Work is therapy, not a goal in itself, for people with chronic pain.

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Introduction

Pain has long been seen as an obstacle for work and many people living with chronic pain feel stigmatised in the workplace (e.g., feeling that their pain is experienced as an excuse not to work or as a sign of weakness)[3]. Although musculoskeletal pain is the leading cause of sick leave in Europe with estimated costs of up-to 2% of the GDP[4], putting people with pain on sick leave is against general recommendations[6,11]. In this commentary, we will introduce the work-as-therapy concept as a plausible rehabilitation method and explain how it can benefit patients and their employers.

Work-as-therapy

Many individuals with chronic pain falsely assume that a) work-related pain is caused by loading or sitting at work, and/or b) work-related pain can and should be reduced before returning to work[12]. Firstly, it is true that pain can be aggravated during or after work-related factors (e.g., loading), however it is only one of many factors associated with aggravation of non-specific low back pain (NSLBP)[24]. Furthermore, there is no strong evidence that occupational lifting or prolonged sitting *causes* NSLBP[28] or increases the risk of developing NSLBP[14]. Secondly, NSLBP is a difficult condition to avoid permanently once pain has persisted for 6-12 weeks[1,2], and time alone is unlikely to lead to improvement for the majority of people with chronic musculoskeletal pain[10]. While this does not undersell the potential of having a *good life with pain*, it illustrates that when we consider work in the context of persistent musculoskeletal pain, it is important to remember to frame it with realistic alternatives, i.e., working-with-pain vs not-working-with-pain.

Considering such evidence, we propose that work can benefit the individual and refer to this idea as **work-as-therapy**. In the following sections, we will argue for the benefits of work-as-therapy both for patients with chronic pain and their employers.

Benefits of work-as-therapy for patients

Work should not be the goal for people with chronic pain: After all, some aspects of working will be aversive, and pain relief during work cannot always be achieved. Yet, the net benefit of working is positive for the individual[27] and much like physical activity[6,16]. Not only is work beneficial for wellbeing and health, re-employment or returning-to-work may reverse the negative effects that worklessness has on physical and mental health[27]. Thus, we re-state the argument that work should be conceptualised as a therapeutic tool. For people with chronic pain adjustments may be necessary (e.g., on rigid schedules, routine assignments, and complicated procedures), and progression should be based on individual needs and progress, just like other therapies.

1) Work-as-therapy reminds the patients of their personal goals

Patients and professionals seem to agree that work is a *meaningful activity* to promote well-being and social activities[18]. But people are different; for some work is an area to display one's skills and creativity. For others it is purely a way to generate an income. Seeing work as a therapeutic tool can encourage individuals see work as a catalyst to achieve activities that they enjoy or find meaningful (e.g., earn money to pay for things the person enjoys). Such an approach does not make work easier *per se,* but it can remind the therapist that skills and abilities of the patient that are beyond their pain.

2) Work-as-therapy allows for gradual return and focus on work, not pain

For a proportion of people with chronic pain, returning to work can seem almost impossible until they feel some control over their pain[11,25]. A key feature of work-as-therapy is that colleagues, leader(s) and employer(s) are also involved in the process[3]. Both workers and employers agree that work tasks can be graded or divided into smaller parts, which allows for individualised adaptations (e.g., flexible hours, time to perform "flare-up control" or adjustments to workload)[11]. Work-as-therapy focuses on managing work-related problems in context, which seems to support the worker find values, establish identity and build new resources[15]. Ideally, work-as-therapy will have all the other positive side-effects from being at the workplace (as opposed to in a clinic), e.g., less time away from colleagues.

3) **Work-as-therapy supports empowerment**

Chronic pain trajectories seem to be fairly consistent over time[10], and many people with chronic musculoskeletal pain who remain at work, do so without seeking care[21]. However, this should not lead us to believe that all people with pain can find a way to "live with the pain" without the support from healthcare professionals[17]. We suggest that such help should aim to build a sense of competences and empowerment (e.g., being able to predict how and when work affects her/his/their pain or what potential changes in lifestyle or other pain management strategies could have). Another important role for the healthcare professional is to educate employers, colleagues, insurers, healthcare professionals etc. about their roles in making the work-therapy optimal.

Benefits of Work-as-therapy for Employers

Due to several factors such as lack of disability management support or knowledge, many organizations let their employees take as much time as they need and leave them to their own resources. Although this method could be effective in other types of disabilities with higher treatment rates, we argue that pain disability requires a different approach due to the difficulty of permanent relief after a certain time threshold. Pain is a potentially chronic condition and refraining from life activities including work for an indefinite period can withhold the patient from living a life[5,9,19]. Similarly, this can mean employers losing their human resources to indefinite disability leave. Below, we will list three reasons why encouraging patients to use their work as a rehabilitation tool (i.e., work-as-therapy) also benefits the employer.

1) **Work-as-therapy is cost efficient for employers.**

Although the process depends on the jurisdiction where the employer is located, in general, disability leaves are covered through employer (i.e., sick or disability leave[26]) or government and/or individual-paid insurance premiums (i.e., disability pension[20]). The costs associated with accommodating employees with pain disability such as tolerating the efficiency losses due to pain or letting the employer work from home can be much lower when we compare them with the disability leave or disability pension costs[23]. Moreover, during this time employers not only save the costs associated with the insurance claims, but also benefit from the outputs of the employee. We acknowledge the possibility that the patient may not be fully functional during the work-as-therapy process. However, with a little support from the employer, patients can make more contribution to their organizations than taking their time off from work completely.

2) **Work-as-therapy prevents problems associated with return-to-work rates.**

Extant research documents low work retention rates as a significant limitation of pain-related disability leave[8]. The reasons include both psychological and systematic barriers[7]. We argue that a work-as-therapy process allows both the patient and employer to stay connected during the patient's rehabilitation process. Therefore, it prevents patients from completely disengaging from work. Moreover, because the patients never leave their work for an indefinite period, the employer can experience the patient's progress with them.

3) **Work-as-therapy allows the patient and employer to monitor and optimize the job design.**

Even if the employee returns to work after an extended disability leave due to their pain, both patients and employers continue to experience difficulties upon return-to-work. For instance, patients may find it difficult to adjust to their lives as an employee[22]. Similarly, organizational leaders may be unable to find working accommodations[11].

The work-as-therapy process allows employers to become involved with the patients' rehabilitation. As a result, the employer can have the opportunity to become an active agent in the patient's healing and/or adjustment. The employer can closely monitor the patient as they try different work tasks, communicate with them about the supporting or hindering role of each work task for their rehabilitation, and make relevant adjustments on the job. This way, while patients are given the room to find a working job design for them, employers can also optimize their accommodation effectiveness.

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