Strategic prevention of musculoskeletal disorders in elderly care

Rikke Seim a, Kasper Edwards a & Signe Poulsen a

aDepartment of Management Engineering, Technical University of Denmark, Kgs. Lyngby, DENMARK

Keywords: Musculoskeletal disorders, Prevention, Health care sector, Municipalities

1. Introduction

Musculoskeletal disorders (MSDs) are a common designation for pain, stiffness or tenderness in the joints, ligaments, tendons, muscles or bones and the associated cardiovascular and nervous system often resulting in symptoms as swelling, restriction of motion and functional impairment. MSD is a serious and comprehensive work environment problem. It is also recognized as such in the Danish National Work Environment Strategy 2020, where MSD is ranked as one of three main focus areas with the aim of reducing the number of MSD incidents with 20% by the year 2020 (WEA 2020). It is estimated that the number of cases of occupational musculoskeletal disorders will increase in the coming years. MSD as a result of repetitive movements of the upper extremities will continue to be a challenge. Furthermore a great challenge is the prevention of MSD among younger employees (under 25), who are often more exposed to heavy physical work.

The known risk factors for developing MSD are: 1) Heavy manual work including person lifting and moving, 2), Monotonous, repetitive and monotonous, stressful work, 3) Straining, awkward postures and movements, 4) Whole-body vibration (NFA 2009, National Research Council and the Institute of Medicine 2001). The first three risk factors are prevalent in the health care sector and employees are prone to develop MSDs due to the high level of manual labor e.g. physical handling of patients. The sector work environment council for the social and health care sector (BAR SOSU) has joint forces with researchers at the Department of Management Engineering with the aim of developing a set of tools to strategically prevent MSDs in municipalities.

The 98 municipalities in Denmark are the primary provider of elderly care in home and nursing home and we expect to find varied but systematic approaches towards preventing MSD as well as MSD being a focus area for the work environment effort.

2. Method

This paper is based on a phone survey of all top level managers of elderly care in Danish municipalities. We developed an interview guide which focused on what interventions the municipalities had towards preventing MSD and how they were organized. In particular we were interested in learning how the top administrative level is connected to practical level where the elderly care worker is doing her job.

Top level managers of elderly care are usually responsible for rather large organizations with several hundred workers. As such the interviews have to be kept short and 15 minutes was estimated to be the maximum duration. The questionnaire consists of 25 questions, 12 of which are closed questions. The interviews were recorded and summarized into a database for analysis.

A total of 44 municipalities answered the survey, giving a response rate of 45%. 6 municipalities denied to participate and in the remaining 48 municipalities we did not manage to get in contact with the top level managers.

3. Results

The preliminary data reveal some interesting trends: Despite our expectation MSD is no longer a high priority focus area and only 5 % of municipalities have specific strategies for MSD. 84 % of the municipalities state that they work preventively to reduce MSD among their employee, however only 9 % of the municipalities have set up target figures/key performance indicators for the reduction of MSD. We can detect a shift in focus from prevention of MSD and physical disabilities associated with the daily routines such as heavy
lifting towards a focus on prevention of acute injuries, for instance when an elder patient is about to fall, and the caregiver react instinctively by reaching out for the patient. In many of the more problematic daily routines aids and facilities such as personnel hoists is now used systematically, and employees are instructed in proper lifting technique and person lifting and moving. We also identified that the preventive efforts was linked to the individual worker, for example individual training after work was often mentioned as an approach offered to the employees.

Acknowledgements

The project is funded by the sector work environment council for the social and health care sector (BAR SOSU).

References

WEA. The Danish Work Environment Authority: “Fremtidens arbejdsmiljø 2020”, Marts 2010