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# Association between Somatoform Disorder and Disability: A Systematic Review

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**ABSTRACT: Background and Aim:** The rates of disability that accompany medically unexplained symptoms appear to be generally comparable to or greater than those seen with many chronic medical conditions. **Methods:** The following databases from 2000 to 2019 have been searched such as: Cochrane Collaboration, MEDLINE, CINAHL, EMBASE, Science Direct, ASSIA, Web of Science, Scopus, PubMed and JSTOR. Only cohort, case-control and randomized controlled trials studies with full text in English were eligible. **Results:** Of 214 articles, and after exclusion criteria; 3 articles only were met the inclusion criteria which have the association between disability and somatoform disorder. Of these ten studies, nine found significant association between disability and somatoform disorder, and while only one study did not find such association. **Conclusion:** In sum, severe somatization is an entity distinct from depression, which may be as distressing, persistent, refractory, and disabling as the somatic symptoms resulting from several major medical conditions. The results in the current systematic review are consistent with a worldwide growing body of literature that demonstrates that the burden of disability from psychiatric disorders rivals, or exceeds, that associated with medical problems.

**Keywords:** Somatoform Disorder, Disability.

## INTRODUCTION

The substantial disability and role impairment resulting from chronic medical and psychiatric disorders have been well established [1]. It is less well known, however, that somatization and somatoform disorders are also associated with substantial impairment of function in several domains. One specific sub-group of severely somatizing patients, those with somatization disorder, spend more days in bed, have higher rates of disability, more occupational and social role impairment, more unemployment, and require more sick leave. Somatization is a common problem. A substantial amount of patient encounters in primary care concern medically unexplained physical symptoms, leading to frequent consultations and high overall health care costs [2].

The rates of disability that accompany medically unexplained symptoms appear to be generally comparable to or greater than those seen with many chronic medical conditions as well as those resulting from mood and anxiety disorders [3]. In primary care populations, patients with five or more medically unexplained symptoms have greater social role impairment than patients whose symptoms have a medical explanation [10], and the total number of medically unexplained symptoms has a linear association with the severity of disability [11]. Although these patients' medically unexplained symptoms may be attributable to underlying mood and anxiety disorders, studies have suggested that as many as a third of somatizing patients do not have a co-morbid psychiatric disorder [3].

Thus, while it is clear that somatization is associated with disability, it remains unclear to what degree this relationship is mediated by co-morbid depressive and anxiety disorders and to what degree it is confounded by medical co-morbidity. Given that treatments have been shown to be effective for somatization, and that these treatments differ in important respects from those for depressive and anxiety disorders, it is important to determine the unique contribution of somatization to disability and role impairment [4].

**Material and Methods**

Recent methodological debate has highlighted the advantages of integrating qualitative and quantitative studies in systematic reviews. Roberts et al. (2002) argue that there are real risks of excluding potentially valuable information if only one type of evidence is used in a systematic review. This review included only quantitative studies to identify the association between disability and somatoform disorder.

Systematic review method was used to draw the methodology for the present study. Cohort studies, case-control studies, randomized controlled trials carried out among patients in developing and developed countries were reviewed. Somatoform and disability disorder defined operationally.

**Search methods and inclusion criteria**

All studies published between 2000 and 2019 in English were searched using the electronic databases: Cochrane Collaboration, MEDLINE, CINAHL, EMBASE, Science Direct, ASSIA, Web of Science, Scopus, PubMed and JSTOR. Keywords used in the search include: disability, somatizing, disease, psychiatric, somatoform, disorder. Hand-searching of reference lists increased comprehensiveness, and key personnel working in such field especially those involving mental health in developing countries were contacted for published studies.

**Search outcome**

Of 214 research papers initially identified using the search criteria, 119 proved irrelevant when the titles were examined and 125 were duplicates. The abstracts of these 65 papers were then examined, resulting in 30 papers being examined in full. Of these, 35 were excluded after reading the full texts. The remaining 20 were fully read and quality assessed. Of these, six were excluded after reading full text, of these, four were excluded on the basis of quality assessment and 10 papers were included in the review (Figure 1).

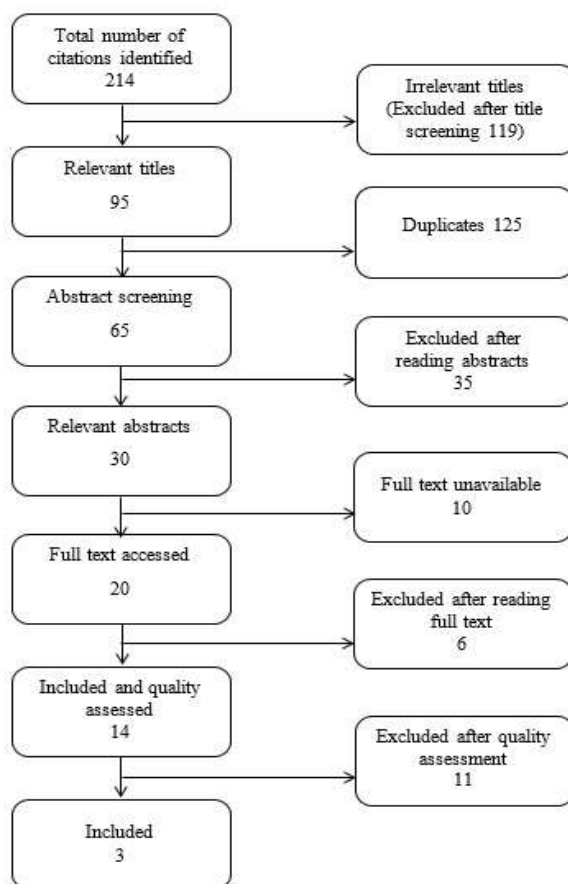


Figure 1. Flow diagram of the process of identifying and including references for the systematic review

**Results**

Author/year	Study design	Country	Sample size	Control of confounder	Outcomes	Conclusion
van der Leeuw et al., (2015) [14]	Longitudinal	Netherlands	1545	Yes	Somatization was significantly associated with disability. Somatization accounted cross-sectionally for 41.8% of the variance in WHO-DAS disability and, longitudinally, for 31.7% of the variance in disability after one year of follow-up	Somatization contributes to the presence of disability in primary care patients, even when the effects of baseline demographic and health characteristics and anxiety or depressive disorder are taken into account
Harris et al. (2009) [1]	Self-report	Brigham	1914	Yes	Patients with somatization, as well as those with serious medical and psychiatric illnesses, had significantly more impairment of activities of daily life and social activities. When these predictors were considered simultaneously in a multivariable regression, the association with somatization remained highly significant and was comparable to or greater than many major medical conditions	Patients with somatization had substantially greater functional disability and role impairment than non-somatizing patients
Yap, AU et al. (2004) [15]	Case-control	Singapore	196	Yes	Patients with moderate and severe somatization had significantly higher MP scores than normal patients. LRMF scores of patients with severe somatization were significantly greater than those who were normal or suffered from moderate somatization.	Depression and somatization are related to the self-report of MP. In addition, severe somatization may be associated with an increase in jaw disability.

**Discussion**

Somatization has been found to be related to disability in several cross-sectional studies [5]. The World Health Organization describes disability as ‘any restriction or lack of capacity to perform an activity in a manner or within a range considered normal for a human being’ [6]. The presence of five or more medically unexplained symptoms is associated with greater social disability compared to five symptoms with a medical explanation [7]. Patients with long-lasting somatization have more disability and higher sick leave than non-somatizers. Up to 30% do not recover or even get worse, indicating a poor prognosis for a substantial group [8].

High levels of somatic symptom severity contribute to reduced health-related functioning [9], even after adjustment for psychiatric and medical co-morbidity [10]. The link with anxiety and depression has been mentioned often and the term syndromality has been suggested for the concurrent occurrence of somatic, anxiety and depressive symptoms [11].

Somatizing patients often have comorbid anxiety or depressive disorders [12]. De Waal and colleagues found that 50% of the primary care patients with an anxiety and/or depressive disorder also had a comorbid somatoform disorder [13].

However, most of this research was cross-sectional and it has rarely been explored if somatization in itself leads to long-term disability, or whether concurrent ill mental health, especially anxiety and depressive disorder, is responsible for the somatization–disability connection. Previous studies that investigated the association between somatization and disability identified psychiatric morbidity as a potential confounder of this relationship [10]. Perhaps patients who are somatizing with comorbid psychiatric disorders show more disability compared to people with only somatization or psychiatric disorder. That would indicate that they should at least receive treatment both for the psychiatric problems and for the somatic symptoms [14].

Additionally, there is a growing body of literature indicating that medically unexplained symptoms are as, or even more, chronic and refractory to treatment than medically explained symptoms. Studies have shown that somatoform disorder symptoms are chronic and persistent<sup>30,31</sup>, and may often be even more persistent and intractable than the symptoms of major medical illnesses<sup>31</sup> and less likely to resolve<sup>30</sup>. Some medically unexplained symptoms have a remarkably poor prognosis: Three-quarters of atypical chest pain patients, for example, are still symptomatic and disabled at 10-year follow-up<sup>32</sup>.

The unique contribution of somatization to disability has important clinical implications since its treatment often differs from that of the anxiety or depressive disorder. While some somatization responds well to treatment with SSRIs, as do depression and anxiety, cognitive behavior therapies specifically targeting the unique aspects of somatization have been developed, tested, and shown to be efficacious [16]. One such protocol aims to restructure beliefs and expectations about health, disease, and

medical treatment. It also addresses those beliefs that contribute to the initiation, amplification, and maintenance of distorted cognitions about symptoms, including the effects of attention, beliefs, circumstances, expectations, behavior, and mood on somatic sensations [17].

### **Conclusion**

In sum, severe somatization is an entity distinct from depression, which may be as distressing, persistent, refractory, and disabling as the somatic symptoms resulting from several major medical conditions. They are therefore by no means trivial or “benign” and are deserving of more intensive study and clinical attention than they tend to receive. The results in the current systematic review are consistent with a worldwide growing body of literature that demonstrates that the burden of disability from psychiatric disorders rivals, or exceeds, that associated with medical problems.

### **REFERENCES**

1. Harris, A. M., Orav, E. J., Bates, D. W., & Barsky, A. J. (2009). Somatization increases disability independent of comorbidity. *Journal of general internal medicine*, 24(2), 155–161. doi:10.1007/s11606-008-0845-0
2. Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. *Arch Gen Psychiatry* 2005; 62:903–10.
3. Kroenke K, Spitzer RL, Williams JBW, Linzer M, Hahn SR, deGruy FV, et al. Physical symptoms in primary care: predictors of psychiatric disorders and functional impairment. *Arch Fam Med*. 1994;3:774–9.
4. Looper KJ, Kirmayer LJ. Behavioral medicine approaches to somatoform disorders. *J Consult Clin Psychol*. 2002;70:810–27.
5. Fink P, Sorensen L, Engberg M, Holm M, Munk-Jorgensen P. Somatization in primary care. Prevalence, health care utilization, and general practitioner recognition. *Psychosomatics* 1999;40:330–8.
6. Wood PH. Appreciating the consequences of disease: the international classification of impairments, disabilities, and handicaps. *WHO Chron* 2015;34:376–80.
7. Kisely S, Goldberg D, Simon G. A comparison between somatic symptoms with and without clear organic cause: results of an international study. *Psychol Med* 1997;27: 1011–9.
8. Olde Hartman TC, Borghuis MS, Lucassen PL, van de Laar FA, Speckens AE, van Weel C. Medically unexplained symptoms, somatisation disorder and hypochondriasis: course and prognosis. A systematic review. *J Psychosom Res* 2009;66:363–77.
9. Jackson J, Fiddler M, Kapur N, Wells A, Tomenson B, Creed F. Number of bodily symptoms predicts outcome more accurately than health anxiety in patients attending neurology, cardiology, and gastroenterology clinics. *J Psychosom Res* 2006;60: 357–63.
10. Harris AM, Orav EJ, Bates DW, Barsky AJ. Somatization increases disability independent of comorbidity. *J Gen Intern Med* 2009;24:155–61.
11. van der Feltz-Cornelis CM, van Balkom AJ. The concept of comorbidity in somatoform disorder—a DSM-V alternative for the DSM-IV classification of somatoform disorder. *J Psychosom Res* 2010;68:97–9 [author reply 99–100].
12. Clarke DM, Smith GC. Somatisation. What is it? *Aust Fam Physician* 2000;29: 109–13.
13. de Waal MW, Arnold IA, Eekhof JA, van Hemert AM. Somatoform disorders in general practice: prevalence, functional impairment and comorbidity with anxiety and depressive disorders. *Br J Psychiatry* 2004;184:470–6.
14. van der Leeuw, G., Gerrits, M. J., Terluin, B., Numans, M. E., van der Feltz-Cornelis, C. M., van der Horst, H., ... Van Marwijk, H. W. (2015). The association between somatization and disability in primary care patients. *Journal of Psychosomatic Research*, 79(2), 117-122.
15. Yap, AU., Chua, EK., Tan, KB., Chan, YH. (2004). Relationships between depression/somatization and self-reports of pain and disability. *J Orofac Pain, Summer*;18(3), 220-5.
16. Smith RC, Lyles JS, Gardiner JC, Sirbu C, Hodges A, Collins C, et al. Primary care clinicians treat patients with medically unexplained symptoms - A randomized controlled trial. *J Gen Int Med*. 2006;21:671–7.
17. Barsky AJ, Ahern DK. Cognitive behavior therapy for hypochondriasis; A randomized controlled trial. *JAMA*. 2004;291:1464–70.