## Work-related stress in women Assessment, prevalence and return to work

Akademisk avhandling som för avläggande av medicine doktorsexamen vid Sahlgrenska akademin vid Göteborgs universitet kommer att offentligt försvaras. Hörsal Arvid Carlsson, Academicum, Medicinaregatan 3.

Fredag 12 september, 2008, klockan 9.00.

Av

## Kristina Holmgren

Fakultetsopponent:
Professor Mona Eklund
Lunds universitet

Avhandlingen baseras på följande delarbeten:

- I. Holmgren K, Dahlin Ivanoff S. Women on sickness absence views of possibilities and obstacles for returning to work. A focus group study. Disability and Rehabilitation 2004;26(4):213-222
- II. Holmgren K, Dahlin Ivanoff S. Supervisors' view on employer responsibility in the return to work process. A focus group study. Journal of Occupational Rehabilitation 2007;17:93-106
- III. Holmgren K, Hensing G, Dahlin-Ivanoff S. Development of a questionnaire assessing work-related stress in women identifying individuals who risk being put on sick leave. Accepted in Disability and Rehabilitation, January 2008
- IV. Holmgren K, Dahlin Ivanoff S, Björkelund C, Hensing G. The prevalence of work-related stress, and its association with self-perceived health and sick-leave, in a cohort of employed Swedish women (submitted)



GÖTEBORGS UNIVERSITET Sahlgrenska akademin

## **Abstract**

**Aim:** The overall aim of this thesis was to learn about work-related stress in women and the return to work possibilities, and to develop a questionnaire assessing work-related stress in women.

**Method:** The thesis is based on two qualitative studies and two quantitative studies. The qualitative studies used the focus group methodology to collect data. The development of items and scales in the questionnaire was based on the categories found in the first qualitative study. To improve the items and scales, and confirm face validity, a pilot group study was conducted. Furthermore, a test-retest study was accomplished to confirm the reliability of the questionnaire. The fourth study had an epidemiological cross-sectional design and used questionnaires in collecting data.

Result: In the first study, women sick-listed because of work-related stress described how personal as well as work-environmental factors had an impact on the return to work possibilities. Having an interactive and supportive communication with the supervisor and the work-place was decisive. In the second study, supervisors with a rehabilitation responsibility saw themselves as being key persons. Furthermore, they described the rehabilitation work as a part of a greater whole influenced by society, demands and resources of the workplace and the interplay between all parties involved. The Work Stress Questionnaire was developed and contains questions on low influence at work, indistinct organization and conflicts, individual demands and commitment and work to leisure time interference. An appended question about perceived stress was also designed. Face validity was confirmed and the reliability satisfactory. In the cross-sectional study ten percent of the study group reported high perceived stress owing to indistinct organisation and conflicts, and 25 % reported high perceived stress owing to individual demands and commitment. Twenty-two percent reported low influence at work and 33 % work to leisure time interference. Overall workrelated stress was significantly associated with increased odds of high level of self-reported symptoms. High perceived stress owing to indistinct organisation and conflicts and low influence at work were significantly associated with sick-leave.

Conclusion: Work-related stress in women should be understood in a societal context with special focus on the interaction between the individual and the environment. Society should work together with employers trying to find policies promoting modified workplaces and suitable tasks. Organisations should improve co-operation between the parties involved, i.e. the supervisors, the social insurance case managers, the health professionals and the sick-listed. The sick-listed women themselves should engage in meaningful activities not only for recreation but also to obtain routines of daily life. The knowledge gained in this thesis could be used to develop a rehabilitation programme in the return to work process. The Work Stress Questionnaire could be a useful tool for health professionals when identifying persons who risk being put on sick-leave.

**Keywords:** Work-related stress, gender, return to work, person-environment interaction, sick-leave, supervisor perspective, questionnaire, prevalence, focus groups, cross-sectional study