Izvori stresa na radu kod smjenskih radnika

Stressors at work in shift workers

Tamara Stević
Željka Sokolović Pavić
Mirjana Ptičar
Ines Ostović
WORK-RELATED STRESS

• Work-related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope.
STRESSORS

Stressors:

• related to job demands
  (shift work, constant communication with clients, direct responsibility for benefit of other people)

• related to organization of work
  (disagreement with colleagues, excess pressure from superiors, work role ambiguity)
STRESSORS

Causes Of Stress

- Shift work/Rotating schedules
- Downsizing/Privatisation
- Contigent work
- Work Load/Time Pressure
- Harassment
- Mandatory Overtime
- Lack Of Job Security
SHIFT WORK

• organization of work - change of workers on the same jobs and same place of work in according to the schedule of working hours

• healthcare, police, fire fighting, customs officers, transportation, mining, seafarers, textile, chemical, food industry
SHIFT WORK

Prevalence (%) of shiftwork that includes night work, by country in Europe in 2005 (4th EU Survey on working conditions)

- Austria 13.2
- Belgium 13.2
- Bulgaria 21.0
- Croatia* 33.5
- Cyprus 11.8
- Czech Republic 22.2
- Denmark 9.3
- Estonia 20.4
- Finland 24.3
- France 14.9
- Germany 15.7
- Greece 13.0
- Hungary 20.7
- Ireland 12.0
- Italy 18.1
- Latvia 21.9
- Lithuania 19.4
- Luxembourg 13.9
- Malta 22.3
- Netherlands 11.8
- Norway 23.4
- Poland 10.3
- Romania 21.0
- Slovakia 27.5
- Slovenia 30.0
- Spain 22.2
- Sweden 16.0
- Switzerland 12.9
- Turkey* 6.4
- United Kingdom 15.4
SAMPLE- subjects

- 540 shift workers that work 12-hour night shifts
- chemical (43%), firefighting (36%) and medical service (16%)
- 85.5% M, 14.5% F
- age average 43.57 (SD=9.46; min=20, max=62)
- average duration of shift work 20.34 y
OBJECTIVE:
• to determine most common psychosocial risks and stressors in shift workers

METHOD:
• HSE standard management indicator tool
STRESSORS - HSE management standards indicator tool

Seven different dimensions:

1. job demands
2. lack of control at work
3. lack of support from managers
4. lack of support from co-workers
5. problematic relationships at workplace
6. work role ambiguity
7. lack of familiarity with the changes in the work process
### STRESSORS - HSE management standards indicator tool

**HSE MANAGEMENT STANDARDS INDICATOR TOOL**

**Instructions:** It is recognised that working conditions affect worker well-being. Your responses to the questions below will help to determine our working conditions now, and enable us to monitor future improvements. In order for us to compare the current situation with past or future situations, it is important that your responses reflect your work in the last six months.

<p>| | | | | | | | | | | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am clear what is expected of me at work</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
<td></td>
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<tr>
<td>2.</td>
<td>I can decide when to take a break</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>3.</td>
<td>Different groups at work demand things from me that are hard to combine</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>4.</td>
<td>I know how to go about getting my job done</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>5.</td>
<td>I am subject to personal harassment in the form of unkind words or behaviour</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<td>6.</td>
<td>I have unreasonable deadlines</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<td>7.</td>
<td>If work gets difficult, my colleagues will help me</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<td>8.</td>
<td>I am given supportive feedback on the work I do</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>9.</td>
<td>I have to work very intensively</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>10.</td>
<td>I have a say in my own work speed</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>11.</td>
<td>I am clear what my duties and responsibilities are</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>12.</td>
<td>I have to neglect some tasks because I have too much to do</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>13.</td>
<td>I am clear about the goals and objectives for my department</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>14.</td>
<td>There is friction or arguing between colleagues</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
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<tr>
<td>15.</td>
<td>I have a choice in deciding how I do my work</td>
<td>Never</td>
<td>Sometimes</td>
<td>Occasionally</td>
<td>Often</td>
<td>Always</td>
<td></td>
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</tr>
</tbody>
</table>
Subjects – work characteristics

<table>
<thead>
<tr>
<th>Work characteristics</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization experience</td>
<td>20,26</td>
<td>9,80</td>
</tr>
<tr>
<td>Shift experience</td>
<td>20,34</td>
<td>9,76</td>
</tr>
<tr>
<td>Night shift experience</td>
<td>20,17</td>
<td>9,69</td>
</tr>
<tr>
<td>Number of working hours per week</td>
<td>44,24</td>
<td>4,74</td>
</tr>
<tr>
<td>Number of night shifts per month</td>
<td>7,89</td>
<td>2,05</td>
</tr>
</tbody>
</table>

*M = mean value      SD = standard deviation*
Subjects – work stressors assessment

<table>
<thead>
<tr>
<th>Psychosocial risk</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>job demands</td>
<td>2.45</td>
<td>0.63</td>
</tr>
<tr>
<td>lack of control at work</td>
<td>2.98</td>
<td>0.65</td>
</tr>
<tr>
<td>lack of support from managers</td>
<td>2.35</td>
<td>0.76</td>
</tr>
<tr>
<td>lack of support from co-workers</td>
<td>2.08</td>
<td>0.59</td>
</tr>
<tr>
<td>problematic relationships at workplace</td>
<td>2.08</td>
<td>0.78</td>
</tr>
<tr>
<td>work role ambiguity</td>
<td>1.36</td>
<td>0.47</td>
</tr>
<tr>
<td>lack of familiarity with the changes in the work process</td>
<td>2.63</td>
<td>0.63</td>
</tr>
</tbody>
</table>

- Highest psychosocial risk: lack of control at work, lack of familiarity with the changes in the work process and job demands
- Lowest psychosocial risk is work role ambiguity

*M = mean value; SD = standard deviation*
## Subjects – work stressors assessment

<table>
<thead>
<tr>
<th>Psychosocial risk</th>
<th>Total sample (N=538)</th>
<th>Chemical service (N=260)</th>
<th>Firefighting service (N=194)</th>
<th>Medical service (N=84)</th>
</tr>
</thead>
<tbody>
<tr>
<td>job demands</td>
<td>2.45 (0.63)</td>
<td>2.24 (0.51)</td>
<td>2.44 (0.56)</td>
<td>3.16 (0.63)</td>
</tr>
<tr>
<td>lack of control at work</td>
<td>2.98 (0.65)</td>
<td>2.85 (0.64)</td>
<td>3.09 (0.67)</td>
<td>3.14 (0.57)</td>
</tr>
<tr>
<td>lack of support from managers</td>
<td>2.35 (0.76)</td>
<td>2.23 (0.72)</td>
<td>2.35 (0.72)</td>
<td>2.75 (0.86)</td>
</tr>
<tr>
<td>lack of support from co-workers</td>
<td>2.08 (0.59)</td>
<td>2.10 (0.58)</td>
<td>1.96 (0.54)</td>
<td>2.34 (0.65)</td>
</tr>
<tr>
<td>problematic relationships at workplace</td>
<td>2.08 (0.78)</td>
<td>1.92 (0.69)</td>
<td>1.92 (0.67)</td>
<td>2.94 (0.74)</td>
</tr>
<tr>
<td>work role ambiguity</td>
<td>1.36 (0.47)</td>
<td>1.32 (0.45)</td>
<td>1.36 (0.49)</td>
<td>1.51 (0.44)</td>
</tr>
<tr>
<td>lack of familiarity with the changes in the work process</td>
<td>2.63 (0.63)</td>
<td>2.47 (0.70)</td>
<td>2.67 (0.70)</td>
<td>3.06 (0.82)</td>
</tr>
</tbody>
</table>

*M = mean value; SD = standard deviation*
Subjects – work stressors assessment

- Job demands
- Lack of control at work
- Lack of support from managers
- Lack of support from co-workers
- Problematic relationships at work
- Work role ambiguity
- Lack of familiarity with the changes

Legend:
- Kemljska djelatnost
- Vatrogasna djelatnost
- Medicinska djelatnost
## Subjects – work stressors assessment according to gender

<table>
<thead>
<tr>
<th>Psihosocijalni rizik</th>
<th>Men (N=458) M (SD)</th>
<th>Women (N=78) M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>job demands</td>
<td>2,34 (0,56)</td>
<td>3,13 (0,62)</td>
</tr>
<tr>
<td>lack of control at work</td>
<td>2,95 (0,66)</td>
<td>3,12 (0,57)</td>
</tr>
<tr>
<td>lack of support from managers</td>
<td>2,29 (0,73)</td>
<td>2,74 (0,85)</td>
</tr>
<tr>
<td>lack of support from co-workers</td>
<td>2,04 (0,57)</td>
<td>2,34 (0,66)</td>
</tr>
<tr>
<td>problematic relationships at workplace</td>
<td>1,93 (0,69)</td>
<td>2,94 (0,74)</td>
</tr>
<tr>
<td>work role ambiguity</td>
<td>1,34 (0,47)</td>
<td>1,51 (0,45)</td>
</tr>
<tr>
<td>lack of familiarity with the changes in the work process</td>
<td>2,56 (0,71)</td>
<td>3,06 (0,82)</td>
</tr>
</tbody>
</table>

* $M$ = mean value; $SD$ = standard deviation
Subjects – work stressors assessment according to gender

- Lack of familiarity with the changes in the work process: 2.56 (M), 3.06 (F)
- Work role ambiguity: 1.34 (M), 1.51 (F)
- Problematic relationships at workplace: 1.93 (M), 2.94 (F)
- Lack of support from co-workers: 2.04 (M), 2.34 (F)
- Lack of support from managers: 2.29 (M), 2.74 (F)
- Lack of control at work: 2.95 (M), 3.12 (F)
- Job demands: 2.34 (M), 3.13 (F)
CONCLUSION

- highest work stressor is lack of control at work
- lowest stressor is work role ambiguity

Analyses of the results indicate the majority of the results are slightly below mean value – moderate level of stress at work

- women assess job demands as highest work stressor
- men assess lack of control as highest work stressor

Men report lower levels of stress according to women
Croatian Institute for Health Protection and Safety at Work
Radoslava Cimermana 64a, Zagreb
www.hzzzsr.hr
e-mail: hzzzsr@hzzzsr.hr