Work-related Muscular Skeletal Disorders and Workload among Social Workers and Social Care Workers

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Introduction. In social sector work-related muscular skeletal disorders (WRMSD) are extremely significant for employees. Rather often the cause of WRMSD is unsafe work environment, awkward postures, hard manual work, and psycho-emotional risks (stress and violence) at work, which significantly affect workability and life quality of employees. Bio-psycho-social approach to an employee is an important way in the assessment of causes of WRMSD in order to improve work conditions of the chronically ill people and to ensure their returning to the labour market.

The aim. The aim of the study is to investigate WRMSD risk factors and workload among social workers and social care workers in order to obtain the information needed for ergonomic interventions.

Materials and methods. This research involved 25 social workers and 15 social care workers who complain about hard working conditions and work related musculoskeletal disorders. The investigation was done in the period of one year. We used questionnaires to poll about general health, physical load at work, work intensity and psychosocial working conditions (job control, mental workload, support from supervisor or colleagues). For determining physical load of the work, we used Key Item Method [Steinberg, Caffier, 1998]. The work heaviness degree depending on worker's physical activity (intensity) was estimated by heart rate monitoring (HRM) [Jackson et al., 1990] using *POLAR S810i*™. Quick Exposure Check method was used for ergonomics risk identification and load determination on the different parts of the body in order to assess the impact of load on the musculoskeletal system [Li and Buckle, 1998; David et al., 2003]. Work Strain Index was determined applying the strain index (SI) assessment software "ErgoIntelligenceTM".

Results. Social workers (75%) and social care workers (94%) report about high physical work load and rapidly increasing psycho-emotional stress at workplaces. They felt very tired after work shift and felt discomfort in shoulders, low back area, hands and arms. The prevalence of chronic pain in the back, shoulders and wrists during the work was higher among social care workers than social workers (for social workers 54%, for social care workers – 85%). The level of physical load is higher for social care workers (corresponds to risk levels II and III). Heart rate monitoring data show that social workers work heaviness can be referred to light work, but social care work is estimated as hard work. Work Strain Index analysis proved that social workers and social care workers are subjected to moderate (3.1 ± 1.6) and high working strain (4.3 ± 1.2). It can be explained by stress situations at work (intensive work, psychological violence, low possibility to influence job).

Conclusion. Social care workers and social workers' job duties are very different. WRMSD are related not only to physical load, but also psychosocial risks at work. The study will be continued with particular focus on physical load, psycho-emotional and lifestyle factors.