

RESEARCH ARTICLE

Perspectives on chronic musculoskeletal pain management among healthcare professionals in Bhutan: A qualitative study

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Abstract

Introduction: Musculoskeletal pain disorders continue to be one of the leading causes of disability worldwide. Best practice care recommends patient-centred biopsychosocial models of care. Little is known about the chronic musculoskeletal pain management in low- and middle-income countries.

Objectives: To explore the management of chronic musculoskeletal pain by healthcare professionals in Bhutan.

Methods: This study employed a qualitative design involving 19 Bhutanese healthcare professionals managing chronic musculoskeletal pain in Bhutan. We collected data using a semi-structured interview guide. Thematic analysis was done manually.

Results: Healthcare professionals reported that patients rely on a combination of home remedies and seek help from local healers and hospitals for chronic musculoskeletal pain management. While healthcare professionals understand chronic musculoskeletal pain as multi-dimensional phenomenon, the primary focus was on identifying and treating structural anomalies. Time constraints, inadequate knowledge and skills, lack of confidence, facilities and expertise were reported as barriers to the effective management of chronic musculoskeletal pain. They proposed a need for clinical guidelines, relevant skills training and creating awareness of chronic musculoskeletal pain.

Conclusion: The management of chronic musculoskeletal pain in Bhutan is focused on identifying and treating physical abnormalities. Healthcare professionals consider psychosocial dimensions important but lack any form of actionable interventions in this domain.

KEYWORDS

biomedical approach, biopsychosocial model, chronic musculoskeletal pain, low- and middle-income countries, model of care

1 | INTRODUCTION

Musculoskeletal pain remains one of the leading health problems for individuals seeking medical care (Coronado et al., 2020). In both developed and developing countries, musculoskeletal pain is highly prevalent (James et al., 2018; Nahin et al., 2019) and impacts a person's quality of life (Coronado et al., 2020). Musculoskeletal conditions such as low back pain, neck pain and lower-extremity osteoarthritis are among the top diseases contributing towards the years lived with disability worldwide (James et al., 2018).

Musculoskeletal pain disorders are complex and multi-factorial. In most non-traumatic musculoskeletal pain disorders, no specific pathoanatomical diagnosis can adequately explain a person's pain intensity and disability (Maher et al., 2017). For instance, non-specific chronic low back pain is associated with the complex interaction of cognitive, psychological, social, behavioural, neuro-physiological, physical and lifestyle factors (Hartvigsen et al., 2018). Traditionally, the approach to managing people with chronic non-specific low back pain is predominantly biomedically oriented (Brown, 2009). However, the increasing prevalence and burden of chronic musculoskeletal conditions (George & Goode, 2020) underpin that biomedical approaches to complex pain disorders have not reduced this burden (Wand & O'Connell, 2008). In line with this complexity, the best practice care for patients with musculoskeletal pain disorders is recommended to be patient-centred with a biopsychosocial focus (Lin et al., 2020). For example, a physiotherapist-led biopsychosocial approach called cognitive functional therapy produced large and sustained improvement in people living with chronic disabling low back pain (Kent et al., 2023).

Healthcare professionals worldwide report not feeling adequately skilled or trained to provide this model of care for patients with chronic musculoskeletal pain. For example, a systematic review found that physiotherapists lacked confidence and ability to identify and manage cognitive, psychological and social components in people with chronic low back pain (Synnott et al., 2015). In addition, the lack of application of clinical guidelines to lower-income countries results in the provision of care inconsistent with the best care practice (Ahenkorah et al., 2019).

Bhutan is a lower-middle-income country where musculoskeletal disorders have jumped from the ninth most common morbidity in 2003 to the fourth in 2019 (Ministry of Health, 2020). People with musculoskeletal pain in Bhutan typically seek care first from local healers and traditional medicine practitioners and later from allopathic health care professionals. However, there is no information on how people with chronic musculoskeletal pain are managed in Bhutan. This study aimed to explore how healthcare professionals in Bhutan manage people with chronic musculoskeletal pain disorders. This is important in order to understand the knowledge gaps as well as the barriers and enablers to improve the standard of care for people living with chronic musculoskeletal pain disorders.

2 | METHOD

2.1 | Study design

We employed a generic qualitative inquiry (Percy et al., 2015) under an interpretivist paradigm (Goldkuhl, 2012) to explore health care professionals' perceptions of managing people with chronic musculoskeletal pain in Bhutan. Generic qualitative research explores people's subjective opinions, perceptions, and beliefs about their experiences without being tied to a formal methodology (Goldkuhl, 2012; Percy et al., 2015). Given this was the first qualitative study exploring Bhutanese healthcare professions perceptions of managing people with chronic musculoskeletal pain, the flexibility in this approach was important and facilitated a data driven inquiry (Kahlke, 2014). We used consolidated criteria for reporting qualitative research (COREQ) guidelines (Tong et al., 2007).

2.2 | Study setting

Bhutan is a small Himalayan kingdom located in the Eastern Himalayas. Both modern medicine and Bhutanese Traditional Medicine co-exist in Bhutan (Wangchuk et al., 2013). As of 2021, there were 186 primary healthcare centres, three municipality hospitals, 49 hospitals and one National Traditional Medicine Hospital, and traditional medicine units were co-located within allopathic hospitals and primary healthcare centres (Ministry of Health, 2020).

2.3 | Study population

Between 25 June and 24 August 2022, we invited 21 healthcare professionals to participate in the study. However, two of them declined to participate. We selected the participants through purposive sampling, where healthcare professionals were approached based on their profession, work place and experience in treating patients with chronic musculoskeletal pain. A sample size of 19 was considered for maximum variability. The study included Bhutanese healthcare professionals dealing with musculoskeletal pain disorders, including orthopaedic surgeons, nurses, general medical doctors, physiotherapists and health assistants. They had experience of managing chronic musculoskeletal pain ranging from 6 months to 35 years (median years of practice = 5 years, range = 6 months–35 years). The demographic characteristics of the participants are presented in Table 1. Importantly, this study did not include traditional medicine practitioners who practice in the hospitals and indigenous medicine practitioners such as shamans, bone setters, astrologers, etc., who practise in pockets of communities.

We interviewed 19 participants using a semi-structured interview guide (Appendix 1), although saturation was attained with 17 participants (Saunders et al., 2018).

TABLE 1 Demographic characteristics of the participants interviewed to explore the management of chronic musculoskeletal pain by healthcare professionals in Bhutan, 2022.

Participants characteristics	Frequency
Duration in practice (median, range)	5 years (0.5–35 years)
Male/female	14/5
Age (median, range)	31 years (25–58 years)
Practice location	
Referral hospital	11
District hospital	4
Primary health centre	3
Military hospital	1
Profession	
Orthopaedic surgeon	3
General medical doctor	4
Clinical nurses	4
Physiotherapist	4
Health assistants	4

2.4 | Data collection and processing

The first author (MT), a clinical physiotherapist and researcher, who received training from experienced qualitative researchers (ND & TD), conducted the interview. He also attended international courses on a biopsychosocial approach to chronic musculoskeletal pain management in hospital settings. An interview guide was developed following an extensive literature review (Coronado et al., 2020; Sanders et al., 2013; Singla et al., 2015; Synnott et al., 2015; Thong et al., 2018; Zangoni & Thomson, 2017), followed by brainstorming among the authors and discussion with the subject experts. We sought prior consent for the interview and digital voice recording from the participants. The face-to-face interviews were conducted via Zoom after ensuring that any information or quotations resulting from this interview would be anonymised. The interviews were conducted in English. However, participants used random Dzongkha and Lhotshamkha phrases in between the conversations, which were translated into English during the transcription. Two authors (MT & TD) translated the phrases independently to retain the meaning of words in a cultural context. Data were transcribed within 48 h of the interview and read through several times for familiarisation and simultaneous analysis to guide data saturation and estimation of sample size. After 17th participants, no 'stand out' new themes emerged, suggesting that the data saturation was achieved and further interviews were not conducted. The interviews lasted from 30 to 70 min. If there were unclear wordings in the transcribed verbatim, we contacted the participants to clarify and authenticate their intention and meaning.

2.5 | Data analysis

Thematic analysis was carried out manually (Braun & Clarke, 2006). To maintain quality and trustworthiness, we performed data analysis in the following steps: (a) two authors (MT & TD) read and re-read the transcripts for familiarisation, (b) two authors (MT & TD) independently developed themes and subthemes. We identified themes inductively; that is, we identified themes from the raw data instead of applying prior themes. Two authors (MT & TD) met to discuss the themes and came to a consensus. Findings were further reviewed by a third person (ND) to ensure that all possibilities of the data were explored and considered. (c) Emerging themes and subthemes were mapped through a robust discussion with the authors with multi-disciplinary professional backgrounds. We placed subthemes under appropriate overarching themes. (d) We continued to refine the themes and subthemes until all authors agreed that the perspectives of all participants in the study were captured and came to the consensus of data saturation when no new themes and subthemes were identified from the data. Disagreement in thematic analyses was resolved through discussion among the authors with different professional backgrounds: a public health expert (ND), an orthopaedic and spine surgeon (KW), a physician (TD), a clinical nurse (ZL) and clinical physiotherapists (KL & MT). We anonymised the quotations by identifying participants through their profession and years of experience.

3 | RESULTS

Four key themes were identified (Figure 1): (1) perceived health-seeking behaviour; (2) biomedical approaches to chronic musculoskeletal pain management; (3) barriers to chronic musculoskeletal pain management; and (4) strategies to overcome the barriers.

3.1 | Perceived health-seeking behaviour

All 19 healthcare professionals perceived that Bhutanese patients with chronic pain resort to home remedies and seek the help of local healers before visiting hospitals (Figure 2). Home remedies include oil massage, the use of locally available herbal plants and twigs, visiting hot spring baths and surfing Google and YouTube for exercises and remedies. Participants reported that patients also visited local healers such as bone setters for joint manipulation and astrologers and shamans for rituals to appease infuriated deities and spirits. Patients visit the hospital only when pain is unmanageable or after exhausted home remedies and local healing therapies. However, most of the patients are reluctant to disclose having undergone such treatments.

Patients do some home remedies or go to local healers.
When those fail, they turn up and seek care from

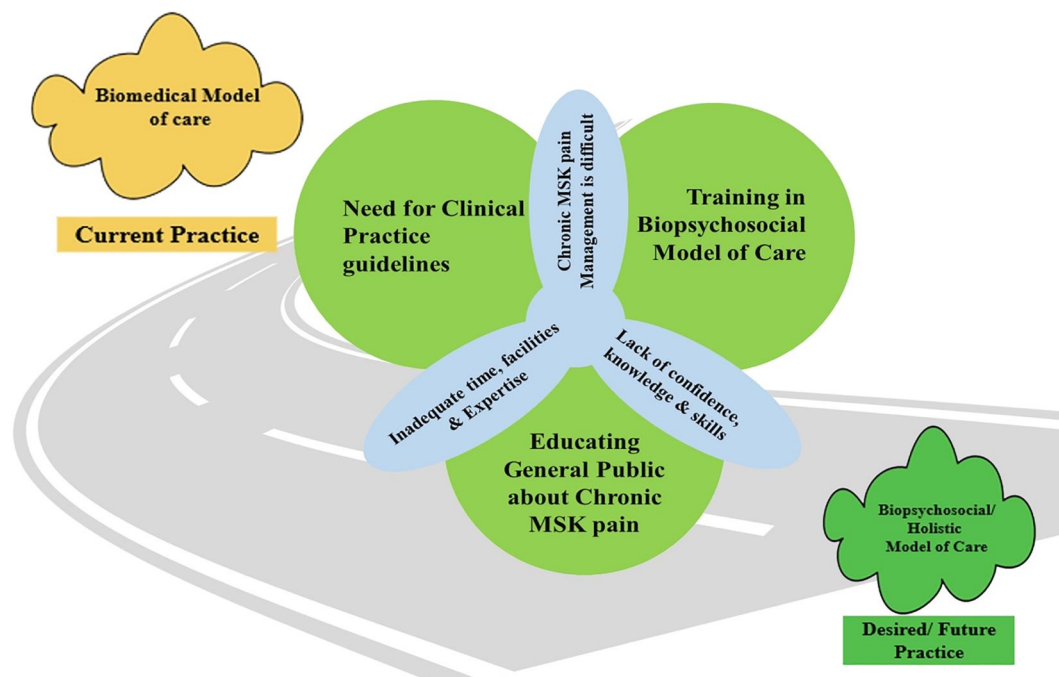


FIGURE 1 Themes and subthemes—chronic musculoskeletal pain management in Bhutan and related barriers and strategies, 2022.

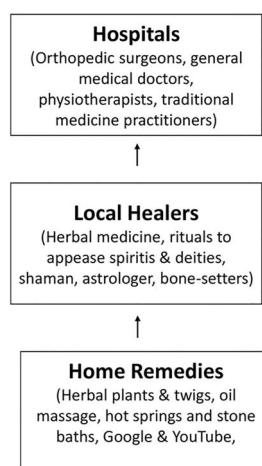


FIGURE 2 Perceived health-seeking behaviour among patients with chronic musculoskeletal pain disorders as reported by healthcare professionals in Bhutan, 2022.

hospitals. But they will not admit having taken local medicine or having undergone certain joints manipulations done by local healers.

- P 17

Patients believe infuriated serpent deities cause such pain and perform rituals to appease deities. They consult astrologers on the types of rituals to appease the deities.

- P 13

Patients go to shaman, take hot stone bath, and hot spring baths to get rid of the chronic pain.

- P 09

Some participants reported the adverse effects of seeking care from local healers and coming late to the hospital.

Patients with fractures and dislocations had gone to local healers and turned up late with complications.

- P 14

3.2 | Biomedical approaches in chronic musculoskeletal pain management

All 19 healthcare professionals considered biomedical components as important for assessing people with chronic musculoskeletal pain. Although the overarching assessment of people with chronic musculoskeletal pain was biomedically orientated, the approach varied among different categories of healthcare professionals. For example, orthopaedic surgeons and medical doctors perceived that radiological imaging helps rule out serious pathologies and explain the patients' symptoms, while physiotherapists considered muscular imbalance and the status of physical activities to explain the symptoms. Some healthcare professionals felt the need to perform structural diagnosis to validate their patients' symptoms.

We need to rule out red flags like cauda equina syndrome, spinal cord issues, infection and fracture.

I prescribe x-ray for almost all patients with low back pain, especially to older adults. But MRI [magnetic resonance imaging] is the best for making diagnosis in chronic musculoskeletal pain.

- P 13

Chronic pain is usually myofascial pain syndrome and muscle strains. In older people, it is the degenerative process that cause back pain and joint pains. This is important component of my assessment.

- P 03

Almost always, patients with chronic pain present with muscular imbalance. I also try to find out if they are physically active or not.

- P 19

Some patients want to know the exact cause of their pain. When we aren't able to do that, they resort to appeasing invisible deities and spirits.

- P 10

Though the majority of the participants considered psychosocial components as important, they only discussed them when prompted. Some participants felt that psychosocial factors were not adequately explored. Many participants considered the involvement of psychosocial dimensions if patients do not get better with pain medications, electro-modalities and exercises. Such perception was consistent among all categories of healthcare professionals.

Psychosocial components are very important but sadly it is not being explored adequately in our setting.

- P 05

When the most effective pain medications and physiotherapy aren't helping my patients, then I consider psychosocial factors.

- P 06

While the majority of healthcare professionals considered psychosocial dimensions as important contributors to the pain experience, biomedical approaches to pain management dominated their practice.

We provide electro-modalities, dry needling, or manual therapy. If there is muscular imbalance – stretch those tight muscles and strengthen weaker ones.

- P10

For myofascial pain, I locate the trigger point and dry needle it. For tendinopathy, platelet-rich plasma (PRP) and steroid injections are given. NSAIDs (non-steroidal

anti-inflammatory drugs) and physiotherapy are prescribed for early-stage arthritis, and steroids for late-stage arthritis. Excision of bony outgrowths are done if it is causing chronic pain.

- P03

Whatever said and done, paracetamol and non-steroidal anti-inflammatory drugs such as ibuprofen, indomethacin and muscle relaxants are first line of treatment. Gabapentin and pregabalin are for neuropathic pain.

- P 14

3.3 | Barriers to chronic musculoskeletal pain management

Healthcare professionals have described numerous barriers to providing care to people with chronic musculoskeletal pain.

3.3.1 | Chronic musculoskeletal pain is difficult to treat

Participants reported that patients with chronic pain often consult numerous healthcare professionals in various hospitals, and some have undergone many modalities of treatments, including surgeries.

Chronic musculoskeletal pain is complex and very difficult to treat. Pain keeps persisting no matter what you do.

- P 14

I have very bad experience dealing with chronic pain patients. When pain killers don't work, they grow aggressive and shout curse on us.

- P 02

3.3.2 | Time constraint

General medical doctors and Health Assistants attributed time constraints as one of the barriers to providing high-level care, while orthopaedic surgeons and physiotherapists reported that they get adequate time to talk, assess and manage patients with chronic musculoskeletal pain.

I have to quickly assess them. If there are no sinister causes, I refer them to physiotherapists hoping that they will take care of them.

- P 17

It is time-consuming to explore psychosocial components of patients when we have many patients waiting for us.

- P 13

I do lot of talking with patients. I work 6 hours a day in the hospital and I get enough time to talk and manage chronic pain patients.

- P 06

3.3.3 | Lack of confidence, knowledge and skills

Many healthcare professionals acknowledged that they lacked the confidence to manage people with chronic pain due to inadequate knowledge, skills and university training. The curriculum focuses more on life-threatening conditions. Some stated they endeavour to provide the best care by reading literature, consulting other professionals and giving adequate time for consultation, but reported they did not have any structured treatment approach. All healthcare professionals acknowledged the importance of psychosocial dimensions; however, many felt they lacked competency in the assessment and management of psychological dimensions. Some reported that psychological evaluation was beyond their scope of practice and time, and that more specialised professionals should do it. For example, one participant reported that it was sensitive to explore the relationship status of patients, while many participants felt they were not in a position to help, even if they found out about patients' psychological stressors.

When examining patients, it is very complex and time-consuming to explore social and psychological factors. I better leave it to the psychologist or the psychiatrist.

- P 19

It is sensitive to ask someone about their relationships and psychological status. They think we are dismissing their pain as psychogenic. If the pain is related to their occupation, I can't help him find another job.

- P 05

It is not the responsibility of orthopaedic surgeons and physiotherapists to explore and manage psychosocial contributors of pain.

- P 06

3.3.4 | Inadequate facilities and expertise

Although a pain clinic at the National Referral Hospital in Bhutan's capital, Thimphu, operates once a week, other hospitals in the country do not have dedicated pain clinics. Health assistants working

in remote primary health centres stated that, although they know that physiotherapy and stronger pain medications will benefit patients, such facilities are not available in their centres. Orthopaedic surgeons reported that they needed sub-specialisation to perform certain surgeries such as arthroplasty and discectomy, while many healthcare professionals felt the need to have pain psychologists and specialist physiotherapists.

Primary health centres neither have physiotherapy services nor stronger pain medications.

- P 11

Even when I know arthroplasty and discectomy is going to help my patients, I need sub-specialisation to be able to do that.

- P 03

Clinical psychologist will be very helpful but we don't have any psychologist specialised in chronic pain management in the country.

- P 12

Currently, physiotherapists are the only healthcare professionals offering non-pharmacological treatments in Bhutan but we don't have specialist musculoskeletal physiotherapists.

- P 01

3.4 | Strategies as a way forward to chronic musculoskeletal pain management in Bhutan

Healthcare professionals have suggested strategies to overcome the barriers and improve the chronic musculoskeletal pain management in the country.

3.4.1 | Training in the biopsychosocial model of care

All healthcare professionals reported that appropriate training was required to acquire knowledge and skills to effectively manage chronic musculoskeletal pain. Many healthcare professionals have expressed the need to undergo training to explore the psychological and social dimensions of pain and engage in effective communication.

I think chronic pain is beyond biological cause. That's when biopsychosocial model of care come into play. However, as we aren't trained, we can't explore psychological and social components. If we get training or course on biopsychosocial model of care, we can definitely deliver better care.

- P 10

Only talking politely with patients won't help. Therefore, we need to be trained to communicate effectively considering whole bunch of psychological, cultural and social dimensions of pain.

- P 02

3.4.2 | Include chronic musculoskeletal pain management in university curriculums

All the healthcare professionals perceived that they were not adequately trained to assess and manage chronic musculoskeletal pain in the universities and colleges. General medical doctors and health assistants reported that their curriculum focused more on life-threatening conditions. However, in the clinical settings, chronic pain is very common.

While I was undergoing MBBS, chronic pain was never a large topic to discuss. It was just a short topic.

- P 05

When we are trainee, they didn't teach us about musculoskeletal system in details. In practice, every next patient complains about back or joint pain and I don't know what to do.

- P 04

3.4.3 | Need for clinical practice guidelines

All the healthcare professionals acknowledged that their treatment varies from their colleagues despite practising the same profession. When patients are provided contrasting messages by different healthcare professionals, it creates confusion and frustration. Some healthcare professionals expressed the need to develop or adopt existing clinical guidelines of developed countries considering socio-economic realities and cultural appropriateness of Bhutan to provide uniform and evidence-based management.

Due to lack of clinical guidelines, some of us prescribe radiological imaging even before examining the patients. My colleague gives ibuprofen but I prefer indomethacin.

- P 05

I prescribe electro-modalities but some physiotherapists focus on manual therapy. Likewise, what doctors say about back pain is different from what physiotherapists say. That's when they grow confused and frustrated. We definitely need clinical guideline to provide uniform and evidence-based treatments.

- P 01

3.4.4 | Educating general public about chronic musculoskeletal pain

Many healthcare professionals have proposed educating and creating awareness of chronic pain among the general public. Education would help patients understand their pain better and seek appropriate care. Such information can be shared through dedicated webpages and social media handles (Table 2).

Educating patients about chronic pain is important. Once they understand the pain mechanism, they will seek appropriate care.

- P 06

We need a dedicated webpage to provide reliable information. Otherwise, they will believe whatever they see online.

- P 09

4 | DISCUSSION

This is the first study to explore how Bhutanese healthcare professionals approach the management of people with chronic musculoskeletal pain disorders and the barriers and strategies to optimise their care.

4.1 | Health-seeking behaviours

The socio-cultural beliefs about chronic musculoskeletal pain, such as low back pain, influence the health-seeking behaviours of the population (Ampiah et al., 2022). Bhutan is also known as 'the land of medicinal herbs,' and remedies made from herbs and minerals plays an important role in Bhutanese society. Bhutan has local healers in different pockets of the community, especially in rural areas, who treat people with musculoskeletal pain. In addition, Bhutan has a well-established and government-sponsored Bhutanese traditional medicine system (Gyeltshen et al., 2021). Bhutanese traditional medicine is based on the philosophy that the imbalance of the five elements, three humours and secretions of the human body results in illnesses (Wangchuk et al., 2007). The treatments consist of behavioural modification, usage of physical agents, such as cold and hot compression, herbal medicine, minor surgery and spiritual healing (Wangchuk et al., 2007). As such, healthcare professionals perceived that people living with chronic musculoskeletal pain resort to home remedies and local healers. Additionally, literate people utilise the Internet to browse remedies and exercises. Patients often seek the help of healthcare professionals and traditional medicine practitioners in hospitals when local treatments fail.

Participants	Profession	Years of experience	Place of work
P01	Physiotherapist	<1	District hospital
P02	Clinical nurse	5	District hospital
P03	Orthopaedic surgeon	2	Military hospital
P04	Health assistant	9	District hospital
P05	General doctor	2	Referral hospital
P06	Orthopaedic surgeon	2	Referral hospital
P07	Health assistant	2	Primary health centre
P08	Clinical nurse	5	Referral hospital
P09	Clinical nurse	18	Referral hospital
P10	Physiotherapist	5	District hospital
P11	Health assistant	2	Primary health centre
P12	Clinical nurse	8	Referral hospital
P13	General doctor	16	Referral hospital
P14	Orthopaedic surgeon	13	Referral hospital
P15	Health assistant	35	Primary health centre
P16	General doctor	<1	Referral hospital
P17	General doctor	2	Referral hospital
P18	Physiotherapist	16	Referral hospital
P19	Physiotherapist	3	Referral hospital

TABLE 2 Demographic details of participants, including profession, years of experience and place of work, 2022.

4.2 | Biomedical model of care

All healthcare professionals reported providing predominantly biomedically orientated care, a finding found in other low- and middle-income countries (Ahenkorah et al., 2019; Mousavi et al., 2011). Healthcare professionals reported that it is important to screen for sinister red flags such as malignancy, infection, fracture, cauda equina syndrome, inflammatory causes of pain and serious conditions masquerading musculoskeletal pain, such as aortic aneurysm, which is consistent with the best practice care for people with musculoskeletal pain (Finucane et al., 2020; Lin et al., 2020). Some healthcare professionals have reported that they prescribe routine imaging for older adults with chronic musculoskeletal pain to ensure they do not miss out on serious pathologies. This is in contrast to guidelines that state radiological imaging in musculoskeletal care is recommended only if (a) serious pathology is suspected, (b) likely to change management, and (c) unsatisfactory response to conservative care or unexplained progression of signs and symptoms (Lin et al., 2020). However, the participants in this study believed that the accurate cause of musculoskeletal pain can be diagnosed with radiological imaging.

Biomedical-focused treatment approaches such as steroid injections, targeting muscular imbalance with strengthening and stretching exercises, use of electro-modalities and prescribing pain medications are the first lines of treatment in Bhutan. However, the current best practice recommends self-management advice,

education and exercise as the first-line treatment after screening for serious pathology (Lin et al., 2020). Although assessing and managing psychosocial factors are recommended (Lin et al., 2020), some participants believed it was outside their scope of practice to perform psychosocial assessments and that more specialised professionals are required. This is similar to the research conducted in high-income countries, where physiotherapists perceived the management of cognitive, psychological and social dimensions as beyond their scope of practice and stigmatised patients with psychological issues (Synnott et al., 2015).

4.3 | Barriers and strategies for the management of chronic musculoskeletal pain disorders

The participants acknowledged that chronic musculoskeletal pain management in Bhutan is inadequate and they felt helpless when all the available treatments were exhausted and they had nothing new to offer. Participants acknowledged when prompted that psychosocial components are important, a view that is in line with a growing body of research, especially in the persistence of the symptoms and disability (Burton et al., 2004; Coronado et al., 2020; Heneweer et al., 2007; Jegan et al., 2017; Laisné et al., 2012).

Some participants were aware of the biopsychosocial approach to pain management, but they reported that they did not possess the skills and knowledge to explore the psychosocial dimensions owing to

a lack of training in the universities and colleges. There is evidence that these barriers can be overcome with the appropriate training. For example, when physiotherapists were provided with comprehensive training in cognitive functional therapy, they reported improved understanding and confidence to work with the cognitive, emotional, behavioural and social dimensions in people with chronic low back pain (Simpson et al., 2022; Synnott et al., 2016). In our study, the participants reported that time constraints to explore psychological and social dimensions, lack of infrastructure and expertise and inadequate training in the universities are barriers to chronic pain management in Bhutan; this finding is similar to studies elsewhere (Driver et al., 2017).

Many low- and middle-income countries lack clinical guidelines, resulting in the provision of management regimes that are inconsistent with standard recommendations (Ahenkorah et al., 2019). Similarly, there is an absence of clinical guidelines for chronic musculoskeletal pain management in Bhutan. Additionally, participants reported varying management practices within the same profession. Clinical guidelines need to be adopted in the country in an attempt to translate the global standards that are applicable to the country's socioeconomic, social and cultural contexts. Furthermore, a comprehensive information package for chronic musculoskeletal pain patients is needed. The information should be accessible to the general public, culturally sensitive and evidence-based.

4.4 | Strengths and limitations

This is the first study exploring barriers and strategies for managing chronic musculoskeletal pain in Bhutan. A novel strength of this study is that the authors of this study are Bhutanese clinicians and researchers who understand the sociocultural as well as biopsychosocial approach to chronic pain management in the country, providing an important lens to the analysis of these data. The sample is representative of healthcare professionals providing care for chronic musculoskeletal pain disorder in Bhutan, with representation from all three levels of hospitals. We had more participants from referral hospitals, which have a higher number of healthcare professionals, which may affect the transferability of these findings. To expand the understanding of chronic musculoskeletal pain management and health care-seeking behaviours, we recommend exploring the perspectives of patients, which was beyond the scope of this study. A follow-up quantitative study with other Bhutanese health professionals is also recommended to extend the findings from this study.

5 | CONCLUSION

Care for people with chronic musculoskeletal pain in Bhutan is largely biomedically orientated, with a primary focus on identifying and treating structural anomalies. Although psychosocial dimensions of pain are considered important, comprehensive training is required

to adequately train healthcare professionals to identify and manage psychological and social components related to chronic musculoskeletal pain.

AUTHOR CONTRIBUTIONS

Monu Tamang: Conception/design of the protocol, acquisition of data, data analysis/interpretation, drafting/critically reviewing the paper and giving approval for the final version to be published. **Nidup Dorji/Thinley Dorji:** conception/design of the protocol, data analysis/interpretation, critically reviewing the paper and giving approval for the final version to be published. **Kuenzang Wangdi/Zimba Letho/Karma Lhaki:** Data analysis/interpretation, critically reviewing the paper and giving approval for the final version to be published.

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CONFLICT OF INTEREST STATEMENT

There are no conflicts of interest among the authors.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATEMENT

This study was approved by the Research Ethics Board of Health (REBH) of the Ministry of Health (MoH) (REBH/Approval/2021/060), Royal Government of Bhutan. We also sought administrative clearance from the MoH. The participants provided consent for the digital recording of the interviews.

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REFERENCES

- Ahenkorah, J., Moffatt, F., Diver, C., & Ampiah, P. K. (2019). Chronic low back pain beliefs and management practices in Africa: Time for a rethink? *Musculoskeletal Care*, 17(4), 376–381. <https://doi.org/10.1002/msc.1424>
- Ampiah, J. A., Moffatt, F., Diver, C., & Ampiah, P. K. (2022). Understanding how patients' pain beliefs influence chronic low back pain management in Ghana: A grounded theory approach. *BMJ Open*, 12(12), e061062. <https://doi.org/10.1136/bmjopen-2022-061062>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706QP0630A>
- Brown, C. A. (2009). Mazes, conflict, and paradox: Tools for understanding chronic pain. *Pain Practice: The Official Journal of World Institute of Pain*, 9(3), 235–243. <https://doi.org/10.1111/j.1533-2500.2009.00279.x>

- Burton, A. K., McClune, T. D., Clarke, R. D., & Main, C. J. (2004). Long-term follow-up of patients with low back pain attending for manipulative care: Outcomes and predictors. *Manual Therapy*, 9(1), 30–35. [https://doi.org/10.1016/s1356-689x\(03\)00052-3](https://doi.org/10.1016/s1356-689x(03)00052-3)
- Coronado, R. A., Brintz, C. E., McKernan, L. C., Master, H., Motzny, N., Silva, F. M., Goyal, P. M., Wegener, S. T., & Archer, K. R. (2020). Psychologically informed physical therapy for musculoskeletal pain: Current approaches, implications, and future directions from recent randomized trials. *PAIN Reports*, 5(5), e847. <https://doi.org/10.1097/pr9.0000000000000847>
- Driver, C., Kean, B., Oprescu, F., & Lovell, G. P. (2017). Knowledge, behaviors, attitudes and beliefs of physiotherapists towards the use of psychological interventions in physiotherapy practice: A systematic review. *Disability & Rehabilitation*, 39(22), 2237–2249. <https://doi.org/10.1080/09638288.2016.1223176>
- Finucane, L. M., Downie, A., Mercer, C., Greenhalgh, S. M., Boissonnault, W. G., Pool-Goudzwaard, A. L., Beneciuk, J. M., Leech, R. L., & Selfe, J. (2020). International framework for red flags for potential serious spinal pathologies. *Journal of Orthopaedic & Sports Physical Therapy*, 50(7), 350–372. <https://doi.org/10.2519/jospt.2020.9971>
- George, S. Z., & Goode, A. P. (2020). Physical therapy and opioid use for musculoskeletal pain management: Competitors or companions? *PAIN Reports*, 5, 1–6. <https://doi.org/10.1097/PR9.0000000000000827>
- Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems*, 21(2), 135–146. <https://doi.org/10.1057/ejis.2011.54>
- Gyeltshen, D., Dorji, T., Choda, S., Gyeltshen, C., Dorji, S., Dorji, T., Tshering, U., Wangmo, D., & Pongpirul, K. (2021). Knowledge, attitude and practice of infection control and waste management among traditional medicine practitioners in Bhutan, 2019: A nationwide cross-sectional survey. *Evidence-Based Complementary and Alternative Medicine*, 2021, 1–6. <https://doi.org/10.1155/2021/6691780>
- Hartvigsen, J., Hancock, M. J., Kongsted, A., Louw, Q., Ferreira, M. L., Genevay, S., Hoy, D., Karppinen, J., Pransky, G., Sieper, J., Smeets, R. J., Underwood, M., Buchbinder, R., Cherkin, D., Foster, N. E., Maher, C. G., Underwood, M., van Tulder, M., & Woolf, A. (2018). What low back pain is and why we need to pay attention. *Lancet (London, England)*, 391(10137), 2356–2367. [https://doi.org/10.1016/S0140-6736\(18\)30480-X](https://doi.org/10.1016/S0140-6736(18)30480-X)
- Heneweer, H., Aufdemkampe, G., van Tulder, M. W., Kiers, H., Stappaerts, K. H., & Vanhees, L. (2007). Psychosocial variables in patients with (sub)acute low back pain: An inception cohort in primary care physical therapy in The Netherlands. *Spine*, 32(5), 586–592. <https://doi.org/10.1097/01.brs.0000256447.72623.56>
- James, S. L., Abate, D., Abate, K. H., Abay, S. M., Abbafati, C., Abbasi, N., Abbastabar, H., Abd-Allah, F., Abdela, J., Abdelalim, A., Abdollahpour, I., Abdulkader, R. S., Abebe, Z., Abera, S. F., Abil, O. Z., Abraha, H. N., Abu-Raddad, L. J., Abu-Rmeileh, N. M. E., Accrombessi, M. M. K., ..., & Murray, C. J. L. (2018). Global, regional, and national incidence, prevalence and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: A systematic analysis for the global burden of disease study 2017. *The Lancet*, 392(10159), 1789–1858. [https://doi.org/10.1016/S0140-6736\(18\)32279-7](https://doi.org/10.1016/S0140-6736(18)32279-7)
- Jegan, N. R. A., Brugger, M., Viniol, A., Strauch, K., Barth, J., Baum, E., Leonhardt, C., & Becker, A. (2017). Psychological risk and protective factors for disability in chronic low back pain - a longitudinal analysis in primary care. *BMC Musculoskeletal Disorders*, 18(1), 114. <https://doi.org/10.1186/s12891-017-1482-8>
- Kahlke, R. M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, 13(1), 37–52. <https://doi.org/10.1177/160940691401300119>
- Kent, P., Haines, T., O'Sullivan, P., Smith, A., Campbell, A., Schutze, R., Attwell, S., Caneiro, J. P., Laird, R., O'Sullivan, K., McGregor, A., Hartvigsen, J., Lee, D. C. A., Vickery, A., & Hancock, M. (2023). Cognitive functional therapy with or without movement sensor biofeedback versus usual care for chronic, disabling low back pain (RESTORE): A randomised, controlled, three-arm, parallel group, phase 3, clinical trial. *The Lancet*, 401(10391), 1866–1877. [https://doi.org/10.1016/S0140-6736\(23\)00441-5](https://doi.org/10.1016/S0140-6736(23)00441-5)
- Laisné, F., Lecomte, C., & Corbière, M. (2012). Biopsychosocial predictors of prognosis in musculoskeletal disorders: A systematic review of the literature. *Disability & Rehabilitation*, 34(5), 355–382. <https://doi.org/10.3109/09638288.2011.591889>
- Lin, I., Wiles, L., Waller, R., Goucke, R., Nagree, Y., Gibberd, M., Straker, L., Maher, C. G., O'Sullivan, P. P. B., & O'Sullivan, P. P. B. (2020). What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: Systematic review. *British Journal of Sports Medicine*, 54(2), 79–86. <https://doi.org/10.1136/bjsports-2018-099878>
- Maher, C., Underwood, M., & Buchbinder, R. (2017). Non-specific low back pain. *Lancet (London, England)*, 389(10070), 736–747. [https://doi.org/10.1016/S0140-6736\(16\)30970-9](https://doi.org/10.1016/S0140-6736(16)30970-9)
- Ministry of Health. (2020). Annual health bulletin 2020. <https://doi.org/10.1093/bja/aet535>
- Mousavi, S. J., Akbari, M. E., Mehdian, H., Mobini, B., Montazeri, A., Akbarian, B., & Parnianpour, M. (2011). Low back pain in Iran: A growing need to adapt and implement evidence-based practice in developing countries. *Spine*, 36(10), E638–E646. <https://doi.org/10.1097/BRS.0b013e3181fa1da2>
- Nahin, R. L., Sayer, B., Stussman, B. J., & Feinberg, T. M. (2019). Eighteen-year trends in the prevalence of, and health care use for, noncancer pain in the United States: Data from the medical expenditure panel survey. *The Journal of Pain: Official Journal of the American Pain Society*, 20(7), 796–809. <https://doi.org/10.1016/j.jpain.2019.01.003>
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76–85. <https://doi.org/10.46743/2160-3715/2015.2097>
- Sanders, T., Foster, N. E., Bishop, A., & Ong, B. N. (2013). Biopsychosocial care and the physiotherapy encounter: Physiotherapists' accounts of back pain consultations. *BMC Musculoskeletal Disorders*, 14(1), 65. <https://doi.org/10.1186/1471-2474-14-65>
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualisation and operationalisation. *Quality and Quantity*, 52(4), 1893–1907. <https://doi.org/10.1007/s11135-017-0574-8>
- Simpson, P., Holopainen, R., Schütze, R., O'Sullivan, P., Smith, A., & Kent, P. (2022). Becoming confidently competent: A qualitative investigation of training in cognitive functional therapy for persistent low back pain. *Physiotherapy Theory and Practice*, 00(00), 1–13. <https://doi.org/10.1080/09593985.2022.2151333>
- Singla, M., Jones, M., Edwards, I., & Kumar, S. (2015). Physiotherapists' assessment of patients' psychosocial status: Are we standing on thin ice? A qualitative descriptive study. *Manual Therapy*, 20(2), 328–334. <https://doi.org/10.1016/j.math.2014.10.004>
- Synnott, A., O'Keeffe, M., Bunzli, S., Dankaerts, W., O'Sullivan, P., & O'Sullivan, K. (2015). Physiotherapists may stigmatise or feel unprepared to treat people with low back pain and psychosocial factors that influence recovery: A systematic review. *Journal of Physiotherapy*, 61(2), 68–76. <https://doi.org/10.1016/j.jphys.2015.02.016>
- Synnott, A., O'Keeffe, M., Bunzli, S., Dankaerts, W., O'Sullivan, P., Robinson, K., & O'Sullivan, K. (2016). Physiotherapists report improved

- understanding of and attitude toward the cognitive, psychological and social dimensions of chronic low back pain after cognitive functional therapy training: A qualitative study. *Journal of Physiotherapy*, 62(4), 215–221. <https://doi.org/10.1016/j.jphys.2016.08.002>
- Thong, I. S. K., Jensen, M. P., Miró, J., & Tan, G. (2018). The validity of pain intensity measures: What do the NRS, VAS, VRS, and FPS-R measure? *Scandinavian Journal of Pain*, 18(1), 99–107. <https://doi.org/10.1515/sjpain-2018-0012>
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- Wand, B. M., & O'Connell, N. E. (2008). Chronic non-specific low back pain - sub-groups or a single mechanism? *BMC Musculoskeletal Disorders*, 9(1), 11. <https://doi.org/10.1186/1471-2474-9-11>
- Wangchuk, P., Pyne, S. G., & Keller, P. A. (2013). An assessment of the Bhutanese traditional medicine for its ethnopharmacology, ethnobotany and ethnoquality: Textual understanding and the current practices. *Journal of Ethnopharmacology*, 148(1), 305–310. <https://doi.org/10.1016/j.jep.2013.04.030>
- Wangchuk, P., Wangchuk, D., & Aagaard-Hansen, J. (2007). Traditional Bhutanese medicine (gSo-BA Rig-PA): An integrated part of the formal health care services. *The Southeast Asian Journal of Tropical Medicine and Public Health*, 38(1), 161–167. <https://pubmed.ncbi.nlm.nih.gov/17539263/>
- Zangoni, G., & Thomson, O. P. (2017). "I need to do another course" - Italian physiotherapists' knowledge and beliefs when assessing psychosocial factors in patients presenting with chronic low back pain. *Musculoskeletal Science & Practice*, 27, 71–77. <https://doi.org/10.1016/j.msksp.2016.12.015>

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APPENDIX 1

Interview guide.

1. In your opinion, how do people generally manage their musculoskeletal related pain?
2. What do you think is your profession's scope in managing musculoskeletal pain disorders?
3. What important components do you consider when assessing patients with chronic musculoskeletal pain disorders?
4. How do you manage patients with chronic musculoskeletal pain disorders?
5. How confident are you in managing patients with chronic musculoskeletal conditions?
6. What are some important barriers you encounter while assessing and managing patients with chronic musculoskeletal conditions?
7. Can you suggest some strategies for overcoming those barriers? Can you elaborate on them?
8. Is there anything more you want to add to this topic?