# Original Research Reports

# Prevalence of Somatoform Disorders in a Large Sample of Patients With Anxiety Disorders

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*The authors investigated the prevalence and characteristics of somatoform (SOM) disorders among 654 subjects with anxiety disorders who were part of the larger Harvard/Brown Anxiety Disorders Research Project. Thirty-six (5.5%) of the subjects had past or current SOM disorders. The subjects with SOM disorders were significantly more likely to have histories of posttraumatic stress disorder (22% vs. 8%, P = 0.01). The subjects with generalized anxiety disorder had significantly higher rates of SOM disorder (9.2% vs. 4.0%, P = 0.01). These results add support to the observation that SOM disorders are frequently comorbid with anxiety and depressive disorders.*

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Patients with somatoform disorders have persistent, unexplained medical symptoms that severely challenge the diagnostic and therapeutic skills of medical practitioners.[1] The patterns of these disorders take several different forms, which have been differentiated in DSM-III-R: somatization disorder, hypochondriasis, conversion disorder, somatoform pain disorder, and somatoform disorder not otherwise specified.

Although the lifetime prevalence of somatization disorder is low (0.13%), persons with this disorder use health services frequently and tend to have multiple surgeries and hospitalizations.[2] However, in specialized settings, such as primary care or family medicine practices, hypochondriasis has been shown to be a more frequent problem, having in one study a current prevalence of nearly 8%,[3] and, in another study of medical outpatients, a 6-month prevalence of between 4.2% and 6.5%.[4] In the latter study, by comparison, the 6-month prevalence for DSM-III somatization disorder was 1.5%.

Somatoform disorders are often viewed as a defense against awareness of emotional distress.[5,6] However, the comorbidity between somatoform disorders and anxiety and depressive disorders has been noted by an expanding number of investigators.[7-14]

In the Epidemiologic Catchment Area (ECA) study,[15] Swartz further confirmed the

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high prevalence of other psychiatric disorders in the Piedmont, North Carolina, sample of subjects with somatization disorder from the larger ECA sample of 3,783 people. The most common comorbid disorders, as determined by prevalence ratios, in descending frequency, were panic disorder, schizophrenia, mania, obsessive-compulsive disorder, and major depression.

Almost all of the studies to date have focused on populations of patients with somatoform disorders. In this study, we have examined the relationship between somatoform disorders and comorbid anxiety disorders in a large sample of patients with anxiety disorders.

## METHODS

This study is part of the larger Harvard/Brown Anxiety Disorders Research Project (HARP), a prospective, naturalistic, longitudinal multicenter study of patients with DSM-III-R–defined anxiety disorders from 11 sites.

Inclusion criteria are that patients must have at least one of the following DSM-III-R current or past diagnoses: panic disorder (with or without agoraphobia), agoraphobia without a history of panic disorder, generalized anxiety disorder, or social phobia. Insufficient for inclusion, but seen frequently as comorbid disorders, are DSM-III-R diagnoses of simple phobia, posttraumatic stress disorder (PTSD), obsessive-compulsive disorder, and anxiety disorder not otherwise specified. Subjects are at least 18 years of age, willing to participate voluntarily in the study, and able to sign a written consent form. Exclusion criteria are the presence of an organic mental disorder, a history of schizophrenia, or psychosis within the last 6 months.

The initial comprehensive evaluation assessed lifetime history by using selected items from the Personal History of Depressive Disorders,[16] the Yale Greater New Haven Health Survey–Community-Interview-Wave 1,[17] the Structured Clinical Interview for DSM-III-R Non-Affective Disorders–Patient Version (SCID-P),[18] and the Schedule for Affective Disorders–Lifetime (SADS-L), which uses the Research Diagnostic Criteria.[19] Items from the SCID-P and SADS-L were combined to create the SCALUP, an instrument in use for the Upjohn-funded intakes.[20] Lifetime prevalence of medical disorders was evaluated with the Medical History Form II.[21] Follow-up is conducted at 6-month intervals with the Longitudinal Interval Follow-up Evaluation (LIFE)[22] to collect detailed information on the course of illness and psychosocial function. Items from the LIFE relating to psychosocial function are also used in the intake battery, including the Global Assessment Scale.[23]

The interviews were conducted in person by experienced clinical interviewers whose training and certification ranged from B.A. to M.D. level. Interview data were reviewed by at least two senior staff for clinical and clerical errors and corrected by the rater before the data were entered into the computer's master file.

In our original examination of the rates of somatoform disorders, we discovered that the rate of diagnosis for one of the clinical interviewers was significantly higher than for the rest of the interviewers: 16 of 57 (28%) vs. 36 of 654 (6%), $\chi^2 = 39.39$, df = 1, $P < 0.0001$. This could not be accounted for by the differences in rates between the sites because the other interviewer for this site had diagnosis rates similar to the rest of the interviewers. For this reason, all 57 subjects interviewed by this interviewer were eliminated from the analyses reported here. These analyses were replicated on the 57 subjects, and no significant differences were found from the remaining 654 subjects. Inter-interviewer differences in rates of diagnosis are now being examined for future reports.

### Statistical Analyses

All statistical analyses were conducted using SAS Version 6.07 (SAS Institute, Inc., 1990) using PROC FREQ and PROC T TEST. Comparisons were made using chi-square tests for nominal data (Fisher's exact test was used when expected cell sizes were small) and *t*-tests for continuous data. *P*-values were not adjusted to