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Mapping the Current Landscape of Osteoarthritis Patient Educational Resources: A Scoping Review of Osteoarthritis Guidebooks

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ABSTRACT

The National Institute of Care and Excellence (NICE) guidelines (2015) recommend that patients receive accurate written and verbal information to enhance self-management. Currently, in Aotearoa New Zealand, there is no accepted osteoarthritis (OA) patient-educational guidebook that fits this recommendation. This scoping review aimed to identify published OA patient-educational resources and synthesise the content contained within the resources, to inform the development of an Aotearoa New Zealand OA guidebook. A scoping review was conducted to identify national organisations with stand-alone OA patient-educational resources. We identified six guidebooks and 68 additional stand-alone resources. Relevant data were extracted and categorised in relation to six key NICE (2015) guideline components (*first-line treatment*, *second-line treatment*, *third-line treatment*, *interprofessional team*, *self-management*, and *other*). Additional data were grouped to construct one additional component (*design features*). Much of the identified content had a biomedical approach to the delivery of OA patient education and treatment, and the material lacked consideration of patient experience. The developers of future guidebooks or other patient-education resources should consider utilising a balance of lay and biomedical information that is socially and culturally relevant to enhance the translation of OA knowledge and may improve engagement with management.

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INTRODUCTION

Osteoarthritis (OA) is the leading cause of musculoskeletal pain and disability worldwide and one of Aotearoa New Zealand's most prevalent chronic health conditions (Deloitte Access Economics, 2018; Woolf & Pfleger, 2003). In 2019, it was estimated that 10.2% of adult New Zealanders were living with OA (Ministry of Health, 2019). Furthermore, arthritis places a substantial financial burden on Aotearoa New Zealand's health system; the economic impact of arthritis in 2018 was estimated at $12.2 billion, with $993 million attributed to direct healthcare costs (Deloitte Access Economics, 2018). Worldwide concern exists surrounding the financial burden of OA, considering the current prevalence coupled with expected increases in modifiable (i.e., obesity, joint injury, and sedentary behaviours) and non-modifiable (i.e., age and gender) risk factors (Cross et al., 2014; Leifer et al., 2021; Palazzo et al., 2016).

Management guidelines for OA typically state that primary care treatments (e.g., education, exercise, and weight loss [if required]) should be fully considered before secondary (e.g., pharmaceutical and complementary therapies) or tertiary interventions (e.g., surgical) are considered (Bannuru et al., 2019; NICE, 2015). However, research suggests that OA first-line care delivery does not match guideline-informed recommendations (Basedow & Esterman, 2015; Runciman et al., 2012) and patients often feel poorly informed about conservative management (Jolly et al., 2017; Smith et al., 2014).

Written information about a health condition is an effective tool for facilitating patient-centred decision making and encouraging patient self-management (Dziedzic et al., 2015; Kennedy et al., 1999; Kennedy & Rogers, 2002). Incorporating educational material into a guidebook format is a practical method of supporting OA knowledge translation (Morden et al., 2011).

Moreover, Morden et al. (2011) found that an OA guidebook including both lay and medical information was an effective patient-education tool when used as part of usual OA care. NICE (2015) guidelines recommend that healthcare professionals provide patients with accurate written and verbal information to enhance self-management and understanding of OA pathophysiology. However, research shows a vast inconsistency in OA information, particularly online content, making it difficult to consistently access high-quality information (Barrow et al., 2018).

Understanding the content and design of existing OA educational guidebooks and resources provides a basis for developing a bespoke OA guidebook for Aotearoa New Zealand. Further to the value of written information providing an effective tool for patient self-management, design and the design process (including testing potential layout, supporting figures, colours, fonts, etc.) is known to influence acceptability and engagement (Groeneveld et al., 2018). Moreover, Reay et al. (2017) highlight the value of collaboration between designers and healthcare professionals when developing resources for healthcare delivery and knowledge translation.

Despite considerable support for the use of OA education resources and the plethora of resources currently available to people via websites, blogs, and other less reputable platforms, there is limited research about the development, design, and acceptability of patient OA education resources. Two notable studies explored the development or implementation of an OA guidebook related to the Management of Osteoarthritis in Consultations Study (MOSAICS) based in the United Kingdom (UK) (Dziedzic et al., 2014; Jordan et al., 2017). Jordan et al. (2017) believed that including an OA guidebook in the programme led to an increase in the provision of written advice, exercise, and weight management to patients. However, it is unclear how much of this change can be attributed to the guidebook specifically, as it was part of a multifaceted clinical intervention (Jordan et al., 2017).

Some aspects of OA patient education, such as the value of exercise or joint replacement surgery, are transferable across cultures or health systems. However, other elements are not simply translated, such as the health service funding or interpretations of health and wellbeing. For example, Aotearoa New Zealand has a unique health funding structure, with the Accident Compensation Corporation positioned between publicly and privately funded services (Accident Compensation Corporation, 2020). Furthermore, Te Tiriti O Waitangi entitles a partnership between Māori and the British Crown that governs many aspects of social policy, including health (Came et al., 2018).

Aotearoa New Zealand presently has no nationally accepted OA patient-educational guidebook responsive to our unique context. The current educational materials available consist of stand-alone, ad hoc resources found online or via pamphlets from musculoskeletal health providers and District Health Boards. An example is a pamphlet entitled *Osteoarthritis* (Arthritis New Zealand, 2017), available through Arthritis New Zealand. However, this resource does not directly link to evidence-based OA self-management guidelines. More recently, Darlow et al. (2020) developed an evidence-informed resource for people with chronic knee pain in Aotearoa New Zealand, titled *Free from Knee Pain*. The booklet includes information to help people understand and live with OA and where to look for support. It employs plain language, infographics, and patient quotes to express the messages. However, the booklet only focuses on the knee joint.

Therefore, it is timely to investigate existing OA patient-educational guidebooks and resources to inform the development of an Aotearoa New Zealand OA guidebook. A scoping review was chosen, which aimed to identify published OA patient-educational resources available online and synthesise the content contained within the resources, to inform future guidebook developments.

METHODS

This scoping review was informed by the structured five-step approach developed by Arksey and O'Malley (2005) and refined by Levac et al. (2010): 1) identify the research questions, 2) identify relevant resources, 3) selection, 4) charting the data, and 5) collating, summarising, and reporting the results. This review followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) outline (Tricco et al., 2018).

1. Identify the research questions

We developed four research questions to frame the search strategy. Although broad (to allow a wider 'scoping' of the evidence), these questions allowed the search to be conceptually defined and targeted (Levac et al., 2010). The four research questions identified were:

- What OA patient-educational guidebooks or resources are available online, published by national arthritis organisations in English?
- What are the similarities and differences in content between the identified OA patient-educational guidebooks or resources?
- How does the content of these identified guidebooks and resources match the NICE (2015) guideline recommendations?
- What design features do the guidebooks and resources use when presenting patient-educational material?

2. Identify relevant resources

A decision was made to search for OA educational guidebooks and resources of national arthritis organisations. This choice was pragmatic because of the resource constraints, the purpose of the project and the related research questions, our belief that these organisations were likely to have credible resources, and the vast amount of information on the Internet. Levac et al. (2010) argue that the search should be broad and feasible. The search was undertaken using Google (California, USA) and included the following key words: guidebook, osteoarthritis, patient education.

3. Selection

Resource selection during a scoping review is often an iterative process (Arksey & O'Malley, 2005; Levac et al., 2010). First author (LM) conducted the initial search with supervision from co-authors (DOB and RE). The team discussed the final inclusion and exclusion of resources in the context of the research questions (Levac et al., 2010). Resources eligible for inclusion were OA patient-educational resources that reflected a summary of OA education and conservative self-management treatments. Furthermore, resources were eligible for inclusion when written in the English language, were freely available (i.e., no cost to obtain, aimed at the public, and wholly downloadable offline information; pdf or Word document). Information was excluded that was published as online webpage resources (e.g., webpage text or articles), delivered as an application, podcast, or online module, or solely reported as a snapshot of information (e.g., fact sheets or OA summary).

4. Charting the data

The characteristics of the included resources were charted using Excel spreadsheets to provide a descriptive summary of the resources. Initially, this process included extraction of information about the arthritis organisation and country of origin, publication title, total page number, chapter contents, and whether the information was evidence-based (including relevant citations).

Next, LM re-read each resource in full, systematically extracting and charting characteristics and comparing these findings against seven key components related to the research questions and the NICE (2015) guidelines. Checked aspects of the charted information were independently checked by DOB and RE. Six key components were synthesised from the NICE (2015) guidelines, recognised as detailing current best practices for OA management, including 1) first-line treatment (education [e.g., pathophysiology, risk factors, signs and symptoms], exercise, and diet), 2) second-line treatment (complementary therapies, supplements, and pharmacological advice), 3) third-line treatment (surgical intervention), 4) interprofessional team, 5) self-management (strategies, coping strategies, mindfulness and relaxation), and 6) other (e.g. pain education, sleep hygiene, and OA misconceptions [myths]). The seventh key component (design features) was added and related to the review's purpose and included guidebook characteristics such as patient stories, contextual features, and visual design features (i.e., diagrams or linked images, spaces for user notes).

5. Collating, summarising, and reporting the results

This step involved synthesising all extracted information to create meaning to guide recommendations (Arksey & O'Malley, 2005; Levac et al., 2010). Again, this process was iterative; LM synthesised the findings and drafted the summary and recommendations with supervision from DOB and RE.

RESULTS

The search was undertaken during December 2019 and January 2020. In total, 74 resources were identified. However, 68 were discarded because they did not meet the inclusion criteria. Most identified resources were excluded because they were web pages (*n* = 37), short fact sheets (*n* = 17) or a part of an online module or application (*n* = 8). The remaining six resources were discarded for a combination of other reasons. Hence, six OA guidebook resources (Table 1) were found that matched the eligibility criteria (Arthritis Australia, 2016; Arthritis Foundation of South Africa, 2006; Arthritis Ireland, n.d.; Arthritis New Zealand, 2017; Arthritis Society Canada, 2018; Versus Arthritis, 2019). The length and detail of the guidebooks were diverse, ranging from eight (Arthritis Foundation of South Africa, 2006) to 38 (Arthritis Ireland, n.d.) pages. Versus Arthritis (2019) (UK) was the only resource to cite research evidence. The chapter content varied between resources, but most started with an introduction to OA and first-line treatment. Characteristics of the included guidebooks are presented using a framework informed by the NICE (2015) guidelines.

Charting the data

Relevant data were extracted and categorised in relation to six key NICE (2015) guideline components (*first-line treatment*, *second-line treatment*, *third-line treatment*, *interprofessional team*, *self-management*, and *other*). Additional data were grouped to construct one additional component (*design features*).

1. First-line treatment: Education, exercise, and diet

1.1. Education

All resources acknowledged that the specific cause of OA is unknown and explained there is no cure. Hip and knee joint OA featured in all resources, but reference to other affected joints (i.e., spine, foot, or hand) were sporadic. OA education primarily comprised information related to joint pathology, including articular cartilage breakdown, reduced ligament/tendon stability, and muscle atrophy. Further detail was offered in four resources (Arthritis Australia, 2016; Arthritis Foundation of South Africa, 2006; Arthritis Ireland, n.d.; Versus Arthritis, 2019) related to bony spurs, osteophytes, synovium swelling, and extra synovial fluid in the joint space. Two resources (Arthritis Foundation of South Africa, 2006; Versus Arthritis, 2019) explained the workings of a typical joint before explaining the pathophysiology of OA, while two resources (Arthritis Society Canada, 2018; Versus Arthritis, 2019) utilised the concept of joint 'wear and repair'. Aside from one (Arthritis Australia, 2016), all resources explained the weak correlation between the degree of pathology, x-ray findings, and symptom severity, while several resources explained that the pathophysiology of OA and associated symptoms were not necessarily linked (Arthritis Australia, 2016; Arthritis Society Canada, 2018).

1.2. Exercise

All resources explained that conservative treatments (exercise and diet) could alleviate symptoms, improve joint and general health, and reduce complications of a sedentary lifestyle. Three modes of exercise were identified (range of motion/flexibility, aerobic [walking, swimming, cycling], and resistance/strength). Physical activity recommendations were referenced in three resources (Arthritis Australia, 2016; Arthritis Ireland, n.d.; Arthritis Society Canada, 2018). The concept of pain and exercise was identified in one resource (Arthritis Australia, 2016) to educate individuals that it is reasonable to feel pain and stiffness with exercise, with additional caveats to change activity if symptoms last longer than 2 hr (Arthritis Australia, 2016). Other exercise interventions of Tai Chi (Arthritis Ireland, n.d.; Arthritis New Zealand, 2017; Arthritis Society Canada, 2018), yoga (Arthritis Society Canada, 2018), and hydrotherapy (Arthritis Ireland, n.d.; Arthritis New Zealand, n.d.; Versus Arthritis, 2019) were recommended.

Table 1

Summary of Patient-Educational Resources

Arthritis organisation	Publication title	Total pages	Chapter contents
Arthritis Australia	Taking control of your osteoarthritis	32	(i) Understanding osteoarthritis, (ii) Who can help, (iii) Working with your GP, (iv) Seeing a rheumatologist, (v) Other health professionals, (vi) Healthy moves for your joints, (vii) Making the most of medicines, (viii) What other treatments can help? (ix) Seeking support, (x) Glossary of terms, (xi) Useful resources
Arthritis Ireland	Living with osteoarthritis	38	(i) Introducing OA, (ii) Getting a diagnosis, (iii) Communicating with health professionals, (iv) Looking after your joints, (v) Practicalities, (vi) Caring for yourself
Arthritis New Zealand	Osteoarthritis	12	(i) What are the warning signs of OA? (ii) What is OA? (iii) What causes OA? (iv) How is OA diagnosed? (v) How can I manage my OA?
Arthritis Society Canada	Osteoarthritis: Causes, symptoms and treatments	16	(i) What is OA? (ii) What are the early signs of OA? (iii) Self-management, (iv) Treatments, (v) What now? Each chapter included sub-headings of other topics.
Arthritis Foundation of South Africa	Osteoarthritis	8	Individual chapter contents not provided
Versus Arthritis [a]	Osteoarthritis	27	(i) Mel's story, (ii) What is OA? (iii) Symptoms, (iv) Causes, (v) Which joints are affected? (vi) Diagnosis, (vii) How will OA affect me? (viii) Possible complications, (ix) Managing your OA, (x) Supplements and complementary therapies, (xi) Practical matters, (xii) Caring for yourself, (xiii) Research and new developments, (xiv) Glossary, (xv) Exercise for OA, (xv) Useful addresses, (xvi) Where can I find out more?

Note. GP = general practitioner; NICE = National Institute of Care and Excellence; OA = osteoarthritis; UK = United Kingdom.

[a] Evidence cited in this paper was from the NICE (2015) guidelines.

1.3. Diet and weight loss

Diet and weight-loss advice were the least referenced first-line treatment interventions. The main topic included the correlation between being overweight/obese and OA development, emphasising the importance of maintaining a healthy diet to avoid co-morbidities related to poor nutrition (Arthritis Australia, 2016; Arthritis Foundation of South Africa, 2006; Arthritis Society Canada, 2018). All resources referred to the inadequate scientific evidence for specific food groups and their effects on OA symptoms.

2. Second-line treatment: Pharmacological and supplements

All resources included some reference to pharmaceutical management. Analgesics (paracetamol and paracetamol-codeine combination), non-steroid anti-inflammatory drugs (NSAID) (oral and topical), and COXS-2 were the three main medications referenced and were included in all the resources. Injection therapies included corticosteroid injections as an option for short-term pain relief (Arthritis Australia, 2016; Arthritis New Zealand, 2017; Arthritis Society Canada, 2018; Versus Arthritis, 2019), and hyaluronic acid (Arthritis Society Canada, 2018; Versus Arthritis, 2019). All resources referenced the food supplements glucosamine and chondroitin due to their popularity with people with OA treatment. However, the information explained the limited efficacy of these supplements.

3. Third-line treatment: Surgical intervention

All resources included some reference to surgical interventions, such as keyhole surgery (arthroscopy), joint replacement, and joint fusion. Furthermore, all explained that surgery was not required for long-term management but may be considered when conservative treatment options were exhausted. The Arthritis Australia (2016) resource identified criteria for surgery may include severe, constant joint pain that does not improve with conservative treatments; night pain affecting sleep; significant limitations on walking and other daily activities; and a reduced ability to work.

4. Interprofessional team

All resources provided information about engaging with a general practitioner (GP) or primary care physician. The most referenced practitioner was GP, with a large emphasis on consultation before altering OA treatments. The resources described the value of including other health care practitioners. For example, including a pharmacist to support medications, a physiotherapist to prescribe exercise, or an occupational therapist to aid with home/work environment modification.

5. Self-management: Strategies, mindfulness, and coping

Self-management was linked to OA education, exercise, diet, medications/supplements, and complementary therapies. Self-management techniques included using aids to avoid excessive joint loading, heat and cold therapy, and advice to reduce load linked to physical activity.

Anxiety and depression were linked to OA in three resources (Arthritis Australia, 2016; Arthritis Foundation of South Africa, 2006; Arthritis New Zealand, 2017), while all resources referenced mindfulness and relaxation as self-management strategies. Other methods suggested to improve psychological health include cognitive behavioural therapy, interpersonal therapy, exercise, meditation, deep breathing, visualisation, yoga, and distraction (Arthritis Australia, 2016; Arthritis Society Canada, 2018; Versus Arthritis, 2019).

6. Other: Pain education, sleep hygiene, and OA misconceptions/myths

The specific topics related to pain education varied between resources. The Arthritis Australia (2016) resource identified pain education strategies such as taking medications wisely, exercise, heat and cold therapy, joint protection, energy expenditure monitoring, relaxation, mindfulness, and stress reduction. The Arthritis New Zealand (2017) resource looked at pain through a biopsychosocial understanding of pain (i.e., acute versus chronic pain) and adjuncts to help treat pain symptoms.

Poor sleep is a common symptom of OA (Hawker et al., 2010), yet information concerning sleep health was sparse. Three resources (Arthritis Australia, 2016; Arthritis New Zealand, 2017; Versus Arthritis, 2019) provided information and strategies to help people improve sleep health, such as a routine wake and sleep cycle and caffeine reduction, and to keep a sleep diary.

Common questions regarding misconceptions (or myths) associated with OA were identified in two resources (Arthritis Foundation of South Africa, 2006; Arthritis Ireland, n.d.); including topics related to the influence of weather, diet as a cure, OA as a degenerative condition, and OA worsened by exercise.

7. Design features: Patient experience, context, and utilised design features

First-hand patient stories (Versus Arthritis, 2019), patient experiences (Arthritis Ireland, n.d.), or quotes (Arthritis Ireland, n.d.) were used to describe a lived experience of OA. The Arthritis New Zealand (2017) resource was the only one to provide a specific context, describing a Māori model of health (Te Whare Tapa Whā) to explain important factors that can affect health and wellbeing.

A rhetorical question began each chapter in all resources to engage the reader, for example, *What is OA?*. Aside from one (Arthritis Foundation of South Africa, 2006), all resources provided real-life photographs of individuals with OA engaged with activity or interprofessional team members. The New Zealand (Arthritis New Zealand, 2017) and Australian (Arthritis Australia, 2016) resources summarised essential information using ‘take-home messages’.

Another common design feature was the use of diagrams or pictures of a ‘normal healthy’ joint, most commonly the knee (Arthritis Foundation of South Africa, 2006; Arthritis Ireland, n.d.; Arthritis New Zealand, 2017; Arthritis Society Canada, 2018; Versus Arthritis, 2019), including anatomical references and comparing it to ‘mild or moderate’ pathology. Several resources (Arthritis Australia, 2016; Arthritis New Zealand, 2017; Arthritis Society Canada, 2018; Versus Arthritis, 2019) displayed OA lesion location (hip, ankle, spine, big toe, lumbar spine) via a skeleton diagram.

Providing opportunities for patient interaction and comment/reflections was another common design feature. Examples included a ‘notes/record section’ (Arthritis Australia, 2016; Jordan et al., 2017), a place for medication tracking, and important contact details for interprofessional team members (Arthritis Australia, 2016) or the relevant regional support groups (Arthritis Australia, 2016; Arthritis Ireland, n.d.; Arthritis New Zealand, 2017; Arthritis Society Canada, 2018; Versus Arthritis, 2019) The Versus Arthritis (2019) resource supplied a list of exercises (including a diagram and description) for readers to perform at home.

DISCUSSION

Although education is included as one of the core primary-care interventions for OA (NICE, 2015), there is limited information on the content, design features, and efficacy of OA patient-educational resources. Our scoping review has identified several OA patient-educational resources that have been created and made available through relevant national arthritis organisations on an ad hoc and bespoke basis. Below we discuss the findings of this scoping review in the context of the four research questions.

What OA patient-educational guidebooks or resources are available online, published by national arthritis organisations in English?

This review included the OA patient-educational resources of six different countries – Aotearoa New Zealand, Australia, South Africa, Canada, Ireland, and the UK. We had expected to find a larger number of guidebooks from the dozens of English-speaking countries worldwide. This finding may reflect limitations of the search or the strict inclusion criteria, but it also may represent the significant amount of research needed to create an OA guidebook.

What were the similarities and differences in content between the identified OA patient-educational guidebooks or resources?

The detail and content of these resources were wide and varied, leading to a lack of consistency in patient information concerning OA. These resources consistently explained OA pathophysiology, lesion location, and exercise benefits. However, additional topics such as pain education, sleep health, and misconceptions/myths of OA were inconsistently covered.

Considering that current OA guideline-informed treatments mainly focus on the biomedical and biomechanical factors that influence pain, rather than addressing other potential pain contributors, the inclusion of information regarding pain neuroscience education, sleep health, and misconceptions/myths of OA would be of great benefit (Mills et al., 2018). This addition would encourage a greater understanding of pain, and psychological and sleep interventions, and reconceptualise misunderstood OA topics to promote increased active self-management, improving the consistency of available information for people living with OA (Mills et al., 2018).

How does the content of these identified guidebooks and resources match key NICE (2015) guideline recommendations?

All identified resources explained first-line care (education, exercise [aerobic and resistance], and diet), complementary therapies, supplements, pharmacological management, and surgical intervention, as detailed in the NICE (2015) guidelines. Furthermore, the guideline recommendations missing from the identified resources included information related to a holistic OA assessment and treatment approach. Mills et al. (2018) determined that a holistic approach to OA assessment is central to establishing appropriate patient-tailored management strategies. This review found that OA content pertinent to patient experience and acknowledgement of social participation was underutilised or indeed absent in the identified patient-educational material. Of concern, all included resources failed to incorporate OA education contextualised to an individual's life, such as identifying activity and participation restrictions due to OA. This created a predominantly biomedical lens of information that patients were provided in the patient-educational resources. To encourage uptake and utilisation of self-management recommendations and education, it is clear that OA patient-educational resources must offer more than biomedical information to support individuals to live with OA (Grime & Ong, 2007; Mills et al., 2018). Therefore, it is important that activity and participation restrictions are identified using a holistic approach, and that tools and education are provided to improve the self-management of OA.

Despite best-practice guidelines advocating for dietary changes in OA (NICE, 2015), few resources incorporated strategies that would lead to significant behavioural change. Ideally, OA patient-educational resources should include information regarding healthy eating guidelines and recommendations (Ministry of Health, 2020; NICE, 2006; World Health Organization, 2020), clinical implications of weight loss (if required) for OA, effective weight management and incorporation of exercise, evidence specific to diet and OA (Thomas et al., 2018), behaviour-change strategies (Khandelwal, 2020), and how to incorporate an individual's family into utilising these recommendations (McGruer et al., 2019).

What design features do the guidebooks and resources use when presenting patient-educational material?

Several useful design features were common among the different resources, such as clear diagrams to show joint changes, lay language to improve relatability, or the inclusion of people engaging in physical activity (i.e., exercise or socialising). However, most patient-educational resources did not reference specific cultures relative to their country or reflect on cultural diversity within their communities. Attention to specific cultural aspects could enhance OA patient self-management information, particularly for national organisations that serve countries with Indigenous populations and/or diverse and multicultural populations (Dixon et al., 2021; McGruer et al., 2019; O'Brien et al., 2021). For example, McGruer et al. (2019) found that OA places a substantial burden on the physical, mental, spiritual, and family (whānau) wellbeing of Māori women (wāhine). Dixon et al. (2021) wrote about the impact that living with OA could have on a man's (tāne's) sense of mana. Therefore, when providing care for this population, practitioners must provide culturally sensitive OA education for Māori and their whānau to improve both patient access and outcomes (McGruer et al., 2019). Furthermore, the use of bilingual text (including kupu Māori. e.g., *Free from Knee Pain* as discussed in Darlow et al. (2020)) may facilitate greater engagement.

Implications for the development of an Aotearoa New Zealand OA guidebook and future research

Based on the findings of this scoping review, we have made five recommendations about developing an OA Guidebook or related resource for Aotearoa New Zealand. First, the patient experience should be reflected within an OA guidebook. Patient experience should reflect both positive and negative experiences of 'living with OA' and treatment options to promote knowledge mobilisation and a sense of patient identification with the treatment recommendations. Second, patient education must represent a holistic, person-centred approach to explain the effects OA can have on an individual's participation and contribution in functional and social activities, and acknowledge the core principles of Mātauranga Māori (if produced for use in an Aotearoa New Zealand context). Third, OA patient education should reflect lay and biomedical terms to allow a complete understanding of the OA pathophysiology. For example, the basics of a working synovial joint (with anatomical terms) should be explained initially, before the complexity of OA pathophysiology is described, to ensure a complete understanding of a 'normal' and 'OA' joint is reached. Fourth, OA patient education requires information concerning all common OA locations (e.g., knee, hip, lower back, hand, and big toe) with anatomical diagrams and pictures (with structural landmarks) rather than just the knee joint, which is found in all resources. This ensures that all individuals reading the guidebook can resonate and understand OA pathophysiology with their OA location and experience. Fifth, all resources or guidebooks should be evidence-informed and link to existing accepted best-practice OA management guidelines.

Due to the scarcity of published research that refers explicitly to OA patient-education resources, there is scope to encourage researchers to publish not only their developed protocols, methods, and results but also the OA patient-educational resources themselves to allow a more comprehensive critique of the design, information, process, and cited scientific evidence.

Strengths and limitations of this review

The strength of this review is the guidance of the structured five-step approach developed by Arksey and O'Malley (2005) and Levac et al. (2010). This approach allowed a broad search of online resources, which was necessary to capture a wide range of information and facilitate greater comparison. The main limitation was excluding educational resources and literature not published in English or provided by other platforms such as smartphone applications or online modules. However, this was a pragmatic decision based on the purpose and constraints of the project. Our study provided limited insight into the potential cultural and contextual factors that should be incorporated; these factors merit further research.

CONCLUSION

The identified patient-educational resources in this scoping review utilised a predominantly biomedical approach to deliver OA education and treatment interventions. Given the limited consideration of the patient experience, OA patient-educational resources developed in the future should incorporate both positive and negative experiences of 'living with OA' to encapsulate readers and contextualise and understand the long-term course of OA. Developers of a guidebook for people living with OA should consider the above recommendations to ensure that patient-educational material is delivered from a holistic, culturally responsive, biopsychosocial viewpoint.

KEY POINTS

1. To the best of our knowledge, this is the first scoping review to identify published osteoarthritis (OA) patient-educational guidebook resources and synthesise the content contained within the resources.
2. While many OA patient-educational resources exist, there are limited studies that describe the development and testing of these resources.
3. Much of the identified content within OA patient-education guidebook resources has a biomedical approach to the delivery of education and treatment, and some of the material lacks consideration of the patient experience.
4. Those developing patient education resources about OA should consider utilising a balance of lay and biomedical information to ensure that readers can contextualise and understand the course of the condition.

DISCLOSURES

There are no conflicts of interest that may be perceived to interfere with or bias this study.

PERMISSIONS

None.

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