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Patients with medically unexplained symptoms and their significant others: Illness attributions and behaviors as predictors of patient functioning over time

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Abstract

Objective: Previous research suggests that medically unexplained symptoms (MUS) are maintained in an interpersonal context. The current study examined MUS concurrently and prospectively by measuring specific interpersonal predictors of symptom severity and health care use. **Methods:** A total of 127 patients with MUS and their significant others were recruited through primary care offices and assessed with self-report questionnaires and structured interviews about illness attributions, illness behavior and responses, relationship quality, symptom severity, and health care use at baseline and 6-month follow-up. **Results:** Illness attributions and interpersonal illness behaviors of patients with MUS were cross-sectionally associated with illness attributions and responses of the patients' significant others. Relationship quality was related to specific illness behaviors and responses. Symptom severity at baseline was predicted by patients' somatic illness attributions. Symptom severity at 6-month follow-up was predicted by somatic illness attributions of patients and withdrawal of patients' significant others at baseline, but these predictors became insignificant when correcting for baseline symptomatology. Health care use at baseline was predicted by a greater amount of coping behavior and higher anxiety scores of patients, and health care use at 6-month follow-up was predicted by more attention-seeking behaviors and health care use of patients at baseline. **Conclusion:** The results document the interpersonal influences on the maintenance of MUS. The perspective of significant others should be considered for enhancement of psychological approaches to the treatment of patients with MUS.

Keywords: Illness behavior; Illness beliefs; Interpersonal; Marital; Pain; Somatoform

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Introduction

Medically unexplained symptoms (MUS), that is, multiple physical symptoms that are not fully explained by a biomedical disease, are widespread. They are considered a burden to patients and their significant others and are assumed to be maintained in an interpersonal context. The present study was aimed at investigating—within the significant relationships of patients with MUS—specific cognitive and behavioral aspects associated with the patient's long-term functioning.

MUS are associated with interpersonal problems [1,2], including more conflict and less cohesion within families [3]. Likewise, increased rates of personality disorders in patients with MUS (e.g., avoidant, schizotypal, paranoid, obsessive-compulsive, and histrionic personality disorders) [4–6] and evidence about insecure attachment styles [1,7,8] suggest interpersonal problems of these patients, including those with their significant others. However, specific

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cognitive and behavioral characteristics of patients' interactions with significant others and the impact of these characteristics on relationship quality, as well as on symptom severity and health care use, remain largely unclear [9,10].

One cognitive variable that has proven to be clinically relevant for MUS but has scarcely been considered in an interpersonal context are illness attributions. According to current conceptualizations of somatoform disorders, patients with MUS utilize somatic illness attributions for their common somatic complaints [11,12]. Indeed, one of the few investigations to examine illness attributions in an interpersonal context showed that patients with chronic fatigue syndrome, a medical syndrome frequently co-occurring with MUS, were most likely to endorse somatic attributions for their symptoms, as did their relatives for the patients' symptoms, although patients' relatives considered other explanations for their own complaints [13]. Furthermore, the type of illness attribution seems to be differentially relevant for symptomatology and treatment outcome: In patients with MUS, somatic illness attributions were cross-sectionally associated with more behavioral symptoms, for example, frequent verification of diagnosis or expression of symptoms, with more somatoform symptoms, and thereby with increased health care use [14,15]. In contrast, psychological illness attributions were associated with comorbid depression and anxiety [15,16]. Longitudinally, one clinical study of MUS showed that a decrease of somatoform symptoms, but not of health care use, was predicted directly by less somatic attributions, and indirectly through more anxiety and psychological attributions [17]. In chronic pain, a medical condition frequently characterized by MUS, there is emerging evidence to suggest that greater congruence between chronic pain patients and their spouses on pain-related variables is associated with patients' higher pain severity and less punishing spousal responses [18]. In light of these findings, the associations between illness attributions of patients with MUS and their significant others and the associations of illness attributions with interpersonal illness behavior and responses warrant further investigation in order to clarify the concurrent and longitudinal impact on symptom severity and health care use.

Among the behavioral aspects likely contributing to the maintenance of MUS, interpersonal responses of significant others such as solicitous, distracting, and punishing spousal responses were significantly associated with greater pain severity in chronic pain patients [9]. These illness responses were interpreted in terms of operant conditions [19]: while punishing spousal responses were associated with patients' decreased pain behavior, solicitous spousal responses were positively related to this behavior [20–23]. Illness behavior and responses were further found to be associated with the perceived relationship quality in chronic pain couples [24–26]. Overall, because of the cross-sectional nature of this research, conclusions about longer-term implications of illness behavior and responses on symptom severity cannot be drawn. In MUS, illness behavior and responses, and relationship quality require further investigation, especially with regard to the long-term impact on patients' symptom severity and health care use.

In this context, it was hypothesized: (1) that patients' illness attributions and behaviors are significantly related with the illness attributions and responses of their significant others; (2) that illness behavior of patients and significant others' illness responses are associated with somatic illness attributions and relationship quality; (3) that somatic illness attributions and illness behavior and responses are cross-sectionally; and (4) longitudinally predictive of greater symptom severity and health care use. Depressiveness and anxiety were considered as control variables in the regression analyses because of their associations with psychological illness attributions.

Methods

Sample

Patients with MUS were recruited through 26 primary care offices at regular visits for a larger study involving a general practitioners (GP) training. This randomized GP training study used a waiting-list control group design and a 6-month follow-up period [27]. The main inclusion criterion was a history of multiple unexplained physical symptoms (at least two symptoms) that were not entirely explained by an established biomedical etiology [28]. Patients were excluded if biomedical reasons for the complaints were identified during the follow-up period of the study. Ethical approval for the conduct of the study was obtained by the Philipps University of Marburg Ethics Committee.

Out of 295 patients with multiple unexplained symptoms that were included in the trial, 148 patients were randomly selected and contacted for participation in the current study (50.2%). Out of these 148 patients, 127 patients and their significant others responded to the request (response rate=85.8%). Patients and significant others from the current study did not differ from those who did not respond in the sociodemographic and clinical characteristics described below (all P>.05). According to the exclusion criterion described above, 4 out of the 127 patients dropped out of treatment (3.8%) but were contacted for assessments.

As presented in Table 1, patients were on average middle-aged and predominantly female. About 90% of patients were married or had a partner and were living with their partner or family. According to psychiatric interview [29], 94.5% of patients carried the diagnosis of a *DSM-IV* somatoform disorder (120/127). Out of these 120 patients, 20 suffered from somatization disorder (15.7%), 42 from undifferentiated somatoform disorder (33.1%), 35 from somatoform pain disorder (27.6%), 4 from conversion disorder (3.1%), and 19 from hypochondriasis (15.0%). All patients not fulfilling the criteria for a somatoform disorder (5.5%, 7/127) received a diagnosis of either a depression or anxiety disorder. For