OSH research priorities 2013 – 2020

EU-OSHA Seminar – Brussels October 10

Nils Fallentin
Research director
NRCWE, Copenhagen, Denmark
Framework – Danish perspective

• While EU OHS strategy 2013-20 is still uncertain and we have to settle with the evaluation report of the previous strategy
• Danish government adapted an ambitious working environment plan or strategy in 2011
• Prioritized areas, goals and specific targets to be achieved by 2020.

• Three main areas identified:
  • Accidents at work
  • Psychosocial working environment
  • Musculoskeletal disorders
Targets and influence on OSH research

- The number of serious accidents at work is to be reduced by 25% in proportion to the number of employees
- The number of employees who are psychologically overloaded is to be reduced by 20%
- The number of employees who experience musculoskeletal disorders is to be reduced by 20%

- This type of strict focus marked influence on OSH research at a national level (doesn’t dictate the research but certainly sets the scene – as it should)
- To a large extent it is from this framework or through these lenses I view the current report
- My feedback has its main focus on demographic changes
- Include some overall comments on the report
Thematic area - Demographic changes

- Successful in pinpointing some of the main areas for OSH initiatives and research in the coming years (close labor market issues and economy)
- Adheres to min elements in the Danish governmental strategy in two ways
  - Efforts to adopt working environment to a diverse workforce (young, old, employees with a chronic disease)
  - In addition to benefiting these vulnerable groups
- Strong, independent effect on accidents/MSD injuries and psychosocial workload in the general work force
Secondly – explicit in the DK plan is the necessity of maintaining an adequate workforce

- Requires an increase in labor market participation across the age span (but with special focus on young and older workers)
Prerequisite – adaption of working environment

- Adaption? Main issue – reduction of exposure (MSD and psychosocial risk factors)
- Two examples
- Best predictor of early retirement

**TABLE V.** Risk Factors for Early Retirement Pension Among Waste Collectors and Municipal Workers in 1997

<table>
<thead>
<tr>
<th>Risk factor in 1994</th>
<th>N</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td>CI 95</td>
<td>OR</td>
<td>CI 95</td>
<td>OR</td>
<td>CI 95</td>
<td>OR</td>
<td>CI 95</td>
</tr>
<tr>
<td>Work environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extreme bending of</td>
<td>Yes</td>
<td>95</td>
<td>6.37</td>
<td>2.50–16.21</td>
<td>5.97</td>
<td>2.33–15.29</td>
<td>6.78</td>
<td>2.56–17.96</td>
<td></td>
</tr>
<tr>
<td>the back</td>
<td>No</td>
<td>33</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>Yes</td>
<td>46</td>
<td>1.59</td>
<td>0.71–3.56</td>
<td>1.56</td>
<td>0.67–3.60</td>
<td>1.56</td>
<td>0.67–3.60</td>
<td></td>
</tr>
<tr>
<td>disorders, knees</td>
<td>No</td>
<td>103</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifestyle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>Current</td>
<td>63</td>
<td>1</td>
<td>0.80</td>
<td>0.27–2.38</td>
<td>0.64</td>
<td>0.21–1.99</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Former</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td>Yes</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.79</td>
<td>1.08–7.19</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

All ORs adjusted for age and occupational group at baseline.
Young workers

- Excess injury rates (days away from work).
- Why – behavioral issue, risk taking etc.? No
- Based on systematic reviews (Canada/USA)

The key message arising from this report is that it is the characteristics of the workplace and the job that put a young worker at higher risk, not the young worker’s individual characteristics. Exposure to work hazards and work overload have the strongest association for risk.

Systematic review of risk factors for work injury among youth, Breslin et al., 2006

Circle is completed

- The focus on "traditional" risk factor reduction in Danish Gov. plan is also the single most important approach to adapt working environments to vulnerable groups
Summary - feedback on theme 1

• The research items outlined and specified are all highly relevant and in fine alignment with current research priorities at NRCWE

• Items of specific interest – migrant workers, effects of workplace exposure on normal aging, RTW research, gender issues (high labor force participation in Nordic countries)

• Minor problem – Concept not included in demographic changes new employment, work patterns part of demographic changes (part og globalization theme)
Overall comments

- Strong – maybe too strong – emphasis on productivity and work output and the "association between OSH and the productivity and performance of companies"

Understand the rational and the effort to link to common EU politics.

- Advocate the dual scope presented by the IEA in their policy paper – Performance and wellbeing – two related but different outcomes
Overall comments (cont’d)

• Problem – Major work related health problems (MSDs, stress, mental health) tightly bound to ”demographic changes” and aging workforce
• Refer to seven research challenges identified by Perosh
Seven areas identified

• Sustainable employability (demographic changes)
• Disability prevention and reintegration
• Psychosocial well being
• Multifactorial genesis of work-related MSDs
• New technologies
• Nanomaterials
• Safety culture (accidents)

• Emphasized as separate, prioritized items
• More weight on more traditional health related issues
Last points – 1. Sustainability

• Key term in the report (as it should be)
• It’s stated that sustainable work
• Requirements of sustainability met in all four dimensions – environmental, economic, human and social – simultaneously
• OSH point of view
• Central issue is the consumption or regeneration of human resources
• "Sustainable work systems... can be characterized as allowing the workers involved to maintain health and to regenerate their human and social resources while utilizing them”

2. Translation research

- Support the importance of this approach
- Claim that European OSH research hasn’t devoted the implementation part enough attention
- US and Canada → Prominent part of the research agenda
- NIOSH
- "Research to practice" initiative"
- NORA (1996) a ”partnership program to stimulate innovative research and improved workplace practices
- Institute of Work (Toronto)
- KTE (Knowledge transfer and exchange” aims at engaging stakeholders in all parts of the research process i.e. from idea to implementation at the workplace.