

A Qualitative Study of Doctors of Chiropractic in a Nova Scotian Practice-based Research Network: Barriers and Facilitators to the Screening and Management of Psychosocial Factors for Patients With Low Back Pain

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ABSTRACT

Objectives: This study aimed to assess chiropractors' awareness of clinical practice guidelines for low back pain and to identify barriers and facilitators to the screening and management of psychosocial factors in patients with low back pain.

Methods: This qualitative study used semi-structured interviews informed by the Theoretical Domains Framework with 10 Nova Scotian chiropractors who were members of a practice-based research network.

Results: The participants correctly identified what the guidelines generally recommend and described the value of psychosocial factors; however, none of the participants could name specific clinical practice guidelines for low back pain. We identified 6 themes related to barriers and facilitators for chiropractors screening and managing psychosocial factors. The themes revolved around the participants' desire to fulfill patients' anatomy-focused treatment expectations and a perceived lack of training for managing psychosocial factors. Participants had concerns about going beyond the chiropractic scope of practice, and they perceived a lack of practical psychosocial screening and management resources. Social factors, such as the influence of other health care practitioners, were reported as both barriers and facilitators to screening and managing psychosocial factors.

Conclusions: The participants in this study reported that they mostly treated with an anatomical and biomechanical focus and that they did not always address psychosocial factors identified in their patients with low back pain. Although these findings are limited to Nova Scotian chiropractors, the barriers identified appeared to be potentially modifiable and could be considered in other groups. Low-cost interventions, such as continuing education using evidence-informed behavior change techniques, could be considered to address these barriers. (*J Manipulative Physiol Ther* 2018;41:25-33)

Key Indexing Terms: *Chiropractic; Low Back Pain; Psychosocial Factors; Qualitative Research*

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INTRODUCTION

Low back pain is a leading cause of disability worldwide.¹ Psychosocial factors are consistently linked to chronicity and poor outcomes.² A systematic “review of reviews” found that several specific psychosocial factors were consistently reported to be associated with poor outcomes for low back pain, including increased stress, negative cognitions, the presence of compensation, and a poor relationship with colleagues.³

Clinical practice guidelines for low back pain recommend screening for psychosocial factors and appropriately managing them to improve patient outcomes.^{4,5} The Clinic on Low-Back Pain in Interdisciplinary Practice guidelines recommend the use of questionnaires, such as the Tampa Scale of Kinesiophobia and the Pain Catastrophizing Scale, in conjunction with taking a thorough subjective history, to identify those at risk for chronicity.⁶ The National Institute for Health and Care Excellence guideline for low back pain and sciatica recommend that clinicians consider using the STarT Back risk assessment tool.⁷ Guideline-recommended psychosocial management strategies for treating patients with low back pain include reassurance, education, advice to stay active, and avoiding an excessive anatomical focus, or patient labeling.^{6,8} Practice guidelines for low back pain developed specifically for chiropractic practice⁹ are in line with those of other professions. Globe et al recommend screening and managing psychosocial factors along with the promotion of active coping and self-management strategies.⁹ However, little is known regarding chiropractors’ beliefs, behaviors, and ability to facilitate psychosocial change in individuals with low back pain. Of concern is that chiropractors, like other clinicians,¹⁰ may be providing guideline-discordant care if they inadequately or only partially recognize and manage psychosocial factors in their patients with low back pain.

The Theoretical Domains Framework was developed to investigate and explain implementation problems from a behavior change perspective and to inform the design of effective interventions to change professional behavior.¹¹ Through the use of the Theoretical Domains Framework, researchers can better understand health care practitioners’ decision making and identify specific barriers and facilitators to desired behavior. The purpose of this study was to use the Theoretical Domains Framework to assess chiropractors’ awareness of clinical practice guidelines for low back pain and to identify barriers and facilitators to the screening and management of psychosocial factors for patients with low back pain.

METHODS

We conducted and reported this study following the consolidated criteria for reporting qualitative research¹² to promote the study’s validity, transparency, and overall

trustworthiness. (See Supplemental Digital File 1 for the 32-item checklist with additional study details.)

Study Design

We used a qualitative study design that included semi-structured interviews to (1) assess chiropractors’ awareness of clinical practice guideline recommendations related to screening and appropriately managing psychosocial factors in their patients with low back pain; and (2) identify chiropractors’ barriers and facilitators to the screening and management of psychosocial factors in their patients with low back pain. Our study was guided by the Theoretical Domains Framework,¹³ and we used the systematic approach described by French et al.¹⁴

Participants and Eligibility Criteria

We recruited participants from a newly formed Nova Scotian Chiropractic Practice-Based Research Network. Currently, there are 7 chiropractic Practice-Based Research Networks across Canada, including the Nova Scotian network. The goals of these networks are to provide a “community of practice” related to evidence-informed practice and to facilitate chiropractic-based research. To be eligible to participate in the study, the chiropractors had to be licensed and practicing in Nova Scotia. The first author contacted all of the 18 members from the Nova Scotian network through e-mail, asking for their voluntary participation. A sample size of 10 to 13 participants was estimated a priori to reach saturation.¹⁵

Procedure

Questionnaires. After obtaining informed consent to participate in the study, we collected information about the chiropractors’ general demographics (sex, age, years in practice, chiropractic school attended), clinic characteristics, and practice style.

Interviews. The first author conducted individual semi-structured face-to-face interviews with each participant. Interviews were scheduled on the basis of availability, and the third author attended several interviews. (See Supplemental Digital File 1 for the interviewer’s characteristics, assumptions, and relationship with the participants.) Interviews were audio-recorded at Dalhousie University in a secure, quiet room. The first and third authors took field notes. The interview questions were adapted from the original (12 domain) Theoretical Domains Framework interview template.¹¹ The first author pilot-tested this interview guide with 2 physiotherapists. Modifications to the interview guide were then made, including additions to reflect the refined Theoretical Domains Framework by Cane et al (14 domains).¹³ (See Supplemental Digital File 2 for the semi-structured

interview guide, which has questions pertinent to each of the 14 domains.)

Analysis. A hired transcriptionist and 1 researcher transcribed a proportion of the interviews verbatim. Analysis was ongoing throughout sampling and data collection, using NVivo 11 software for Mac.¹⁶ Themes were generated from the data using directed content analysis¹⁷ based on the Theoretical Domains Framework.¹³ Before any coding was done, NVivo was set up so that each of the 14 domains was represented as a “node” with a brief definition, as presented by Cane et al.¹³ The interview transcripts were then coded, assigning segments of text to corresponding domains. The first and third authors performed this analysis independently, and consensus was reached after each interview had been analyzed. Throughout the process, these authors discussed field notes and looked within and across the domains for linkages and the presence of recurrent or new themes.

Member Checking. Member checking was conducted; participating chiropractors were sent (through e-mail) a summary of the preliminary themes with examples of identified barriers and facilitators to the screening and management of psychosocial factors for patients with low back pain. They were provided with the option to comment and provide feedback. Further, the participants were invited to attend an in-person group session, where the results of the study were further disseminated and discussed. This session once again provided the participants with the option to provide feedback or express disagreement with the results.

Ethics. This study obtained Dalhousie University Health Sciences Research Ethics Board approval (#2016-3808), and all participants gave informed consent.

RESULTS

Fourteen practice-based research network chiropractors expressed interest in participating. No responses were received from the remaining 4 members. To avoid conflict of interest and bias, it was decided that 1 of the 14 interested members would be excluded, as close work-related connections to members of the research team were recognized.

Saturation and Member Checking

Ten participants completed the full interview (40-71 minutes each). Interview numbers 8, 9, and 10 did not elicit the development of any new major themes. No additional interviews were conducted because they were unlikely to generate any significant new themes from the targeted population. The remaining 3 eligible chiropractors were advised that participants were no longer needed. No participants expressed disagreement after receiving a summary of the preliminary themes through e-mail. Furthermore, 5 of the 10 participants were able to attend

the in-person group session, where the results were further disseminated and discussed. After the first and third authors presented the results (verbally and on paper in the form of a poster), the 5 participants were asked to provide feedback regarding the validity of the findings. No one expressed concern or felt that the results misrepresented their beliefs or experiences.

Participant Characteristics

Six females and 4 males participated in the study. Nine participants were in practice less than 5 years, and 1 participant was in practice for more than 20 years. All participants were graduates of the Canadian Memorial Chiropractic College and were currently working in multidisciplinary practices, most commonly practicing alongside massage therapists and physiotherapists.

Knowledge About Clinical Practice Guidelines and Psychosocial Factors

None of the participants could name specific clinical practice guidelines for low back pain, yet most were confident that they were practicing in an evidence-informed manner. However, as the interviews progressed and the participants were able to guess what the guidelines recommended, all of the participants acknowledged that they perceived their practice related to screening and management of psychosocial factors as suboptimal. When assessing the participants' awareness of psychosocial factors that can impact patient outcomes, they identified several factors as being important, including preferences for passive care or a “fix,” work- or home-related stress, job- or home-life satisfaction, social isolation, low mood, litigation related to their low back injury/pain, fear-avoidance, catastrophizing, belief that they will not get better, persistent focus on pain or an anatomical focus, widespread pain, concerns about the future, positive Waddell signs, and unusual pain diagrams (eg, drawing of angry face). Despite this ability to identify important psychosocial factors, they reported limited awareness of management techniques.

Identified Themes

The final NVivo file, after the 2 coding researchers reached consensus, contained 1662 segments of coded text attributed to the 14 domains. Table 1 delineates content that was frequently discussed by the participants and was subsequently coded under specific domains.

Six main themes about barriers and facilitators to screening and managing psychosocial factors in patients with low back pain emerged from the data: (1) therapeutic alliance and patient-centered care, (2) screening and management training, (3) professional role and identity uncertainty, (4) cognitive dissonance and priorities, (5) environmental context and resources, and (6) social context

Table 1. Number of Codes Attributed to Each Domain, From the Theoretical Domains Framework, Regarding the Barriers and Facilitators to Chiropractors' Screening and Management of Psychosocial Factors in Patients With Low Back Pain

Domain	Number of Codes
Knowledge	222
Skills	211
Environmental Context and Resources	158
Social/Professional Role and Identity	155
Beliefs About Capabilities	154
Intentions	131
Beliefs About Consequences	118
Social Influences	107
Memory, Attention, and Decision Processes	101
Behavioral Regulation	80
Goals	60
Emotion	59
Reinforcement	54
Optimism	52

and resources. Table 2 summarizes the themes with key barriers and facilitators identified. Table 3 provides supporting quotes for each theme.

DISCUSSION

This is the first study, to our best knowledge, that has used theory-informed qualitative research to investigate the beliefs and clinical behaviors of chiropractors related to the screening and management of psychosocial factors for their patients with low back pain. The participants could not name any specific clinical practice guidelines for low back pain; however, they correctly described the guideline recommendations regarding psychosocial factors for their patients. Although the participants understood the value of psychosocial factors, the majority of the participants in this study appeared to follow an anatomical and biomechanical approach in their practice. They reported that they often did not consciously or intentionally manage psychosocial factors in their patients with low back pain. Evidence to determine whether chiropractors' focus is more anatomical and biomechanical compared with that of other health care practitioners is conflicting.^{18,19} Nevertheless, our findings are consistent with a Dutch chiropractic survey²⁰ reporting that chiropractors appeared to be able to identify psychosocial factors and their importance; however, the survey found that they reported limited routine management and lack of confidence with the management of psychosocial issues.

The themes reported in this study are also consistent with previous qualitative research in Nova Scotian chiropractors; that qualitative study had explored the barriers and facilitators to prescribed exercise adherence in patients with persistent low back pain.²¹ They found that participants appeared to be unaware of the specific behavior

change techniques that they already employed in their practice. In this current study, many participants at first stated that they did not know how to manage psychosocial factors; some even initially denied that it was relevant to chiropractic practice. Yet, as the interviews progressed, many participants described (sometimes unknowingly) such techniques as education, reassurance to reduce fear-avoidance, graded exercise/exposure, goal setting, intention formation, or relaxation techniques. Some participants realized partway through the interview that they did manage psychosocial factors; their approach simply was not intentional or documented in their files. This suggests that there may be room to strengthen and build on what chiropractors are already doing.

This study revealed barriers and facilitators related to all of the Theoretical Domains Framework domains. The top 5 most frequently coded domains were *knowledge*, *skills*, *environmental context and resources*, *social/professional role and identity*, and *beliefs about capabilities*. The interconnected nature of these 5 domains was evident. The chiropractors in our study reported a perceived lack of *knowledge* and *skills*, especially about managing psychosocial factors. With regard to *environmental resources*, the participants emphasized the need for a simple yet applicable psychosocial screening tool and structured management techniques (including when to refer the patient to a mental health care provider). Interestingly, when 1 participant was describing potential resources, the individual was essentially describing the online STarT Back Screening Tool²²/PICKUP Calculator²³ and pain neuroscience education flashcards,²⁴ seemingly unaware of their existence. The lack of awareness of existing resources may be related to the chiropractors' interests and perceived *role* (prioritizing anatomy and biomechanics over psychosocial factors). This is compounded by their desire to fulfill patients' anatomy-based treatment expectations and the chiropractors' concerns about going outside their scope of practice when managing psychosocial factors and using psychological techniques. The participants described how clinical disorders, such as depression, are best managed by a psychiatrist or psychologist; yet they were not sure about who would be best suited to manage common psychosocial factors, such as fear-avoidance behaviors and kinesiophobia, in patients with low back pain. The participants described a lack of deliberate practice managing psychosocial factors, resulting in low self-efficacy (*beliefs about capabilities*), feeding back into a perceived lack of *knowledge* and *skills*.

Although some barriers presented in this study may be costly or difficult to modify (eg, building a gym/open exercise space in the clinic to address feared movements), there are possibilities for introducing some relatively simple, low-cost interventions that may improve guideline adherence and patient outcomes. Relatively brief training sessions have been found to change clinicians' beliefs and,

Table 2. Summary of Themes Generated from 10 Semi-Structured Interviews With Chiropractors, Identifying the Barriers and Facilitators for Guideline-Based Management of Psychosocial Factors in Patients With Low Back Pain

Theme Identified	Key Barriers	Key Facilitators
1. Therapeutic Alliance and Patient-Centered Care	a. Perception that patients expect mechanical, tissue-based treatment that will “fix” their low back pain. b. Desire to fulfill patients’ expectations so they do not discharge themselves because they are not receiving “actual” treatment. c. Psychosocial questionnaires are not subtle and can impact patient rapport negatively (eg, message that pain is “all in their head”). Therefore, chiropractors deterred from administering them. d. Stigma associated with referral to a mental health care provider; concerns over patients’ potential response to referral.	a. Ability to fulfill patients’ expectations (eg, when desire for only passive care) while gently, but firmly, addressing psychosocial factors. b. Slowly building patient trust and rapport allows for the identification and management of psychosocial factors. c. Eliciting an emotional response in the patient can build rapport and facilitate the management of psychosocial factors. d. Helping patients view education and exercise (graded exposure to feared movements) as “actual” treatment.
2. Screening and Management Training	a. Perceived competency in the management of psychosocial factors was very poor; feel they lack knowledge and skills. b. Chiropractors unaware of the psychosocial management techniques they are using. Therefore, lack intentional application. c. Unsure how and when to optimally refer a patient to a mental healthcare provider.	a. Feel they can easily identify psychosocial factors, even without questionnaires. b. Chiropractor 7 (diverse case/outlier) described using an integrated biopsychosocial approach to low back pain management—not seeing psychosocial management as “separate.”
3. Professional Role and Identity Uncertainty	a. Concerns over appropriate scope of practice. b. Unsure what psychosocial factors should be managed by chiropractors. c. Unsure if “crossing a line” when managing psychosocial factors and using psychological techniques.	a. Strong belief that chiropractors <i>should</i> be addressing psychosocial factors in the context of low back pain. b. Belief that it is the role of all health care providers to screen and manage psychosocial factors to improve patient outcomes.
4. Cognitive Dissonance and Priorities	Note: Knowledge-action gap: see discrepancy between barrier and facilitator. a. Managing psychosocial factors takes time (money). Anatomy/biomechanics-focused manual therapy takes priority, as it satisfies patients, is more familiar/comfortable for the chiropractor, and takes less time per patient (financial incentive).	a. Strong belief that patients will not get better if psychosocial factors are not appropriately addressed.
5. Environmental Context and Resources	a. Lack of awareness of simple and short, research-based psychosocial screening questionnaire. b. Perception of too many questionnaires to choose from and they lack practicality. Some questionnaires may elicit negative emotional response. c. General resistance to more paperwork for the patient and themselves/clinic staff. d. Open concept clinics may not facilitate screening and management of psychosocial factors; patient may not be comfortable. e. Lack of behavior regulation; charting not set up to document or monitor psychosocial features or questionnaire scores.	a. Access to private treatment rooms to discuss psychosocial factors. b. Access to an open space or gym to address fear-avoidance through movement/exercise. c. Access to content to help educate patients (eg, Explain Pain book).
6. Social Context and Resources	a. Anatomical and biomechanical culture—the screening and management of psychosocial factors are not a typical conversation point. b. Other practitioners can negatively influence patients through non-indicated imaging and previous advice that promotes inactivity and fear. c. Other chiropractors can negatively influence patients by overemphasizing magnitude of their problem and overtreatment (creating or amplifying psychosocial factors). d. Internet sites that contain poor information can promote fear. Patient receives mixed messages.	a. Supportive administrative staff and working with a team that relays a consistent message to the patient. b. Clinical mentorship and working with those who are interested in managing psychosocial factors (eg, some physiotherapists viewed as helpful.)

Table 3. Sample Supporting Quotes for Each Theme Generated From 10 Semi-Structured Interviews with Chiropractors, Identifying the Barriers and Facilitators for Guideline-Based Management of Psychosocial Factors in Patients with Low Back Pain

Theme	Sample Quotes
1. Therapeutic Alliance and Patient-Centered Care	“Some patients I see just want to come in, get adjusted, get a bit of treatment and get out ... they’re not receptive to any discussion on exercise or dealing with any of those barriers ... they’re just “fix me.” Those type of people, they’re hard to deal with ...” (Chiropractor 1) “In their minds, they think it’s all tissue-related. There’s definitely a lot of that happening. But they just don’t consider the psychosocial aspect of things as much as maybe the clinician would ... Or just don’t want to hear anything of it. You know, their time spent with you, they want to focus on the muscle work or the joints ...” (Chiropractor 5) “And then once you kind of build a rapport with them and they start to decrease their pain a little bit, you can start shifting into ... active care, more exercise-based, and more of the educational component.” (Chiropractor 9)
2. Screening and Management Training	“I’m pretty good at screening, it’s the management that would be where I would be lacking ... We don’t know what to do when we find it or we only have a couple strategies ... we just say “I don’t know what to do, so I’m just not going to do anything”...” (Chiropractor 3) “You can go to manual therapy courses all day, and people can assess our abilities and teach us. But no one ... We had one course in school where they would videotape you interviewing and doing a history on someone, and they would critique and “You didn’t do this and maybe you should have gone that way.” Oh my God, we need so much more of that. It’s unbelievable. I loved that course ... Like to have someone that does like motivational interviewing, recognition of flags that can like coach you.” (Chiropractor 8) “I definitely would say in all areas of my practice, this (screening and managing psychosocial factors) is the biggest piece that I would feel under-equipped.” (Chiropractor 9)
3. Professional Role and Identity Uncertainty	“Also in terms of managing, that’s a struggling point for me, is when is the management outside of my capabilities and has to be passed on to somebody else ... And the thing is I don’t often make that referral to like psych just because, you know, it obviously has a negative connotation to it.” (Chiropractor 8) “It comes down to legally what’s within our scope ... I think what’s always in the back of your mind is like ... how much advice can I give ... where can I kinda dip my toes into this ... So I think that kinda causes a lot of hesitation from practitioners.” (Chiropractor 4) “I feel as far as I go with managing them (psychosocial factors), I may not spend a lot of time with that. Like my time is mostly spent like fixing or assessing—a functional approach method. So I wouldn’t have a lot of time to discuss, you know, ways for them to feel happy. Or like strategies on exercise ... my approach is to be aware of these things but ... you’re not a psychologist, so you can’t treat them with psychology, you can only treat them with the findings that you get anatomically.” (Chiropractor 5)
4. Cognitive Dissonance and Priorities	“Oh, absolutely. Yeah, I think it is. Like 100%. If you’re not doing that [screening and managing psychosocial factors], you’ll have trouble with getting people better” (Chiropractor 8) “... If you’re giving a few exercises and someone has that fear-avoidance behavior, it might take 20-30 minutes to get through one exercise. So time’s a big one ... Like as a business owner, time, like the financial aspect of it ... ideally we could just charge more and do a better job, but people aren’t going to pay that ... it’s hard to make a living when you’re treating 30 minutes or 40 minutes per patient, right? (Chiropractor 1) “You don’t manage psychosocial issues in 2 minutes ... So it’s proper care. And I mean that’s what the guidelines, I think, are trying to drive us into doing the right thing for the patient...” (Chiropractor 7)
5. Environmental Context and Resources	“It would be certainly nice having a test that broke down ... You know, here’s 12 questions or something ... especially if it was something that I could fill out on a tablet at the front, and then it would then spit out, oh, your psychosocial pain numbers are ... you’re a 4 out of 5 ...” “Something that could help explain. I mean sometimes I’m trying to explain to people the idea of pain centralization and how the neurological process ... can create more pain than the tissue is actually creating. And I don’t have a really nice little graphic that I can show people where I can sort of say “Here’s how this creates more pain.” (Chiropractor 7) “Like when I read the Orebro, for example, as a patient—if I was a patient—I’d read it and I’d be like “This person thinks I’m crazy.” So they’re not stupid, like they can read this questionnaire and be like “They’re clearly trying to determine something about my behaviour here” and they might be offended by that ...”. “There’s so many ... they need to—a consolidated questionnaire; there we go ... there’s just too much out there ...” (Chiropractor 4) “Being able to develop a system that would help me a little bit better to ensure I would do it more frequently... So if there’s like a standard reassessment form or like a timeline that was put in ... either a note in my schedule or there was like a form that you filled out that then had a reassessment date on it, and there was room for reassessment scores or something.” (Chiropractor 9)

6. Social Context
and Resources

"A chiropractic conversation is usually surrounding the mechanics' aspect, the weak this, or the tight that. Not many chiropractors are like, 'Oh, I got this patient so much better because I changed their belief system and re-altered their framework of thinking' ... everyone is like, 'What?' ... Because it's more of like a soft skill ... But if you talked about a new hamstring rehab protocol, everyone's got their ears open." (Chiropractor 8)

"I get patients who come in, who they've got x-rays ordered. They just hurt their back 3 days ago, and the first thing their family doctor does is order a set of x-rays. And I'm kind of like, yeah, we didn't really need those ... 'Like it's alright, I know the x-ray says there's this—but this osteoarthritis that your doctor's identified is really probably a red herring and it doesn't mean that you're sick or diseased or something like that.'" (Chiropractor 7)

"We have a physiotherapist, [name] ... I have learned so much from [them] about you know active versus passive and identifying these attitudes early on. So basically, yeah, not really my peers in my profession, but actually people in, you know, another profession." (Chiropractor 4)

ultimately, their behaviors.²⁵ For example, biopsychosocial training can improve clinicians' guideline-based recommendations for low back pain.²⁵ Furthermore, evidence suggests that educational presentations/interventions are more likely to be effective when they are designed to address the relevant barriers and facilitators to change.²⁶ Our study described numerous theoretically derived behavioral determinants that can be matched to evidence-based behavior change techniques²⁶ to increase adherence to clinical practice guidelines related to the screening and management of psychosocial factors in patients with low back pain.

Limitations

Because of the limited number of chiropractors available to participate in research in Nova Scotia, the interview guide was piloted on physiotherapists rather than chiropractors. However, as the professions are relatively congruent, we anticipate that this factor had little impact on the study. The lack of diversity in our sample is also a limitation as most of the participants were in practice for less than 4 years, which does not represent the full spectrum of chiropractors in Nova Scotia. Furthermore, this study sampled only from a practice-based research network of chiropractors interested in research and evidence-based practice, possibly limiting the generalizability and transferability of the findings to other chiropractors in Nova Scotia. The findings may not be geographically generalizable to chiropractors from other provinces or countries. The biases of the interviewer are also a potential limitation; Supplemental Digital Files 1 and 2 have been made available online in an attempt to increase the transparency of these potential biases and to describe the diverse backgrounds of all the authors.

CONCLUSIONS

This study identified 6 themes regarding chiropractors' barriers and facilitators to the screening and management of psychosocial factors in their patients with low back pain. These themes stemmed from multiple domains from the Theoretical Domains Framework, especially addressing the areas of *knowledge, skills, environmental context and resources, social/professional role and identity, and beliefs about capabilities*. Participants could not name any clinical practice guidelines for low back pain but correctly identified what the guidelines generally recommend, and they had an understanding of the value of psychosocial factors. However, the majority of the participants reported that their practice approach had an anatomical and biomechanical focus and described how they often did not consciously or intentionally manage psychosocial factors that they identified in their patients with low back pain. Many of the barriers to guideline-based care that we identified appeared to be

potentially modifiable with low-cost interventions, such as continuing education with the use of evidence-informed behavior change techniques.

FUNDING SOURCES AND CONFLICTS OF INTEREST

The Canadian Chiropractic Guideline Initiative funded this study. No conflicts of interest were reported for this study.

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Practical Applications

- Many of the barriers to screening and managing psychosocial factors in patients with low back pain appear modifiable.
- Continuing education with the use of evidence-informed behavior change techniques may facilitate a biopsychosocial approach to low back pain care.

SUPPLEMENTARY DATA

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jmpt.2017.07.014>.

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