

Supplemental material

Table S1: Diagnostic criteria of irritable bowel syndrome (29)

Within the last 12 months: Frequently or almost constantly presence of

Abdominal pain
and Distension
and Borborygmi and/or Altering stool consistency

Table S2: Diagnostic criteria for fibromyalgia syndrome (30)

Within the last 12 months: Frequently or almost constantly presence of bothersome

Pain in muscles, bones, or joints
and Pain in shoulders, arm, or hands
and Pain in legs or feet
and Pain in neck, chest, or back
and Both a right and left side positive response or a positive response on both sides

Table S3: Diagnostic criteria for chronic fatigue syndrome (31)

Within the last 12 months: More than usual or much more than usual presence of

At least 4 of
Problems with tiredness
Need to rest more
Feeling sleepy or drowsy
Problems starting things
Lack of energy
Less strength in muscles
Feeling weak
Difficulties concentrating
Making slips of the tongue when speaking
Difficulties saying the right words
Problems with memory

Table S4: Diagnostic criteria for whiplash associated disorders (32)

Within the last 12 months

Involvement in a rear-end, frontal, or side-impact car collision
and No unconsciousness in relation to accident
and Neck pain arised in relation to accident
and Neck pain ≥ 4 on VAS-scale for ≥ 6 month after accident

Abbreviations: VAS, Visual analog scale

Table S5: Diagnostic criteria of multiple chemical sensitivity (33,34)

Experiences after fragrances or chemicals

Reaction from ≥ 2 exposure types	<ul style="list-style-type: none"> Perfume, aftershave, deodorant Cleaning agents Nail polish remover, glue, permanent marker Newly printed material New household furniture Soft plastic or rubber New electronic devices Frying odors Car exhaust Tar products Smoke from wood stoves
and ≥ 1 CNS symptom	<ul style="list-style-type: none"> Headache Exhaustion or excessive fatigue Dizziness Concentration difficulties Drowsiness Panic anxiety
and ≥ 1 Respiratory symptom	<ul style="list-style-type: none"> Eyes Nose Sinus Mouth Throat Lungs
and ≥ 1 Influence in everyday life	<ul style="list-style-type: none"> Choice of personal care products Choice of way to do domestic cleaning Choice of shops
And at least	
≥ 1 Influence on social life	<ul style="list-style-type: none"> Avoidance of usage taxis or other public transport Avoidance of attending meetings, cinema, theatre, or restaurant Avoidance of attending social arrangements
or ≥ 1 Influence on work life	<ul style="list-style-type: none"> Sick leave Quit education or job Ability to maintain an education or a job
or ≥ 1 Symptom from other areas of the body	<ul style="list-style-type: none"> Skin Heart or chest Stomach or gut Urinary system Joints Muscles

Table S6: Diagnostic criteria for bodily distress syndrome (BDS) (35)

Within the last 12 month: Somewhat, quite a bit, or a lot bothered by

≥ 4 Cardiopulmonary symptoms	<ul style="list-style-type: none"> Palpations/heart pounding Precordial discomfort Breathlessness without exertion Hyperventilation Hot or cold sweats Dry mouth
≥ 4 Gastrointestinal symptoms	<ul style="list-style-type: none"> Frequent loose bowel movements Abdominal pains Feeling bloated/full of gas/distended Diarrhea Regurgitations Nausea

	Burning sensation of the upper part of stomach/epigastrium
≥ 4 Musculoskeletal symptoms	Pains in arms or legs Muscular aches or pains Pains in the joints Feeling of paresis or localized weakness Back ache Pain moving from one place to another Unpleasant numbness or tingling sensation
≥ 4 General symptoms	Concentration difficulties Excessive fatigue Headache Impairment of memory Dizziness
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1-2 of the above	Single-organ BDS
3-4 of the above	Multi-organ BDS
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Table S7: Diagnoses reported to have been received by the participants from a physician

Conventionally-defined physical disease used to measure physical comorbidity

Cancer
 Diabetes
 Hypertension
 Hypercholesterolemia
 Myocardial infarction
 Other heart disease
 Stroke
 Asthma
 Hay fever
 Atopic dermatitis
 Psoriasis
 Osteoarthritis
 Celiac disease
 Osteoporosis
 Chronic obstructive pulmonary disease

Conventionally-defined psychiatric disorder used to measure psychiatric comorbidity

Depression
 Anxiety

Functional somatic syndromes used to measure if the participant had received such a diagnosis*

Irritable bowel syndrome
 Fibromyalgia
 Chronic fatigue syndrome
 Whiplash associated disorders
 Multiple chemical sensitivity

* Were only asked in DanFunD-2

Table S8: Percentages on sex, social factors, physical health, and comorbidity of functional somatic syndromes. "X pure"=Only fulfilling criteria for that single functional somatic syndrome. No FSS=Participants not fulfilling criteria for any functional somatic syndrome. *Received a diagnosis of at least one of the following: irritable bowel syndrome, fibromyalgia, chronic fatigue syndrome, whiplash associated disorders, or multiple chemical sensitivity from a physician was only asked in DanFunD part 2

	No FSS (n=7791)	IBS (n=337)	IBS pure (n=180)	FM (n=442)	FM pure (n=217)	CFS (n=823)	CFS pure (n=523)	WAD (n=157)	WAD pure (n=88)	MCS (n=188)	MCS pure (n=109)
Basic											
Sex; Women, % (n)	51.1 (3979)	74.8 (252)	68.9 (124)	77.4 (342)	76.0 (165)	70.0 (576)	66.4 (347)	59.2 (93)	54.6 (48)	67.0 (126)	61.5 (67)
Social											
Cohabiting, % (n)	78.7 (6116)	71.5 (241)	75.6 (136)	76.8 (338)	81.0 (175)	68.8 (564)	69.7 (364)	78.3 (123)	80.7 (71)	75.4 (141)	80.7 (88)
Currently in employment, % (n)	69.6 (5372)	64.4 (217)	68.9 (124)	50.5 (217)	51.2 (108)	62.3 (503)	66.9 (346)	72.6 (114)	79.6 (70)	54.6 (100)	58.3 (63)
Formerly in employment, % (n)	29.1 (2249)	33.2 (112)	29.4 (53)	48.1 (207)	48.3 (102)	34.5 (279)	30.2 (156)	26.8 (42)	20.5 (18)	44.3 (81)	41.7 (45)
Never been in employment, % (n)	1.3 (98)	2.4 (8)	1.7 (3)	1.4 (6)	0.5 (1)	3.2 (26)	2.9 (15)	0.6 (1)	0.0 (0)	1.1 (2)	0.0 (0)
No education/0 years, % (n)	9.9 (755)	16.1 (52)	14.5 (25)	15.2 (64)	13.5 (28)	15.3 (122)	12.8 (66)	8.5 (13)	8.0 (7)	12.4 (22)	6.5 (7)
Short education/<3 years, % (n)	15.0 (1137)	16.4 (53)	13.4 (23)	21.7 (91)	21.7 (45)	18.4 (147)	18.5 (95)	15.7 (24)	13.6 (12)	14.6 (26)	14.0 (15)
Medium long education/3-4 years, % (n)	43.9 (3331)	41.1 (133)	39.5 (68)	43.3 (182)	48.3 (100)	41.5 (331)	43.6 (224)	48.4 (74)	46.6 (41)	47.2 (84)	49.5 (53)
Long education/>4 years, % (n)	31.2 (2372)	26.5 (86)	32.6 (56)	19.8 (83)	16.4 (34)	24.7 (197)	25.1 (129)	27.5 (42)	31.8 (28)	25.8 (46)	29.9 (32)
Physical health											
Poor self-perceived health, % (n)	4.9 (376)	27.9 (94)	14.4 (26)	45.5 (199)	26.2 (56)	38.5 (315)	30.1 (157)	27.4 (43)	17.1 (15)	27.2 (50)	9.4 (10)
Being limited in daily activities, % (n)	7.4 (575)	26.1 (87)	16.3 (29)	49.7 (217)	35.1 (75)	40.5 (330)	31.3 (162)	32.5 (51)	27.3 (24)	35.0 (65)	18.5 (20)
GP diagnosis and comorbidity											
Having FSS according to a doctor ^a , % (n)	11.3 (666)	60.8 (160)	59.1 (81)	47.7 (157)	32.0 (47)	34.2 (230)	21.5 (93)	72.7 (88)	63.9 (39)	44.2 (68)	31.9 (29)
Physical comorbidity, % (n)	67.8 (5246)	76.9 (256)	71.0 (125)	90.8 (396)	89.3 (191)	75.9 (620)	69.5 (362)	79.6 (125)	75.0 (66)	79.7 (149)	73.4 (80)
Psychiatric comorbidity, % (n)	10.8 (830)	30.4 (101)	20.9 (37)	30.7 (131)	23.4 (49)	35.8 (288)	34.2 (176)	24.4 (38)	17.1 (15)	23.1 (43)	19.4 (21)

Abbreviations: FSS, functional somatic syndrome; IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; WAD, whiplash associated disorders; MCS, multiple chemical sensitivity; GP, general practitioner

Table S9: Percentages on sex, social factors, physical health, and comorbidity of functional somatic syndromes and bodily distress syndrome. No FSS or BDS=Participants not fulfilling criteria for either functional somatic syndrome or bodily distress syndrome. FSS or BDS= Participants fulfilling criteria for either FSS, BDS or both. ^aReceived a diagnosis of at least one of the following: irritable bowel syndrome, fibromyalgia, chronic fatigue syndrome, whiplash associated disorders, or multiple chemical sensitivity from a physician – was only asked in DanFunD part 2

	No illness	Illness	FSS – illness severity			BDS – illness severity	
	No FSS or BDS (n=7095)	FSS or BDS (n=2244)	One FSS (n=1170)	Two FSS (n=279)	≥ 3 FSS (n=69)	Single-organ BDS (n=1447)	Multi-organ BDS (n=96)
Basic							
Sex; Women, % (n)	50.0 (3547)	67.2 (1508)	67.9 (794)	72.4 (202)	87.0 (60)	66.8 (967)	77.1 (74)
Social							
Cohabiting, % (n)	79.1 (5597)	73.8 (1652)	74.8 (874)	68.2 (189)	71.0 (49)	73.6 (1062)	56.3 (54)
Currently in employment, % (n)	70.6 (4962)	61.3 (1357)	63.7 (737)	56.5 (153)	50.0 (34)	58.3 (831)	46.3 (44)
Formerly in employment, % (n)	28.2 (1980)	37.0 (818)	34.6 (400)	40.6 (110)	47.1 (32)	40.4 (575)	47.4 (45)
Never been in employment, % (n)(%)	1.3 (89)	1.8 (39)	1.7 (20)	3.0 (8)	2.9 (2)	1.3 (19)	6.3 (6)
No education/0 years, % (n)	9.7 (673)	13.1 (285)	12.3 (140)	17.4 (46)	20.3 (13)	13.7 (192)	22.6 (21)
Short education/<3 years, % (n)	14.8 (1024)	17.7 (385)	17.9 (204)	20.0 (53)	15.6 (10)	17.7 (249)	18.3 (17)
Medium long education/3-4 years, % (n)	43.8 (3028)	43.9 (956)	44.3 (505)	40.0 (106)	42.2 (27)	43.8 (615)	37.6 (35)
Long education/> 4 years, % (n)	31.7 (2193)	25.3 (550)	25.5 (291)	22.6 (60)	21.9 (14)	24.8 (349)	21.5 (20)
Physical health							
Poor self-perceived health, % (n)	3.4 (241)	27.6 (615)	24.2 (281)	50.7 (140)	62.3 (43)	31.5 (453)	63.5 (61)
Being limited in daily activities, % (n)	5.4 (384)	32.3 (717)	28.7 (332)	48.4 (133)	68.1 (47)	37.3 (533)	64.2 (61)
GP diagnosis and comorbidity							
Having FSS according to a doctor ^a , % (n)	9.7 (517)	36.0 (636)	34.0 (308)	56.8 (126)	74.6 (44)	36.8 (426)	65.4 (53)
Physical comorbidity, % (n)	66.3 (4667)	79.5 (1772)	75.1 (870)	85.1 (235)	94.2 (65)	82.8 (1188)	90.6 (87)
Psychiatric comorbidity, % (n)	9.5 (670)	28.2 (622)	27.6 (317)	35.1 (95)	42.7 (29)	29.1 (414)	59.6 (56)

Abbreviations: FSS, functional somatic syndrome; BDS, bodily distress syndrome; GP, general practitioner

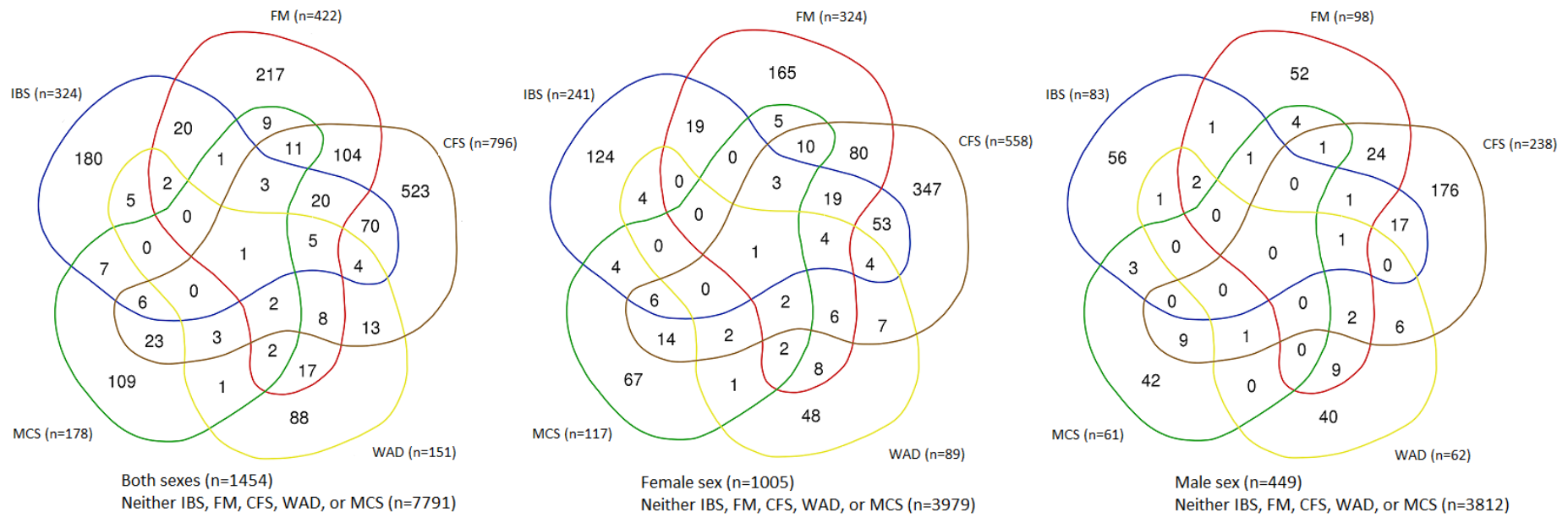


Figure S1: Overlap of five functional somatic syndromes in both sexes, females, and males where information on case-status of all five syndromes could be obtained (n=9245). The total number of observations are stated in each cell
Abbreviations: IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; WAD, whiplash associated disorders; MCS, multiple chemical sensitivity

Table S10: Age-distributed prevalence estimates and confidence intervals of functional somatic syndromes and bodily distress syndrome in women. Participants with chronic physical disease are excluded. "X pure"=Only fulfilling criteria for that single functional somatic syndrome. "X only " = Only fulfilling criteria for that exclusive bodily distress syndrome subtype.

	Prevalence, overall; % (CI)
No functional somatic syndrome and no bodily distress syndrome	76.0 (75.1-76.8)
Functional somatic syndrome	
1 functional somatic syndrome	12.0 (11.3-12.7)
2 functional somatic syndrome	2.8 (2.5-3.2)
3-5 functional somatic syndrome	0.5 (0.4-0.7)
Irritable bowel syndrome	3.3 (2.9-3.7)
<i>Irritable bowel syndrome pure</i>	<i>1.8</i> (1.6-2.1)
Fibromyalgia	4.2 (3.8-4.7)
<i>Fibromyalgia pure</i>	<i>2.2</i> (1.9-2.5)
Chronic fatigue syndrome	8.1 (7.5-8.7)
<i>Chronic fatigue syndrome pure</i>	<i>5.3</i> (4.8-5.7)
Whiplash associated disorders	1.5 (1.3-1.8)
<i>Whiplash associated disorders pure</i>	<i>0.9</i> (0.7-1.1)
Multiple chemical sensitivity	1.7 (1.4-2.0)
<i>Multiple chemical sensitivity pure</i>	<i>1.0</i> (0.8-1.3)
Bodily distress syndrome	14.2 (13.5-15.0)
Single-organ bodily distress syndrome	0.3 (0.2-0.4)
<i>Cardiopulmonary subtype only</i>	<i>1.0</i> (0.9-1.3)
<i>Cardiopulmonary subtype</i>	<i>2.1</i> (1.8-2.4)
<i>Gastrointestinal subtype only</i>	<i>4.0</i> (3.6-4.5)
<i>Gastrointestinal subtype</i>	<i>7.7</i> (7.1-8.2)
<i>Musculoskeletal subtype only</i>	<i>10.2</i> (9.6-10.9)
<i>Musculoskeletal subtype</i>	<i>1.7</i> (1.5-2.0)
<i>General symptoms subtype only</i>	<i>3.9</i> (3.5-4.3)
<i>General symptoms subtype</i>	
Multi-organ bodily distress syndrome	0.8 (0.6-1.0)

Abbreviations: CI, confidence interval

Table S11: Age-distributed prevalence estimates and confidence intervals of functional somatic syndromes and bodily distress syndrome in women. Participants with chronic physical disease are excluded. "X pure"=Only fulfilling criteria for that single functional somatic syndrome. "X only"= Only fulfilling criteria for that exclusive bodily distress syndrome subtype.

Women, age (years); % (CI)					
	All (n=4856)	18-39 (n=887)	40-49 (n=1102)	50-59 (n=1313)	60-76 (n=1554)
No FSS and no BDS	71.5 (70.2-72.8)	69.3 (66.1-72.4)	70.9 (68.1-73.6)	69.4 (66.8-71.9)	75.0 (72.7-77.1)
FSS					
1 FSS	15.3 (14.3-16.3)	17.6 (15.1-20.3)	17.2 (15.0-19.6)	16.2 (14.2-18.3)	11.8 (10.2-13.5)
2 FSS	3.8 (3.3-4.4)	5.5 (4.1-7.3)	3.5 (2.5-4.8)	4.2 (3.1-5.4)	2.8 (2.0-3.8)
3-5 FSS	0.9 (0.7-1.2)	0.9 (0.4-1.8)	1.1 (0.6-1.9)	1.5 (0.9-2.3)	0.3 (0.1-0.8)
IBS					
<i>IBS pure</i>	<i>2.4</i> (2.0-2.9)	<i>3.4</i> (2.3-4.9)	<i>2.9</i> (2.0-4.1)	<i>2.1</i> (1.4-3.0)	<i>1.8</i> (1.2-2.6)
FM	6.1 (5.4-6.8)	2.0 (1.2-3.2)	4.8 (3.6-6.3)	8.2 (6.8-9.8)	7.4 (6.1-8.9)
<i>FM pure</i>	<i>3.1</i> (2.6-3.6)	<i>0.6</i> (0.2-1.3)	<i>2.2</i> (1.4-3.2)	<i>3.9</i> (2.9-5.1)	<i>4.5</i> (3.5-5.7)
CFS					
<i>CFS pure</i>	<i>6.7</i> (5.9-7.3)	<i>10.7</i> (8.7-12.9)	<i>8.9</i> (7.3-10.8)	<i>6.2</i> (4.9-7.6)	<i>2.9</i> (2.1-3.9)
WAD					
<i>WAD pure</i>	<i>0.9</i> (0.7-1.3)	<i>0.9</i> (0.4-1.8)	<i>1.5</i> (0.8-2.4)	<i>1.2</i> (0.7-2.0)	<i>0.3</i> (0.1-0.8)
MCS					
<i>MCS pure</i>	<i>1.3</i> (1.0-1.6)	<i>1.1</i> (0.5-2.1)	<i>1.0</i> (0.5-1.8)	<i>1.7</i> (1.1-2.5)	<i>1.2</i> (0.7-1.8)
BDS					
Single-organ BDS	17.8 (16.7-18.9)	16.8 (14.4-19.4)	16.7 (14.6-19.0)	18.8 (16.8-21.1)	18.1 (16.2-20.1)
BDS-CP only	0.4 (0.2-0.6)	0.1 (0.003-0.6)	0.4 (0.1-0.9)	0.6 (0.3-1.2)	0.4 (0.1-0.8)
<i>BDS-CP</i>	<i>1.5</i> (1.1-1.8)	<i>1.6</i> (0.9-2.6)	<i>1.3</i> (0.7-2.1)	<i>2.0</i> (1.3-2.9)	<i>1.1</i> (0.6-1.8)
BDS-GI only	2.2 (1.8-2.7)	4.4 (3.1-6.0)	2.6 (1.8-3.8)	1.2 (0.7-2.0)	1.5 (1.0-2.3)
<i>BDS-GI</i>	<i>5.0</i> (4.4-5.7)	<i>8.8</i> (7.0-10.8)	<i>5.7</i> (4.4-7.3)	<i>3.7</i> (2.7-4.8)	<i>3.5</i> (2.7-4.6)
BDS-MS only	9.2 (8.4-10.1)	3.5 (2.4-4.9)	6.7 (5.3-8.4)	11.1 (9.4-12.9)	12.7 (11.1-14.4)
<i>BDS-MS</i>	<i>12.8</i> (11.9-13.8)	<i>6.4</i> (4.9-8.2)	<i>10.7</i> (9.0-12.7)	<i>15.7</i> (13.8-17.8)	<i>15.5</i> (13.7-17.4)
BDS-GS only	2.5 (2.1-2.9)	4.3 (3.0-5.8)	3.2 (2.2-4.4)	2.4 (1.7-3.4)	1.0 (0.5-1.6)
<i>BDS-GS</i>	<i>5.7</i> (5.0-6.3)	<i>9.1</i> (7.3-11.2)	<i>7.4</i> (5.9-9.1)	<i>6.5</i> (5.2-7.9)	<i>1.8</i> (1.2-2.6)
Multi-organ BDS	1.2 (0.9-1.5)	1.4 (0.7-2.4)	1.5 (0.8-2.3)	1.8 (1.1-2.6)	0.5 (0.2-0.9)

Abbreviations: FSS, functional somatic syndrome; BDS, bodily distress syndrome; IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; WAD, whiplash associated disorders; MCS, multiple chemical sensitivity; BDS-CP, cardiopulmonary bodily distress syndrome; BDS-GI, gastrointestinal bodily distress syndrome; BDS-MS, musculoskeletal bodily distress syndrome; BDS-GS, general symptoms bodily distress syndrome; CI, confidence interval

Table S12: Age-distributed prevalence estimates and confidence intervals of functional somatic syndromes and bodily distress syndrome in men. Participants with chronic physical disease are excluded. "X pure"=Only fulfilling criteria for that single functional somatic syndrome. "X only"= Only fulfilling criteria for that exclusive bodily distress syndrome subtype.

	Men, age (years); % (CI)				
	All (n=4046)	18-39 (n=705)	40-49 (n=871)	50-59 (n=1053)	60-76 (n=1417)
No FSS and no BDS	84.4 (83.3-85.6)	85.3 (82.4-87.8)	85.3 (82.7-87.6)	83.2 (80.8-85.4)	84.4 (82.4-86.3)
FSS					
1 FSS	8.0 (7.1-8.8)	9.7 (7.6-12.1)	7.9 (6.2-9.9)	7.6 (6.1-9.4)	7.4 (6.0-8.9)
2 FSS	1.6 (1.2-2.0)	1.3 (0.6-2.5)	1.2 (0.6-2.2)	2.2 (1.4-3.3)	1.5 (0.9-2.3)
3-5 FSS	0.1 (0.01-0.2)	0.1 (0.004-0.8)	0 (0)	0 (0)	0.1 (0.002-0.4)
IBS					
<i>IBS pure</i>	<i>1.1</i> (0.8-1.5)	<i>0.9</i> (0.3-1.9)	<i>1.7</i> (1.0-2.9)	<i>0.9</i> (0.4-1.5)	<i>1.1</i> (0.6-1.8)
FM					
<i>FM pure</i>	<i>1.1</i> (0.8-1.5)	<i>0.6</i> (0.2-1.5)	<i>0.9</i> (0.4-1.8)	<i>1.3</i> (0.7-2.2)	<i>1.4</i> (0.9-2.2)
CFS					
<i>CFS pure</i>	<i>3.7</i> (3.1-4.3)	<i>6.0</i> (4.4-8.0)	<i>3.7</i> (2.6-5.2)	<i>3.4</i> (2.4-4.7)	<i>2.7</i> (1.9-3.7)
WAD					
<i>WAD pure</i>	<i>0.9</i> (0.6-1.2)	<i>1.1</i> (0.5-2.3)	<i>0.7</i> (0.3-1.5)	<i>1.1</i> (0.5-1.9)	<i>0.6</i> (0.3-1.2)
MCS					
<i>MCS pure</i>	<i>0.7</i> (0.5-1.0)	<i>0.7</i> (0.2-1.7)	<i>0.3</i> (0.1-1.0)	<i>0.5</i> (0.2-1.1)	<i>1.2</i> (0.7-1.9)
BDS					
Single-organ BDS	10.0 (9.1-10.9)	7.8 (5.9-10.0)	8.6 (6.8-10.7)	12.3 (10.3-14.4)	10.2 (8.7-11.9)
BDS-CP only	0.1 (0.04-0.3)	0.1 (0.004-0.8)	0.2 (0.03-0.8)	0.1 (0.002-0.5)	0.1 (0.002-0.4)
<i>BDS-CP</i>	<i>0.6</i> (0.4-0.9)	<i>0.6</i> (0.2-1.4)	<i>1.0</i> (0.5-2.0)	<i>0.6</i> (0.2-1.2)	<i>0.4</i> (0.1-0.9)
BDS-GI only	1.9 (1.5-2.3)	1.6 (0.8-2.8)	1.5 (0.8-2.5)	2.2 (1.4-3.3)	2.1 (1.4-2.9)
<i>BDS-GI</i>	<i>2.8</i> (2.3-3.4)	<i>2.7</i> (1.6-4.2)	<i>2.6</i> (1.7-3.9)	<i>3.5</i> (2.5-4.8)	<i>2.5</i> (1.7-3.4)
BDS-MS only	5.8 (5.1-6.6)	3.3 (2.1-4.9)	4.4 (3.1-5.9)	7.5 (6.0-9.3)	6.8 (5.5-8.2)
<i>BDS-MS</i>	<i>7.2</i> (6.4-8.0)	<i>4.3</i> (2.9-6.0)	<i>6.4</i> (4.9-8.3)	<i>9.3</i> (7.6-11.2)	<i>7.5</i> (6.2-9.0)
BDS-GS only	0.8 (0.7-1.1)	1.8 (1.0-3.1)	0.8 (0.3-1.6)	0.8 (0.3-1.5)	0.4 (0.1-0.8)
<i>BDS-GS</i>	<i>1.8</i> (1.4-2.3)	<i>3.0</i> (1.9-4.5)	<i>2.4</i> (1.5-3.7)	<i>1.7</i> (1.0-2.7)	<i>1.0</i> (0.5-1.7)
Multi-organ BDS	0.4 (0.2-0.6)	0.6 (0.2-1.4)	0.7 (0.3-1.5)	0.4 (0.1-1.0)	0.1 (0.002-0.4)

Abbreviations: FSS, functional somatic syndrome; BDS, bodily distress syndrome; IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; WAD, whiplash associated disorders; MCS, multiple chemical sensitivity; BDS-CP, cardiopulmonary bodily distress syndrome; BDS-GI, gastrointestinal bodily distress syndrome; BDS-MS, musculoskeletal bodily distress syndrome; BDS-GS, general symptoms bodily distress syndrome; CI, confidence interval

Table S13: Characteristics on age, sex, social factors, physical health, and comorbidities of functional somatic syndromes. Participants with chronic physical disease are excluded. No FSS = Participants not fulfilling criteria for any functional somatic syndrome. "X pure"=Only fulfilling criteria for that single functional somatic syndrome. *Compared with a Wilcoxon-Mann-Whitney test. **Adjusted for age. *** Adjusted for sex and age. ^aReceived a diagnosis of at least one of the following: Irritable bowel syndrome, fibromyalgia syndrome, chronic fatigue syndrome, whiplash associated disorders, or multiple chemical sensitivity from own physician – was only asked in DanFunD part 2. Bold: Significant different from participants not fulfilling criteria for any FSS (P<0.05). "-" could not be estimated because of too few observations

	No FSS (n=7316)	IBS (n=290)	IBS pure (n=161)	FMS (n=374)	FMS pure (n=195)	CFS (n=713)	CFS pure (n=463)	WAD (n=136)	WAD pure (n=79)	MCS (n=152)	MCS pure (n=90)
Basic											
Age, Median (IQR)*	54 (44-63)	48 (38-58)	49 (40-60)	57 (50-64)	58 (51-66)	48 (38-57)	47 (38-57)	51 (42.5-57)	50 (43-54)	54.5 (44-63)	56 (47-64)
Sex; Men v women, RR**	1 (Ref.)	0.5 (0.4-0.6)	0.6 (0.4-0.7)	0.4 (0.4-0.5)	0.5 (0.4-0.6)	0.6 (0.5-0.7)	0.7 (0.6-0.8)	0.8 (0.6-1.0)	0.9 (0.7-1.1)	0.6 (0.5-0.7)	0.7 (0.5-0.9)
Social***											
Cohabiting, RR	1 (Ref.)	1.0 (0.9-1.1)	1.0 (0.9-1.0)	1.0 (0.9-1.0)	1.0 (1.0-1.1)	0.9 (0.9-1.0)	0.9 (0.9-1.0)	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.9-1.1)
Formerly in employment, RR	1 (Ref.)	2.2 (1.6-3.1)	1.3 (0.9-2.1)	1.8 (1.4-2.3)	1.4 (1.0-2.0)	2.6 (2.1-3.2)	2.2 (1.7-2.9)	1.4 (0.9-2.3)	1.1 (0.5-2.1)	2.2 (1.5-3.4)	1.4 (0.8-2.4)
Never been in employment, RR	1 (Ref.)	0.9 (0.4-2.3)	1.0 (0.3-3.5)	1.9 (0.6-6.4)	1.6 (0.2-11.8)	1.6 (0.9-2.6)	1.6 (0.9-2.8)	-	-	0.4 (0.6-3.2)	-
Vocational training, OR	1 (Ref.)	1.0 (0.8-1.2)	1.1 (0.8-1.5)	0.6 (0.5-0.8)	0.6 (0.5-0.8)	0.9 (0.7-1.0)	0.9 (0.8-1.1)	1.1 (0.8-1.5)	1.3 (0.8-1.9)	0.9 (0.7-1.3)	1.1 (0.7-1.6)
Physical health***											
Poor self-perceived health, RR	1 (Ref.)	5.4 (4.3-6.8)	2.4 (1.5-3.8)	8.0 (6.8-9.4)	4.3 (3.3-5.8)	8.3 (7.2-9.6)	6.7 (5.6-8.1)	5.5 (4.0-7.4)	4.0 (2.5-6.4)	4.3 (3.1-5.9)	1.1 (0.5-2.7)
Being limited in daily activities, RR	1 (Ref.)	3.2 (2.6-4.1)	1.9 (1.3-2.9)	5.5 (4.8-6.4)	3.8 (3.0-4.7)	5.7 (5.0-6.4)	4.6 (3.9-5.4)	3.9 (3.0-5.2)	3.5 (2.4-5.2)	4.0 (3.2-5.2)	2.2 (1.4-3.4)
GP diagnosis and comorbidity***											
Having specific FSS according to a doctor ^a ,RR	1 (Ref.)	4.7 (4.2-5.4)	4.6 (3.9-5.4)	3.2 (2.8-3.7)	2.3 (1.8-3.0)	2.8 (2.5-3.2)	1.9 (1.5-2.3)	5.4 (4.7-6.1)	4.9 (4.0-6.0)	3.3 (2.7-4.1)	2.6 (1.9-3.5)
Physical comorbidity, RR	1 (Ref.)	1.1 (1.1-1.2)	1.1 (1.0-1.2)	1.2 (1.1-1.2)	1.3 (1.2-1.3)	1.1 (1.0-1.2)	1.1 (1.0-1.1)	1.0 1.0-1.0	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)
Psychiatric comorbidity, RR	1 (Ref.)	2.2 (1.6-2.7)	1.7 (1.1-2.2)	2.4 (2.0-2.9)	1.9 (1.5-2.5)	2.8 (2.4-3.1)	2.6 (2.3-3.1)	2.0 (1.5-2.8)	1.5 (1.0-2.5)	2.0 (1.5-2.7)	1.6 (1.1-2.5)

Abbreviations: FSS, functional somatic syndrome; IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; WAD, whiplash associated disorders; MCS, multiple chemical sensitivity; IQR, interquartile range; RR, risk relative risk; OR, odds ratio; GP, general practitioner

Table S14: Characteristics on age, sex, social factors, physical health, and comorbidities on numbers of functional somatic syndromes and bodily distress syndrome. Participants with chronic physical disease are excluded. No FSS or BDS = Participants not fulfilling criteria for either functional somatic syndromes or bodily distress syndrome. FSS or BDS = Participants fulfilling criteria for either functional somatic syndromes, bodily distress syndrome or both. *Compared with a Wilcoxon-Mann-Whitney test. **Adjusted for age. *** Adjusted for sex and age.^aReceived a diagnosis of at least one of the following: Irritable bowel syndrome, fibromyalgia syndrome, chronic fatigue syndrome, whiplash associated disorder, or multiple chemical sensitivity from own physician – was only asked in DanFunD part 2. Bold: Significant different from participants not fulfilling criteria for functional somatic syndromes or bodily distress syndrome (P<0.05). "-" could not be estimated because of too few observations

	Not ill	Ill	FSS – illness severity			BDS – illness severity	
	No FSS or BDS (n=6701)	FSS or BDS (n=1962)	One FSS (n=1033)	Two FSS (n=243)	≥ 3 FSS (n=46)	Single-organ BDS (n=1263)	Multi-organ BDS (n=73)
Basic							
Age, Median (IQR)*	53 (44-63)	53 (43-61)	51 (41-60)	51 (41-60)	50.5 (44-57)	54 (45-62)	49 (41-56)
Sex; Men v women, RR**	1 (Ref.)	0.6 (0.6-0.7)	0.6 (0.6-0.7)	0.5 (0.4-0.7)	0.1 (0.02-0.3)	0.7 (0.6-0.7)	0.4 (0.3-0.7)
Social***							
Cohabiting, RR	1 (Ref.)	1.0 (0.9-1.0)	1.0 (0.9-1.0)	0.9 (0.9-1.0)	1.0 (0.9-1.2)	1.0 (0.9-1.0)	0.8 (0.7-1.0)
Formerly in employment, RR	1 (Ref.)	1.7 (1.5-1.9)	1.7 (1.4-2.0)	2.9 (2.1-4.1)	4.4 (2.1-9.2)	1.7 (1.5-2.0)	6.8 (3.8-12.3)
Never been in employment, RR	1 (Ref.)	1.4 (0.9-2.1)	1.2 (0.7-2.1)	1.5 (0.6-3.5)	-	1.2 (0.7-2.1)	1.9 (0.4-8.7)
Vocational training, OR	1 (Ref.)	0.8 (0.8-0.9)	0.9 (0.8-1.0)	0.7 (0.6-0.9)	0.8 (0.5-1.5)	0.8 (0.7-0.9)	0.6 (0.4-0.9)
Physical health***							
Poor self-perceived health, RR	1 (Ref.)	7.4 (6.4-8.6)	4.7 (4.0-5.4)	10.6 (9.1-12.4)	11.9 (9.3-15.2)	6.4 (5.6-7.3)	14.9 (12.3-17.9)
Being limited in daily activities, RR	1 (Ref.)	5.5 (4.9-6.2)	3.7 (3.2-4.2)	6.4 (5.5-7.5)	7.9 (6.4-9.6)	5.2 (4.7-5.8)	9.6 (8.0-11.6)
GP diagnosis and comorbidity***							
Having specific FSS according to a doctor ^a ,RR	1 (Ref.)	3.3 (3.0-3.7)	2.8 (2.5-3.2)	4.4 (3.8-5.0)	4.6 (3.8-5.6)	2.8 (2.5-3.2)	5.0 (4.1-6.1)
Physical comorbidity, RR	1 (Ref.)	1.2 (1.1-1.2)	1.1 (1.1-1.1)	1.3 (1.2-1.4)	-	1.2 (1.1-1.2)	1.5 (1.3-1.6)
Psychiatric comorbidity, RR	1 (Ref.)	2.6 (2.3-2.9)	2.2 (1.9-2.5)	2.8 (2.4-3.4)	3.0 (2.1-4.3)	2.4 (2.1-2.7)	4.5 (3.7-5.5)

Abbreviations: FSS, functional somatic syndrome; BDS, bodily distress syndrome; IQR, interquartile range; RR, risk relative risk; OR, odds ratio; GP, general practitioner

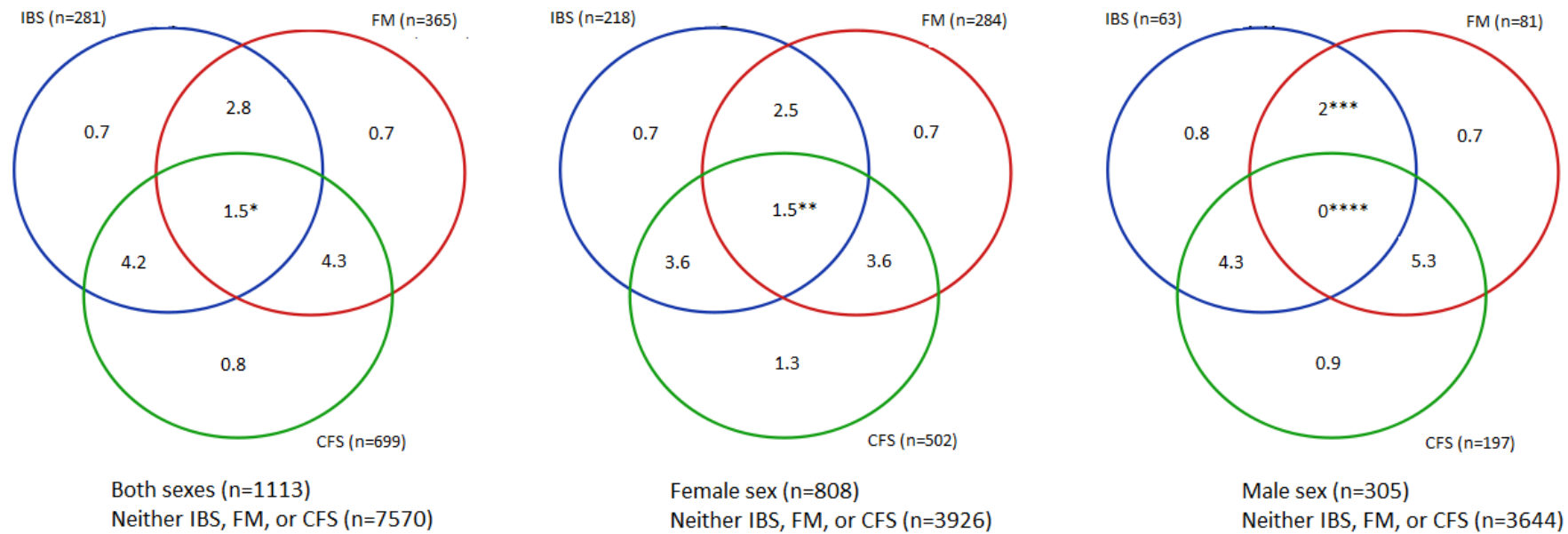


Figure S2: Overlap of irritable bowel syndrome, fibromyalgia, and chronic fatigue syndrome in both sexes, females, and males where information on case status of all three syndromes could be obtained. Participants with severe, chronic disease are excluded (n=8683). The number in each cell illustrates the factor of overlap (the relation between the observed number and the expected number of participants). For all the cells with overlap, the observed numbers of participants were significantly different from the expected number of participants ($P \leq 0.001$), besides from the four cells indicated with stars; *Pearson χ^2 $P = 0.007$, ** Pearson χ^2 $P = 0.006$, ***Fisher's Exact $P = 0.190$, **** Fisher's Exact $P = 0.546$

Abbreviations: IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; Obs, observed number of participants; Exp, expected number of participants

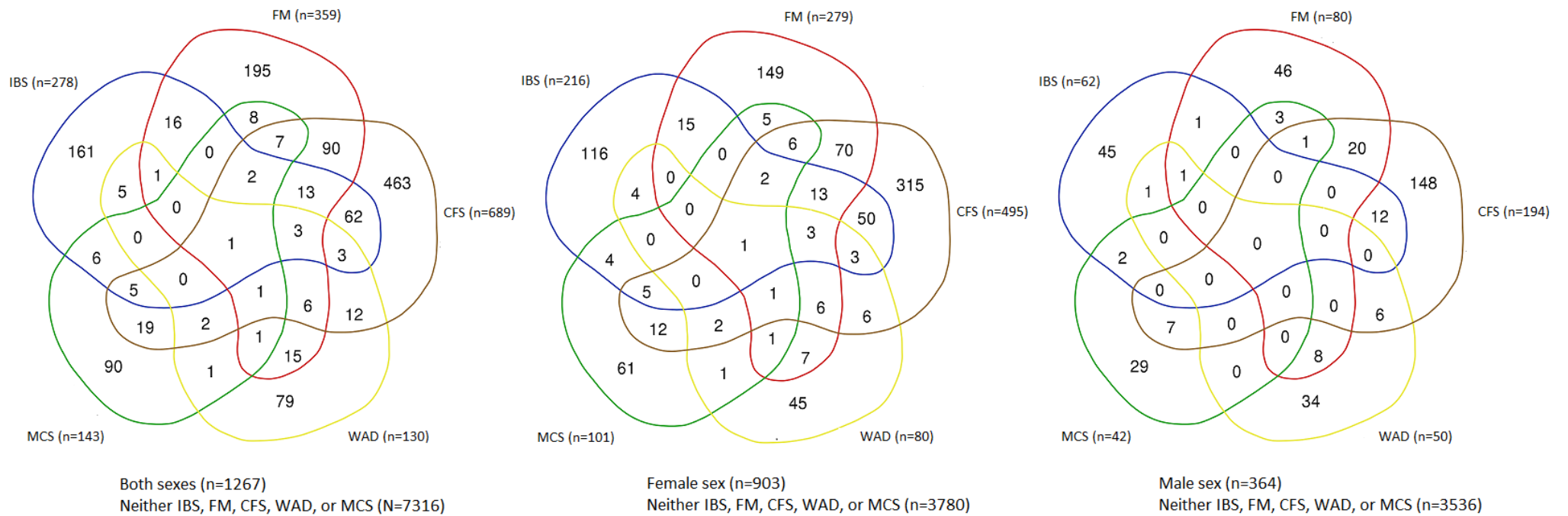


Figure S3: Overlap of 5 functional somatic syndromes in both sexes, females, and males where information on case-status of all five syndromes could be obtained. Participants with severe, chronic disease are excluded (n=8583). The total number of observations are stated in each cell

Abbreviations: IBS, irritable bowel syndrome; FM, fibromyalgia; CFS, chronic fatigue syndrome; WAD, whiplash associated disorders; MCS, multiple chemical sensitivity