Commonalities and differences between the diagnostic groups: Current somatoform disorders, anxiety and/or depression, and musculoskeletal disorders[☆]

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Abstract

Objective: To identify the similarities and differences of risk factors and correlates of different groups of people fulfilling criteria for specified diagnostic groups according to current somatoform disorder (SDs) criteria, presence of anxiety and/or depression, and self-reported musculoskeletal disorders. **Methods:** Participants of the Oslo–Lofoten general population cross-sectional study in 2000–2001 interviewed with the Composite International Diagnostic Interview (CIDI) somatoform section were examined by comparing similarities and differences in 8 groups identified by cross-tabulation of current SDs, anxiety and/or depression, and musculoskeletal disorders. The current SDs group was computed from the CIDI somatoform section raw data, anxiety and/or depression from the CIDI diagnostic algorithms and musculoskeletal disorders by questionnaire and self evaluation. **Results:** In the 2001 sample of 1668 (875 women and 793 men) participants, the following eight disorder groups were identified:

(i) current SDs, $n=49$ (75.5% women) (ii) musculoskeletal (functional somatic disorders), $n=327$; (53.5% women) (iii) anxiety and/or depression, $n=148$ (73.6% women); (iv) current SDs with anxiety and/or depression, $n=38$ (73.7% women); (v) current SDs with musculoskeletal, $n=44$ (72.7% women); (vi) current SDs with anxiety and/or depression and musculoskeletal, $n=34$ (76.5% women); (vii) musculoskeletal with anxiety and/or depression, $n=101$ (66.3% women); and (viii) no disorders, $n=927$ (43.3% women). Commonalities and differences between current SDs, anxiety and/or depression, and musculoskeletal disorders are apparent. Impairment of outcomes and risk factor load is high in current SDs with anxiety and/or depression and musculoskeletal. **Conclusion:** The data in this article could help toward the needed *DSM-V* and *ICD-11* diagnostic revision of the SDs category.

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Introduction

The identification of medically explained (MES) and unexplained (MUS) symptoms, as required by existing *DSM-IV* [1] and *ICD-10* [2] classification of somatoform disorders (SDs), has been found prone to faulty recall over time [3] and a large degree of overlap between existing somatoform diagnostic categories has been demonstrated [4]. It has been postulated that one cannot justify considering SDs alone (with no psychiatric disorder co-morbidity) a mental disorder [5]. The critique of today's SDs classification systems is extensive [5–11] and voices advocating the need for revision in the forthcoming *DSM-V* and *ICD-11* revisions are many [7,12–19]. The data in this article could help towards that

revision. Essential to the revision is knowledge about commonalities and differences in risk factors, mental state and outcome measures between SDs and functional somatic syndromes (FSS) diagnosis groups from general population studies. In contrast to other recent epidemiological studies [20,21] the Oslo–Lofoten survey [4,5,22] included and did not leave out, the SDs section in the Composite International Diagnostic Interview (CIDI) [23].

Against this background, the aim of this article is to explore common and specific aspects of SDs and FSS diagnostic categories, derived from the cross-tabulation of current SDs, anxiety and/or depression, and musculoskeletal disorders in all participants interviewed with the CIDI somatoform section in the Oslo–Lofoten 2000–2001 (hereafter 2001) cross-sectional study. We hypothesize that the risk factor load and the impairment of outcomes (meaning the overall amount of statistically significant (P<.05) variables) would be greatest in people with a combination of current SDs with anxiety and/or depression and/or musculoskeletal. We expect the risk factor load to be smaller in those with current SD and musculoskeletal disorders and least in those without disorders.

Material and methods

Overall material

The cross-sectional data from 2001 were derived from the Norwegian Oslo–Lofoten study, extensively described elsewhere [3,5,24–26]. An initial random sample of 5000 individuals aged 18 years or older (2600 from the capital Oslo and 2400 from the rural northwest coastal area of Lofoten) was drawn from the National Population Register administered by Statistics Norway (the Norwegian Bureau of Statistics) in 1989 [5]. A total of 2014 people (1009 from Oslo and 1005 from Lofoten, equivalent to 74% of the eligible 2727), representative of the age and gender distributions of the source population [26], responded to the 25-item Hopkins Symptom Checklist (HSCL-25). In 2001, 1000 new respondents were added on to the "old" cohort [5]. In 1989–1990 a Phase II preselection by HSCL-25 score (score >1.55) was undertaken for those CIDI-interviewed. Altogether, 421 of these respondents from 1990 were re-interviewed in 2001. For all CIDI interviewed in 2001, with the somatoform disorders module of the updated computerized M-CIDI (electronic DIA-X/WHO-CIDI version 1.2) [23], no HSCL-25 pre-selection was undertaken. Altogether, 1247 respondents without any HSCL-25 pre-selection remained, together with 421 re-interviewed and earlier preselected with HSCL-25 in 1990, giving a total of 1668 subjects in the below 2001 cross-sectional data analyses for this study.

Diagnostic categories

Anxiety and depression disorder diagnoses used in this study were computed by the use of a CIDI software program

designed for the purpose [23]. The *ICD-10* diagnostic algorithms were derived from *DSM-IV* criteria [27]. Depression disorders were those prevalent during the previous 12 months, with *ICD-10* [2] codes from F31.3 to F34.1. Similarly, anxiety disorders were those prevalent during the last 12 months, with *ICD-10* [2] codes from F40.0 to F41.8.

The current SDs category consisting of Somatoform disorder not otherwise specified (SDnos) and/or Multi-somatoform disorder (MSD) was computed from the CIDI somatoform section raw data, applying the additional Criterion B of *DSM-IV*, i.e., MUSs causing impairment (moderate to severe) "in social, occupational or other important areas of functioning," as undertaken and described earlier [5]. Similarly, the musculoskeletal disorder category consisted of one or more of the following self-reported FSS conditions during the last year: (i) tendonitis/muscle knots; (ii) fibromyalgia; (iii) neck/shoulder myalgia, including whiplash; or (iii) lumbago, sciatic back pain/myalgia [5].

The cross tabulation of current SDs, anxiety and/or depression, and musculoskeletal disorders identified the following 8 disorder groups (Fig. 1): (i) current SDs (n=49), (ii) musculoskeletal (n=327), (iii) anxiety and/or depression (n=148), (iv) current SDs with anxiety and/or depression (n=38), (v) current SDs with musculoskeletal (n=44), (vi) current SDs with anxiety and/or depression and musculo-skeletal (n=34), (vii) musculoskeletal with anxiety and/or depression (n=101), and (viii) no disorders (n=927).

Statistical analysis

Overall differences in characteristics of respondents in the 8 disorder groups were examined by chi-square statistics for dichotomous variables and analyses of variance (ANOVAs) for continuous variables.
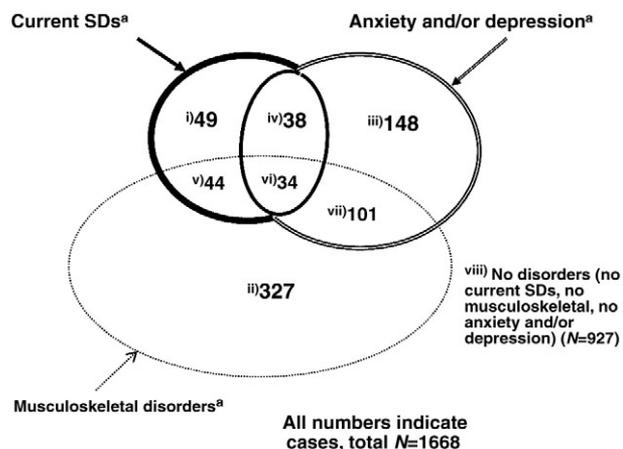

Fig. 1. Diagnostic groups: (i) current SDs, (ii) musculoskeletal, (iii) anxiety and/or depression, (iv) current SDs with anxiety and/or depression, (v) current SDs with musculoskeletal, (vi) current SD with anxiety and/or depression and musculoskeletal, (vii) musculoskeletal with anxiety and/or depression, and (viii) no disorders (n=1668). [a]See legend of Table 1.