Somatoform disorders – functional somatic syndromes
– Bodily distress syndrome.
Need for care and organisation of care in
an international perspective
- EACLPP Lecture

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MD, Ph.D, Dr.Med.Sc.

www.functionaldisorders.dk
Outline

• The new Bodily Distress Syndrome (BDS) diagnosis

• Implications for treatment and the organisation of care
Somatoform disorders

- DSM-IV (300.X)
  Somatization Disorder
  Undifferentiated SD
  Hypochondriasis
  Pain Disorder
  SD not otherwise specified

- ICD-10 (F45.X)
  Somatization Disorder
  Undifferentiated SD
  Hypochondriacal Disorder
  Persistent Somatoform Pain
  SD unspecified

Conversion disorder
  ___ / ___
  ___ / ___
Body Dysmorphic Disorder
  ___ / ___

- Dissociative Disorder (F44.4-7)
- Other DS
- Somatoform Autonomic Dysfunction
- Pers. Delusional Disorders (F22.8)
- Neurasthenia (F48.0)
## Functional somatic syndromes by specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastroenterology</td>
<td>Irritable bowel syndrome (IBS), non-ulcer dyspepsia</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>Pelvic arthropathy, premenstrual syndrome, chronic pelvic pain</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>Fibromyalgia, lower back pain</td>
</tr>
<tr>
<td>Cardiology</td>
<td>Atypical or non-cardiac chest pain, syndrome-X</td>
</tr>
<tr>
<td>Respiratory medicine</td>
<td>Hyperventilation syndrome</td>
</tr>
<tr>
<td>Infectious diseases</td>
<td>Chronic fatigue syndrome (CFS, ME)</td>
</tr>
<tr>
<td>Neurology</td>
<td>Tension headache, pseudo-epileptic seizure</td>
</tr>
<tr>
<td>Dentistry</td>
<td>Temporomandibular joint dysfunction, atypical facial pain</td>
</tr>
<tr>
<td>Ear, nose and throat</td>
<td>Globus syndrome</td>
</tr>
<tr>
<td>Allergy</td>
<td>Multiple chemical sensitivity (MCS)</td>
</tr>
<tr>
<td>?</td>
<td>Electricity hypersensitivity</td>
</tr>
<tr>
<td>?</td>
<td>Infrasound hypersensitivity</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>WAD – whiplash ass. disorder</td>
</tr>
<tr>
<td>Anaesthesiology</td>
<td>Chronic benign pain syndrome</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>Somatoform disorders, Neurostenia, Dissociative (conversion)</td>
</tr>
</tbody>
</table>
Fibromyalgia - definition

Widespread pain condition with presenting pain in both body halves - beyond and beneath the waist and pain at 11 out of 18 tender points by a 4-kilo pressure

*ACR criteria (Wolfe et al. A&R 1990)*
### Bodily distress syndrome (BDS), latent class analysis (n=693).

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Symptom groups</th>
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</thead>
<tbody>
<tr>
<td>≥ 3</td>
<td></td>
<td>≥ 3 Cardiopulmonary /autonomic arousal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Palpitations, heart pounding, precordial discomfort, breathlessness without exertion, hyperventilation, hot or cold sweats, trembling or shaking, dry mouth, churning in stomach, &quot;butterflies&quot;, flushing or blushing</td>
</tr>
<tr>
<td>≥ 3</td>
<td></td>
<td>≥ 3 Gastrointestinal arousal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequent loose bowel movements, abdominal pains, feeling bloated, full of gas, distended, heavy in the stomach, regurgitations, constipation, nausea, vomiting, burning sensation in chest or epigastrium</td>
</tr>
<tr>
<td>≥ 3</td>
<td></td>
<td>≥ 3 Musculoskeletal tension</td>
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<tr>
<td></td>
<td></td>
<td>Pains in arms or legs, muscular aches or pains, feelings of paresis or localized weakness, back ache, pain moving from one place to another, unpleasant numbness or tingling sensations</td>
</tr>
<tr>
<td>≥ 3</td>
<td></td>
<td>≥ 3 General symptoms</td>
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<tr>
<td></td>
<td></td>
<td>Concentration difficulties, impairment of memory, fatigue, headache, dizziness</td>
</tr>
<tr>
<td>≥ 4</td>
<td></td>
<td>≥ 4 symptoms from one of the above groups</td>
</tr>
</tbody>
</table>

**Diagnostic criteria:**

a) 1-3: "yes": Moderate or single-organ system 'bodily distress syndrome'
   - 4-5: "yes": Severe or multi-organ system 'bodily distress syndrome'

b) Relevant differential diagnoses ruled out
c) Impairing
d) >= 6 month (ICD-11)

Fink et al *Psychosomatic Med. 2007*
### Symptom clusters or factors in patients presenting with medically unexplained symptoms (exploratory and interview-based studies only)

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>GI</td>
<td>+</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Musc.skel./pain</td>
<td>(+)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<tr>
<td>CP</td>
<td></td>
<td>+</td>
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<td>+</td>
<td>+</td>
<td>(+)</td>
<td>-</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>Neurological</td>
<td>+</td>
<td></td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sexual</td>
<td>+</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Headache</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High hierarchy cluster (i.e. multisympt.)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>NA</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

**Schröder & Fink J Psychosom Res 2009**

**Irritable bowel syndrome**

**Fibromyalgia**
Latent structure model

Stress

- Emotional distress
  - Anxiety
  - Depression
  - Unspecific Etc.

- Cognitive disturbances
  - Memory Concentration Etc.

- Bodily distress
  - Autonomic arousal & HPA axis hyperactivity "alertness"

- CP arousal
  1) Hot or cold sweats
  2) Trembling or shaking
  3) Dry mouth
  4) Heart pounding
  5) "Butterflies" in stomach,
  6) Flushing or blushing
  7) Precordial discomfort
  8) Breathlessness
  9) Hyperventilation

- GI arousal
  1) Bowel hyperactivity
  2) Abdominal pains
  3) Feeling bloated
  4) Diarrhoea
  5) Regurgitation
  6) Constipation
  7) Nausea
  8) Vomiting
  9) Burning in epigastrium

- Musculoskeletal arousal
  1) Pains in arms or legs
  2) Muscular aches/pains
  3) Pains in the joints
  4) Localized weakness
  5) Back ache
  6) Pain moving around
  7) Numbness/tingling

- Unspecific hypersensitivity to bodily symptoms
Any Somatoform disorder
n=178

Any functional somatic syndrome
n=220
Prevalence 14.2 [11.8-17.0]

Diagnostic overlap of Bodily distress syndrome with explored somatoform disorders and functional somatic syndromes

Overall diagnostic agreement 95 % (95 % CI [93.1 ; 96.0]; kappa 0.86, p<0.0001)

Explored functional somatic syndromes:
- fibromyalgia
- chronic fatigue syndrome
- irritable bowel syndrome
- non-cardiac chest pain
- hyperventilation syndrome
- pain syndrome (e.g. low back pain or chronic pelvic pain)

Bodily distress syndrome
n=250
prevalence 15.7 [13.2-18.6]

Fink P. & Schröder A. J Psychosom Res 2010
Conclusion – Bodily distress syndrome

- The construct is empirically based on patients from different clinical settings
- It is based on the identification of symptom patterns (not symptom count)
- It does not include psychological or behavioral symptoms / criteria
- Despite this it includes almost all patients with DSM-IV somatoform disorder characterized by physical symptoms
- It includes almost all patients with the most common functional somatic syndromes
- It includes both patients with multiple symptoms and sub-categories
Patients presenting with physical symptoms

- Bodily distress disorder
- Health anxiety
- Others
- Secondary to other mental disorder?

Functional somatic syndromes

Somatoform disorders (ICD-10/DSM-IV)
- Somatization disorder
- Undifferentiated SD
- Pain disorder
- Neurastenia / CFS
- Somatoform autonomic dysfunction
- Hypochondriasis
- NOS

Fink & Schröder, *J Psychosom Res* 2010
Implications for new classification

- Bodily distress syndrome
  - Severe (multi-organ system type)
  - Modest (single-organ system type)
    - CP type
    - GI type (incl. IBS)
    - MS type (incl. Fibromyalgia)
    - Others

- Health anxiety
- Others
- Factitious disorder (incl. Münchhausen’s syndrome)
- Secondary to other mental disorder?

Fink & Schröder, *J Psychosom Res* 2010
Outline

• The new Bodily Distress Syndrome (BDS) diagnosis

• Implications for treatment and the organisation of care
## Evidence for antidepressants, aerobic exercise and psychological interventions in different subtypes of bodily distress

<table>
<thead>
<tr>
<th>Symptom profile (BDS subtype) and corresponding functional somatic syndrome or diagnostic label</th>
<th>Type of treatment</th>
<th>GS-type Chronic fatigue syndrome</th>
<th>MS-type Fibromyalgia</th>
<th>GI-type Irritable bowel syndrome</th>
<th>CP-type Non-cardiac chest pain</th>
<th>Multi-organ type Multiple medically unexplained symptoms and Somatization disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidepressants</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
<td>?</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Exercise</td>
<td>+++</td>
<td>+++</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>+</td>
</tr>
<tr>
<td>Psychological treatment (mainly CBT)</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++</td>
</tr>
</tbody>
</table>

Evidence ratings are based on meta-analyses or high-quality randomised controlled trials.

+++ strong evidence
++ moderate evidence
+ weak evidence
? no evidence, or lack of studies

Overhead-model

Traditional

Russian

Arab

Chinese

Vatican

Latin American

American

United Nations
A) Organisation of service for bodily distress (functional somatic syndromes and disorders)

Traditional model
- **Infectious medicine**
  - CFS
- **Gastroenterology**
  - IBS
- **Rheumatology**
  - Fibromyalgia
- **Neurology**
  - Headache
- **Anaesthesiology**
  - Idiopathic Pain
- **Others**

CL model
- CL-psychiatry or psychosomatic
  - Assessment for mental disorders / Advice
  - Treatment & follow-up?

Primary care
- Functional or idiopathic symptoms

B) Fractionated specialised clinics

- **Infectious medicine**
  - CFS
- **Gastroenterology**
  - IBS
- **Rheumatology**
  - Fibromyalgia
- **Neurology**
  - Headache
- **Anaesthesiology**
  - Pain
- **Others**

- **Primary care**
  - Functional or idiopathic symptoms

- **Gen. Medicine**
  - **General psychiatry**
    - Somatoform and related disorder

- **CL-psychiatry**

Fink et al. Current state of management and organisation of care in: Medically unexplained symptoms, somatisation and bodily: Developing better clinical services. Cambridge University Press 2011
C) Specialised clinic for bodily distress syndrome including functional somatic syndromes

- Infectious medicine
  - CFS
- Gastroenterology
  - IBS
- Rheumatology
  - Fibromyalgia
- Neurology
  - Headache
- Anaesthesiology
  - Pain
- Others

Functional disorders / Bodily distress
If necessary, separate programs for various syndromes

Primary care
Functional or idiopathic symptoms

Gen. Psychiatry
General psychiatry
Somatoform and related disorder

CL psychiatry

Fink et al. Current state of management and organisation of care in: Medically unexplained symptoms, somatisation and bodily: Developing better clinical services. Cambridge University Press 2011
Questions

Bodily distress or functional disorder

- Should it be a medical specialty of its own?
- Should it be a psychiatric subspecialty?
- Is it part of CL–psychiatry / psychosomatic medicine?
- Could the German psychosomatic model be used?
- Is it all pain?
- Is the time ripe for an international association for BDS?
- Should it be organised under psychiatry or under general medicine?
- How do we integrate other specialties?
- How can psychologists work with this group of patients?
Invitation

We are pleased to invite you to the Annual Scientific Meeting of the European Association for Consultation-Liaison Psychiatry and Psychosomatics (EACLPP) and the European Conference on Psychosomatic Research (ECPR) entitled

Towards a New Agenda: Cross-disciplinary Approach to Psychosomatic Medicine

The conference is held in the beautiful city of Aarhus, Denmark, on 27 – 30 June 2012.

Please see the conference website for more details, www.eaclpp-ecpr2012.dk

We look forward to welcoming you in Aarhus!
One or many – pros and cons

Pros

• Substantial evidence that functional somatic syndromes belong to the same diagnosis category
• The treatment is by large the same regardless of the name
  – CBT
  – Gradual excercises
  – Antidepressants
• The symptoms are by large the same
• The behaviour of the patients is by large the same
• Emotional comorbidity is by large the same
• It seems a Sisyfos task to establish services for multiple syndromes

Cons

• CBT may be tailored to specific syndromes / symptoms
• Distinct services for each syndrome are more acceptable to some patients
• The patients attend specific specialties
Agreement between Bodily distress concept and various functional somatic syndromes and somatoform disorders

<table>
<thead>
<tr>
<th>Bodily distress syndrome (n=250)</th>
<th>Fibromyalgia (% n=58)</th>
<th>CFS (% n=54)</th>
<th>IBS (% n=43)</th>
<th>Chest pain (% n=129)</th>
<th>Hypervent. synd. (% n=49)</th>
<th>Pain syndrome (% n=130)</th>
<th>Any Som. dis. (% n=178)</th>
<th>Any FSS (% n=242)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-organ type (n=57)</td>
<td>43.1</td>
<td>51.9</td>
<td>48.8</td>
<td>30.2</td>
<td>43.8</td>
<td>26.9</td>
<td>24.2</td>
<td>22.0</td>
</tr>
<tr>
<td>Single-organ type (n=193)</td>
<td>56.9</td>
<td>48.1</td>
<td>48.8</td>
<td>65.1</td>
<td>56.3</td>
<td>66.9</td>
<td>65.7</td>
<td>66.0</td>
</tr>
<tr>
<td>CP subtype (n=60)</td>
<td>8.6</td>
<td>13.0</td>
<td>11.6</td>
<td>29.5</td>
<td>27.1</td>
<td>19.2</td>
<td>18.5</td>
<td>21.2</td>
</tr>
<tr>
<td>Gl subtype (n=46)</td>
<td>6.9</td>
<td>9.3</td>
<td>44.2</td>
<td>20.2</td>
<td>10.4</td>
<td>14.6</td>
<td>14.0</td>
<td>16.4</td>
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<tr>
<td>MS subtype (n=71)</td>
<td>46.6</td>
<td>33.3</td>
<td>7.0</td>
<td>18.6</td>
<td>16.7</td>
<td>31.5</td>
<td>27.0</td>
<td>24.0</td>
</tr>
<tr>
<td>GS subtype (n=66)</td>
<td>25.9</td>
<td>29.6</td>
<td>7.0</td>
<td>22.5</td>
<td>16.7</td>
<td>22.3</td>
<td>25.8</td>
<td>23.6</td>
</tr>
</tbody>
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P. Fink and A. Schröder. *J Psychosom Res, 2010*