

#### Medically unexplained symptoms

#### **Professor Else Guthrie**



#### Plan

- What are MUS?
- Prevalence, severity and outcome
- Sickness and disability
- Treatment

# Medically unexplained symptoms

- Physical symptoms suggesting physical disorder for which there are no demonstrable organic findings or known physiological mechanism,
- <u>AND</u> for which there is positive evidence, or a strong assumption, that the symptoms are linked to psychological factors.

## MUS

Not only a diagnosis of exclusion but

 also requires a positive diagnosis of psychological factors



#### Janet



## "Talking Cures"



#### Janet

#### Freud



# Somatisation and emotional distress



## Somatic symptoms are normal

#### Frequency of somatic symptoms in the Danish Population over a two week period (males)



Ekholm et al 2005

#### Frequency of somatic symptoms in the Danish Population over a two week period (females)



# Incidence and aetiology of the 10 most common symptoms

3 year FU



Kroenke and Mangelsdorff, 1989

#### Most patients have multiple symptoms

(500 primary care patients presenting with a physical condition)



Kroenke et al, 1997

## Symptoms can be measured and monitored like any other disease/condition





#### During the past four weeks, how much have you been bothered by any of the following problems?

	Not at all	A little	A lot
Stomach pain			
Back pain			
Pain in your arms, legs, or joints (knees, hips, etc.)			
Menstrual cramps or other problems with your periods			
Pain or problems during sexual intercourse			
Headaches			
Chest pain			
Dizziness			
Fainting spells			
Feeling your heart pound or race			
Shortness of breath			
Constipation, loose bowels, or diarrhea			
Nausea, gas, or indigestion			

NOTE: If a patient reports being bothered "a lot" by at least three of the symptoms without an adequate medical explanation, a somatoform disorder should be considered.



#### Symptom Clusters

#### Infectious diseases

#### Reumatological

Dizziness Excessive fatigue headaches

#### Gastroenterological

Nausea Stomach cramps Heartburn bloating Pains in joints Pains in lower back numbness

Cardiological

Chest pain Breathing difficulty Breathlessness palpitations

#### "The existence of specific somatic syndromes is largely an artefact of medical specialisation"

- Simon Wessely
- Lancet 1999

## Functional Somatic Syndromes

- Chronic fatigue syndrome
- Irritable bowel syndrome
- Functional dyspepsia
- Chronic pelvic pain
- Multiple chemical sensitivity syndrome (20<sup>th</sup> Century Disease)
- Fibromyaglia
- Temporomandibular joint pain
- Globus

Functional Somatic Syndromes are associated with depression and anxiety

- Meta-analysis of 244 studies:
- IBS, Fibromyalgia, non-ulcer dyspepsia, chronic fatigue syndrome
- Syndromes had greater association with depression and anxiety than healthy controls or patients with related, organic syndromes

#### Unexplained symptoms and psychiatric comorbidity



Kroenke et al, 1994

#### Serious diseases that are not found or expected after initial evaluation seldom emerge later

Symptoms	Study	number	<b>Foll</b> <b>dur</b> later found to
Back pain	Von Korff (1993) Costa (2009)	1534	1 have organic disease
Chest pain	Sox (1981)	254	4-20
Neurological	Stone (2009) 🖌	1144	18
Fatigue	Kroenke (1988)	102	12
Dizziness	Kroenke (1992)	100	12
Diarrohea	Hawkins (1971)	163	24-240
Palpitations	Weber (1996)	190	12
Abdo pain	Wasson (1981) Martina (1997)	664	4-29

### MUS is a spectrum disorder

![](_page_20_Figure_1.jpeg)

## Somatic Symptom Disorder

- One or more somatic symptoms that are distressing or result in significant disruption of daily life
- Excessive thoughts, feelings or behaviours related to the somatic symptoms or associated health concerns manifested by at least one of:
  - Disproportionate and persistent thoughts about the seriousness of the symptoms
  - Persistent high level of anxiety about health or symptoms
  - Excessive time and energy devoted to these symptoms
- Six months or longer

#### Medically unexplained symptoms

How common are they in medical settings

Primary care: 15-19%
Medical out-patients: 35-52%

Burton C. British Journal of General Practice 2003; Nimnuan Journal of Psychosomatic Research 2001 Hamilton J Journal of the Royal College of Physicians 1996. Jackson J Journal of Psychosomatic Research 2006. Kooiman CG Psychosomatic Medicine 2000

#### Medically unexplained symptoms in medical out-patient clinics

	No of pts	% unex	Clinics
Nimnuan 2001	550	52%	Gynaecology, Neurology Cardiology, Gastroenterology
Van Hemert 1993	191	52%	General medical
Hamilton 1996	324	35%	Neurology, Cardiology,
Fiddler 2004	295	39%	Gastroenterology
Kooiman 2004	695	39-50%	General Medicine

#### Outcome

- Between 50-70% patients (primary care or community) find symptoms wane within a 12 month period (Hiller et al, 2006; Simon et al, 1999; Gureje et al, 1999; olde Hartman et al, 2009)
- At least 70% find symptoms wane over 10 years (Leiknes et al, 2007)
- In secondary care symptoms are more persistent

- Two recent systematic reviews of the course and prognosis of MUS, have reported that approximately half of patients develop persistent symptoms (Rief et al, 2007; olde Hartman et al, 2009).
- Factors associated with a poorer outcome are number and severity of symptoms at baseline.
- People with more severe and persistent symptoms have poor physical function, impaired quality of life, and high healthcare costs (Katon et al,1991).

The impact on healthcare costs, sick leave and disability

# Relationship between symptoms and impairment

- Number of bodily symptoms and illness worry are distributed continuosly in primary care or population based samples.
- Linear relationship between number of bodily symptoms and degree of impairment and frequency of health care use.
- Number of bodily complaints is also related in linear fashion to degree of psychological distress.

#### Number of medical consultations over 6 months by IPQ score

Number of doctor

![](_page_28_Figure_2.jpeg)

# There is a relationship between somatic symptoms and psychological symptoms

**Disability days** 

![](_page_29_Figure_2.jpeg)

Kroenke et al, 2010

## ICD diagnosis: "Signs, symptoms & ill-defined conditions" (ICD codes 780-789)

- <u>UK NHS</u>: most costly diagnostic category of out-patients
- 4<sup>th</sup> most expensive category in primary care
- <u>Netherlands:</u> 5<sup>th</sup> most expensive category
- <u>USA:</u> 5<sup>th</sup> most frequent reason for clinic visits (60 million per annum)
- Cherry et al . National Ambulatory Medical Care Survey: 2005 CDC National Center for Health Statistics. 2007.

- A recent estimate of the excess costs and utilisation of health care services in England as a result of MUS was approximately £3.145 billion per annum in the fiscal year 2008/2009 (DH 2011).
- Costs appear higher than those incurred by stroke and cancer
- Do not take into account other significant costs to society of MUS, such as time lost from work, reduced productivity, and sickness benefits.

#### High levels of somatic symptom severity are determinants of prolonged sickness absence, enduring disabilities and health-related job loss.

 In one study, the median duration of sick leave for people with high somatic symptom scores was 78 days longer than those without

Hoedeman et al, 2010

#### The degree of disability associated with somatic symptoms is equal or greater than that associated with many, major medical disorders.

Harris et al, 2008

#### Negative predictors of return to work in employees with mental health problems are:

- Duration of problems greater than 3 months prior to sickness absence
- Somatisation/MUS

#### Patient samples

![](_page_35_Figure_1.jpeg)

# Risk of new awards of full or partial disability pension during 10 years follow-up

![](_page_36_Picture_1.jpeg)

![](_page_36_Picture_2.jpeg)

Risk = 2.15 (1.08; 4.27)

N=76

Risk is double

Risk = 4.04 (2.55;6.40)
N=145
Risk is quadruple

## Some Specific therapies that have been shown to treat MUS

Strong evidence	Moderate Evidence	Weak Evidence		
Cognitive behavioural therapy				
Exercise				
antidepressants				
Consultation letter to primary care physician				
Non-CBT psychotherapies (psychodynamic-interpersonal therapy)				
Training of primary care physicians in MUS care				

#### **Clinical Considerations**

![](_page_38_Picture_1.jpeg)

Graded response Mild casesmanagement by GP

Severe cases require multidisciplinary team with psychological treatment and antidepressants

Henningsen 2008

#### Conclusions

- MUS are common
- Spectrum disorder
- More symptoms are associated with an increasing likelihood of psychological symptoms, disability, sickness absence and retirement because of ill health
- There is good evidence MUS can be treated (mild to moderate forms)
- Less evidence for treatment impact on return to work