#### Social partners' conference on approaches to the issue of musculoskeletal disorders

#### Paris, 25 March 2015

#### Abstracts

### Size and nature of the phenomenon of musculoskeletal disorders

Jean-Michel MILLER, Eurofound

This presentation will provide information on the:

- sector,
- definition,
- data sources,
- extent,
- reasons for the phenomenon's level,
- looking forward comments.

## **MSD** in the nursing profession: how do we solve the problem? What are the cornerstones? *Nico KNIBBE, LOCOmotion Research NL*

Occupational back pain among nurses still leads to high costs for health care facilities and personal suffering for nurses. There is considerable proof that 'non-lifting', or ergonomic programs can be effective in reducing the overload on the nurses musculoskeletal system. For this guidelines are necessary to tell when 'load on the back' changes into 'over load' on the back. EU Legislation with respect to patient handling – EU Health and Safety Directive on Manual Handling (90/269/EEC) for patient handling – is a good step in right direction. More recently in 2012 the ISO Technical Report (12296) was published, this TR was endorsed by CEN in July 2013. A working group of international specialists have been working on this document for a period of more than 3 years. Its main goals are to improve caregivers' working conditions by decreasing biomechanical overload risk, thus limiting work-related illness and injury, as well as the consequent costs and absenteeism, and to account for patients' care quality, safety, dignity and privacy as regards their needs, including specific personal care and hygiene.

Guidelines and assessments instruments mentioned in this CEN ISO TR 12296 are implemented in The Netherlands by means of so-called convenants. In each health care sector agreements supported by signed commitment by social partners and the government led to the development of guidelines for practice and considerable support for the implementation process.

Basically successful ergonomic programs in nursing profession must pay attention to four cornerstones. First of all clear guidelines are required. These can be based on the EU Health and Safety Directive on Manual Handling (90/269/EEC) and / or the CEN ISO TR 12296. Secondly (Cornerstone 2) social partners must contribute to the implementation of these guidelines. For example by communicating a straightforward message about safe working, both from the employers and the workers point of view. The third cornerstone is about safe working space. Architects, employers and hospital workers might have conflicting opinions about how hospitals should de designed, still clear guidelines are available about square meters required for safe working around the bed, the toilet area, OR, etc. Cornerstone 4 is about (re)educating the hospital employers. What is the best way to train our nurses? What is the experience with peer leaders and ErgoCoaches in managing behavioural change? What is the role of the nursing schools? And e-learning?

In this presentation all four Cornerstones will be addressed, using examples from different EU countries. Also results of the Dutch Convenants approach will be presented.

#### Ergonomics at the Workplace - An EU Baseline Scenario

Antonio CAMMAROTA, DG EMPL, European Commission

The lecture will outline the current EU baseline scenario regarding ergonomics at the workplace.

It will highlight current trends, size and extent of the problem, focussing on prevalence rates of workrelated musculoskeletal disorders, their impact on business and society, and the interventions developed over the last few years at both European and national levels to tackle them.

Against this baseline scenario, the lecture will also examine the potential impact of interrelated factors which are likely to determine future trends in the development of these problems.

These trends suggest that status quo (no action taken) is very likely to contribute to aggravating problems in the future.

Therefore, further initiatives need to be taken to reduce the societal and financial costs of work-related ergonomic conditions.

#### Swedish regulatory framework and implementation

Minke WERSÄLL, Swedish Work Environment Authority

I will briefly present the Swedish regulatory framework and the implementation of EU legislation, give an introduction to the Swedish provisions and then I'll guide you through recent implementation by the Swedish Work Environment Authority. You are familiar with the directive, it is mainly focused on prevention of back injury: Council Directive 90/269/EEC of 29 May 1990 on the minimum health and safety requirements for the manual handling of loads where there is a risk particularly of back injury to workers (fourth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC). In Sweden the Work Environment Act is clarified by provisions. My focus will be the provisions on physical ergonomics. The purpose of these provisions is that work and tasks should be arranged and designed so that the risks of hazardous or unnecessarily tiring loads are prevented. Definitions are given and the need of assessment of risks of WRMSD at work are described. The next question to highlight is "How do we implement the regulations?" Our experiences and lessons learned while working in an assignment we got from the Swedish government 2011 about women's health and work are worth sharing with you, ergonomics was a significant part of it. A brief description of the assignment will follow, why we got it and how it was organized will follow.

I will speak about inspections which focused physical ergonomics in patient transfer carried out in 2013 and 14 and the aim of the inspections project was to increase knowledge of the risks of work related musculoskeletal disorders in healthcare and social care. We wanted to contribute to advancing knowledge of how these can be detected and prevented.

How risk assessment is performed and which metods were used is the next topic. The brochure "Lighten the load during patient transfer" was used as information material and methods are presented I ISO Technical standard 12296 from 2012. The brochure is (or will soon be) available in English on our website www.av.se

How did we train the inspectors for the project? Information to the employers and the safety delegates, and how we performed the supervision will be described. Something will be mentioned about the most common demands and how we involved the social partners in a discussion about knowledge regarding ergonomics and safe performing of patient transfers.

Good practice, but also challenges were encountered.

#### Video presentation of experience from Hospitals of the Mont-Blanc region (France)

This video is a presentation of the methodology used at the Hospitals of the Mont-Blanc region to improve occupational health and safety. The focus is on prevention and reduction of musculoskeletal disorders.

The video consists of two parts: the first one deals with the description of the action made by the local branch of the CFDT. There are three interventions (Agnès, Sophie and Damien). Agnès will talk about the background and explain that the role of the Occupational Health and Safety Committee is to reduce occupational risks. Then, Sophie will tackle the primary prevention with the MSD as the center of their

concerns. She will describe their multi-step approach – the goal is to make concrete improvements and to permit better quality of working life. Finally Damien will present a concrete example of corrective action carried out with respect to hospital laundry to limit the risk of musculoskeletal disorders.

The second part of the video covers two interviews – one interview of Mr. Labbé, assistant director of the Hospitals of the Mont-Blanc region and Chairman of the Occupational Health and Safety Committee and a second interview of Mr. Massard, director of the Hospitals of the Mont-Blanc region.

#### Health, Safety and Wellbeing Partnership Group "Back-Pack"

Kim SUNLEY, Royal College or Nursing & James TRACEY, Leeds Teaching Hospitals NHS Trust

The Chairs from the Health, Safety and Wellbeing Partnership Group, which is a sub-group of the United Kingdom National Health Service's (NHS) Staff Council, will give a presentation on their work past and present, focussing specifically on the "Backpack". The "Backpack" is a 6-part guide on how to support employees who are at risk of sustaining musculoskeletal injury at work, how to prevent the injury occurring through risk assessment and what managers, union representatives and healthcare employees can all do to reduce the risk. Like all of the work produced, the "Backpack" was a jointly written by union and management representatives of the group and communicated through the support supplied by NHS Employers organisation.

#### Good Work Environment and Good Performance Go Hand in Hand

Ing-Marie LARSSON & Solveig TORENSJÖ Karlskoga hospital (Sweden)

In the beginning of 1990 we observed that a lot of female employees at Karlskoga Hospital had a lot of reported occupational accidents/diseases during patient transfer.

The objective at the beginning of this project was to decrease the number of reported working accidence by learning how to move and handle our patient in a careful way and in a safe way for our employees.

From the beginning the opportunity was only focused on ergonomic matters, but during the time the project was expanded to consist of a comprehensive view of the individual and the working environment. The opportunity nowadays is to reach our goals for patient safety and working environment and this opportunity involve all our patients and all staff.

A cornerstone of the concept found success, is that it is carried out in collaboration with management and the union.

# Cost-Effectiveness of Ergonomic Hospital Design: Methods and strategies to reduce operational costs of hospitals by introducing ergonomic concepts to enable better work conditions and higher work efficiency

Tom GUTHKNECHT, Lausanne Health & Hospitality group

#### Introduction

- Ergonomic work flow requirements are neglected in today's hospital design.
- Health facility design should contribute to operational cost reductions by providing more efficient and more ergonomic work conditions.

#### **Methods and Approach**

- Unnecessary work and unergonomic, dangerous work procedures are detected by Grey Performance Analysis.
- In a combined approach dangerous work sequences can be replaced and work efficiency increased at the same time.
- While work efficiency is improved, definite quality standards must be introduced and monitored at the same time.
- The available additional so called "alternatively usable time for care" is partly used to increase quality care time with patients and partly for cost reductions.

#### **Results and Conclusions**

- Ergonomic focus is an indispensable feature of future hospital design.
- Ergonomic design contibutes to coping with future staff shortage in health facilities and enables reductions of operational costs.
- Joining economical and building requirements from the beginning enables quality-oriented facilities.

#### Building ergonomic hospitals - What should ergonomic hospitals look like?

Leena TAMMINEN-PETER, PhD, Ergosolutions BC Oy Ab

The basic principles for hospital designs are: design for all, usability and adaptability. Adaptability is very important, because the most common reason for space problems is that the original facilities were not build for the patients presently hospitalised. Good quality of care must be taken into consideration already during the planning phase. Adequate care is to be based on patients' needs, privacy, cosiness and patients' and workers' safety.

A model room concept, where the patient room is built with all the technologies in size 1:1, helps to detect possible problems in design. Lacks of space in patient rooms and toilets as well as heavy burdens of both patients and laundry are the most common problems found during risks assessments of health care facilities. International recommendations of needed space for the hospital bed and toilet/shower facilities and solutions how to handle heavy loads will be provided.

Important source of information is CEN ISO TR 12296:2012 (Ergonomics - Manual handling of people in the health care sector <u>http://www.iso.org</u>.) It gives guidance on analysing and identifying deficiencies in various different circumstances in which patients may be handled.

Quality of care and safe working practices can be achieved by the ergonomic surrounding, right usage of mechanical aids and safe working techniques. For this reason the standardised national Ergonomic Patient Handling Card<sup>®</sup> -education scheme has been introduced in Finland (http://sotergo.fi/files/240/NES2011\_Tamminen\_peter.pdf)

#### Risks assessment at work: the obligatory of an ergonomic design

Jean-Pierre ZANA, French National Institute for Research and Safety (INRS)

The design of new care units, the establishments of new organizations is often done without prior risk analysis as recommended by the standards. A fundamental principle should be required in France, there are no ready-made solutions. Thus, applying solutions that have worked elsewhere without prior risk analysis and expectations of employees without taking into account the probable care strategies developments, ends often in failure: unused material because evil adapted, moved risk, additional costs to correct the situation afterwards.

The proposed approach is based on two methods and recommendations of the technical report ISO TR 12296. It has been selected the MAPO method developed by Italian teams EPM (Ergonomics of posture and movement). It is a method for analyzing the conditions for carrying out manual handling of patients, designed for units supervisors. The second method is the adaptation of the physical load analysis work method developed by INRS, the health and social sector that allows the involvement of caregivers through their feelings.

Key to the prevention is found in the implementation of risk assessment, by stakeholders of health care structures, before any new unit design or work organization. Training in ergonomics referents applied for the supervision and training of caregivers in the prevention of risks associated with physical activity are the two complementary training modules that frame the proposed approach.

#### Preventing musculoskeletal disorders and training: FAQs

Diana ROBLA, Galician Health Service

Musculoskeletal disorders are one of the main risks in health, and training is one of the keys to achieve a safer working practice and reduce the physical exertion that is causing injuries. So training is an on-going

process that it should begin at caregiver schools and review or refresher coaching is required in the workplace.

But training is usually expensive and not always the expected results are achieved. It is for this reason that if you want to get the maximum success of these actions is necessary to apply a systemic approach. Training has to be integrated into a strategy to manage this type of risk at all organization levels, it should be tailored to the problems of the institution and a periodical assessment of education and training is always necessary. This will preserve workers health and of course promote patient safety and better quality care.

## Preventing musculoskeletal disorders: from training to internal preventers: the example of the Institut Robert Merle d'Aubigné

Hélène ANTONINI-CASTERA, Institut Robert Merle d'Aubigné

- Assessment of musculoskeletal disorders risks according to the public:
  - Musculoskeletal disorders in the hospital sector
  - Specificity and paradox of prevention of musculoskeletal disorders in a rehabilitation centre
- State of play:
  - o Level of risk of musculoskeletal disorders at the Institut Robert Merle d'Aubigné
  - Measures implemented:
    - Training
    - Handling tools
    - Inadequacy of these measures
- Project: creation of internal preventers