Improving pain management in occupational healthcare lead to massive reductions in sick leaves

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Background

Occupational health centres (OHC) are primary healthcare providers in Finland for almost 2 million people (out of total of 6 million). The aim of "Pain and Work Disability – alternatives to sick leave" project in 2015-2016 was to systematically improve pain management in one of the largest OHCs in Finland and accordingly, to reduce work disability. Helsinki City's own OHC (staff size approx. 150) provides medical services for 40 000 employees.

Methods

The project consisted of following modules:

1. creating "common language",
2. educating all OHC professionals to understand pain, especially chronic pain, and how to manage it;
3. enhancing the use of comprehensive pain management tools (particularly non-pharmacological) based on scientific knowledge;
4. deploying the use of individually tailored pain management plans (task taken over mainly by OH nurses);
5. screening systematically high-risk disability cases with an e-survey with build-in algorithm;
6. launching professional-guided pain management peer groups (6 weekly meetings);
7. creating specific guidelines for physicians for sick leave prescribing in 6 common pain diagnosis (back, shoulder, elbow, neck pain, knee arthrosis pain and plantar fasciitis);
8. finding alternatives for full-time sick leave (work arrangements, fit note, part-time sick leave etc.);
9. providing direct access to occupational physiotherapist (self-referral); and
10. educating Helsinki city's upper management, supervisors and employees about pain.

Example of no 7: Low back pain guideline for physicians for sick leave prescribing

Page 1: Low back pain, lumbago, M54.5

Acute low back pain is very common experienced by everybody during lifetime. It is characterized by pain, ache and stiffness of the lower part of back. It is almost always a harmless and benign complaint that is alleviated by itself but it recurs often within the next months. Even when it does recur its prognosis is good. Pain can begin suddenly when doing something harmless, but it also can start gradually.

- In most cases, acute back pain alleviates within few days. Over 90 % does not have any back pain left after 4-6 weeks.
- Signs of a severe back disorder (continuous and gradually increasing back pain even in rest, fever, weight loss, accident with high energy, osteoporosis, changes in ability to hold urination/defecation, history of cancer) can be ruled out with simple methods

Assessing the need for sick leave:

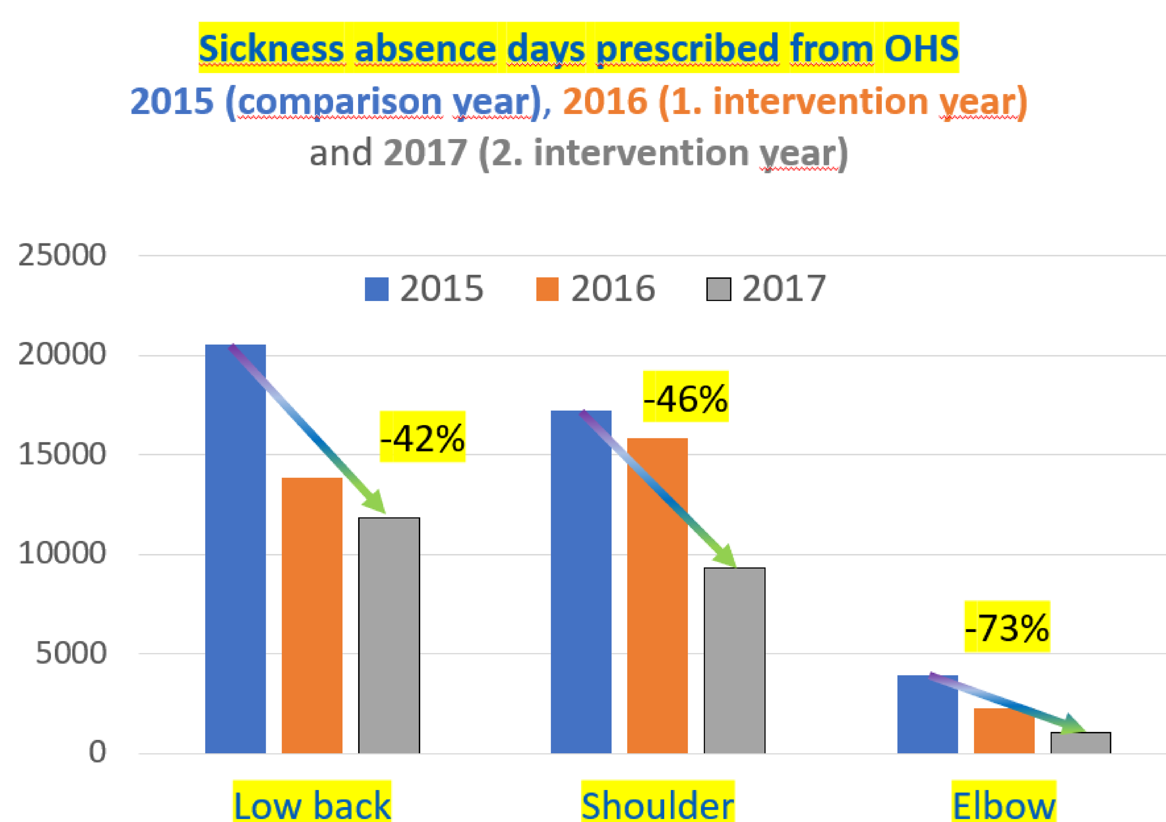
- According to the latest recommendations, sick leave is not necessarily needed at all. *There is no evidence, that hard work would slow down the recovery from common LBP, or that it would increase the risk of prolonged complaints or additional injuries.*
- If sick leave is considered necessary: The patient's capacity to physically light work (little lifting, bending and awkward postures) may be **reduced during few days or up to one week.**
- The patient's capacity to physically hard work (with lifting, bending and awkward postures) may be **reduced up to two weeks** (+ 2 more weeks on partial sick leave, if needed) mainly because the difficulty to lift heavy objects. **Latest after that the following list has to be checked**.

- **Temporary reduction and modification of factors provoking pain are recommended.**
- Despite LBP working is not dangerous, and continuing work and strain mainly speed up recovery.
  - **Patient has to be encouraged to use back normally – it is not dangerous**. Pain may be prolonged, if the patient becomes passive and afraid of moving. Physical activity is beneficial and excessive rest is harmful. Moderate pain related to exercise is not a sign of harm.
  - In the beginning, pain should be treated with sufficiently high doses of paracetamol and/or NSAID. Strong pain medication (opiates) or muscle relaxants has not been proven to be of any help.
  - In prolonged pain, manipulation, massage or acupuncture may be helpful.
  - In prolonged pain, diverse drug-free methods to manage pain and medications of pain threshold reduce sensitivity to pain and improve resistance to pain. Sleep and mood problems related to pain are worth treating.

Page 2: Checklist

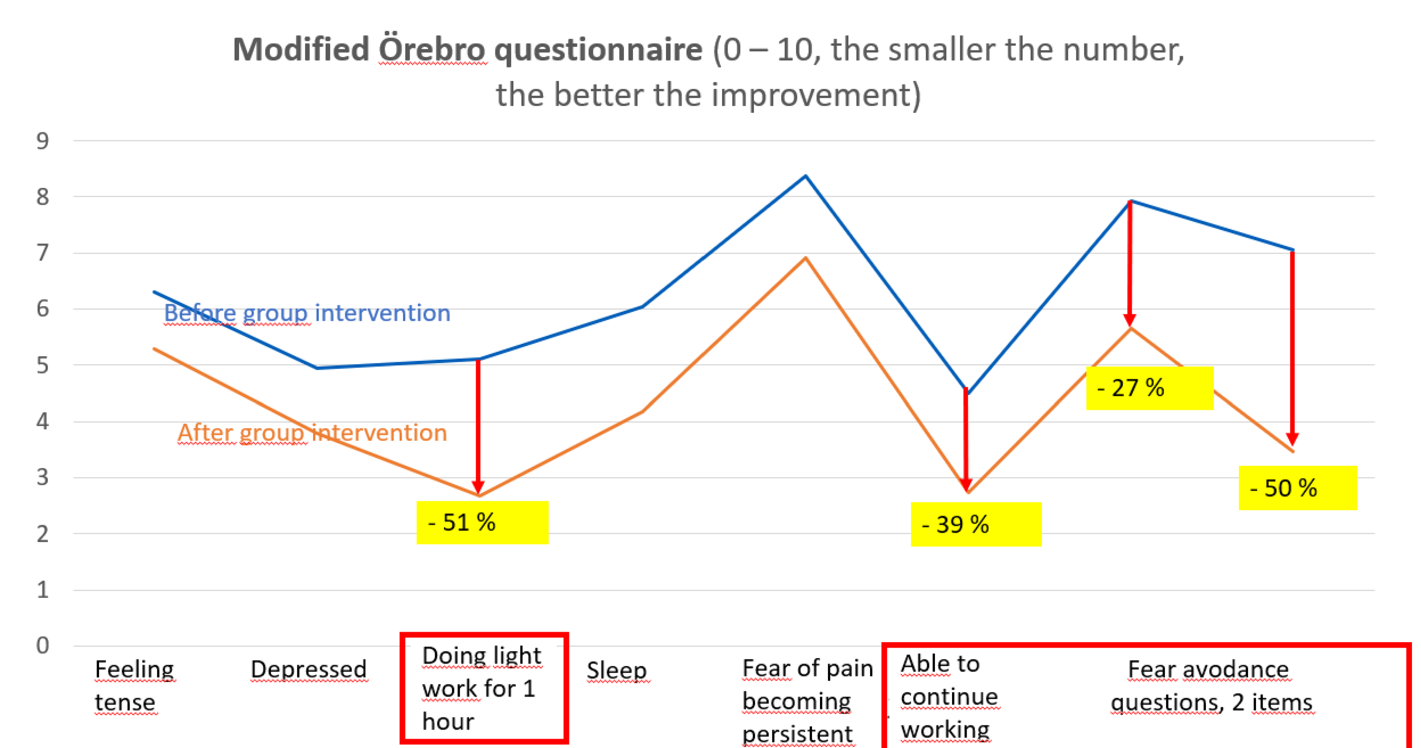
Checklist	
Diagnosis - Has the possibility of **inflammatory disease** (e.g., ankylosing spondylitis) been excluded? - Any **trauma or previous malignancy** in the history? - Pain radiation or numbness below the knee (**impingement of the sciatic nerve**)?	✓
Work: - Has work been modified so that repeated lifting, bended or twisted back postures and work tasks causing vibration have been temporarily reduced? - Have psychosocial strains affecting work ability been identified (bad work climate, lack of supervisor support, time constrain, too demanding work etc.) If so, have they been modified? - Has the employee discussed with the supervisor about work and work ability? - Have OHS contacted the supervisor concerning work arrangements? - Has the OH physiotherapist visited the work place and instructed on how work could be modified?	✓
Individual factors: - Are there any stress factors outside of work, that could have an effect on resistance to pain and ability to cope with pain (crisis, grief, prolonged stress)? - Any activities outside of work or hobbies that might maintain pain (sports, especially ball games and climbing, renovation at house, long driving, prolonged working with laptop or mobile, gardening)?	
Treatment: - Has anyone asked, which treatment the patient perceives effective? Which treatments make the situation worse? - Has the patient received self-help advice from the occupational physiotherapist? - Does the patient use active methods to manage pain? Exercise?	

Results



Sickness absence guidelines on low back pain, shoulder pain and elbow pain lead to a total reduction in sick leave days for more than 20 000 days in two year, estimated to produce circa 5 million euros' savings for Helsinki city.

No. 6: Pain management peer group intervention



Conclusions

Primary healthcare needs to increase its role in pain management. Most pain patients can be treated and followed up in primary care. Specialized pain clinics are needed for the more severe pain conditions. The doctor-driven system needs to be expanded to incorporate all professionals (nurses, physiotherapists, psychologists, occupational therapists etc.) to manage pain comprehensively and effectively. Also, supporting work ability should be the shared target for all multidisciplinary actions.