



Debate Article

Reframing how we care for people with persistent non-traumatic musculoskeletal pain. Suggestions for the rehabilitation community

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Abstract

There have been repeated calls to re-evaluate how clinicians provide care for people presenting with persistent non-traumatic musculoskeletal conditions. One suggestion is to move away from the ‘we can fix and cure you’ model to adopting an approach that is more consistent with approaches used when managing other persistent non-communicable diseases; education, advice, a major focus on self-management including lifestyle behavioural change, physical activity and medications as required. Currently the global delivery of musculoskeletal care has many of the elements of a ‘super wicked problem’, namely conflict of interest from stake-holders due to the consequences of change, prevailing expectation of a structural diagnosis and concomitant fix for musculoskeletal pain, persistent funding of high risk, more expensive care when low risk more economic viable options that don’t impact on the quality of outcome exist, and an unquestionable need to find a solution now with the failure resulting in a growing social and economic burden for future generations. To address these issues, 100 participants included clinicians, educators and researchers from low-, middle- and high-income countries, eight presenters representing the physiotherapy, sport medicine and the orthopaedic professions and the insurance industry, together with three people who shared their lived experiences of persistent musculoskeletal pain, discussed the benefits and barriers of implementing change to address this problem. This paper presents the results from the stakeholders’ contextual analysis and forms the basis for the proposed next steps from an action and advocacy perspective.

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Keyword: Reframing musculoskeletal care; MSK; Pain; Physiotherapy

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Introduction

In 2018, Lewis & O’Sullivan [1] asked the question ‘Is it time to reframe how we care for people with persistent non-traumatic musculoskeletal (MSK) pain? They argued for a move away from the ‘we can fix and cure you’ model to adopting an approach that is more consistent with approaches to managing other persistent non-communicable diseases. This call will be even more pressing post-COVID-19, given depleted financial resources placing strain on health budgets combined with the growing burden non-communicable diseases in society.

It was argued that best practice for persistent conditions such as non-insulin dependent diabetes, hypertension, depression, multiple sclerosis and asthma is underpinned by person-centred care. An approach that includes education, lifestyle considerations such as sleep, smoking cessation, a well-balanced diet and a graduated and on-going physical activity program, and, when required, pharmacological management. Consistent with the approach proposed by *Hutting et al.* the emphasis would be on coaching and empowerment to support effective self-management supporting people to participate valued in social, vocational and sporting activities [2]. This paradigm shift requires all stakeholders to reconsider their perspectives, actions and decision-making. The stakeholders include, but are not limited to; patients, physiotherapists, medical colleagues, insurance providers, educators, professional associations and the wider health policy community. Moreover, implementation would require a significant realignment of understanding from the public relating to managing persistent MSK conditions and the role of the physiotherapy profession in the care of MSK conditions.

Delivery of MSK care has many of the elements of a ‘super wicked problem’ [3], being a problem with the following key characteristics:

- (i) Endemic and persistent funding of low-value care (e.g. subacromial decompressions), despite evidence of (underfunded) higher-value, lower-risk, reduced cost care (e.g. progressive exercise for rotator cuff related shoulder pain) without a reduction in quality.
- (ii) A prevailing lack of understanding of non-traumatic musculoskeletal pain by ‘consumers’ (patients, clients, their families), providers (healthcare workers), insurers, educators, and media resulting in expectations of a ‘structural diagnosis and a fix’ for MSK pain.
- (iii) Fragmentation and non co-operation of the promoters of change due to a lack of national and international inertia, consensus, and collaboration.
- (iv) Conflicts of interest from all the actors (stakeholders) due to the magnitude and consequences of change.
- (v) An unquestionable need to find a solution now with the failure resulting in a growing social and economic burden for future generations. This is associated with dissipative pseudo-innovation; a process of introducing change

designed to enhance care that results in no meaningful improvement.

From editorial to (the start of) action and advocacy

The editorial [4] described a desired outcome, namely, the alignment of the management of non-traumatic persistent and disabling MSK pain conditions with the principles underpinning the management of other persistent conditions. It also described context but did not provide a comprehensive strategy (‘next steps’) to achieve the desired outcome.

The World Confederation for Physical Therapy (<https://world.physio/>) is the sole international organisation representing the global physiotherapy community. It represents and can draw together diverse global perspectives from its 120 member organisations and 25 subgroups and networks. Its stated strategic imperatives include knowledge sharing and advocacy on the basis of health policy. It works collaboratively within a number of global health alliances including the World Health Professions Alliance and the Global Rehabilitation Alliance on advocacy issues. It works at an organisational level with its member organisations and seeks to amplify capacity within the global community in support of promoting inclusivity and the value and impact of physiotherapy.

Advocacy is a combination of individual and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular goal or program (WHO, 1995) or more simply; it is a planned action of influence undertaken to achieve a specific outcome. This model is embedded in the World Physiotherapy philosophy.

Methods

To progress from editorial to action and advocacy required a review of the context within which we operate as a global community. Vivifying its role in international leadership, World Physiotherapy provided the opportunity to bring together a diverse group of stakeholders to discuss in detail the wider context with a view to identifying a set of ‘next steps’ in terms of action and advocacy. This action learning opportunity at the World Physiotherapy Congress 2019 (<https://www.wcpt.org/wcpt2019>) was limited to 100 physiotherapists, medical doctors and surgeons.

Patient participants

Three patients presented their lived experiences of persistent MSK pain, including their journeys’ through different health systems. The patient participants provided consent to share their experiences. The patient participants were chosen by the seminar presenters.

Presenters

Two of the eight presenters were the authors of the editorial. The other presenters were chosen to represent the physiotherapy, sports medicine and orthopaedic professions, as well as an expert in healthcare insurance. The presenters also brought expertise from high-, middle- and low-income countries, including Ireland, Switzerland, Japan, Australia, South Africa, Nigeria, United Kingdom, the Middle East, and Nepal. Initially, the authors of the editorial provided an overview of the paper, and the other presenters debating the philosophy of the paper in terms of introducing suggested changes into their profession, countries and the insurance industry.

Seminar participants

The 100 participants included clinicians, educators, and researchers from low-, middle- and high-income countries. The majority of the participants self-selected to participate. At the end of the formal presentations from the presenters, the seminar participants were asked to consider potential barriers and benefits of the proposal with consideration to their home countries (where they were working) on the basis patient groups, clinicians in training, working clinicians, educators, funders and policy makers, industry, professional bodies and the media. Their responses were shared (i) as part of whole seminar discussions and (ii) consensus following small group ($n = 10$) round table conversations.

This paper presents a contextual analysis of the responses from the patient and seminar participants. It forms the basis for the proposed next steps from an action and advocacy perspective.

The experience of people living with persistent MSK pain

The participants heard the lived experiences of three people suffering from persistent MSK shoulder, low back, and knee pain. A number of consistent themes emerged from their stories:

- The ‘revolving door’ of seeking and receiving multiple and varied treatments from a range of health professionals including physiotherapy, chiropractic, osteopathy, pain physicians, orthopedic surgeons, general practitioners, and providers of complementary healthcare. The health professionals provided explanations for the pain and offered treatments to fix the cause. The prescribed fixes were ineffective, leading to ‘confusion’, ‘frustration’, ‘anxiety’ and ‘desperation’.
- They recounted the loss of valued aspects of their life (work, family, social, exercise), profound emotional distress, and the sense of feeling dependent, confused, not listened too and prevailing hopelessness.

Box 1: Key principles underpinning the perceived benefits of the proposed model (ACES).

- Aiming to build the self-efficacy to take control and ultimately be responsible and self-manage their health
- Coaching individuals to engage in exercise and a healthy lifestyle (physical activity, sleep, smoking cessation, appropriate nutrition choices, weight and stress management, importance of social interaction, *etc.*)
- Education regarding the biopsychosocial contributors to the musculoskeletal conditions
- Strong clinical alliance

- The costs – both direct and indirect. The financial costs of ‘treatments’ as well as the cost in terms of time and energy focusing on finding an elusive ‘cure’.
- Lost income and ‘making ends meet’ (having the financial resources for what you need to live) due to the perceived aggregation of damage caused by movement.
- Finally, they reported the empowerment and ‘success’ of self-management when coached by a physiotherapist and/or a healthcare professional, that focused on empowerment and placing the individual in charge of their health.

The physiotherapist perspective

During the seminar participants were asked to consider benefits and challenges or barriers to the proposed paradigm shift in care. Given the range of experience, cultural diversity, and work settings of the participants this was a key question. There was overwhelming support for the model as the patient’s experiences were familiar to them. The role of the practitioner as a health coach was supported as a positive suggestion to reducing pressure to find unrealistic and unobtainable ‘cures’. This paradigm shift was described as empowering professional leadership in the management of MSK pain. Empowering people to build their self-efficacy and gain control of their lives was seen as a way to improve both patient and clinician satisfaction.

Barriers to the model of care were also noted, including the perception that patients expected cessation of symptoms and believed that MSK physiotherapists offered ‘cures’ and that passive treatments would ‘fix’ them. Inconsistent messages coming from different healthcare providers (within and between) professions were considered to significantly undermine the proposed model. Self-management was perceived as a challenge to many people, and for others, it may not be culturally acceptable or expected.

The key principles underpinning the perceived benefits of this approach are detailed in [Box 1](#).

The influence of media

When asked to consider the role that various media might play in terms of positively or negatively influencing the outcome of the proposed paradigm shift, participants noted that being truthful with the public is the principal responsibility of a journalist and that by providing honest information journalists will drive important change. In addition, it was suggested that there is an urgent need for sustainability and this change in focus would support such an approach. However, participants also noted several barriers arising from the media's influence on the education and expectations of the wider public. Namely, a need to sensationalise health matters to sell stories with little regard to the harm associated with sensationalising inaccurate 'breaking news' and generate revenue by selling advertising space for products and services that may be of poor quality, have no evidence base and may be harmful. Other barriers included speaking predominately to medical doctors and not seeking a variety of opinions within and across professions. Concerns were raised over the capacity of social media to provide biased opinions that may involve low-value care to those seeking help.

The economic context

Financial considerations were mentioned by individual patients, participating physiotherapists and medical colleagues and the insurer. It was acknowledged that achieving the outcome of reframing practice could ultimately have a positive economic impact on individuals, businesses, and society but this was nonetheless an area of challenge. A barrier to promote this was a lack of easily accessible data.

Reimbursement models for health services vary across the world and they have been noted to be influential on physiotherapy practice [5]. The 'Academy of Royal Medical Colleges' initiative to reduce the harm of too much medicine [6] has argued that the reason why insurance companies continue to pay for unnecessary diagnostics and treatment is a systemic issue. It was noted by participants that business models for companies within the sector may be challenged by the approach being proposed – a shift away from high-tech, quick fix, predominantly passive approaches represents a significant change to the prevailing model of practice. It was suggested that in MSK healthcare, a biomedical model prevails and not a biopsychosocial one, which in turn creates financial incentives that may be contrary to self-management and patient empowerment. In addition, insurance models that limit the autonomy of a physiotherapist to deviate from an agreed 'care plan' or funding by activity and not outcomes may have an economic impact on both the cost for the patient and physiotherapist's income and may be a barrier to change.

Education and continuing professional development

Entry to practice education is the start of a life-long professional journey. Participants noted that current curricula may not have changed for a substantial period of time and that those teaching may have biomedical beliefs and attitudes that MSK conditions are curable. Although change may be slow in higher-education institutions encouraging examples of positive disruption in physiotherapy education were presented. The clinical knowledge and skills for managing persistent pain in line with appropriate standards such as recommended by the International Association for the Study of Pain [7] have been introduced in the entry to practice physiotherapy education in some countries, such as Qatar, Nepal and South Africa [8]. In addition, Cook [9] argued that educators need to teach what is needed [4,10]. In addition to engaging and practicing a biopsychosocial understanding and shared decision-making model of healthcare, new graduates and current practitioners will need to gain expertise in coaching and motivational skills, as well as skills promoting behavioural changes especially to target lifestyle issues such as inactivity, obesity and associated co-morbidities.

Challenge to change may arise from regulators and licensure requirements and it was proposed that because of this it remains important to work within systems to affect change. Participants noted how rewarding it will be to educate the future generation of healthcare professions who can be an inspiration for other healthcare professions.

The global perspective

MSK conditions are identified as the leading cause of disability globally accounting for 16% of all years lived with disability [11] and are associated with substantial levels of disability in low-, middle- and high-income countries [12]. The ageing population [13], contributes to the unmet needs and escalation of the burden of MSK pain conditions globally. A recent review of health policies in OECD countries as they relate to integrated prevention and management of non-communicable diseases noted that historically MSK conditions have not featured strongly in global or national management and monitoring frameworks. This suggests that as a consequence, political attention and resource distribution has been incommensurate with the burden of disease [11].

The provision of inappropriate investigations and low value, poorly evidenced passive care is a potential reason the burden of persistent MSK disorders is expected to rise in many countries in the next decade [14]. As discussed in the seminar, the use of low-value care is increasingly being delivered in low-income countries for both diagnosis and treatment of MSK pain. For example, unnecessary diagnostic imaging for non-specific neck and back pain are extensively used in Nepal with increasing invasive procedures to manage these conditions [15,16].

Where to from here?

Given the complexity and multifarious action required to achieve a paradigm shift of this magnitude and involving so many actors, it is not unreasonable to think ‘is it all just too much’? We believe not. What follows is a series of suggested actions for various stakeholders involved in MSK pain care.

Educators

The challenge for educators is to be at the forefront of knowledge translation and skills training to equip the MSK health workforce for the future. MSK physiotherapy is a rapidly evolving profession. Educators need to balance historical perspectives of the profession such as the emphasis on passive therapies (i.e. manual therapies and electrotherapeutic devices) and placing them in context with current evidence-informed practice. MSK physiotherapy needs to move towards a broader biopsychosocial understanding of MSK pain and the delivery of high-value care for people with MSK pain and long-term symptoms with a focus on pain coping, improving function and self-management. This changing role needs to be reflected in the training programs including the development of skills for; triage for serious pathology, person-centred care, evidence-informed examination, management planning, and implementation [17]. This needs to be combined with the training of clinical skills needed to deliver this model of care; communication, motivational and behavioral change techniques, exercise prescription, as well as the ability to effectively communicate with other clinicians to offer meaningful multi-professional care. Additional skills are required when caring for patients with comorbidities such as; mental health, obesity, addiction, cardiovascular and respiratory disease. Skills training requires practice and direct mentoring. Those trained under ‘older’ models of care need support and encouragement to a transition towards contemporary evidence-informed practice.

Clinicians

Clinicians need to update their knowledge and skills to reflect best practices with a transition away from treating ‘symptoms’, towards targeting the underlying drivers (i.e. inactivity, obesity) and consequences of the of the disorder (i.e. pain-related fear and movement avoidance). The challenge is considerable given the prevalence of outdated diagnostic labels, lower-value care (such as passive therapies in isolation), short consultation times and over-treatment in clinical practice. This change is constrained by cultural beliefs within professions, financial incentives for low-value care and insufficient funding for high-value care. This transition will be difficult but critical for sustainable health care into the future and financial incentives to support new models of care are needed to support this process. This change will

also facilitate the flexible delivery of care such as the use of Telehealth, opening up opportunities to care for people in their own homes and in remote locations.

Clinicians are often challenged when their patients expect or demand low-value care. In such situations, careful communication is required to highlight the long-term benefits of high-value care, as well as having honest conversations regarding the limitations of low-value care. Ongoing mentoring and support is required within clinical communities to improve clinicians’ communication skills to support this model of care. The clinicians should not be required to make these changes without support, and management teams must fully participate in this transition for it to be successful.

Patients

Patients need to be educated to make informed and empowered decisions for their own care based on the latest available evidence. This includes understanding the nature of their problem in simple language as well as being informed regarding the short- and long-term costs, benefits, risks and likely outcomes of the various interventions available to them. Understanding that with persistent MSK pain a permanent ‘fix’ is unlikely and being coached towards effective self-management has long term benefits for both their physical and mental health.

Professional organisations

Professional organisations have a responsibility to provide leadership to clearly articulate and promote the best care for MSK pain. This role extends to the provision of knowledge and skills development to their members. They also need to call out low-value care in their members to hold them to account. They also have a critical role in lobbying government and funders to appropriately fund high-value care and defund low-value care. Professional societies and organisations need to work with the media to call out ‘fake news’ as they appear, while providing accurate and honest health information to the broader community.

Funders and policy-makers

Policy-makers and funders need to be held accountable to the people they serve in order to provide health-care systems that deliver models of care that are evidence-informed and high-value for the consumer. Transition to funding high-value care and underfunding of low-value care is required while educating consumers of the benefits of this process.

Research community

Researchers need to assess the long-term benefits, risks and costs of various models of care for MSK pain. Researchers need to partner with clinical communities to address relevant clinical concerns, embed evidence into

practice, help translate research to support practice, and encourage clinicians to evaluate long term clinical outcomes that include a broad range of measures including quality of life (QOL) and general health.

An exemplar of this model of care

The GLA:D™ program [18] is an example of an evidence-based intervention for hip and knee osteoarthritis (OA) that has been implemented across the world, in high and low economically developed countries. It is evidence-based, cost-effective and is aligned to best care guidelines. GLA:D programme trains physiotherapists to deliver pain education, lifestyle advice and progressive exercise to coach people with knee and hip OA towards self-management of their condition. An analysis of GLA:D registry data of 9825 patients with osteoarthritis has demonstrated improvements in pain, disability and QOL, while reducing the need for medication and the progression to total knee replacement. This model of care is being taught at an undergraduate and graduate level. It has been adapted to a Telehealth platform. It is supported and advocated by professional organisations, and has been adopted and funded by health systems as a first-line treatment for hip and knee OA in Denmark [18]. Importantly, researchers and clinicians work together to monitor long term clinical outcomes.

Summary

The approach to delivering care for people with musculoskeletal pain must improve. Care should prioritise integrated, high-value, cost-effective approaches (e.g., graduated exercise for rotator cuff related shoulder pain) over low-value expensive approaches (e.g., subacromial decompression). This change requires a collective effort by policy-makers, funders, professional bodies and clinicians in order to improve the health of people with MSK pain in society. If action on this super-wicked problem is not taken, then there is danger, not unlike climate change, that all will suffer.

Key messages

- The approach to delivering care for people with musculoskeletal pain must improve. Care should prioritise integrated, high-value, cost-effective approaches (e.g., graduated exercise for rotator cuff related shoulder pain) over low-value expensive approaches (e.g., subacromial decompression).

- This change requires a collective effort by policy-makers, funders, professional bodies and clinicians in order to improve the health of people with MSK pain in society.
- If action on this super-wicked problem is not taken, then there is danger, not unlike climate change, that all will suffer.

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