Are social problems a consequence of chronic pain

Centre for Pain Medicine

Ljutow, André
Metzger, Marius; Matter, Sibylle; Frotzler, Angela; Schleinzer, Wolfgang
Swiss Paraplegic Centre, Nottwil, Switzerland
Disclosure

- I do not have any affiliations (financial or otherwise) with a commercial organization. The presented data have been elaborated without any financial help of any kind.
• my workplace
• the bio-psycho-social model of disease
• how to assess the need for social work in pain medicine
• is there a special relationship between pain and social factors?
• result of our data analysis: social factors are independent possible sources for chronic pain as well as medical or psychological disorders
Centre for Pain Medicine

a part of the swiss paraplegic centre
fullfills the IASP criteria for a comprehensive pain centre
eleven different specialities work together in one team
we provide any kind of pain care, education on all levels, research

www.pain-nottwil.ch
Biopsychosocial model of disease

- biosphere
- society, nation
- culture, subculture
- community, village, town
- family
- two-person relationships
- Individual person
- organ
- tissue
- organelle
- molecule
- atom

**Health** = the competence of the system to cope with disturbances on any level in a self-adjusting way.

**Disease** = the competence to cope with disturbances on a certain level is not sufficient, regulation circuits are overstrained. The location and level of disturbance are not important, but the possible harm to the subordinate or superordinate level of the system is.

Biopsychosocial model of G.L. Engel 1975, 1976
Disability model of Main & Spanswick

- Injury
- Pain:
  - Focus on symptoms
  - Physical deconditioning
  - Guarded movements & muscle spasm
  - Reduced physical activity
  - Anger & frustration
  - Socio-economic factors
- Patient's (mis)attributions
  - Fear & avoidance
    - Treatment (failed)
  - Iatrogenics
- Family

Main & Spanswick, 2000

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The story behind the pain
Tasks of social work in pain medicine

- Diagnostics, investigation of social status
- Definition of the need for social counseling
- Rating of social status means assessment of its relationship to the general view of the person and his/her pain
  - independent factors
  - co-factors for pain chronification or maintenance
  - independent causes of suffering
- Counseling, guidance of the patient during the therapeutic process to the extent required
Publications on social work in pain medicine

- Almost all publications rely on the biopsychosocial concept of disease.
- Many of these publications investigate risk factors for the maintenance and chronification of pain (but not as a cause). (Systematic review of psychosocial factors at work and private life as risk factors for back pain, Hoogendoorn 2000; Prognosis in patients with recent onset low back pain in Australian primary care: inception cohort study, Henschke 2008)
- In large-scale reviews, a social worker is proposed as a member of the team in multidisciplinary pain treatment units (in palliative care more often than in non-tumor pain) (Chronic pain management, Schatman, Campbell 2007)
Is there a need for professional social workers in pain medicine?

- Numerical data from the literature

- Not only are objective data on requirements lacking, but standardized instruments to create these data are also missing
Structured interview for the determination of a need for social work

- The following areas of social life (Staub-Bernasconi 1996, Geiser 2000) were investigated using the interview we developed:
  - Living conditions / housing
  - Work
  - Income and insurance
  - Social environment
  - Legal issues
Structured interview for the determination of need for social work

1. Housing
   A) How do you feel in your current housing situation?
      1.1.1 How do you rate your actual housing?
      - O good   O rather good   O rather bad   O bad

      1.1.2 How is your well-being concerning noise exposure?
      - O good   O rather good   O rather bad   O bad

      1.1.3 How do you rate your amount of living space?
      - O good   O rather good   O rather bad   O bad
Data of our survey patients

- 91 patients at their first consultation in the Centre for Pain Medicine at Nottwil, Switzerland

- 40 men (44%) / 51 women (56%)

- mean age 53.1 years, SD = 15.9

- 65 Swiss (71.4%); others: Kosovar (5), Italian (4), Bosnian (3), German (2), Croatian (2), …

- 62 married (68.1%)
Results of the interview

Living

- Contentment with housing: 94.44%
- Housing adapted to impairment: 84%
- Need for housekeeping help: 88%
- Need for help with personal hygiene: 99%
Results of the interview

Work situation

<table>
<thead>
<tr>
<th>No work</th>
<th>Job satisfaction</th>
<th>Adjustment workplace</th>
<th>Fear of job loss</th>
<th>Relation to employer/co-workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>gut/ehrer gut</td>
<td>36%</td>
<td>gut/ehrer gut</td>
<td>27%</td>
<td>gut/ehrer gut</td>
</tr>
<tr>
<td>schlecht/ehrer schlecht</td>
<td>7%</td>
<td>schlecht/ehrer schlecht</td>
<td>16%</td>
<td>schlecht/ehrer schlecht</td>
</tr>
<tr>
<td>gut/ehrer gut</td>
<td>31%</td>
<td>gut/ehrer gut</td>
<td>31%</td>
<td>gut/ehrer gut</td>
</tr>
<tr>
<td>schlecht/ehrer schlecht</td>
<td>12%</td>
<td>schlecht/ehrer schlecht</td>
<td>12%</td>
<td>schlecht/ehrer schlecht</td>
</tr>
<tr>
<td>nein/ehrer nein</td>
<td>57%</td>
<td>nein/ehrer nein</td>
<td>57%</td>
<td>nein/ehrer nein</td>
</tr>
<tr>
<td>ja/ehrer ja</td>
<td>7%</td>
<td>ja/ehrer ja</td>
<td>7%</td>
<td>ja/ehrer ja</td>
</tr>
</tbody>
</table>

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Results of the interview

### Income

**Sufficient**
- Ja: 88%
- Nein: 12%

**Debts**
- Ja: 97%
- Nein: 3%

**Enforcement**
- Ja: 98%
- Nein: 2%

**Social welfare**
- Ja: 90%
- Nein: 10%

**Financial counseling**
Results of the interview

Insurance

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>答</th>
<th>否</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHV</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>IV</td>
<td>13%</td>
<td>87%</td>
</tr>
<tr>
<td>SUVA</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>BVG</td>
<td>29%</td>
<td>71%</td>
</tr>
<tr>
<td>ALV/RAV</td>
<td>2%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Results of the interview

Family and social environment

- Good relationship: 75%
- Recreation: 25%
- Stress, conflicts: 34%
- Social counseling: 56%
- Social withdrawal: 67%

Social counseling: 88%
Social withdrawal: 33%

Results of the interview

Legal issues

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>99%</td>
</tr>
<tr>
<td>Family</td>
<td>96%</td>
</tr>
<tr>
<td>Work</td>
<td>90%</td>
</tr>
<tr>
<td>Foreigner</td>
<td>99%</td>
</tr>
<tr>
<td>Criminal Law</td>
<td>100%</td>
</tr>
<tr>
<td>Liability</td>
<td>96%</td>
</tr>
</tbody>
</table>

(nein: no, weiss nicht / ja: don't know / yes)
# Results of the interview

<table>
<thead>
<tr>
<th>Area</th>
<th>Stress factors in %</th>
<th>Multiple stress factors in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>living</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>work</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>income + insurance</td>
<td>53</td>
<td>38</td>
</tr>
<tr>
<td>social environment</td>
<td>18 S / 56 R/ 49 SW</td>
<td>62</td>
</tr>
<tr>
<td>legal questions</td>
<td>19</td>
<td>10</td>
</tr>
</tbody>
</table>

S = support by friends, family, partner / R= recreation / SW = social withdrawal

- **27% do not have multiple stress factors**
- **35% have multiple stress factors in one area**
- **31% have multiple stress factors in two areas**
- **7% have multiple stress factors in three areas**
Requirements of foreigners

- Swiss natives and foreigners show differences in emotional distress and impairment in the psychological data.
- Thus, there is no difference in the need for social work.
- There are no significant differences between these groups in
  - housing
  - work
  - social support
  - recreation, social withdrawal
Conclusions of the social interview

- The structured interview permits the need for social work to be identified
- The concept of a biopsychosocial model of disease makes sense, at least in pain medicine
- The need for social work in patients with chronic pain is probably not just a result of medical or psychological findings
- The integration of a social worker in an interdisciplinary team of pain specialists needs to be considered
Is there a special relationship between pain and social factors?

- An experimental study of shared sensitivity to physical pain and social rejection

- Social rejection shares somatosensory representations with physical pain
  Kross, Bermann, Mischel, Smith, Wager  PNAS Feb 22, 2011
  www.pnas.org/cgi/doi/10.1073/pnas.1102693108
Result of our data analysis

- Do psychological and medical factors explain, which patient has a need for social work?
- Included psychological factors
  - Depression (HADSD)
  - Anxiety (HADSA)
  - Chronicity of pain (FSC)
  - Psychological and physiological health-related life quality (SF-12)
- Included medical factors
  - Pain intensity
  - Number of medical diagnosis
  - Number of pain diagnosis
## Result of our data analysis

<table>
<thead>
<tr>
<th>Areas</th>
<th>The probability of need for social work in pain medicine was significantly influenced by</th>
<th>Logistic Regression Stepwise backward $\alpha = .05$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Living</strong></td>
<td>Health related quality of life (SF-12 psychological score)</td>
<td>R $^2 = 0.176, \ p &lt; .05$</td>
</tr>
<tr>
<td></td>
<td>Pain intensity</td>
<td></td>
</tr>
<tr>
<td><strong>Work</strong></td>
<td>ANY of the psychological and medical parameters</td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>Anxiety (HADSA)</td>
<td>R $^2 = 0.328, \ p &lt; .05$</td>
</tr>
<tr>
<td><strong>Social environment</strong></td>
<td>Health related quality of life (SF-12 somatic score)</td>
<td>R $^2 = 0.205, \ p &lt; .05$</td>
</tr>
<tr>
<td><strong>Legal questions</strong></td>
<td>Health related quality of life (SF-12 psychological score)</td>
<td>R $^2 = 0.253, \ p &lt; .05$</td>
</tr>
</tbody>
</table>

- The probability of need for social work in pain medicine was determined by only few of the analysed factors.
- The need for social work in the different areas has to be especially determined by social workers. It may not be interfered by psychological factors (i.e. depression, anxiety) or medical factors (i.e. pain intensity, number of diagnosis)
Take Home Messages

- We have to pay more attention to the social aspects of pain than we are doing today, and we have to do it with professional social workers as team members!
- Medical, psychological and social conditions influence each other in many ways.
- Social aspects of chronic pain conditions have to be recognized and treated early.
- The need for social work in the different areas has to be especially determined by social workers. It may not be interfered by psychological factors (i.e. depression, anxiety) or medical factors (i.e. pain intensity, number of diagnosis)
Thank you for your attention

Thanks to the team behind

- Monika Seehafer, Kathrin Huber, Sibylle Matter, Angela Frotzler
- Marius Metzger
- Theresa Tondorf, Susan Balogh, Wolf Schleinzer

1 Clinical trial unit, Swiss Paraplegic Centre
2 Lucerne University of Applied Sciences and Arts, Social Work