Kees van Boven / Barcelona /October 2011

Dia 1

Dia 2

Dear Ladies and Gentlemen,

Introduction

People experience many symptoms, but they only present a small minority of about 10% to a physician. Many (about one third to three quarters) of the symptoms presented to a physician are not explained by organic pathology. These symptoms remain 'medically unexplained'

The relation between unexplained symptoms on the one hand and mental health problems on the other has been addressed in several studies in primary care. The results of these studies are not congruent. The aim of our study is to investigate whether unexplained symptoms **as presented to the family physician, so based on a face to face encounter** predict mental disorders.

Dia 3,4 and 5 Quizz

I will start with a little quiz

Dia 3

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 (pursen**tizj**) of all diagnoses of a general practitioner per year is a 'symptom diagnosis'?

Dia 4

- Part of the patients in primary care very frequently present unexplained symptoms i.e. symptoms not explained by disease.

- What percentage (pursen**tizj**) of all patients in primary care do very frequently present unexplained symptoms?

Dia 5

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

The answers will follow at the end!

Dia 6

We formulated two main questions

Two main questions

1: Are mental health problems associated with unexplained symptoms presented to the GP and

2; Do unexplained symptoms, presented to the GP, predict a mental health problem?

Data source

Dia 7

We performed an analysis of data generated by a practice-based research network, the Transition Project. Within this ongoing project all contacts between general practitioners and patients are registered since 1985. For our study we used data obtained between 1997 and 2008. The participating general practitioners had on average 16.000 enlisted patients. The registration period for the enlisted patients ranged from 1 to 11 years. We included encounters (N = 419056) with all patients of 15 years and older in this study.

(The project currently consists of 10 Dutch family)

The physicians code routinely each episode of care according to the International Classification system of Primary Care (ICPC) in an episode structure. An episode of care is defined as "a health problem in an individual from the first encounter until the completion (komplisiun) of the last encounter for it with a health care provider". For all episodes of care, the family physicians register the patient's reason for encounter (RFE), the physician's diagnosis (episode title), and the FP's intervention.
Also, for each episode of care, FPs indicated its status: 'new' (start) or 'old' (follow-up). The reason for encounter should be recognized by the patient as an acceptable description of the demand of care presented by the patient. (The RFE, all interventions and the diagnostic labels for each encounter were classified with the ICPC.) After history taking and physical examination, the physician makes a diagnosis. The diagnosis is the physician's point of view.
Coding health problems should be at the highest level of diagnostic refinement for which the user can be confident, and which meets the inclusion criteria for that rubric. The diagnostic labels can be on a symptom level or on a disease

level. An episode title on symptom level does not mean that the patient only presented the symptom (from the title); the GP applies an episode title according to the most important complaint and this includes the other symptoms mentioned by the patient of which the GP assumes that they belong to each other

Procedure

For all analyses we have compared 2 groups of symptoms. Firstly, symptoms generally seen as part of the '**somatoform construct'**; secondly, symptoms mostly explained by **somatic causes**.

We have examined the following 13 unexplained symptoms which are frequently presented to the FP : chest symptoms (L04), shortness of breath (R02), palpitations (K04), abdominal pain (D01), nausea (nozia) (D09), constipation D12), headache (N01), muscle pain (L18), low back complaints (L02), fainting (A06), dizziness (N17), disturbances of sleep P06), tiredness (A04). These symptoms constitute the PHQ-15, a scale specifically (spi**sifi**klie) developed for the detection of somatoform disorders in primary care.[22] From the original 15 symptoms in this questionnaire we left 2 symptoms out as these were only weakly associated with somatoform disorders (menstrual problems, sexual pain/problems).

Somatic symptoms Somatic symptoms are symptoms generally known as symptoms that are commonly caused by organic disease. The chosen somatic symptoms are lymph gland enlargement (B02), localized abdominal pain (D06), diarrhea (D11), red eye (F02), swollen ankles (K07), shoulder symptoms (L08), hand/finger symptoms (L12), hip symptoms (L13), tingling fingers/toes/feet (N05), cough (R05), throat symptoms (R21), pruritus (S02), urinary frequency

(U02). According to the literature these symptoms are not related with mental health problems.

Dia 8 and Dia 9

The next two sheets shows that medically unexplained symptoms or rather symptom episodes are very frequently encountered in the Transition project: about one third (36,7%) of the symptom presentations remain coded as a symptom.

The year prevalence of the 'unexplained' **somatoform** symptom episodes ranged from 0,4% (abdominal pain) to 4,8% (low back pain); the total year prevalence of these symptom episodes was 23,1%. The year prevalence of the '**somatic**' symptom episodes varied between 0,2% and 2,9% (Table 1).

The year prevalence **based on face to face encounters** of anxiety and depressive disorder was 5,8 (11,9) per 1000 patients per year for anxiety disorder and 22,2 (45,8) for depressive disorder.

Analysis

(The unit of analysis is the episode title (the diagnosis).)

 For answering our 2 main questions

1: Are mental health problems associated with unexplained symptoms presented to the GP and

2; Do unexplained symptoms, presented to the GP, predict a mental health problem?

we used two different views in our analysis:

A: cross-sectional and **B**: prospective. (We examined differences in rates with chi (kai)-square tests. For the calculation of ORs we used logistic regression adjusted for age and gender. We considered p values < 0,05 statistically significant.)

A1:

Cross-sectional analyses. Within a time frame of one year we calculated the odds ratios (with 95% CIs) for the chance that a patient with an anxiety disorder or depressive disorder had presented with one of 13 selected **somatoform** symptom episodes or one of the 13 **somatic** symptom episodes during that year.

Results

Dia 10 and Dia 11

Results of cross-sectional analyses. All but 3 symptom episodes – **somatoform** and **somatic** – had significant relations with anxiety and depression. **Somatoform** symptom episodes showed slightly higher associations with anxiety disorder and depressive disorder in comparison (komperizon) with **somatic** symptoms.

The **somatoform** symptom episodes nausea, constipation, sleep disturbances and shortness of breath had ORs $\geq$ 3 for depressive disorder. Generalized abdominal pain, nausea, palpitations and muscle pain had ORs $\geq$ 3 for anxiety disorder.

Ten out of thirteen **somatic** symptom episodes showed statistically significant associations for anxiety disorder or depressive disorder. Only two 'somatic' symptom episodes – swollen ankles and diarrhoea – had an OR $\geq$ 3 for depressive disorder.

A3:

Furthermore, we analyzed the *relation between anxiety and depression and the number of symptom episodes* for all the years between 1997 and 2007, also with ORs.

Results

Dia 12

The *number* of symptom episodes presented to the FP showed a clear relation with the presence of anxiety or depressive disorder. Presenting 2 or more symptom episodes gives a 5-fold increase of the risk of anxiety or depressive disorder. However, there was no difference between **somatoform** symptom episodes and **somatic** symptom episodes in relation to number of presented episodes.

Dia 13

All these result seems to be important but !!!

B:

Prospective analyses. We calculated the positive predictive value of a symptom diagnosis for a new mental health problem **in a period of 3 months** after the symptom diagnosis.

Dia 14, Dia 15, Dia 16 and Dia 17

Results of prospective analyses. The positive predictive value of all symptom episodes for anxiety and depression was very limited. Values varied (verried) between zero and 2,5%.

Dia 14

For anxiety, the post-test odds (posterior chance) roughly remained unchanged with respect to the pre-test odds (prior chance) for **somatoform** symptom episodes.

Except the somatoform symptom episode 'palpitations' which tripled the risk of anxiety.

Dia 15

Somatic symptom episodes generally reduced the risk for a new episode of anxiety.

Dia 16

The risk of depressive disorder was not raised by somatoform symptom episodes. See for example the symptom episode tiredness. The pre and post test stays the same. Only sleep disturbances doubled the risk for a new episode of depressive disorder.

Dia 17

By somatic symptom episodes. On this sheet we see that the posttest is frequent lower than the pretest.

Conclusion These **episode based** results from the Transition project does not justify screening for anxiety or depression in patients presenting with **somatoform** symptom episodes. The reason is the low incidence of those affective disorders following **somatoform** and also **somatic** symptom episodes in our clinical population. Finally, in the light of the generalist working style of the FP, we do not consider the distinction between **somatoform** and **somatic** symptoms relevant as this distinction might lead to false conclusions.