A cluster within the continuum of biopsychosocial distress can be labeled "fibromyalgia syndrome"--evidence from a representative German population survey.

OBJECTIVE: We tested the hypothesis that "fibromyalgia syndrome" is a biopsychosocial continuum disorder. METHODS: A cross-sectional survey of a representative sample of the German general population with persons $\geq 14$ years of age was conducted based on face-to-face contacts. Physical distress was measured by the regional pain scale (RPS) and the Patient Health Questionnaire 15 (PHQ-15), psychological distress by the PHQ-9, and social distress by the Oslo Social Support Scale. Health-related quality of life (HRQOL) was measured by the 12-item form of the Medical Outcome Study Short Form Health Survey. A k-means clustering procedure with 2-8 clusters preset was used to classify the scores of the RPS, PHQ-9, and PHQ-15. The number of clusters retained was based on the stability and interpretability of the clusters. The cluster analysis was first performed with a randomly selected half of the sample and then cross-validated on the second half of the total sample. RESULTS: A 4-cluster solution produced the most stable and meaningful results. Cluster 1 was very low on all symptom scores. Cluster 2 was low on pain sites, somatic symptoms, and depression. Cluster 3 was high on pain scores, moderate on somatic symptoms, and low on depression. Cluster 4 was high on all symptom scores. The centroids of
cluster 4 met the survey criteria of fibromyalgia syndrome. Cluster 4 reported a lower HRQOL and less social support compared to the other 3 groups. CONCLUSION: A cluster within the continuum of biopsychosocial distress can be labeled fibromyalgia syndrome.