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Pain Management

Background

Defining pain

In 1994, pain was defined by the International Association for the Study of Pain (IASP) as " an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage".[1] Potential mechanisms for pain and the risk factors for associated disability have been extensively studied in order to understand the pain experience and to minimise the impact of pain on an individual's life.

Current understanding demonstrates that complex neural processing produces pain and that modulation of the pain experience occurs at multiple sites in the periphery and throughout the central nervous system. This is reflected by the many factors - from the internal (thoughts, mood) and external environment[2] - that can affect the intensity and quality of pain. Although this concept has been recognised for over 30 years, new treatment strategies have been developed to target processes involved in pain at multiple levels, underscoring the importance of a bio-psycho-social approach.[3&4]

Types of pain

Acute pain is generally accepted to be the pain associated with acute tissue damage. The damage may be due to an event such as an injury or surgery or an active disease process within the tissues. The pain is considered to be driven by peripheral factors responding to the tissue event. As tissue structure is re-established, the inflammation process resolves and tissue healing takes place, pain will also resolve. Pain in this situation provides an effective warning system, protecting vulnerable tissue, and is a symptom related to a distinct pathological condition or surgical procedure.

When pain does not resolve it is relabeled persistent pain, or chronic pain. To align with key developments nationally and internationally, this position statement uses the term 'chronic pain' rather than persistent pain. The IASP accepts that pain lasting for longer than three months can be classified as chronic pain, whilst recognising that the transition of pain from acute to chronic occurs across varying time periods.

One of the key concepts in the management of pain is the contention that the chronic pain state does not exist to protect from an illness or injury. In such presentations pain is no longer an effective warning system. Chronic pain is not simply a symptom of a separate pathological process. Indeed, due to the apparent changes to neurophysiology, chronic pain can be considered a pathological condition itself.[5] As pain persists, its construction is increasingly influenced by complex factors and dimensions related to the individual and his/her environment. The initial peripheral response to tissue damage may no longer be contributing at all to the person's pain. Importantly this type of pain is no less 'real' than the pain that is apparently triggered by frank tissue injury.

The problem of pain – 1 in 5 Australians experience chronic pain

Much of the pain experienced in the community can be effectively diagnosed and treated in primary care settings. As primary contact clinicians, physiotherapists effectively treat conditions where peripheral damage to musculoskeletal tissues is a major contributor to pain. Many painful conditions completely resolve and some which are linked to chronic diseases such as osteoarthritis respond significantly to physiotherapy but without total resolution of pain. Further, some members of the community experience complex pain states which may require practitioners with additional qualifications and/or experience in the management of this kind of pain.

The case for pain management services is highlighted by statistics that show one fifth of all Australians experience chronic pain at some stage in their lives, and it is estimated that chronic pain is the third most costly health problem in Australia.[6] There is also widespread acceptance that complex chronic pain is best managed in a multidisciplinary pain service. However there is an

inadequate supply of such services, leading to unacceptable waiting times for Australians with chronic pain.

Pain is a problem through the lifespan. Some studies indicate that the occurrence of chronic pain in children is as common in adults. Pain in children and young people is often undertreated[7], and children and young adults with chronic pain are at an increased risk of transitioning to chronic pain as adults. Older people are twice as likely to be diagnosed with chronic pain,[8] however, funded pain management options under the Aged Care Funding Instrument do not align with current, best-practice pain management guidelines.

The National Pain Strategy

In 2010 the National Pain Summit brought together representatives of over 150 organisations, who met to discuss a way forward to ensure that the extent of the problem of pain in our communities is recognised by government health strategists and workforce planners.The National Pain Strategy (NPS) is "aimed at acute, chronic and cancer-related pain [and] is the result of collaborative work of health professionals, consumers and funders, who agreed that an integrated approach was needed to improve care for all types of pain."[9] Through the National Pain Summit, the APA was involved in the development of the NPS and supports it as an important resource that can guide government bodies and other stakeholders to address the problem of pain in Australia.

The APA emphasises the importance of the National Pain Strategy, and its five goals:

- That chronic pain should be recognised by governments and other health funders as a disease in its own right, and that people in pain be recognised as a national health priority
- That interventions focus on education, empowerment and support of people in pain
- That professionals are adequately facilitated to provide best-practice, evidence-based care
- That people with pain have timely access to interdisciplinary care at all levels
- That the importance of quality improvement processes and evaluation of outcomes and adequate funding of clinical, social and economic research and appropriate dissemination and implementation of evidence be recognised

Physiotherapy management of pain

Physiotherapists play a critical role in assisting people to live with chronic pain. Physiotherapists work across the lifespan continuum assisting patients with their pain in primary care settings with the aim of diminishing pain, improving quality of life where possible and preventing acute and sub-acute painful conditions developing into chronic pain.

Physiotherapists working without the direct support of clinicians from other disciplines, can apply a biopsychosocial approach with interprofessional collaborate practices and facilitate the knowledge and skills necessary for people to self-manage their pain.

Physiotherapists with additional training and experience in pain sciences, work in rehabilitation centres, private clinics and tertiary pain services as part of multidisciplinary pain teams to assist people with complex chronic pain to improve their quality of life by increasing their level of activity and participation in their community. Providing information and support to family and significant others, the workplace and other healthcare providers is also an important physiotherapy role.

Physiotherapy interventions

For acute pain, recommended management involves pain education, assurance, advice on resuming normal activity and discussion of options for pain management, as needed.[10] Management techniques such as manual therapy should follow international best practice guidelines[11] and their efficacy should be measured by objective outcome measurements at regular intervals. These strategies can also be useful in chronic pain, however in highly complex pain presentations the European Guidelines[12] recommend intensive multi-disciplinary biopsychosocial rehabilitation with a functional restoration approach - utilising graded exercises and activities, education about pain, and modification of unhelpful beliefs and responses, such as catastrophizing and depression. These guidelines were based on systematic reviews of randomised controlled trials.[13&14] A more recent

systematic review[15] further supports multi-disciplinary interventions in the management of chronic pain. Appropriate selection of people has shown that this approach is a cost-effective way of decreasing disability in people with low back pain.[16] Physiotherapists play an integral role at all stages of this process from acute to chronic presentation through the application of activity based programs utilising cognitive behavioural principles.[17]

Psychosocial factors have been demonstrated to be major predictors for chronicity. Clinical guidelines[18] consistently recommend early detection and intervention for these factors. Where psychological intervention is required, community physiotherapists will refer on to appropriate mental health professionals for management of these factors. Where physiotherapy management of these factors is appropriate, physiotherapists in the primary health care setting are ideally placed to be able to identify these factors and contribute to the prevention of the transition from sub-acute to chronic pain. The identification and appropriate management of complex pain issues with clients requires additional time for functional goal setting and working with families, employers and other parties.

Enabling self-management of chronic pain

Physiotherapy intervention for chronic pain has a focus on empowering people to manage their conditions. Training in self-management for people with pain is part of a person centred approach that aims to educate people around pain science including neuroplasticity, lifestyle modification and the optimisation of function and independence. Such an approach requires a partnership with clients that involves collaborative management of their condition, and may take place in a variety of settings (community, hospital, residential care) and with a number of approaches such as individual consultations or group education classes. Physiotherapists working in this manner have further training and experience in pain management techniques and work holistically to consider the biopsychosocial influences on a patient's condition.

Pain management skills and training

Most pain associated with acute tissue damage is best managed within primary care services, with only those conditions representing serious underlying pathology of complex pain (eg neurological disorders, systemic diseases, fractures, malignancy, infection or multiple co-morbidities) requiring specialist care. However, as pain persists and psychological, social and environmental factors compound the complexity, primary care providers are likely to require specific skills and training if they are to successfully assist people to manage their pain. To date, this expertise has been developed by health care providers who have refined their skills through working with people with chronic pain in secondary or tertiary pain clinics, or through specific pain science and pain management professional development activities. This knowledge should be integrated into the study of acute, sub-acute and chronic conditions in the undergraduate/entry level course and in professional development throughout the physiotherapist's career.

If coordinated interdisciplinary care is to be provided in primary care settings, it is likely to require support by specially trained physiotherapists through services which provide teaching and research opportunities. This perspective has clear funding implications if it is to be available nationally, and the APA calls on governments at all levels to improve funding to existing pain services, and to fund the establishment of new services. Such actions are necessary to ensure that people at the acute and sub-acute stages at risk of developing chronic pain are able to access appropriately trained health professionals to prevent deterioration of their condition, as well as enabling the management of existing chronic pain.

Timely access to coordinated care and support

In order to improve timely access to effectively coordinated care and support, as close as possible to where people with pain live, there needs to be a commitment from both state and federal funding bodies to support the mentoring and training of physiotherapists and provision of services within the community, to be accessible under Medicare, private health funding arrangements, residential aged care funding instruments and insurance bodies.

Due to the complexity of the assessment and treatment process, the current time-limited funding is inadequate to fund the type of services required. The APA believes that Medicare Locals (ML) have the potential to address systemic shortcomings to improve access to pain services at a local level, and the APA calls for ML's to engage with local physiotherapists to improve pain services for people in need of intervention.

Well coordinated care is fundamental to an interdisciplinary approach, and physiotherapists are well placed to act in the role of coordinator. Current funding mechanisms are inflexible and do not allow for this to occur, even in situations where such care is the most appropriate approach. This is particularly evident in the Medical Benefits Schedule, and the APA believes that it is important that this mechanism be changed to acknowledge that there are circumstances where the physiotherapist may be the most appropriate person to act as care coordinator.

Quality and best practice

Standardised outcome measures, both functional and self-report, that are currently in widespread use in tertiary pain management centres should be advocated for broad clinical use to effectively measure outcomes and provide a benchmark for management. The APA supports the Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials (IMMPACT) and its focus on six core outcome domains.[19]

Support for ongoing professional development and career structure should be put in place, and ongoing research for the physiotherapy management of people with chronic pain should be better supported by funding bodies to ensure best evidence-based practice.

The APA position

The launch of the National Pain Strategy is an important achievement which must help guide policy makers to address the issue of chronic pain in Australia.

As a founding member of painaustralia, the APA supports the five goals from the NPS. In this context it is the position of the Australian Physiotherapy Association that:

- Physiotherapists are primary contact professionals who are well trained in the biopsychosocial management of musculoskeletal and other conditions. Physiotherapists are therefore well placed to work with clients whose features of acute and sub-acute conditions put them at risk of developing a chronic pain condition, and to manage chronic pain conditions.
- Physiotherapists in primary care should be supported in furthering their skills in assessment and screening techniques to identify those clients who are at risk of developing disabling effects of chronic pain.
- Medicare Locals are well positioned to support physiotherapists and other practitioners to deliver well coordinated services, and the APA believes that Medicare Locals must recognise the need for improvement to local pain services.
- In addition, funding bodies should explore alternative models of care to support the multidisciplinary delivery of service to people at risk of developing chronicity because of the multi-factorial nature of managing their healthcare.
- Existing Medicare Benefits Schedule (MBS) rebates for team care are not sufficient to support treatment for people with chronic pain conditions, and the APA believes that additional rebates for care should be established. Such rebates must support individual assessments and reviews; group therapy and education sessions; communication and coordination of health services; and the use of clinical judgement around the type and number of sessions required.
- Funding for pain management in residential aged care facilities should support evidence based practice.
- Funding mechanisms should recognise the skill and expertise of physiotherapists with additional training and expertise in the management of complex pain

- The development of acute pain into ongoing chronic pain is a significant problem for compensable patients. In order to address the bio-psychosocial factors often present in their client cohort, compensable bodies should act to support the provision of effective and evidence based treatments, targeting both the reduction in risk of chronicity development and the optimisation of activity including return to work and participation in their clients. Recompense for both the greater time taken to deliver this treatment and the utilisation of alternative treatment delivery strategies to the one to one consultation process is required.
- Further development of innovative models of care must be supported by governments through research grants that acknowledge a breadth of interventions for pain.
- Governments should support funding for formalised mentoring of physiotherapists working in primary care, specifically in rural and isolated areas, from therapists with advanced training and skills in the management of complex pain conditions.
- Training of primary care health professionals involved in the management of chronic pain should be interdisciplinary and physiotherapists should play an integral part in the delivery of this training. This model of training could incorporate online educational programs and telehealth.

References

[1] IASP Task Force on Taxonomy, (1994) Classification of Chronic Pain, Second Edition, Part III: Pain Terms, A Current List with Definitions and Notes on Usage" 209-214, Seattle, IASP Press

[2] Worz, R. (2003). Pain: Clinical updates: Pain in Depression – Depression in Pain. International Association for the Study of Pain 11(5), 1-4.

[3] Wall, PD. (1979). On the Relation of Pain to Injury. The John J Bonica Lecture. Pain, 6(253-264)

[4] Turk, D. C. and Melzack, R. (2001) *Handbook of Pain Assessment*. New York: Guilford Press

[5] Ibid

[6] Blyth, FM, March, LM, Brnabic, AJ, Jorm, LR., Williamson, M. & Cousins, MJ.(2001) 'Chronic pain in Australia: a prevalence study', Pain, 89(2-3),pp. 127 – 134.

[7] Pain Australia, (2010) National Pain Strategy

[8] Gatchel, R J, (2005). Clinical essentials of pain management. Washington, DC: American Psychological Association.

[9] Pain Australia, (2010) National Pain Strategy

[10] Australian Acute Pain Guidelines Group (2003). Evidence-based Management of Acute Musculoskeletal Pain, NHMRC

[11] Lawrence D, Meeker W, Branson R, Bronfort G, Cates JR, Haas JR, Haneline M, Micozzi M, Updyke W, Mootz R, Triano JJ, Hawk C, (2008). Chiropractic Management of Low Back Pain and Low Back-Related Leg Complaints: A Literature Synthesis, Journal of Manipulative and Physiological Therapeutics, 2008;31,9:659-674

[12] Airaksinen O, Brox J, Cedraschi C, Hildebrandt J, Klaber-Moffett J, Kovacs F, Mannion A, Reis S, Staal J, Ursin H, Zanoli G. (2006) Working group on Guidelines for Chronic Low back pain. Chapter 4. European guidelines for the management of chronic nonspecific low back pain. European Spine Journal, 15(Suppl 2), S192-S300.

[13] Guzmán J, Esmail R, Karjalainen K, Malmivaara A, Irvin E, Bombardier C. (2001). Multidisciplinary rehabilitation for chronic low back pain: systematic review. BMJ 2001; 322: 1511-1516

[14] Schonstein E, Kenny DT, Keating J, Koes BW. (2003) Work conditioning, work hardening and functional restoration for workers with back and neck pain. Cochrane Database of Systematic Reviews 2003, Issue 3

[15] Scasighini L, Toma V,Dober-Spiekmann,S, & Sprott H, (2008). Multidisciplinary treatment for chronic pain; a systematic review of interventions and outcomes, Rheumatology 2008; 47:670 -678.

[16] Haldorsen EM, Grasdal AL, Skouen JS, Risa AE, Kronholm K, Ursin H (2002). Is there a right treatment for a particular patient group? Comparison of ordinary treatment, light multidisciplinary treatment, and extensive multidisciplinary treatment for long-term sick-listed employees with musculoskeletal pain. Pain 2002; 95: 49-63

[17] Nicholas M; George S. (2011) Psychologically informed interventions for low back pain: an update for physical therapists. Phys. Ther. 2011; 91: 765-776

[18] Koes, BW, van Tulder M, Lin C-W C, Macedo LG, McAuley J & Maher C. (2010).An updated overview of clinical guidelines for the management of non-specific low back pain in primary care. European Spine Journal 2010, 19:2075 – 2094.

[19] Turk DC, Dworkin RH, Allen RR, Bellamy N, Brandenburg N, Carr DB, Cleeland C, Dionne R, Farrar JT, Galer BS, Hewitt DJ, Jadad A, Katz NP, Kramer LD, Manning DC, McCormick CG, McDermott M, McGrath P, Quessy S, Rappaport BA, Robinson JP, Royal MA, Simon L, Stauffer JW, Stein W, Tollett J, Witter J. (2003). Core outcome domains for chronic pain clinical trials: IMMPACT recommendations. Pain 2003;106:337–45.