MUS becomes Bodily Stress Syndrome in the ICD-11 for primary care

Results from the WHO Primary Care Consultation Group on mental health

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OUTLINE

- Classification systems and MUS
- WHO working process
- New proposal for the ICD-11
  - Evidence
  - Field trials
- Discussion and challenges

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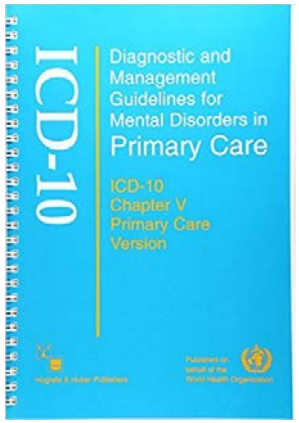
Classification systems

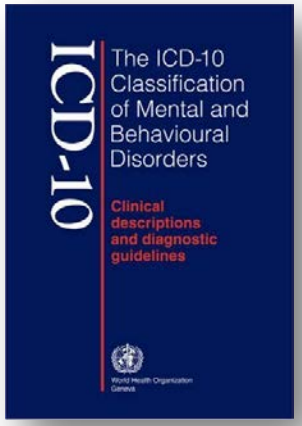
Primary care

- ICD-PC
  - ICD-PC mental disorders
- ICPC
- Read codes
- (ICF)
- ……



Secondary care

- ICD
- DSM
- Snomed-CT (terminology)
- ……



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ICD-10-PC chapter V
Functional Disorders

F44 Dissociative (conversion) disorder

F45 Unexplained somatic complaints

F48 Neurasthenia

Not useful for PC clinicians

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Features of unexplained somatic complaints

- **Various many physical symptoms without a physical explanation** (a full history and physical examination are necessary to determine this)
- **Frequent medical visits in spite of negative investigations**
- Some patients may be primarily concerned with obtaining relief from physical symptoms. Others may be worried about having a physical illness and be unable to believe that no physical condition is present (hypochondriasis).
- **Symptoms of depression and anxiety are common**

Classification ICD-10 – chapter V/F

Somatoform disorders

Physical symptoms and persistent requests for medical investigations, in spite of negative findings and reassurance

Duration > 6 months

F45.0 Somatization disorder (>2 years)
F45.1 Undifferentiated somatoform disorder
F45.2 Hypochondriacal disorder
F45.3 Somatoform autonomic dysfunction
F45.4 Persisting somatoform pain disorder
F45.8 Other somatoform disorders
F45.9 Somatoform disorder, unspecified

Neurastenia
Dissociative disorder

Classification ICD-10

Medical specialty	Functional somatic syndrome
Gastroenterology	Irritable bowel syndrome (IBS), non-ulcer dyspepsia
Gynaecology	Pelvic arthropathy, premenstrual syndrome, chronic pelvic pain
Rheumatology	Fibromyalgia, chronic lower back pain
Cardiology	Atypical or non-cardiac chest pain
Respiratory medicine	Hyperventilation syndrome
Infectious diseases	Chronic fatigue syndrome (CFS, ME)
Neurology	Tension headache, pseudo-epileptic seizure
Dentistry	Temporomandibular joint dysfunction, atypical facial pain
Ear, nose and throat	Globus syndrome
Allergy	Multiple chemical sensitivity (MCS)
Orthopaedics	WAD - whiplash associated disorder
Anaesthesiology	Chronic benign pain syndrome

(Wessely 1999, Barsky 1999, Feinstein 2001, Aaron 2001, Nimnuan 2001, Whitehead 2002)

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Problems with the ICD-10 criteria

- Diagnoses based on the exclusion of organic disease
- Developed in highly selected patient populations
- ‘Somatoform Disorder’ only includes illness of at least 6 months’ duration (in ICD-10)
- Competing parallel diagnoses

- GPs are reluctant to use the diagnosis SD (fear of stigmatisation, fear of misclassification)
- GPs do not agree on the concept

(Rosendal 2007, Fink 2008, Rask 2016)

The WHO

THE ICD-11 PRIMARY CARE CONSULTATION GROUP ON MENTAL HEALTH

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International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders

- Chairs
  - **David Goldberg, UK**
  - Geoffrey Reed, WHO
  - Michael Klinkman, US
- Primary care
  - Anthony Dowell, N.Z.
  - Marianne Rosendal, DK
  - Tai Pong Lam, Hong Kong
  - (Gloria Thupayagale-Tshweneagae, Botswana)
- Psychiatrists
  - Sandra Fortes, Brazil
  - Linda Gask, UK
  - Kuruthukulangara S. Jacob, India
  - Joseph K. Mbatia, Tanzania
  - Fareed Aslam Minhas, Pakistan

8 specialist groups on the ICD-11 mental disorders

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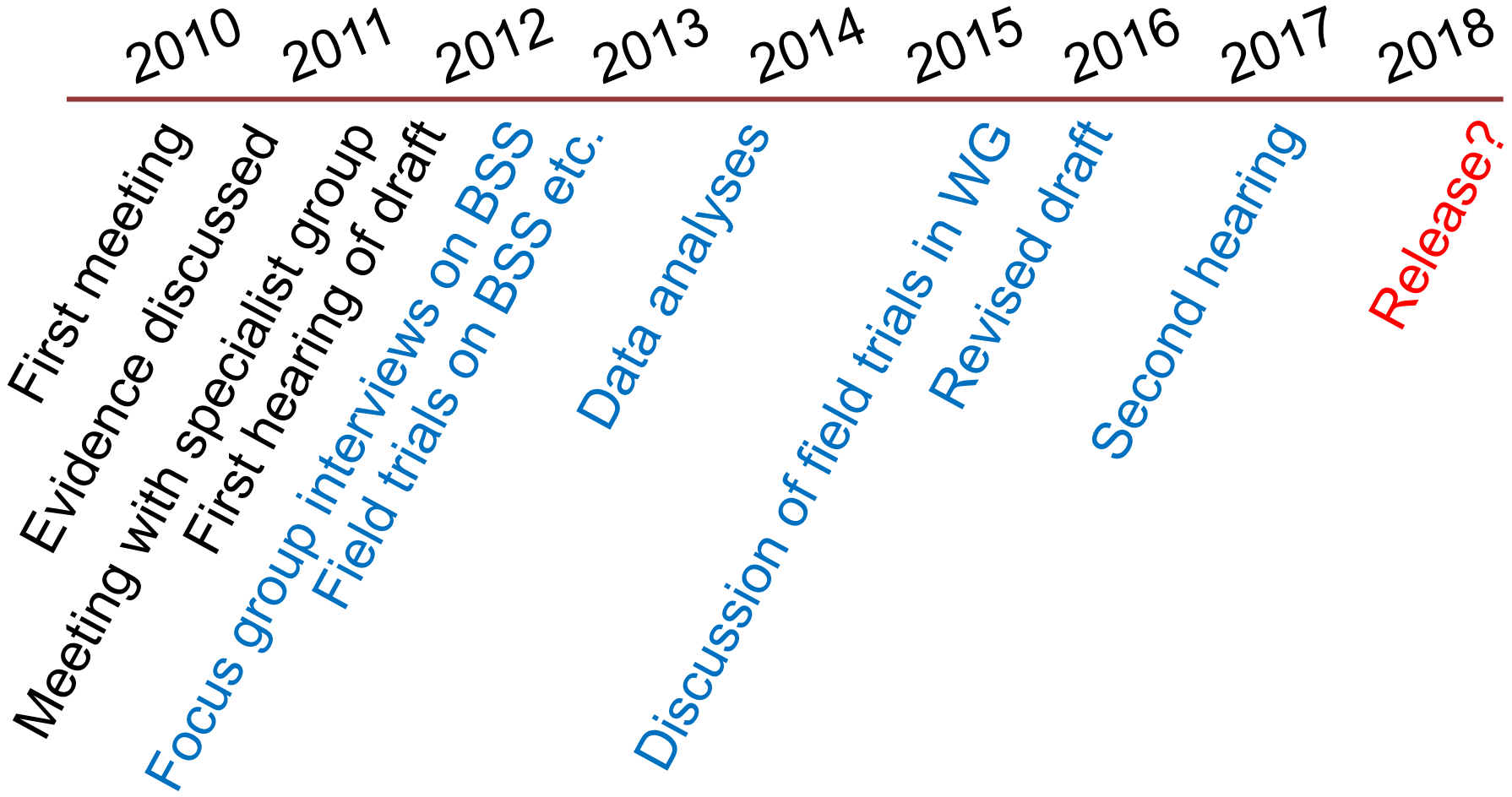
WHO timeline for new proposals



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”MUS” becomes ”BSS”

EVIDENCE

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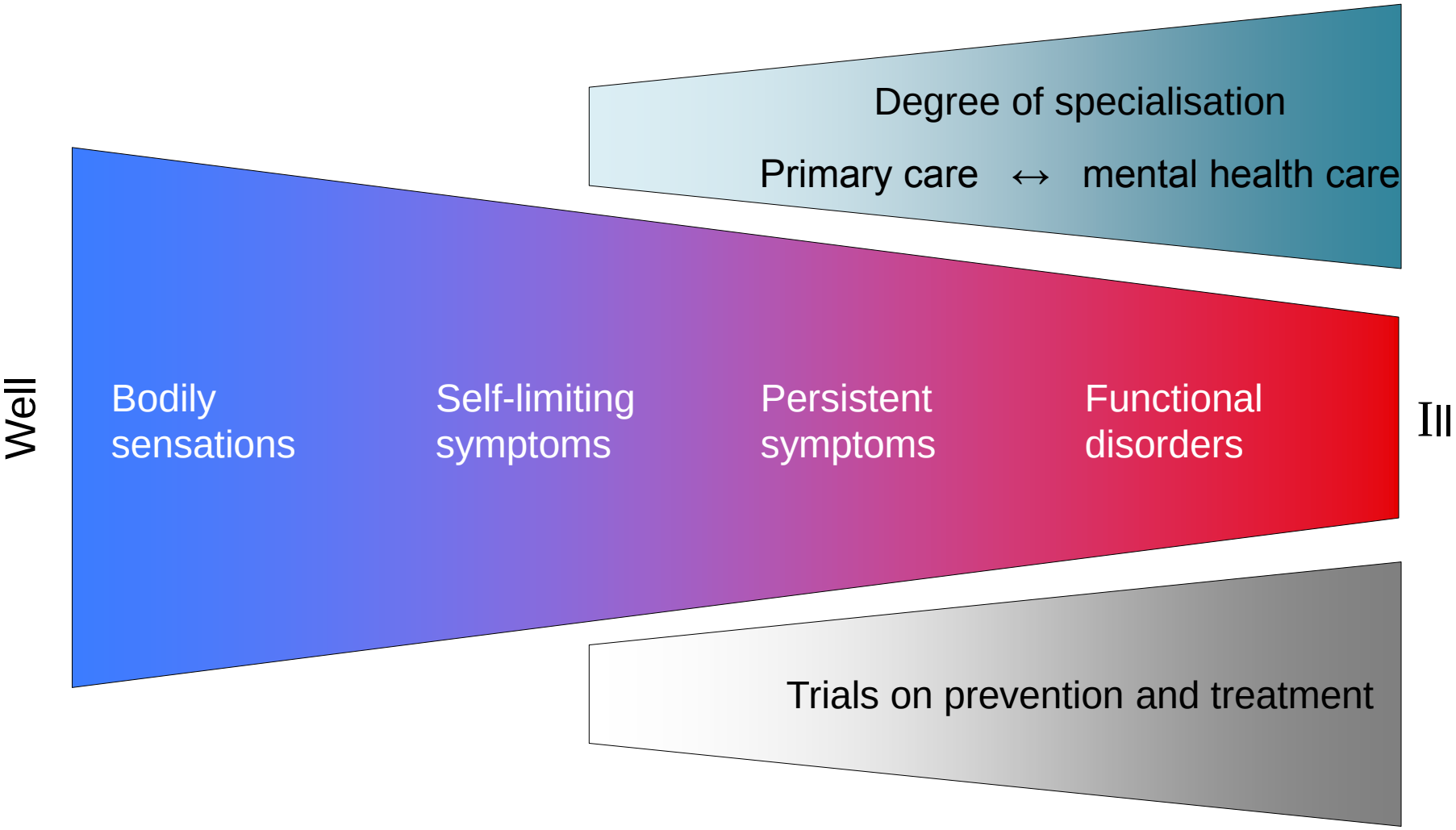
Spectrum disorder



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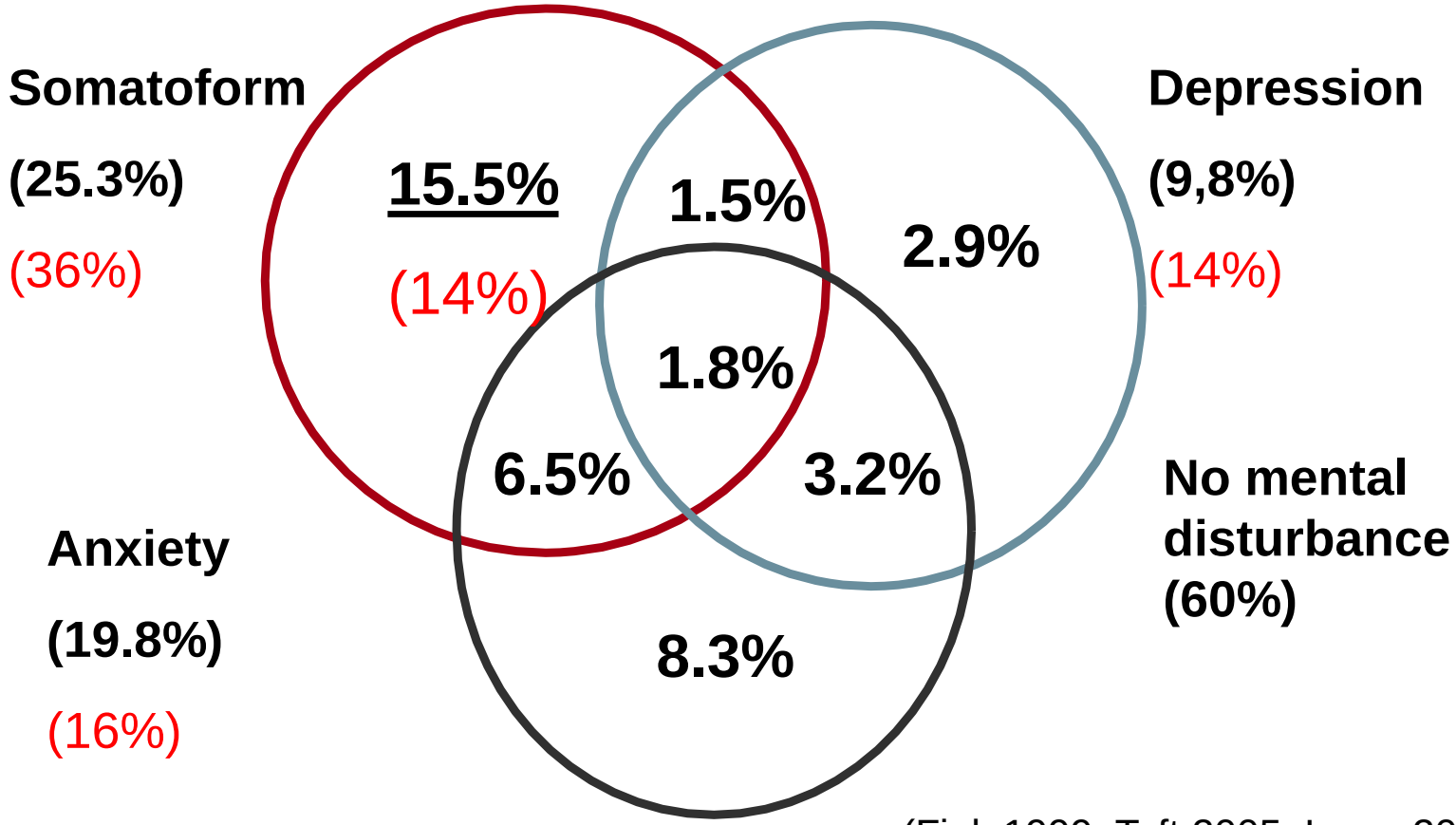
Co-morbidity in psychiatry

Medical and neurological inpatients / Primary care



(Fink 1999, Toft 2005, Lowe 2008)

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The Aarhus study

- Patient population – Central Denmark Region
  - Primary care, n=1785
  - Neurological department, n=198
  - Medical department, n=294
- Procedures
  - Consecutive inclusion of patients
  - 978 selected for interview (SCAN)
  - 76 physical symptoms explored and rated by trained interviewers (psychiatrists)
  - Principal component factor analysis of 62 most frequent symptoms
  - Latent class analyses

Physical symptoms – clusters

Cardiopulmonary/ autonomic symptoms

1. Palpitation / heart pounding
2. Precordial discomfort
3. Breathlessness without exertion
4. Hyperventilation
5. Hot or cold sweats
6. Dry mouth

Musculoskeletal symptoms

1. Pains in arms or legs
2. Muscular aches or pains
3. Pains in the joints
4. Feeling of paresis/ localized weakness
5. Backache
6. Pain moving from one place to another
7. Unpleasant numbness/ tingling sensation

Gastrointestinal symptoms

1. Abdominal pains
2. Frequent loose bowel movements
3. Diarrhoea
4. Feeling bloated/full of gas/distended
5. Nausea
6. Regurgitations
7. Burning sensation in chest/ epigastrium

General symptoms

1. Concentration difficulties
2. Excessive fatigue
3. Headache
4. Impairment of memory
5. Dizziness

(Fink 2007, Kato, 2010, Rosmalen 2010)

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Cardiopulmona

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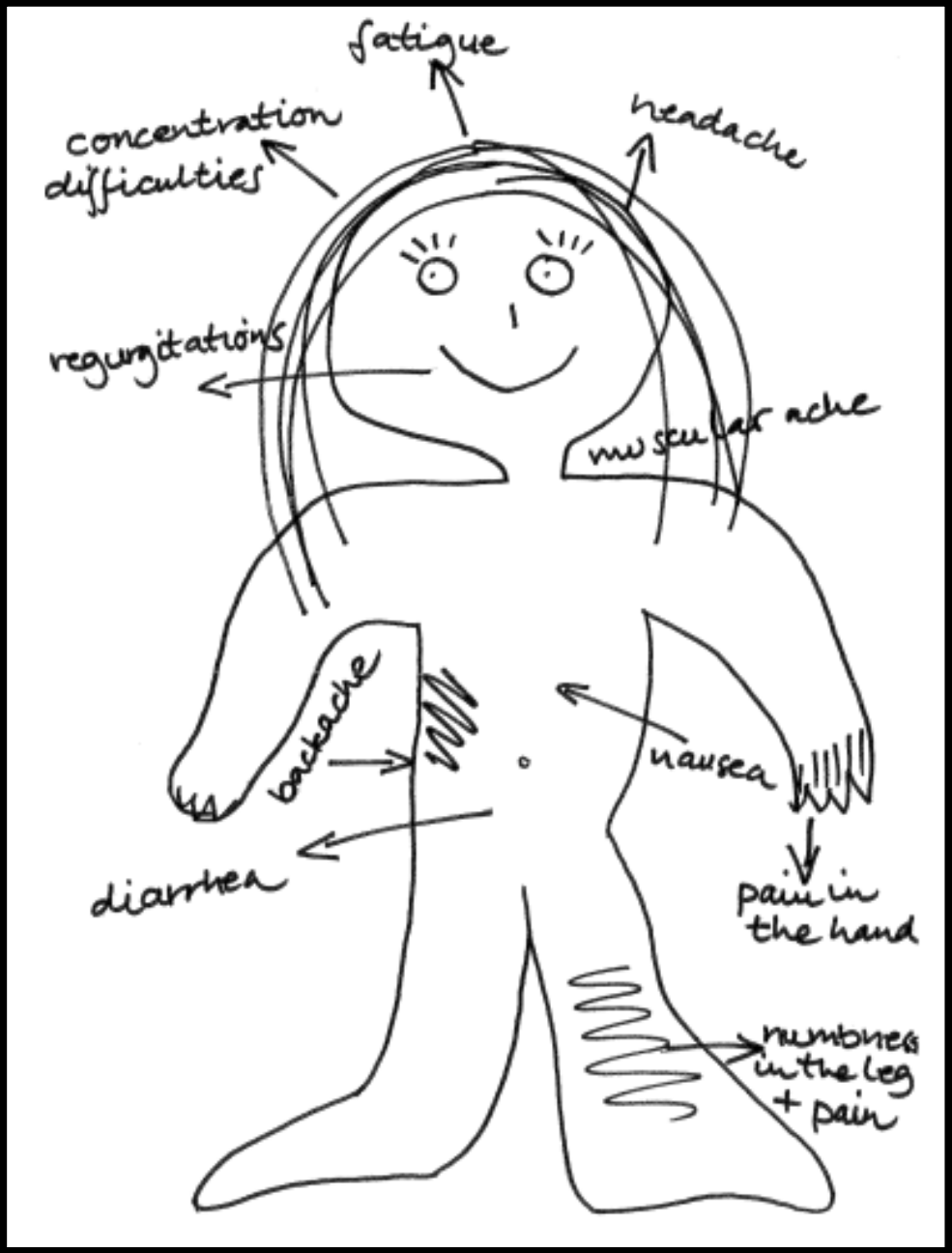

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Rosmalen 2010)

Clinical diagnosis: Bodily distress syndrome

Symptom groups
≥ 3 cardio-respiratory /autonomic arousal
≥ 3 gastro-intestinal arousal
≥ 3 musculoskeletal tension
≥ 3 general symptoms

1) Palpitations
2) Precordial discomfort
3) Breathlessness without exertion
4) Hyperventilation
5) Hot or cold sweats
6) Dry mouth

1) Fatigue
2) Headache
3) Impaired memory
4) Concentration difficulties
5) Dizziness

(Fink 2007)

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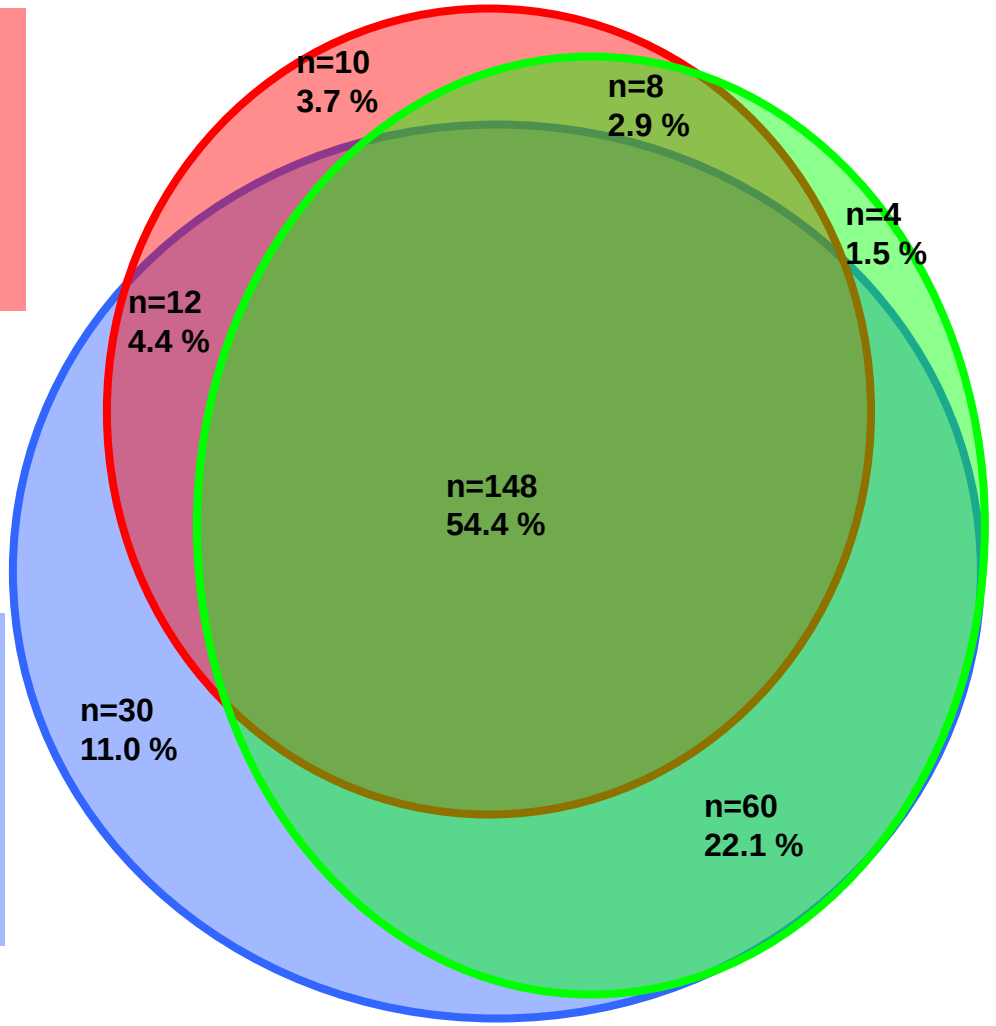
BDS captures functional syndromes

Any Somatoform disorder, n=178

Prevalence 11.2 [9.1-13.6]



Any functional somatic syndrome (fibromyalgia, CFS, hyperventilation syndrome, IBS, noncardiac chest pain, pain syndrome) **n=220**

Prevalence 14.2 [11.8-17.0]

Bodily distress syndrome, n=250

Prevalence 15.7 [13.2-18.6]

Population
N=2277

(Fink 2010)

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BDS in primary care – confirmed

- Cross sectional study 2008-2010 (Budtz-Lilly, 2016)
- Population – Central Denmark Region
  - 404 GP participants
  - Face-to-face contacts, adults (N= 4162)
  - Response 58% (n=2475) on questionnaire
- Results BDS:
  - Symptom clusters confirmed
  - Prevalence 17%
  - SF-12, Physical Component Summary: 33.6 (SD 10.1)
  - SF-12, Mental Component Summary: 39.1 (SD 11.2)

MUS becomes Bodily Stress Syndrome

PROPOSAL AND FIELD TRIALS

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Bodily Stress Syndrome – BSS proposal

- At least 3 persistent symptoms over time attributable to autonomic over-arousal (cardio-respiratory, gastrointestinal, musculoskeletal) or as general symptoms of tiredness and exhaustion
- Patient's concern over health expresses itself as excessive time and energy devoted to these symptoms
- Symptoms are distressing and result in significant disability
- Exclusion:
  - Those with anxiety or depression at case level should not be diagnosed as BSS, but sub-threshold anxious depression may be present.
  - If the symptoms are accounted for by a known physical disease this is not BSS

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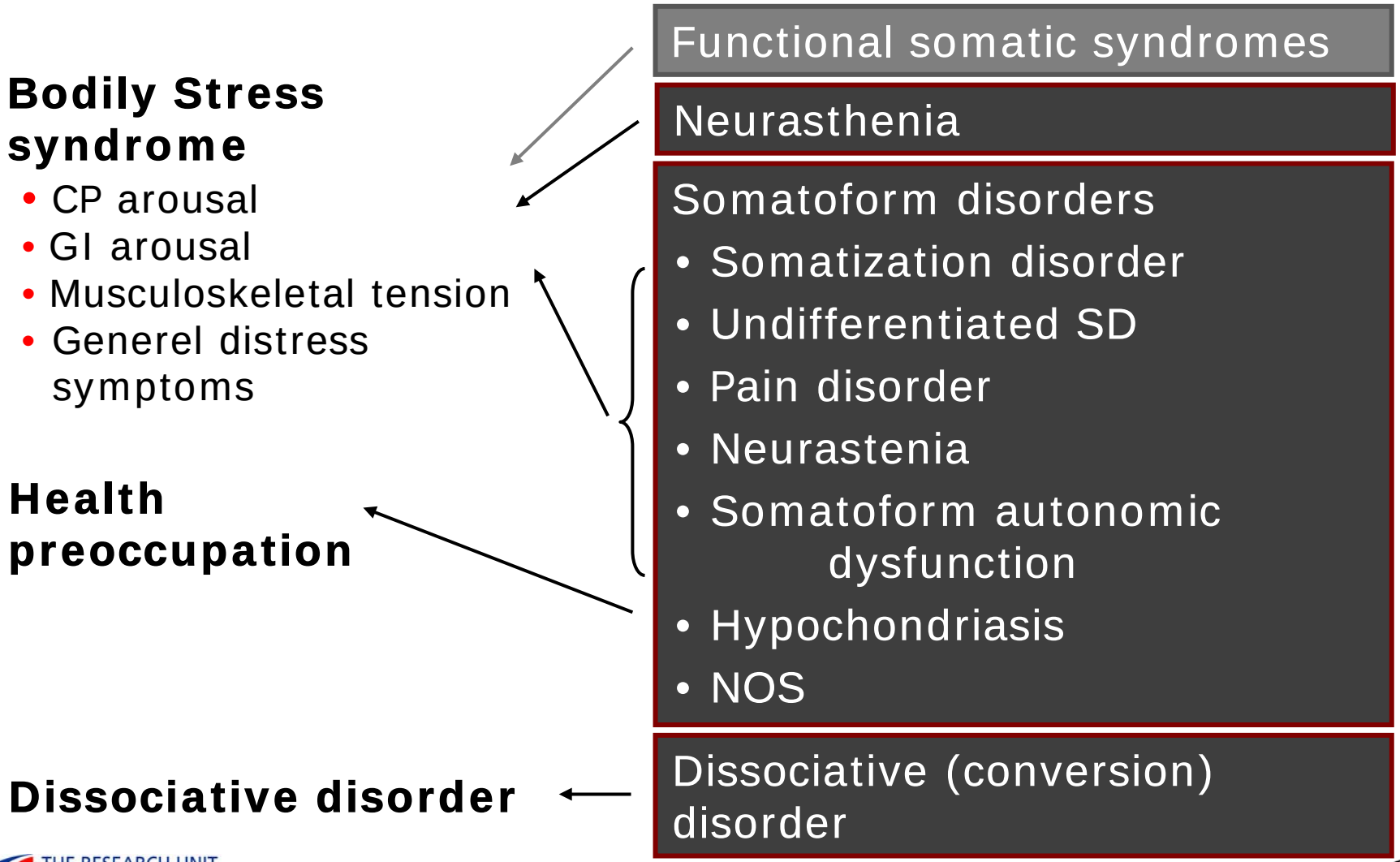
ICD-11-PC vs. ICD-10



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Field trials - publications

1) Lam TP, Goldberg DP et al: Proposed new diagnoses of anxious depression and bodily stress syndrome in ICD-11-PHC: an international focus group study (Fam Pract. 2013)
2) Goldberg DP, Reed GM et al: Multiple somatic symptoms in primary care: A field study for ICD-11 PHC, WHO's revised classification of mental disorders in primary care settings (J Psychosom Res. 2016)
3) Goldberg DP, Lam TP et al: Primary care physicians' use of the proposed classification of common mental disorders for ICD-11 (Fam Pract 2017)
4) Goldberg DP, Reed GM et al: Screening for anxiety, depression, and anxious depression in primary care: A field study for ICD-11 PHC (Journal of affective disorders, 2017)

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Field trial: Focus group interviews

- 9 groups, 4-15 participants, 2011
- 7 locations: Austria, Brazil, Hong Kong, New Zealand, Pakistan, Tanzania and United Kingdom.
- **BSS considered a better term than MUS**
- **Disagreements about the number of symptoms required**
- **Symptom categories provided a basis for useful explanations**

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Field trial: cross sectional study

- 5 countries: Hong Kong, Pakistan, Spain, Mexico, Brazil
- 587 patients
- Selective inclusion by PCP (BSS or HA)
- Followed by standardised psychiatric interview (CIS-R)

- **81% female**
- **70.4% had both BSS and HA**
- **Average of 11 somatic symptoms**

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PCP diagnoses

	Brazil (n=55)	China (n=74)	Mexico (n=175)	Pakistan (n=214)	Spain (n=69)	All (n=587)
Health Anxiety only	1 1.8%	11 **14.9%**	15 8.6%	0	2 2.9%	29 4.9%
95% Confidence Interval	-1.8 - 5.4	6.7 - 23.0	4.4 - 12.7		-1.1 - 6.9	3.2 - 6.7
BSS only	33 **60.0%**	32 43.2%	32 18.3%	33 15.4%	15 21.7%	145 24.7%
95% Confidence Interval	46.9-73.1	31.9-54.6	12.5-24.0	10.6-20.3	11.9-31.6	21.2-28.2
BSS and Health Anxiety	21 38.2%	31 41.9%	128 73.1%	181 **84.6%**	52 75.4%	413 70.4%
95% Confidence Interval	25.2-51.2	30.6-53.2	66.5-79.7	79.7-89.4	65.1-85.6	66.7-74.1

78.9% [75.6–82.2] with BSS/HA comorbid **mood or anxiety** disorder

Except China: 45.9% [34.5–57.4]

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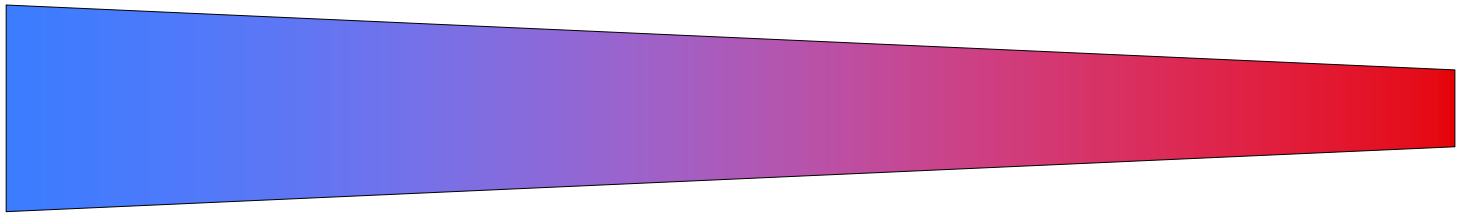
Symptom patterns in BSS

	All countries	
	N, %	95% CI
Diffuse symptoms	98, 17.6%	14.4 - 20.7
Single symptom cluster	137, 24.6%	21.0 - 28.1
Multiple symptom clusters	323, **57.9%**	53.8 - 62.0



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Key points

- Criteria for BSS proposed and in final hearing
- BSS stays in chapter about mental health
- The new criteria found useful in PC
- Quantitative results differ between countries
- Results about comorbidity and symptom patterns differ from original (rigorous) trials

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Discussion / challenges

- Conservative approach – once mental always…
- Proposal as a mix of evidence and GOBSAT
- Field trials are methodologically weak
- Must cover worldwide
  - Differences between countries?
  - Evidence for whom?
- Specialist groups at odds with criteria in primary care

- What will be released by the WHO?

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