Promotion and Maintenance of Work Ability (PMWA)

The Finnish Concept on Workplace Health Promotion (WHP) as a function of Occupational Health Services (OHS)

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Finnish Institute of Occupational Health
Deauville 26 April 2007
THREE AGING WAVES OF THE WORKFORCE

I Graying society
* ‘old’ occupations
* mass unemployment
* lack of training
* dependency ratio grows (unemployment)

II Aged society
* work ability of the aging
* new generations enter the work life
* lack of young people
* recruiting unemployed
* dependency ratio levels off

III Retirees’ society
* declining and younger workforce
* lack of young workers
* need for curative care increases
dependency ratio grows (retirements)
* funding of social and health care

Demand for productivity/individual

Value Society

Information Society

Services -> info -> Knowledge

Goods -> Services

Society in Transition

Goods -> Services

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More people leaving the Finnish labour market than entering it

Changes in labour force supply 1990–2010

Newcomers to the labour market (median age 20.5 years)
Withdrawal age increases to 61.5 years in 2010
Persons leaving the labour market (median age 58.5 years)
<table>
<thead>
<tr>
<th>Country</th>
<th>1990</th>
<th>2010</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany (b)</td>
<td>4.5</td>
<td>3.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Finland</td>
<td>5.2</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.4</td>
<td>4.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>4.4</td>
<td>4.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>4.7</td>
<td>3.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.7</td>
<td>3.7</td>
<td>2.8</td>
</tr>
<tr>
<td>France</td>
<td>4.8</td>
<td>4.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Italy</td>
<td>5</td>
<td>3.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Belgium</td>
<td>4.7</td>
<td>4.2</td>
<td>3</td>
</tr>
<tr>
<td>Greece</td>
<td>5.5</td>
<td>3.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Spain</td>
<td>5.2</td>
<td>4.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Great Britain</td>
<td>4.4</td>
<td>4.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>5.6</td>
<td>4.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.4</td>
<td>6</td>
<td>4.4</td>
</tr>
</tbody>
</table>
Employment rates of the 55+ in the EU-15, 2005

Source: Employment in Europe 2006

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Age–integrated working life

Lähde: Reday-Mulvey 2005
Work-relatedness of common chronic diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percentage (%)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (adult males)</td>
<td>30</td>
<td>(Karjalainen et al, 2001)</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>25-30</td>
<td>(Axelsson 2001)</td>
</tr>
<tr>
<td>Cardiovascular disorders</td>
<td>5-10</td>
<td>(Leigh 1997)</td>
</tr>
<tr>
<td>Musculoskeletal disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper extremities</td>
<td>15-40</td>
<td>(EU OSHA)</td>
</tr>
<tr>
<td>Low back pain</td>
<td>50 ?</td>
<td>(NAS 2001)</td>
</tr>
<tr>
<td>Work-related mortality /</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(total mortality)</td>
<td>6.7</td>
<td>(Karjalainen et al, 2001)</td>
</tr>
</tbody>
</table>
Why Emphasis on Workplace Health Promotion (WHP) ?

Competitive World → Need to assure productivity and protect "vulnerable" groups
"Graying" Nation → Responsible Society and Companies

<table>
<thead>
<tr>
<th>Unemployment</th>
<th>Restructuring</th>
<th>Work–arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure, CVD</td>
<td>Job satisfaction and commitment</td>
<td>Occ.accidents, ODs, Compensation claims,</td>
</tr>
<tr>
<td>Depression, stress, anxiety, mental disorders</td>
<td>Downsizing unfairness, Lost sense of trust and &quot;psychological contract&quot;</td>
<td>Concerns on OH&amp;S, Training,</td>
</tr>
<tr>
<td>Family problems</td>
<td>Prolonged stress, work intensity, Autonomy, social relations</td>
<td>Mobility of workers and difficulties in cumulative trauma claims,</td>
</tr>
</tbody>
</table>
The determinants and interrelationship between work, health and employability
(Hämäläinen, Lindström 2006)

- Employment
- Insecurity
- Temporary contracts
- Dowsizing
- Outsourcing
- Low-paid job

- Work pressure
- Job control
- Social support
- Fair leadership
- Effort-reward

- Societal demand
- Level of social welfare
- Living standard

- Work motivation
- Job satisfaction
- Strain
- Health status
- Chronic diseases
- Work-related or occup. diseases
Stages in the development of Finnish OHS

Demand of professional competence

- Correction & control
- Curative & protective
- Monofactorial
- Risk and risk factor oriented
- Preventive service
- Adaptive

Need of multidisciplinarity

- Comprehensive
- Multidisciplinary
- Health promotion
- Well-being
- Productivity
- Multifactorial
- Work ability
- Health promotion

Stages:
- 1850
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000

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<table>
<thead>
<tr>
<th>Promotion or Prevention?</th>
</tr>
</thead>
<tbody>
<tr>
<td>determinants of health</td>
</tr>
<tr>
<td>wide range of motives</td>
</tr>
<tr>
<td>health, well-being, quality of life</td>
</tr>
<tr>
<td>population</td>
</tr>
<tr>
<td>empowered people</td>
</tr>
<tr>
<td>circular evaluation</td>
</tr>
<tr>
<td>processes, impact</td>
</tr>
<tr>
<td>risk factors</td>
</tr>
<tr>
<td>causal relationships</td>
</tr>
<tr>
<td>incidence, prevalence, mortality</td>
</tr>
<tr>
<td>population/risk group</td>
</tr>
<tr>
<td>object for expert action</td>
</tr>
<tr>
<td>linear, expert evaluation</td>
</tr>
<tr>
<td>outcomes</td>
</tr>
</tbody>
</table>
Promotion and Maintenance of Work Ability (PMWA)

- Workplace activities aiming at promoting and maintaining the ability to work
  - include all measures,
  - that the employer and the employees as well as
  - the co-operative organizations at the workplace make in a united effort
  - to support the ability to work and to enhance the functional capacities of all persons active in working life
  - throughout their working careers
COMPREHENSIVE OCCUPATIONAL HEALTH (The Finnish Model)

- Occupational Hygiene
- Psychology
- Safety
- Occupational Medicine
- Ergonomics
- HR Development
- Work Organizations
- Health Promotion (WHP) & Promotion and Maintenance of Work Ability (PMWA)
Promotion and Maintenance of Work Ability and its consequences

- Health
- Functional Capacities

- Promotion of Work ability 45+
- Adjustment of physical work environment
- Professional competence
- Adjustment of psychosocial work environment

- Good Work Ability, Health and Competence

- Good Productivity and Quality of Work
- Good Quality of Life and Well-being

- Good Retirement, Meaningful, Successful, and Productive "Third Age"
Work Ability Index and Age

WAI Scores vs. Age, yrs by Bus company

WAI, mean

Bus company

WAI

excellent

good

Clas

moderate

poor
Promotion and Maintenance of Work Ability (PMWA)
The Finnish Concept

Work Ability

Family

Society

Relatives, friends

Work
- Environment
- Content and Demands
- Community and Organisation
- Management and Leadership

Values
- Attitudes
- Motivation

Competence
- Knowledge
- Skills

Health
- Functional Capacities

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Health and sickness are a multidisciplinary challenge

Bio-physiology:
disease ↔ life style & resources

Consciousness:
illness ↔ will, well-being

Environment & Social situation:
sickness, handicap ↔ participation
The concept of health has many dimensions

- **Well-being**
  - Is healthy and well
  - Has a disease but is well

- **Health**
  - Is healthy but is not well

- **Disease**
  - Has a disease and is not well

- **ILL-being**

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Health at work – the wide approach

- Physical and psychological work conditions
- Leadership, age management, work atmosphere, dissemination of information
- Work ability, promotion of healthy lifestyles
- Work/life balance
- Lifelong learning, career planning, job rotation, motivation...
- Exposure, risks
- Incentives
Improvements in team function and organization of work in Finnish workplaces during the previous 12 months

- Dimishing of hurrying and time-pressure
- Increasing flexibility in working time
- Strengthening the skills to control change and crisis
- Improvements in organisation and division of work tasks
- Improving the appreciation of personnel
- Increase of feedback and support
- Increase in independence and responsibilities in work
- Development of leadership and supervisory skills
- Clarification of the goals of work processes
- Improvement in communication
- Increase in cooperation and participation
- Improve in planning and quality control

Management (n = 882) vs. Personnel (n = 812)

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Promotion of health and functional capacity of the employees in Finnish workplaces during the previous 12 months

- Organising physical activities: 83%
- Other hobbies: 68%
- Organising rehabilitation: 60%
- Promotion of healthy nutrition: 42%
- Smoking and drinking reduction program: 38%

Management (n = 882) and Personnel (n = 812)
Improvements made in working environment in Finnish workplaces during the previous 12 months

- Improvements in working tools and mechanical safety: 70% (79% management, 70% personnel)
- Ergonomic improvements: 61% (73% management, 61% personnel)
- Hygienic improvements: 56% (59% management, 56% personnel)
- Reduction of harmful effects of machines: 44% (45% management, 44% personnel)
- Reduction of carrying tasks: 40% (40% management, 40% personnel)
- Protection from chemical hazards: 37% (34% management, 37% personnel)

% Personnel (n = 812) Management (n = 882)
WHP as a platform for partnership

- Legislation, Policies, Strategies, Monitoring, Evaluation
- Corporate social responsibility including H&S at work and WHP
- Rights of workers and wellbeing of workers
- Health determinants
- NGOs and other advocacy groups
- Heart, Diabetes, Weight, Sport etc. organisations

OH&S and WHP

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Benefits of initiatives for employees and companies

**Benefits for employees**
- New job offers/social inclusion
- Improved self-esteem through the reintegration into productive work
- Career advancement
- Improved health and well-being
- Increased motivation
- Better work-life-balance
- Skills development

**Benefits for employers**
- Reduced rates of staff turnover
- Cost containment (decrease in rates of sickness absence/disability)
- Higher productivity
- Enhanced innovative capacity
- Better knowledge sharing/utilisation
- Image gain
- Increase in quality

→ Stabilisation and increase of employability

→ Increase in productivity and competitiveness
Economic appraisal of PMWA

- Over 200 companies of various size from different branches
- Method: Tervus Economic Appraisal
- Benefit / Cost ratio variation between 3 and 20
- Benefit: Reduction of absenteeism and work incapacity 50%, increase in productivity 50%

(Bergström and Ahonen 2000)
Finland: Increase in the employment rate of ageing workers

Employment rate

Age group

Statistics Finland 2006
Important reasons for staying at work until statutory old-age retirement based on surveys of the Finnish experts

- Decrease in workload and haste: 70%
- More challenges in work content: 67%
- Better rehabilitation opportunities: 64%
- Better leadership: 62%
- Improvements in work environment: 61%
- Higher salary: 60%
- More opportunities for education: 56%
- More flexible working times: 53%
- Better health care: 53%
- Sabbatical: 44%

Source: Juhani Ilmarinen
Publication

- Health in the World of Work: Workplace Health Promotion as a Tool for Improving and Extending Work Life

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