To return or not return?

Predictive factors for return to work in persons with musculoskeletal disorders

– prospective studies over a 10-year period

AKADEMISK AVHANDLING

som för avläggande av medicine doktorsexamen vid Sahlgrenska akademin,
Göteborgs universitet,
kommer att offentligen försvaras på Avdelningen för allmänmedicin,
Hus 2, sal 2119, Hälsovetarbacken, Göteborg,
fredagen den 21 maj 2010, kl. 13.00.
av
Marie Lydell

Fakultetsopponent Professor Ewa Wigaeus Tornqvist
Kungliga Tekniska Högskolan Stockholm

Avhandlingen baseras på följande delstudier:

I   Lydell M, Baigi A, Marklund B, Månsson J
     Predictive factors for work capacity in patients with musculoskeletal disorders
     J Rehabil Med 2005;37:281-285

II   Lydell M, Grahn B, Månsson J, Baigi A, Marklund B
     Predictive factors of sustained return to work for persons with musculoskeletal disorders who participated in rehabilitation
     Work 2009;33:317-328

III Lydell M, Hildingh C, Månsson J, Marklund B, Grahn B
     Thoughts and feelings of future working life as predictor for return to work – a combined qualitative and quantitative study in sick-listed persons with musculoskeletal disorders
     Submitted

IV   Lydell M, Marklund B, Baigi A, Mattsson B, Månsson J
     Return or no return – psychosocial factors related to sick leave in persons with musculoskeletal disorders
     Submitted

Göteborg 2010

GÖTEBORGS UNIVERSITET

To return or not return?

Predictive factors for return to work in persons with musculoskeletal disorders
– prospective factors over a 10-year period

Marie Lydell, Sahlgrenska School of Public Health and Community Medicine, Department of Primary Health Care, University of Gothenburg.

Abstract

Background: Musculoskeletal disorders (MSD) are a major reason for sick leave and results in individual suffering as well as economical consequences for both the individual and society. It is important to identify factors predicting a sustainable return to work (RTW). The overall aim was to identify multidimensional predictors and psychosocial factors for RTW in persons with MSD, over a 10-year period.

Study I: *Aim:* To identify predictive factors for RTW in patients with MSD. *Design:* Prospective. *Method:* Persons aged 18-65 years (n=377), were divided into two groups due to sickness certification or not one year after rehabilitation. The groups were compared regarding predictive factors for RTW using logistic regression analysis. *Result:* Predictive factors for RTW were gender, age, education, number of sick-listed days before rehabilitation, physical capacity, self-rated pain, self-rated functional capacity and self-rated Quality of Life (QoL). *Conclusion:* New predictors for RTW were identified.

Study II: *Aim:* To identify multidimensional predictive factors for sustainable RTW in a long-term follow-up study of persons with MSD. *Design:* Prospective. *Method:* Persons aged 18-65 years (n=183) were divided into two groups "working full-time" and "sick-listed", five and ten years after a rehabilitation program. The groups were compared regarding predictive factors for RTW using stepwise logistic regression. *Result:* Long-term predictive factors were number of sick-listed days before rehabilitation, age, self-rated pain, life events, gender, physical capacity, self-rated functional capacity, educational level, and light physical labour. *Conclusion:* Multidimensional predictive factors for sustained RTW were identified in both the 5-years and 10-years follow-up.

Study III: *Aim:* To describe thoughts and feelings of future working life related to RTW in persons who are sick-listed due to MSD and to compare these descriptions with the person's actual working situation to create predictors for RTW. *Design:* Explorative and prospective. *Method:* Persons aged 18-65 years (n=320) answered an open-ended question about thoughts and feelings of their future working life before participating in a rehabilitation program. The answers were analysed using qualitative content analysis. The emerging categories were compared with the persons working situation one, five and ten years after the rehabilitation program using Pearson's chi-squared test. *Result:* Three categories; "motivation and optimism", "limitations to overcome" and "hindrance and hesitation", and nine subcategories, were defined. Persons in the subcategories "driving force", "new possibilities" and "demand another job" had changed job and those in the "reduced work-time" subcategory were working part-time after a five-year period. *Conclusion:* It is of predictive value to ask questions about thoughts and feelings of future working life.

Study IV: *Aim:* To compare psychosocial factors between healthy and sick-listed persons, both groups with MSD ten years ago. *Design:* Prospective. *Method:* Ten years after a rehabilitation program persons aged 18-65 years (n=183) were divided into a healthy group and a sick-listed group. The groups were compared regards to psychosocial factors using logistic regression analysis and Pearson's chi-squared test. *Result:* The healthy group had a higher QoL, more control over the working situation, better sense of coherence and more life events. *Conclusion:* There was a difference regarding psychosocial factors in the healthy group and the sick-listed group. General conclusion and implications: The focus of this thesis has been on healthy factors for RTW in line with the salutogenic theory. When predicting RTW for persons with MSD we must have a multidimensional perspective and physical, psychosocial and occupational factors must be considered. Taking all dimensions and all predictive factors into account, sick leave can be reduced by directing the person to the correct amount rehabilitation, not more and not less.