



**Karolinska  
Institutet**

Institutionen för klinisk neurovetenskap  
Sektionen för försäkringsmedicin

# Workplace-based sick leave prevention and return to work

Exploratory Studies

## AKADEMISK AVHANDLING

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# ABSTRACT

**Background:** Earlier research have revealed risk factors for sick leave in the workplace, and thus the workplace has become an important arena for sick leave prevention and return to work (RTW). Despite that, some of these aspects have received little attention in exploratory studies. Simultaneously, there is a need to translate and implement the growing knowledge base in this field in order to develop evidence-based practice (EBP).

**Aim:** The aim of the present research was to explore some aspects of workplace-based sick leave prevention and RTW, such as workplace interventions (studies III, IV, and the appendix), leadership qualities (study I), and work demands (study II), and also to reveal challenges to translating scientific knowledge into intervention decisions in the RTW process, and possible solutions to these challenges (study III).

**Methods:** Content analysis methods were applied on data from interview transcripts and documents. In addition, a Cochrane systematic review of the literature was conducted.

**Results:** *Study I* identified 78 distinct leadership qualities and seven leadership types ( $n = 345$  meaning units) perceived by 30 employees on long-term sick leave and their immediate supervisors. The three most valued leadership qualities were “ability to make contact”, “being considerate”, and “being understanding”. The three most valued leadership types were the Protector, the Problem-Solver, and the Contact-Maker. The subordinates gave more descriptions of the Encourager and the Recognizer, whereas the supervisors most often described the Responsibility-Maker and the Problem-Solver. The combination of leadership types reported most frequently was the Protector together with the Problem-Solver. *In study II*, eight employees on long-term sick leave due to musculoskeletal diseases and disorders described 51 work demands they had experienced. The demands were perceived in some cases as having only a negative or a positive impact on work performance, but in others as both. Only seven of the demands were physical in nature, and most involved emotional and cognitive challenges in mastering the work tasks. It was also experienced that most demands came from the employee ( $n = 36$ ) and only a few from the employer/work environment ( $n = 7$ ) or both those sources ( $n = 8$ ). *Study III* was a hypothetical case study aimed at revealing the challenges associated with translating scientific evidence into intervention decisions in the RTW process. This investigation was performed according to EBP frameworks. The evidence seemed to differ depending on whether it came from preventive, curative, or rehabilitative interventions. Moreover, it appeared that evidence in some cases originated from “good-for-all” interventions but in others from “tailored-type” interventions. Thus, a need to differentiate the roles of evidence was revealed in terms of whether it inspired, challenged, enlightened, informed, or determined the intervention decision. In general, the evidence-based framework seemed to construct a confined decision process. Possible solutions, and revised EBP steps were suggested. *In study IV*, 15 workplace interventions were identified ( $n = 306$  meaning units), which were intended to reduce sick leave rates in 12 municipalities. The interventions were divided into two groups according to their targets in the organizations: nine organizational-workplace interventions targeted structures, processes, and culture ( $n = 220$  descriptions, 72%); six employee-workplace interventions targeted persons ( $n = 86$  descriptions, 28%). Examples of organizational-workplace interventions were developing routines/systems, establishing cooperation/ collaboration, providing information/education, building culture/anchoring, and recruiting/staffing. Employee-workplace interventions involved well-being/lifestyle interventions, physical activity/exercise, redeployment, adaptation, follow-up of employees on sick leave, and RTW programmes. The intervention profiles varied considerably between the municipalities. *In the appendix (study V)*, a Cochrane systematic review of the literature was conducted to reveal the content and effectiveness of workplace interventions for employees with neck pain. Of 1,995 references found, 10 randomized controlled trials (RCTs) were included. Two of the RCTs had low risk of bias, and eight of them examined office workers. Few were on sick leave. Only three of the ten studies assessed the outcome of sick leave. The workplace interventions varied considerably regarding complexity and content. Overall, evidence was of low quality and showed no significant impact of workplace interventions on *pain reduction* (seven RCTs, 2,368 workers). Furthermore, one RCT, with 415 workers revealed that workplace interventions were significantly more effective in *reducing sick leave* in the intermediate term (OR 0.56, 95% CI 0.33–0.95), but not in the short or the long term.

**Conclusions:** The results reported in this thesis revealed a variety of terminology related to workplace interventions, leadership qualities, and work demands, which might contribute to more in-depth understanding of sick leave prevention and RTW at workplaces. It was a challenge to trying to use evidence from randomized controlled trials in the RTW process, and the results call for new EBP approaches to translate evidence into decisions concerning complex workplace interventions. The current research also revealed that knowledge about the effectiveness of workplace interventions is still limited.

*Key words:* sick leave, sickness absence, return to work, workplace interventions, work demands, disability prevention, evidence-based practice, knowledge translation, implementation science, occupational rehabilitation, Rogaland RTW study.