

LETTER TO EDITOR

Understanding Chronic Pain Among People with Knee Osteoarthritis

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Dear Editor,

Knee osteoarthritis (OA) is a disabling joint disease that long existed at low frequencies, but has doubled in prevalence since the mid-20th century (1). It provides ongoing challenges for healthcare professionals such as to develop a proper culturally adapted preventive lifestyle modification program to suit with Malaysian setting (2). In Malaysia, majority of the patients with knee OA still suffer from pain and physical disability although many pharmaceutical treatments for patients have been implemented but it was still insufficient (3). Despite, non-pharmacological interventions should always be attempted as the first line of treatment and the aim of the management of knee OA is to control the painful signals originated from the affected joints.

Patients with osteoarthritis experience pain as the most disabling symptom which is typically an intermittent and mainly weight-bearing (mechanical) pain (4). The musculoskeletal pain could impact the functions and increases the risk of falling among people with knee OA in the community (5). Knee pain mechanism in OA are complex and has two major types of pain which are (i) intermittent but severe and (ii) constant background pain or aching (6). The pain is variable intensity through the day, insidious in onset, may be intermittent and relapsing, increased by joint use and impact; and relieved by rest as patient with severe in OA may occur night pain (7).

Mechanism of pain that can be operative in knee OA is peripheral/nociceptive pain, which is the origin are from inflammation or mechanical damage in tissues rather than central nervous system (8). However, even the peripheral nervous system is prominently involved in maintaining the pain in OA but there have evidence that they have centralized their pain and should likely be treated with centrally acting treatments. This means that the pain in knee OA is associated with both peripheral and central sensitivity (9), thus will making targeted therapy problematic (6).

Chronic pain should be treated based on the underlying mechanisms present in each individual, where healthcare professionals have to considered "peripheral" pain syndromes, and treat these individuals with more centrally than peripherally directed pharmacological and nonpharmacological approaches (8). However, treating chronic pain in knee OA is challenging as the peripheral and central pain mechanisms are not fully discovered, and safe and as efficient analgesic drugs are not available (10). Hence, the best current management practices are best described as reactive and palliative (11). This is because knee OA pain is complex, multifactorial and multimodal as not all OA patients experience the same set of symptoms or rate of disease progression (7).

Furthermore, current management modalities are targeted towards symptom control rather than regression and restoration of damaged structures, as OA is a progressive and degenerative condition (13). Currently, there are many different guidelines have been developed such as The Malaysian Clinical Practice Guidelines Management of Osteoarthritis (2017), Osteoarthritis Research Society International (OARSI), American College of Rheumatology (ACR), European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (ESCEO) and American Academy of Orthopaedic Surgeons (AAOS) publications. All of these guidelines is strongly recommended combination of non-pharmacological and pharmacological treatment remains key to the management of knee OA.

Nevertheless, non-pharmacological interventions could be attempted as the management of knee OA is to control the painful signals originated from the affected joints. Many older people with knee OA believe that education and exercise based programme could be conducted among the community (15) and was trialled within the community in Malaysia (16). Furthermore, music

therapy is promising to be included in dealing with mental well-being and physiological outcomes for pain management although it was tested among patients with similar diagnosis who are undergoing surgery (17,18).

In conclusion, healthcare professionals should improve the physical health of patients with knee OA by complementing social support interventions including pain relief and improving physical disability. The interventions should be more patient-centered, integrated and comprehensive approach, which is likely to be safe and effective in reducing OA pain and disability. Lastly, it is really proposed the promotion of interventions according to evidence-based practice among healthcare professionals, improved organization of care and to provide self-management education to older persons with knee OA.

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