

Aspects of work and health in women with fibromyalgia

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- I. Palstam A, Bjersing J, Mannerkorpi K. Which aspects of health differ between working and nonworking women with fibromyalgia? A cross-sectional study of work status and health. *BMC Public Health*. 2012; 12: 1076.
- II. Palstam A, Gard G, Mannerkorpi K. Factors promoting sustainable work in women with fibromyalgia. *Disability and Rehabilitation*. 2013; 35: 1622-9.
- III. Palstam A, Larsson A, Bjersing J, Löfgren M, Ernberg M, Bileviciute-Ljungar I, Ghafouri B, Sjörs A, Larsson B, Gerdl B, Kosek E, Mannerkorpi K. Perceived exertion at work in women with fibromyalgia – explanatory factors and comparison with healthy women. *Journal of Rehabilitation Medicine*. 2014; 46:773-80.
- IV. Larsson A*, Palstam A*, Löfgren M, Ernberg M, Bjersing B, Bileviciute-Ljungar I, Gerdl B, Kosek K, Mannerkorpi K. Resistance exercise improves muscle function, health status and pain intensity in fibromyalgia – a randomized controlled trial. *Submitted*.

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ABSTRACT

Fibromyalgia (FM) is characterized by persistent widespread pain, increased pain sensitivity and tenderness. FM is also associated with fatigue, psychological distress, impaired physical capacity, activity limitations and impacts the ability to work. Work ability is complex and influenced by individual aspects, such as aspects of health, as well as work related aspects and environmental aspects.

The overall aim of this thesis was to gain deeper knowledge on aspects related to work and health in women with FM.

Methods: A cross-sectional study investigated differences in aspects of health between working and nonworking women with FM (study I). A qualitative focus group study explored the experiences of promoting factors for sustainable work in women with FM (study II). A controlled cross-sectional study compared perceived exertion at work in women with FM and in healthy women and investigated explanatory factors for perceived exertion at work in women with FM (study III). A randomized controlled trial evaluated the effects of a person-centered progressive program of resistance exercise in women with FM (study IV).

Results: Working women with FM reported better health than nonworking women with FM in terms of pain, fatigue, stiffness, depression, disease specific health status and physical aspects of quality of life. Pain was found to be the only independent explanatory factor for work, meaning that reporting less pain increased the probability of being in work. The meaning of work and individual strategies, namely strategies for handling symptoms, the work day, and long term work life were found to be important individual promoters for sustainable work while a favorable work environment and social support outside work were found to be important environmental promoters for sustainable work. The promoting factors for sustainable work mainly involved the identification and use of internal and external resources to manage the risk of physical and mental overload. Perceived exertion at work was elevated in the women with FM compared to the healthy women. Perceived exertion at work in the women with FM was explained by their physical workload and physical activity level at work, as anticipated, but also by their hand-grip force, anxiety, and fear avoidance work beliefs. Person-centered progressive resistance exercise improved physical capacity, health status, current pain, pain management, and participation in activities of daily life. The low rates of reported adverse effects and very few drop-outs due to increased pain indicate that this exercise program is feasible for women with FM.

In conclusion: Working women with FM reported better health than nonworking women with FM. Promoting factors for work involved the identification and use of internal and external resources to manage the risk of physical and mental overload, which was a careful balancing act performed by the women. Working women with FM perceived an elevated exertion at work, and for the women with a medium heavy physical workload, hand-grip force was an important explanatory factor for perceived exertion at work. Person-centered progressive resistance exercise can be recommended for improvement in muscle function, health status, current pain, pain management, and participation in activities of daily life.

Keywords: fibromyalgia, chronic pain, pain, tender points, work, work ability, health, women, physical, physical capacity, physical workload, resistance exercise, focus groups

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