



Musculoskeletal pain as a challenging problem for patients and occupational therapists

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Abstract

The aim of the present work is to present the problems connected with occupational therapy that make the major part of the programmes for the treatment for mobility limitations connected with different dysfunctions. In many cases, the obstacle in performing the comprehensive programme for the treatment for mobility is pain of a musculoskeletal character. This difficult problem is still connected with many questions and requires further research. In this paper some aspects of the problem are presented. Many occupational therapists, psychologists, physiotherapists, find the employment in this tough area of musculoskeletal pain is a very difficult challenging. Chronic pain has some features making occupational therapy difficult to conduct. An extensive review of the literature suggests that the knowledge around personalized medicine, rehabilitation and occupational therapy continues to grow.

Keywords: *musculoskeletal chronic pain, occupational therapy, psychological factors, improved functioning*

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INTRODUCTION

The aim of the present work is to present the problems connected with occupational therapy that make the major part of the programmes for the treatment for mobility limitations connected with different dysfunctions. Chronic musculoskeletal pain is a complex and challenging problem for patients have it, and for occupational therapists. Pain is very common and affects people throughout life.

Chronic pain is a major public health problem, which is associated with devastating consequences to patients and families, a high rate of health care utilization, and huge society costs related to lost work productivity. The existing treatments for chronic pain are unable to address the problem and better therapies are urgently needed [1,2].

Pain can be classified as either acute or persistent. Chronic pain has been described as pain that has persisted for at least 1 month following the usual healing time of an acute injury, pain that occurs in association with a nonhealing lesion, or pain that recurs frequently over a period of months. In most clinical and research reports, chronic pain is typically defined as pain that has persisted for at least 3 months [3,4,5,6,7,8,9]. Chronic pain has some features making occupational therapy difficult to conduct.

A representative example is the difficulty in maintaining systematicity, due to relapses, problems with maintaining proper motivation under the influence of setbacks and side effects of applied medicines. In the case of patients with musculoskeletal pain, the occupational therapy does not take place in isolation very often. There are other forms of therapy used at the same time. Among others, the locally effective medicines are used (such as adhesive bandage or ointment). The effect of achieving a comprehensive therapeutic effect (with the inclusion of pharmacotherapy and psychological help) is providing the possibility of undertaking physical activity faster.

FROM THE MUSCULOSKELETAL CHRONIC PAIN TO REDUCED OCCUPATIONAL ROLE PERFORMANCE

Many occupational therapists, psychologists, physiotherapists find the employment in this tough area of pain (and disability) is a very difficult challenging. Often these professions work closely together, since they are both concerned with restoring the individual (patients) to her or his normal level of function and occupational engagement [10]. Optimal functioning improvement considering the individual context of each patient should be common objective of the interdisciplinary therapeutic interaction [11,15]. How an occupational therapist work with patients with chronic pain will depend on the practice setting. Often this will relate to the patient's performance and volitional system.

The context in which the therapist is working will determine the extent to which he (or she) is able or required to perform an assessment and measurement of musculoskeletal pain [16,18]. The risk of pain is increased by many physical and psychical factors (figure 1). To often ergonomic considerations and evaluation of the work place or home to reduce risk of pain occurs after the onset of musculoskeletal chronic pain and disability (table 1).

The focus of occupational therapists working in pain management is therefore to enable individuals with chronic pain to participate in the activities that have value and meaning to them, despite their pain. In many cases a good idea is combining occupational therapy with physical therapy for the rehabilitation [17,18]. According to literature, chronic pain is common among individuals with physical disabilities. It can interfere with therapy since patients with chronic pain can become uncooperative and reluctant to move. In some cases, patients may even project their discomfort onto the therapist [19].

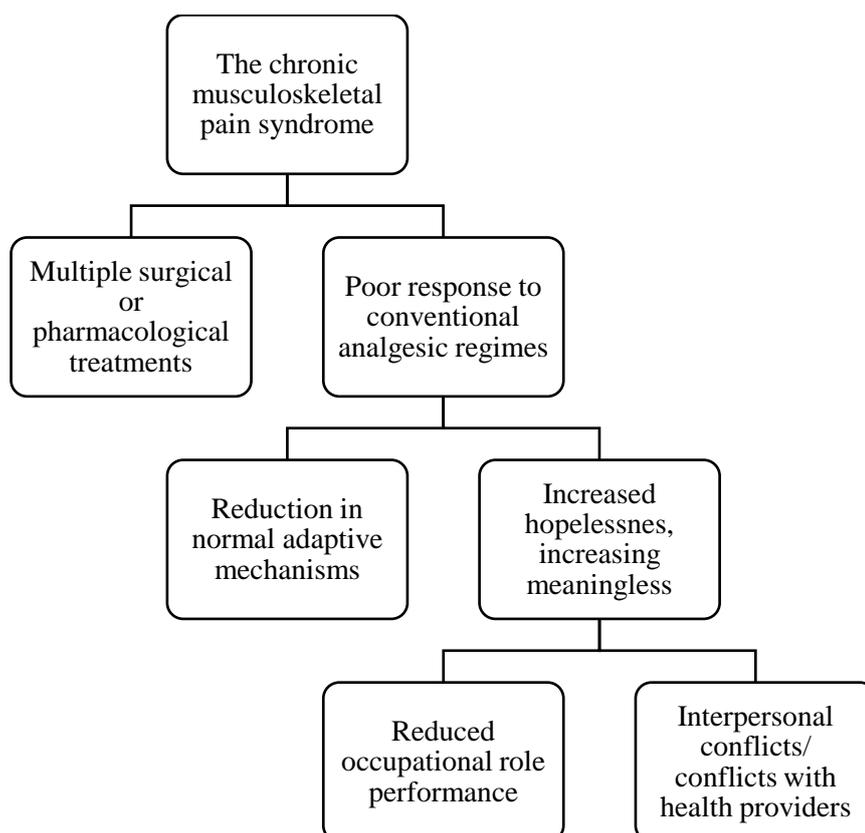


Figure 1. From the chronic pain syndrome to reduced occupational role performance

Goals of interdisciplinary programmes (occupational therapy, exercise, relaxation training, psychotherapy) include: increased physical functioning, reduction of pain intensity, improvement of mood, return to work, school, or daily activities [11,20,21]. The occupational therapy may involve working with patients at home, school or workplace, activity adaptation, the development of coping strategies and vocational rehabilitation [17].

An occupational therapist or physical therapist who provides a physical modality or an assistive device to a client, without some background consideration of psychological aspects, may not be providing the best available intervention for the patient [10]. Safe and effective pain treatment is especially important for person with reduced general immunity because inadequate treatment or lack of treatment for pain may have problematic long-term consequences. Immunity system and nociceptive system interactions cover the changes in hormone economy and influence on lymphatic structures with the mediation of cortisol at persons who suffer from chronic pain. The effects of chronic pain in a neurohormone pathway refer to, among others, cognitive area. For instance: as a result of chronic pain and accompanying stress, the locus coeruleus produces less noradrenaline and it lowers concentration abilities (attention focus). Moreover, chronic stress causes an increase of quantity cells loss within hippocampus [6].

One of the forms of therapy is using medicines that have local effect, including, the more and more frequently used in the therapy of acute and chronic pain, adhesive bandage that is applied at the spots where the analgesic medicine is supposed to be absorbed. Absorption (and controlling the degree of absorption and effect) of analgesic and anti-inflammation medicines applied locally is the subject of intensive research in many fields, including the basic sciences. The source of valuable data is the research in the field of physics concentrating on the interpretation of the phenomena occurring in membrane profiles for a 1-membrane osmotic-diffusive cell [22,23].

Review of the literature suggests that occupational therapy for people with chronic pain can be as consisting activities of daily living, goal setting, grading activity, ergonomics, energy conservation, fatigue management, exercise, vocational rehabilitation, body mechanics and postural education, passive joint mobilization, soft-tissue management, sleep hygiene, stress management, complementary therapies, relaxation, cognitive-behavioral therapy (CBT) and many others [10,24,25,26,27,28]. Restoring and developing abilities takes sport. Inspiration provides sport (fencing among others). The overall fencing performance depends on large number of several factors and their interactions (psychological factors, technique, tactics, reaction time, level of the muscular coordination during the movement, specific endurance, performance level etc.) [29-32].

Table 1. Chronic back pain aggravators - selected factors [6].

Standing postures Stooping, hyperextending back, extended forward reaches, crouching postures	Twisting/Load pushing, pulling, inadequate lifting with pushing, over size loads, sustained heavy, handling postures, uneven carrying
Sitting postures Lack of foot support, twisting of trunk, constant sitting, inadequate support	Vibration repetition and duration, feeling, hand tool use, weight/force, reaching
Manual handling Heavy lifting, twisting while lifting, over size loads.	Individual factors Personality, adequate self-assessment, stamina, emotions, psychosocial factors, resistant to stress and tension, persistence physical and mental.

Occupational therapy has the potential to address the occupational performance disruption caused by chronic pain; however, occupational therapists' contemporary practice may not adequately meet the occupational needs of people with chronic pain. Different problems with the evidence base to support practice have been identified [24]. An extensive review of the literature suggests that the knowledge around personalized medicine, rehabilitation and occupational therapy continues to grow.

SUMMARY

The purpose of this study was to adopt a multi-dimensional approach to improving functional efficiency in the comprehensive treatment of the patient with musculoskeletal chronic pain. Significant levels of pain related disability can then result leading to significant detrimental effects for the sufferer and their families. Occupation is central to human behaviour. Occupational therapy is based on the premise that there is an intrinsic relationship between occupations, health and wellbeing [17]. Chronic pain restricts the performance of activities. Regardless of the various sources and origins of activities directed at supporting an individual in increasing his functional capabilities, numerous doubts remain. They refer to the way of ensuring safety while performing training tasks, and physiotherapeutic exercises and treatment [16]. Both occupational therapist and physiotherapists should be cognizant of the ethical and legal issues that concern pain management. Attention to professional codes of ethic and practice guidelines is important [10].

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