



## Severe pain and multiple physical symptoms – evidence-based early diagnosis and prevention of iatrogenic harm

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## Background

According to previous population based studies, more than 10% of adults suffer from chronic widespread pain. This compares to the prevalence of severe symptom syndromes such as irritable bowel syndrome found among 11% of Danes. An increasing number of studies suggest that patients with chronic widespread pain or multiple symptoms experience symptom persistence, substantial disability, reduced quality of life and mental distress/disorders.

Few studies have explored the risks associated with investigations and treatment attempts, when individuals with physical symptoms enter the healthcare system. According to the biopsychosocial model, GPs estimate that 78% of symptoms relate to biomedical aspects, 17% to psychological and only 5% to social aspects. These estimates are contrasted by the fact that a third of patients presenting health problems in general practice leave the consultation without a specific diagnosis. Prompt diagnosis of life-threatening diseases is crucial, but when no disease is found, the reflected narrow biomedical approach among GPs may expose patients to iatrogenic harm.

## Aim

- To investigate to which degree individuals with multiple physical symptom patterns overlap with individuals having localized or widespread pain, respectively. Furthermore, to describe the characteristics associated with the different symptom patterns, i.e. localized pain, widespread pain and multiple physical symptoms, respectively, in the general population. Characteristics evaluated are: disability, subjective health, comorbidity, healthcare use, socioeconomic status, social network, and labour market affiliation.
- 2) To explore possible associations between the use of medication and localized pain, widespread pain and multiple physical symptoms, respectively.
- 3) To explore possible associations between the exposure to hospitalisation and surgery on the one hand and the experiences of localized pain, widespread pain and multiple physical symptoms on the other.

## Method

The project will be conducted as a population-based cohort study with a 3-year follow-up. It is based on the national Danish Symptom Cohort (DaSC) at the Research Unit for General Practice in Odense, Department of Public Health, University of Southern Denmark. The DaSC is a nationwide cohort study of 100,000 people aged above 20 years randomly selected in the general population and with baseline data collected in a web-based survey. The questionnaire survey took place from June until December 2012. Of the 95,253 eligible





subjects, 49,706 (52%) completed the questionnaire (included in the present study). So far, data from the DaSC has provided the basis for 3 approved PhD thesis and 11 international peer reviewed publications. A database has been established with linkage of the obtained questionnaire data with register data. The database contains information on socioeconomic variables (education, cohabiting status, labour market affiliation and income), medication, physical diseases, contacts to the primary healthcare system, and cause of death. For the present study, this will be supplemented by information on mental disorders and surgical procedures from national registers.

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