

MUSCULOSKELETAL DISORDERS IN THE FUTURE WORK ENVIRONMENT IN DENMARK

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This paper describes the process and background for the priority of musculoskeletal disorders for the national working environment effort until 2010. During the process all available information about the past development and the expectations to the future has been taken into consideration. The methods has been brain storms, workshops, expert rapports, and analyse of the data of the development in work related health problems and exposure of risk factors. Musculoskeletal disorders have been prioritised but we still are waiting for the final decision about the reduction measurement and the focus areas.

Keywords, musculoskeletal disorders, strategy, prioritising

1 Introduction

During the latest more than 25 years we have in Denmark concentrated the working environment effort in the framework of national programs accepted by the social partners and the government. The Danish Working Environment Authority, the National Institute of Occupational Health in Denmark and the National Board of Industrial Injuries has a key role in both the preparation process and in the carrying out process. The agreement between the government and the social partners is of big importance for the success of the program.

After 10 years with the national working environment program “*Clean Working Environment by 2005*” a new order of priority should be made. The Danish Working Environment Authority has in cooperation with the National Institute of Occupational Health in Denmark and the National Board of Industrial Injuries made analyses of the development of the labour marked and working environment in Denmark. The purpose was to provide a good and solid background for the political decisions on the future priority of the working environment effort. We also collected our expediencies from the latest working environment program and looked at the future programs from other countries and institution. We ended up with a rapport which was the basic document for the further political discussions. The result was that musculoskeletal disorders (MSD) ended up as 1 of 4 items with top priority for the future working environment effort until 2010. The other 3 was accidents, psychosocial work and noise.

2 Objectives

The aim of this paper is to describe the process leading to the priority of musculoskeletal disorders.

3 Methods

Based on analyses of the development in work related musculoskeletal disorders, the working environment and the development of the labour marked during the last 10 years, we arranged workshops with national specialist on the relevant areas. The input from the workshops was used to describe the expectations for the future development.

In order to place the working environment development in a broader perspective we also looked at:

- working environment and family life
- working environment in the special groups (senior workers and immigrants)
- the infinite working situations
- the global perspective

Finally we connected different elements and analysed their interrelations. The final rapport gave the political decision makers the possibility to select and prioritize in agreement with their special interests.

4 Results

All the elements from the analyses can be seen in different perspectives and thus give background for prioritising. This provides a possibility to change focus during the period.

4.1 The health perspective

Musculoskeletal disorders are an essential work related health problem.

About 50% of all reported occupational diseases are musculoskeletal disorders. The average loses of work ability is 42 %, especially due to back disorders. (National Board of National Injuries)

More than 50 % of the workers complain to have episodes of musculoskeletal pain during a year.

Essential part of the days in hospital and the seek leave from work is due to work related musculoskeletal disorders.

Health consequence	Work related risk factors	Work environments part of the total MSD	Prevalence and seriousness
Work related musculoskeletal disorders Back Shoulder/neck Hand/arm	Manual handling Repetitive work Monotonous loading Working postures Heavy work Vibrations Psychosocial risks	12 - 21 %	Most frequent reason for long-term seek leave Highest lose of good life quality years Often reason for early pension Often reason for seek leave

4.2 Exposure factors perspective

The ergonomic risk factors are not only related to MSD but also to other health problems.

The following table shows the relation between risk factor, health problem, evidence, and whether few or many people are exposed to the current risk factor.

Ergonomics risk factor	Health problem	Evidence	Amount of exposed workers/ MSD
Manual handling	MSD Reproduction damages	good	many/many
Repetitive work	MSD in shoulder, neck, hand and arm	good	many/several
Monotonous loading	MSD in shoulder, neck, hand and arm	good for computer and cleaning work	many/several
Working postures	MSD Reproduction damages (standing/walking)	good for certain working postures good	many/several many/?
Physical inactivity	Cardiovascular disorders	good	many/many
Heavy work	MSD	good	few/?

The question marks means that we don't know how many exposed workers we have in Denmark.

In Denmark these risk factors are always looked upon in the context of work organisation, workers participation, planning, training, and other physical and environmental factors.

4.3 Trends in the future labour marked

Trends which will influence the future work environment:

- Globalisation means that many Danish enterprises outsource there production to other countries with lower salary. Nearly all textile productions and many other industrial enterprises have already outsourced. It is estimated that about 5000 workplaces each year will be outsourced. This means a decrease in job with repetitive work in DK.
- Economical integration in Europe and worldwide means that DK is more dependent of what is happened in the rest of the word.
- The economic situation in DK means economic growth and low unemployment rate. The Danish Flexicuritymodel is supposed to be the background for this trend.
- More senior workers, more immigrant workers, longer work life. That stands in contrast to earlier expectations that the future would bring more leisure time.
- Increased need for service e.g. social and health functions. This will increase the amount of jobs with manual handling of persons.
- Fast changes in work situations. Old enterprises are closing down and new are established. This means that the workforce has to be very flexible.
- Technological development means more work with computers and similar functions. This will increase the jobs with long duration of physical inactivity.
- Unlimited work. The work can e.g. be performed during transportation such as trains, and at home.

- More free agents. Many one person enterprises are expected in the future.

4.4 Candidates for the Danish prioritizing

Work related musculoskeletal disorders were pointed out as a focus candidate within the health perspective.

Physical inactivity, computer work and manual handling of persons was pointed out as a focus candidate according to a risk factor perspective.

Other ergonomic risk factors which were still regarded as essential were: repetitiv work, manual handling, working positions, vibrations (both hand and whole body vibrations), cold, draft and heat, and heavy physical work.

The further process

The rapport was discussed in the Working Environment Council which is an advisory Council for the Minister of Employment. The different social partners are the members of the Council.

They agreed to give priority to musculoskeletal disorders but they could not agree upon a reduction percentage or point out which specific risk factors there should be focus on. The effect should be an essential reduction in the sick leave due to MSD. The government agreed with the priority but expected that the Working Environment Council would deliver a reduction factor and priority of the focus areas for the effort before April 2007. But at the writing moment we are still waiting for the final decision.

5 Discussion

We have used 2 different definitions for work environmental problems:

- 1) Health problems and
- 2) Risk factors.

This is different from earlier campaigns, where we only prioritized according to risk factors. The health problem aspect provides us with a possibility to take into consideration that MSD often has a multifaktoriel background.

In the analyses of the future development we have used actual knowledge from experts collected at 2 work shops. That is a qualitative method, and in the context it was a very efficient method to collect the newest knowledge.

The rapport has been an appreciated background material for the political decision makers.

6 References

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Link to the rapports mentioned above <http://www.at.dk/sw16158.asp>

