication style. [71]

The need for shared decision-making, respect and being listened to Two studies reported on the patients’ perceived need to be included in shared decision-making. [64, 67] Patients believed that their encounters with healthcare providers should be consultative rather than prescriptive and they were eager to work with their clinicians in their own care. [64, 67] Nine studies explored the patients’ need to be listened to, given the opportunity to relate their experience and be treated with respect [36, 39, 41, 48, 50, 51, 55, 64, 72]. Lyons found that some patients felt frustrated when healthcare providers did not listen and prioritised other health conditions over their LBP. [55]

The need for empathy, understanding and confidence Empathy and understanding were characteristics that patients value, and were identified in seven studies [41–43, 56, 63, 65, 76]. Patients preferred care-providers to be non judgemental and empathic to their situation [41, 43, 56, 63]. However, Slade and May found that patients felt a lack of empathy and prejudice from healthcare providers. [42, 65] Also, Soeker found that some patients thought that medical doctors did not understand their work environment and the psychosocial stressors that could aggravate their back pain. [76]

Qualifications and technical skills Four studies found that patients’ believed that their healthcare providers’ qualifications, technical skills and reputation were important [50, 51, 58, 66]. Bishop found that patients consider a practitioner’s qualifications and technical skills important. [50] Briggs reported that some patients felt that general practitioners lacked critical knowledge and skills for managing LBP presentations. [66] Bush reported that patients with healthcare providers who appeared more confident and comfortable with treating patients with LBP were more satisfied with the information they received about their back pain. [58]

 Information needs

The need for a diagnosis and finding a cause of pain Patients wanted their healthcare providers to provide a diagnosis or a cause of their LBP [23, 36–38, 41, 44, 49, 59–62, 67, 69, 73]. This was a recurring theme that was identified in 14 studies. Andersson found that receiving diagnostic support and excluding pathology were reasons for patients to seek medical care from primary care providers. [69] Slade reported that patients felt angry or frustrated if professionals could not fulfil the patients’ expectations of a diagnosis-treatment-cure pathway. [65]

The need for information provision by healthcare providers Fifteen studies reported the patients’ perceived need for the provision of health information from healthcare providers [23, 24, 43, 51, 53–57, 63–65, 67, 72, 75]. High proportions of patients reported lack of instruction about how to take care of their back [24, 65]. Patients wanted direction from their healthcare provider, reassurance and information about the cause of their pain and activities they should avoid which may aggravate their pain [23, 56, 67, 72]. Lyons found that patients preferred the information to be given clearly with diagrams and they wanted assistance with accessing reliable information. [55] One study by Bahouq found that patients believed that healthcare providers should integrate management of sexual problems in LBP consulting. [75] The most frequently cited area of dissatisfaction from patients was an inadequate explanation of the problem and poor understanding of what was wrong [43, 53–55, 64]. In addition, 4 papers highlighted patients’ desire for healthcare providers to provide congruent information and consistent recommendations [39, 55, 62, 67].

 Aspects of care

The need for holistic, personalised, emotionally supportive and encouraging healthcare Five studies evaluated the patients’ preferences for types of approaches to healthcare [43, 49, 56, 67, 69]. Andersson and Stenberg found that patients appreciated a holistic approach. [65, 67] Andersson reported that some patients have found conventional medical therapy to be reductionist with more of a focus on disease compared to a holistic view of the patient and their unique impacts. Patients preferred a holistic approach, as it was perceived to facilitate increased treatment response, support and empowerment. [69] Stenberg and Cooper found that patients wanted assessment and treatment to be personalised. [49, 67] Kawi reported that patients valued the emotional support and encouragement provided by their health-care providers. [56]

The need for a thorough assessment, time and effort, continuity of care Six studies reported that patients wanted a thorough assessment from their healthcare provider [22, 36, 39, 40, 51, 57]. Amonkar found that over 90% of patients considered it valuable for doctors to perform a physical examination, although only 70% of doctors placed importance on this. [22] Carey reported that the strongest correlates of satisfaction were the patients’ responses to questions about the quality of the provider’s history taking, examination and explanation of the problem. [57] Furthermore, the healthcare providers’ time was highly valued and patients have expressed their concerns about the limited time spent with their healthcare provider [36, 43, 48]. Patients also desired continuity of care from their healthcare provider [43, 44, 63, 64, 67].

The need for legitimization Patients’ need for healthcare providers to legitimise symptoms was identified in three studies [61, 65, 76]. Slade found that patients felt stigmatised by health professionals, the community, friends and families, the workplace and other back pain sufferers. [65] Moreover, patients were angry and frustrated in their search for legitimacy and validation. [65]

The need for collaboration between different healthcare providers One studies reported on the patients’ perceived need of collaboration between healthcare providers. [55] Lyons reported that some patients felt that there was a strained professional relationship between medical doctors and chiropractors. [55]

 Barriers to care

Patients reported several barriers to care [37, 41, 45–49, 55, 63, 66, 69, 73, 74]. Patients had concerns regarding the financial expenses of back pain management and they found the financial burden unmanageable and an obstacle to consistent attendance at exercise programs [55, 63, 69]. Patients were also dissatisfied with lengthy waiting times for referrals, investigations and healthcare appointments [37, 41, 48, 49, 73]. They had concerns regarding the accessibility to healthcare and longer-term support for their LBP [45, 49, 55], particularly in rural settings in Australia. [66] Furthermore, patients reported facing a conflict between knowing they should adhere to treatment (such as exercise therapy), however, bad weather, poor social supports, a lack of personal time and family commitments were common obstacles [46, 47, 74].

Discussion

This review identified 43 relevant articles examining patients’ perceived needs of healthcare providers managing LBP. Four areas of perceived need emerged, related to

(1) the desired characteristics of healthcare providers,

(2) the need for information,

(3) aspects of healthcare that patients’ perceived were important and

(4) perceived barriers to care that need to be addressed in the management of LBP.

Patients with LBP identified characteristics of healthcare providers that they believe to be desirable. They wanted healthcare providers to be good communicators and listeners [36, 40, 41, 49, 51, 52, 55, 63–65, 70–72] and to be treated with respect, empathy and understanding in a manner that legitimized their pain experience. Some patients expressed dissatisfaction when healthcare providers prioritise other medical conditions over their LBP, which may again reflect their desire for legitimisation, but it may also highlight potential discrepancy between the priorities of healthcare providers and those of patients. Furthermore, patients also desired shared-decision making, and to be included in the management of their LBP [39, 41–43, 48, 50, 55, 56, 58, 63–65, 67, 72, 76]. The existing literature supports the patients’ perceived needs of good communication from their healthcare provide. Prior research has demonstrated that effective physician-patient communication improves patient outcomes and patient adherence to treatment in a number of medical conditions, including cancer, diabetes and cardiovascular disease. [77, 78] Also, the articles included in this review regarding the desired characteristics of healthcare providers had a good representation of studies that recruited patients from primary care, tertiary hospitals and allied health clinics, demonstrating that these desired characteristics apply to all domains of health professionals.

Another message that strongly resonated from this review is that patients wanted their healthcare providers to offer information. Patients wanted to be given a cause of their pain and to be provided with information about the management of their LBP [23, 37, 39, 41, 44, 49, 51, 59–62, 67, 69, 73]. In particular, patients wanted a diagnosis to legitimise their symptoms as they felt stigmatised by healthcare providers, family members and the community [61, 65, 76]. Patients reported frustration and dissatisfaction when healthcare providers were not able to supply this, or when explanations were seen to be inadequate or inconsistent [24, 39, 40, 43, 53–55, 62, 64, 65, 67, 72]. This may reflect the knowledge gap among primary care physicians in managing LBP [79] or a skills gap relating to the delivery of information about LBP, and highlights a need to provide education and support to healthcare providers to bridge this gap. It also calls for future public education programs to educate patients and the community about the mechanism of LBP and its natural history, particularly as the patients’ need for a diagnosis may be driving the inappropriate overutilization of radiology in investigating LBP and contributing to the substantial burden of LBP. In particular, given that some 90% of LBP presentations cannot reliably be associated with structural pathology18, healthcare providers need support in effectively communicating helpful messages about non-specific LBP.

This review captured several aspects of the nature of care that patients perceived to be important. Patients valued holistic, individualised care, time spent with the healthcare provider and the expertise and qualifications of healthcare providers [22, 36, 39, 40, 43, 44, 48–51, 56, 57, 63, 66, 67, 69]. Additionally, patients wanted continuity of care and to be provided with social support for their LBP [43, 56, 67, 69]. These findings are similar to patients’ needs in other musculoskeletal conditions [28] and emphasizes the emerging trends in patient care where personalised treatment that is tailored to the individual is desired. However, the included articles have a predominance of females and middle-aged participants from developed, English-speaking countries. Further studies are required to evaluate male patients’ perceived information needs, as well as those of older age and different ethnic backgrounds. There is a particular need to focus on geriatric populations, given the increased prevalence of LBP with advancing age and lack of information3.

Patients perceive many barriers to their ability to access care for the management of LBP. These include cost, long waiting times and difficulties with access to treatment [37, 41, 45, 47–49, 55, 63, 66, 69, 73]. Personal time and effort were also obstacles to patients’ management of LBP [46, 74]. The studies that discussed the patients’ perceived barriers were from both primary and tertiary settings, suggesting inadequacies in the care provided at both healthcare levels. To address these problems, health services should provide more flexibility (e.g. after hours services, community-based centres, telehealth services), as well as better coordination of care with different healthcare professionals, employers and allied health services. Furthermore, the implementation of Models of Care co-developed with consumers may facilitate self-management and partnership-based service delivery. [80]

This review had a number of limitations. Few studies directly examined the patients’ perceived needs of healthcare providers for LBP, such that the areas of need have been extrapolated from heterogeneous studies evaluating different study questions with varied populations. There was also a female predominance and recruitment of participants was conducted mainly from hospital settings or primary care practices, rather than community centres. Additionally, many studies were from developed, English-speaking countries. These limitations restrict the generalizability of the results to the general population and people of different ethnic and socioeconomic backgrounds. Additionally, some of the included studies are over 10 years old, and may not reflect current health service needs. Furthermore, many of the included studies were susceptible to bias and had methodological flaws, however, as this is a scoping review, the main concern would be a failure to capture the breadth of the topic.

Despite these limitations, this review incorporated all study methodologies and encompassed four complementary databases, which captures the existing relevant literature in a comprehensive fashion. An in-depth scoping review was performed to explore the breadth of the topic and to provide an inclusive description of the patients’ perceived need, spanning across all disciplines of LBP healthcare. Furthermore, many of the findings were consistent across several studies, allowing themes to be identified and reflecting the strength of the results. What about assessment of quality?

This review has highlighted a need for healthcare providers to focus on patient-centred care in managing LBP. Addressing the issues raised by this review may improve the provider-patient relationship and better encourage patients to actively self-manage their disease, ultimately leading to improved outcomes in LBP. Moving forward, participatory action research involving patients in back pain management programs should be conducted to incorporate the patient perspective in developing innovative healthcare delivery models to improve back pain management. Further studies identifying the modifiable enablers and barriers in primary care should also be conducted to support the development of tailored interventions to bridge the gap between provider and patient.

Patients with LBP prefer the patient-centred model, and desire good communication from healthcare providers. They also want to be well informed and to be actively involved in their own care. The perceived challenges patients face in the management of their LBP includes cost, long waiting times and access to treatment. This calls for healthcare providers and policy makers to acknowledge and address these concerns. There is a need to develop novel healthcare delivery models to better align the patient preferences and expectations, to improve the provider-patient relationship and ultimately result in improved outcomes in LBP.

Author Contributions

All authors including Louisa Chou, Tom Ranger, Waruna Peiris, Flavia Cicuttini, Donna Urquhart, Andrew Briggs and Anita Wluka made substantial contributions to the conception and design of the study, the analysis and interpretation of the data, drafting and revision of the article and final approval of the version to be submitted. Anita Wluka (anita.wluka@monash.edu) and Louisa Chou (louisa.chou@monash.edu) take responsibility for the integrity of the work as a whole.

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Conflict of interests

Not applicable

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