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Do unexplained symptoms
predict anxiety or depression in
primary care.



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Symptoms are sometimes the manifestation of a disease; frequently symptoms are not explained by disease. In the latter case, the general practitioner makes a ‘symptom diagnosis’.

What percentage of all diagnoses of a general practitioner per year is a ‘symptom diagnosis’?

- 0–10%
- 10-20%
- 20-30%
- 30-50%

- Part of the patients in primary care very frequently present unexplained symptoms i.e. symptoms not explained by disease.
- What percentage of all patients in primary care do very frequently present unexplained symptoms?
 - 0-2%
 - 2-4%
 - 4-6%
 - 6-8%

In how many patients with unexplained symptoms is depression or anxiety the causes of the symptoms?

- 0-5%
- 5-10%
- 10-15%
- 15-20%

Research questions

- Are mental health problems associated with unexplained symptoms presented to the GP?
- Do unexplained symptoms, presented to the GP, predict a mental health problem?

Transition Project

16 000 patients
ICPC classification

Data

Patients followed for 1-11 years (1997 – 2008)
419056 encounters with patients ≥ 15 year

ICPC codes

Reason for encounter

Diagnosis

Intervention

Structured in an Episode of care

Somatoform symptoms			Somatic symptoms		
	Number of episodes between 1997 and 2008	Year prevalence (%)		Number of episodes between 1997 and 2008	Year prevalence
tiredness	5179	3,8	lymph gland enlargement	571	0,4
fainting	939	0,7	localized abdominal pain	2888	2,1
abdominal pain	582	0,4	diarrhea	865	0.6
nausea	681	0,5	red eye	350	0,3
constipation	2741	2,0	swollen ankles	1524	1,1
palpitations	1288	0,9	shoulder symptoms	2397	1,7
low back complaints	6625	4,8	hand/finger symptoms	1480	1,1

Somatoform symptoms episodes			Somatic symptoms episodes		
	Number of episodes between 1997 and 2008	Year prevalence (%)		Number of episodes between 1997 and 2008	Year prevalence
chest symptoms	3367	2,5	hip symptoms	1164	0,9
muscle pain	1358	1,0	tingling fingers/toes/feet	335	0,2
headache	2353	1,7	cough	3998	2,9
dizziness	2035	1,5	throat symptoms	2294	1,7
disturbances of sleep	3661	2,7	pruritus	1378	1,0
shortness of breath	1008	0,7	urinary frequency	856	0,6
total	31817	23,1	total	20100	14,6

Cross-sectional analysis of data with a time frame of one year. Association of somatoform and somatic symptoms with anxiety and depressive disorder (ORs, 95%CI)

Somatoform symptoms	Anxiety disorder OR	Anxiety disorder 95% CI	Depressive disorder OR	Depressive disorder 95% CI
tiredness	1,85	1,53-2,23	2,85	2,61-3,12
fainting	2,44	1,69-3,52	2,16	1,75-2,68
abdominal pain	4,49	3,20-6,30	1,99	1,52-2,61
nausea	3,08	2,23-4,26	4,24	3,60-5,00
constipation	1,97	1,63-2,38	3,79	3,49-4,12
palpitations	4,7	3,74-5,89	2,49	2,11-2,94
low back complaint	1,72	1,47-2,02	1,7	1,56-1,86
chest symptoms	2,79	2,29-3,39	1,83	1,61-2,08
muscle pain	5,09	4,11-6,31	2,88	2,47-3,35
headache	2,95	2,41-3,61	2,49	2,21-2,81
dizziness	2,62	2,07-3,31	2,25	1,96-2,59
disturbances of sleep	2,55	2,23-2,92	4,08	3,82-4,36
shortness of breath	2,13	1,48-3,07	3,15	2,64-3,75

Odds Ratios

Cross-sectional analysis of data with a time frame of one year. Association of somatic symptoms with anxiety and depressive disorder (ORs, 95%Ci)

Somatic symptoms	Anxiety disorder OR	Anxiety disorder 95% CI	Depressive disorder OR	Depressive disorder 95% CI
lymph gland enlargement	2,59	1,62-4,15	0,69	0,43-1,11
localized abdominal pain	1,68	1,30-2,17	2,03	1,79-2,32
diarrhea	2,66	1,98-3,59	3,02	2,58-3,55
red eye	1,25	0,59-2,64	1,47	1,01-2,14
swollen ankles	1,65	1,23-2,22	3,05	2,68-3,47
shoulder symptoms	1,59	1,20-2,11	1,6	1,37-1,86
hand/finger symptoms	1,94	1,39-2,71	1,84	1,53-2,22
hip symptoms	0,92	0,55-1,54	2,06	1,70-2,51
tingling fingers/toes/feet	2,65	1,49-4,72	2,01	1,40-2,88
cough	1,47	1,21-1,80	1,84	1,66-2,04
throat symptoms	1,56	1,17-2,09	1,56	1,34-1,83
pruritus	2,35	1,80-3,09	2,43	2,09-2,82
urinary frequency	2,42	1,66-3,51	2,47	2,01-3,03

Cross-sectional analysis in a time frame of one year (2007). Percentages of patients with/without anxiety or depression in patients presenting with different numbers of symptom episodes.

	number of symptoms	number of patients	no depression or anxiety (%)	depression or anxiety (%)
Somatoform symptoms episodes	0	8447	98,83	1,17
	1	1357	96,61	3,39
	2 or more	335	94,03	5,92
Somatic symptom episodes	0	8782	98,54	1,46
	1	1156	97,66	2,34
	2 or more	201	95,02	4,98

This seems useful, but...



Anxiety disorder				
Somatoform symptom episodes	pretest	posttest	Positive predictive value	Negative predictive value
tiredness	0,004	0,003	0,003	0,996
fainting	0,004	0,004	0,004	0,997
abdominal pain	0,004	0,004	0,004	0,997
nausea	0,004	0,007	0,007	0,997
constipation	0,004	0,003	0,003	0,996
palpitations	0,004	0,013	0,012	0,997
low back complaint	0,004	0,001	0,001	0,996
chest symptoms	0,004	0,004	0,004	0,997
muscle pain	0,004	0,002	0,002	0,996
headache	0,004	0,004	0,004	0,997
dizziness	0,004	0,004	0,004	0,997
disturbances of sleep	0,004	0,008	0,008	0,997
Shortness of breath	0,004	0,006	0,006	0,997

Anxiety disorder

Somatic symptom episodes	pretest	posttest	Positive predictive value	Negative predictive value
lymph gland enlargement	0,004	0,002	0,002	0,996
localized abdominal pain	0,004	0,002	0,002	0,996
diarrhea	0,004	0,004	0,004	0,997
red eye	0,004	0,000	0,000	0,996
swollen ankles	0,004	0,001	0,001	0,996
shoulder symptoms	0,004	0,002	0,002	0,996
hand/finger symptoms	0,004	0,001	0,001	0,996
Hip symptoms				
hand/finger symptoms	0,004	0,002	0,002	0,996
tingling fingers/toes/feet	0,004	0,003	0,003	0,997
cough	0,004	0,002	0,002	0,996
throat symptoms	0,004	0,004	0,004	0,997
pruritus	0,004	0,002	0,002	0,996
urinary frequency	0,004	0,003	0,003	0,997

Depressive disorder				
Somatoform symptoms	pretest	posttest	Positive predictive value	Negative predictive value
tiredness	0,014	0,014	0,014	0,986
fainting	0,014	0,014	0,014	0,986
abdominal pain	0,014	0,010	0,010	0,986
nausea	0,014	0,021	0,021	0,986
constipation	0,014	0,014	0,014	0,986
palpitations	0,014	0,012	0,012	0,986
low back complaint	0,014	0,007	0,007	0,986
chest symptoms	0,014	0,005	0,005	0,986
muscle pain	0,014	0,008	0,008	0,986
headache	0,014	0,011	0,011	0,986
dizziness	0,014	0,009	0,009	0,986
disturbances of sleep	0,014	0,026	0,025	0,986
shortness of breath	0,014	0,015	0,014	0,986

Somatic symptoms	pretest	posttest	Positive predictive value	Negative predictive value
lymph gland enlargement	0,014	0,005	0,005	0,986
localized abdominal pain	0,014	0,008	0,008	0,986
diarrhea	0,014	0,013	0,013	0,986
red eye	0,014	0,005	0,005	0,986
swollen ankles	0,014	0,013	0,012	0,986
shoulder symptoms	0,014	0,009	0,009	0,986
hand/finger symptoms	0,014	0,006	0,006	0,986
Hip symptoms				
hand/finger symptoms	0,014	0,005	0,005	0,986
tingling fingers/toes/feet	0,014	0,000	0,000	0,986
cough	0,014	0,008	0,008	0,986
throat symptoms	0,014	0,007	0,007	0,986
pruritus	0,014	0,007	0,007	0,986
urinary frequency	0,014	0,013	0,013	0,986