

# Relationship between Perceived Social Support and Severity of Symptoms in Persons with Somatoform Disorder

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## ABSTRACT

### BACKGROUND

Somatization is a common problem in primary health care leading to disproportionately heavy demands on health services. Patients with somatoform disorder account for about 20% of the workload in general practice. In somatoform disorder multiple or unexplained physical symptoms cause substantial disability in patients, while their psychiatric distress remains unrecognised and untreated. Studies have shown that good perceived social support improves the well-being of a person and also affects the outcome of treatment in somatoform disorder. Our study aimed at investigating relationship of severity of somatic symptoms and perceived social support in people with somatoform disorder.

### METHODS

This study is a cross-sectional single interview study in a tertiary care centre. All patients attending psychiatry OPD of R. G. Kar Medical College and Hospital, Kolkata, diagnosed with somatoform disorder (ICD-10) fulfilling inclusion and exclusion criteria were included in this study. Total 60 patients were selected. Inclusion criteria include patients aged between 18 to 60 years, both sexes and exclusion criteria include patients with mental retardation, epilepsy, any other neurological disorder and with co-morbid mental disorder. Patient Health Questionnaire-15 (PHQ-15) and Multidimensional scale of perceived social support assessment were used to assess severity of somatic symptoms and perceived social support respectively. Data was then analysed using standard statistical methods.

### RESULTS

Our study revealed that women (93.33%) reported more somatic symptoms than men (6.66%). There was highly significant ( $p$  value=0.00) negative correlation ( $r=-0.76$ ) between social support and severity of somatic symptoms i.e. patients who perceived high acuity of social support were reported to have less severity of somatic symptoms.

### CONCLUSIONS

There exists a significant negative correlation between severity of somatic symptoms and perceived social support in persons with somatoform disorder.

### KEY WORDS

Somatoform Disorder, Somatic Symptoms, Social Support

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## BACKGROUND

The classification of patients with bodily symptoms who come for psychiatric assessment and management is difficult to diagnose and manage. Somatic or bodily symptoms are common across health settings. Lipowski introduced the term somatization and defined it as “the tendency to experience, conceptualize, and/or communicate psychological states or contents as bodily sensations, functional changes, or somatic metaphors.”<sup>1,2,3</sup> This description was criticized for highlighting the psychological distress rather than somatic distress which is experienced by patients. Later, somatization was defined as “a tendency to experience and communicate somatic distress and symptoms unaccounted for by pathological findings, to attribute them to physical illness and to seek medical help for them.”<sup>1,2,3</sup> Somatoform disorder is defined as presence of at least 2 years of multiple and variable physical symptoms for which no adequate physical explanation has been found. The patient persistently refuses to accept the advice or reassurance of many doctors that there is no physical basis of the symptoms. There is also some degree of impairment of social and family functioning of the individual because of these symptoms. In somatoform disorder symptoms may be referred to any part of the body but Gastrointestinal sensations like pain, belching, regurgitation, nausea, vomiting etc. and abnormal skin sensations like itching, burning, tingling-numbness etc. are among the commonest. Often there are co-morbid depression and anxiety and specific treatment of these conditions are needed. The disorder is far more common in women than in men. Somatoform disorder may occur at any age, but it appears to be most common in the middle aged.<sup>4,5,6</sup> In somatoform disorder multiple or unexplained physical symptoms cause substantial disability in patients, excess use of medical services and frustration for physicians.

Somatization is a presentation to communicate psychological distress in the form of physical symptoms<sup>7</sup>. Somatization is more common among non-western cultures particularly Asians and Africans.<sup>8</sup> It is the most common clinical expression of emotional distress worldwide.<sup>9,10</sup> Symptoms often occur in reaction to stressful situations. Social support is thought to serve as a protective factor against environmental stressors.<sup>11</sup> Social support can be perceived from family, friends and from significant others.

In this study we will search for the correlation between severity of symptoms and perceived social support in patients with somatoform disorder.

## METHODS

This observational study with cross-sectional design was conducted among patients with somatoform disorder, aged between 18 and 60 years of both sexes, attending the outpatient department of Psychiatry of R. G. Kar Medical College & Hospital, Kolkata. Patients with mental retardation, epilepsy, any other neurological disorder and with comorbid mental disorder were excluded from the study.

Data for the period October 2018 - December 2018 was collected. Consecutive patients attending psychiatry OPD of R. G. Kar Medical College and Hospital, Kolkata were interviewed and were clinically examined. Cases were diagnosed as somatoform disorder (F.45) according to ICD-10 criteria.<sup>12</sup> Patients who fulfilled inclusion and exclusion criteria were studied.

### Sample Size

Sample size is 60 calculated according to the formula of determining sample size for a qualitative variable,

$$N = \frac{(Z_{1-\alpha/2})^2 \times p \times q}{l \times l}$$

$p = 15.1$  (expected proportion of cases in clinic population based on previous study).<sup>13</sup>

### Tools Used

1. Semi structured pro-forma for socio-demographic profile: Specially designed for this study.
2. Patient Health Questionnaire: It is to assess severity of somatic symptoms.
3. Multidimensional scale of perceived social support: It is a 12-items scale and divides perceived social support from family members, friends and from significant others. Higher score indicated more social support.

### Procedure

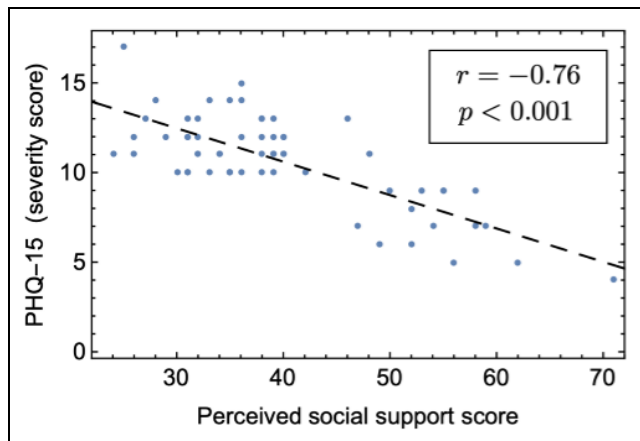
Informed consent was taken from the patients. The patients and their family members were explained about the purpose and nature of the study. All the subjects were interviewed and were then assessed with the help of a semi structured pro-forma for socio-demographic profile. Thereafter, Patient Health Questionnaire-15<sup>14</sup> and Multidimensional scale of perceived social support<sup>15</sup> were administered.

### Statistical Analysis

For statistical analysis Descriptive statistical tests were done using SPSS 23. The correlation coefficient was calculated by Pearson's correlation test among severity of somatic symptoms and perceived social support score. Finally, the correlation coefficient was again calculated for each different subcategory of various socio demographic variables as explained in Table 1.

## RESULTS

The findings of correlation between severity of somatic symptoms and perceived social support is depicted in Figure 1. Correlation coefficient between severity of somatic symptoms and perceived social support is -0.76 and p value is 0.00 that means there is a significant negative correlation between these two variables.



**Figure 1. Severity of Somatic Symptoms Decreases with Perceived Social Support**

Demographic Variables	Subcategory (Number)	Correlation Coefficient (within group)	p Value
Age (in years)	Below 30 (8)	- 0.85	0.002
	30-45 (38)	- 0.74	0.000
	Above 45 (14)	- 0.75	0.002
Gender	Male (4)	- 0.88	0.057
	Female (56)	- 0.76	0.000
Religion	Hindu (13)	- 0.69	0.007
	Muslim (47)	- 0.78	0.000
Habitat	Rural (55)	- 0.75	0.000
	Urban (5)	- 0.87	0.029
Marital status	Married (47)	- 0.76	0.000
	Unmarried (13)	- 0.27	0.440
Education	Illiterate (25)	- 0.71	0.000
	Literate (35)	- 0.75	0.000
Occupation	Un-employed (45)	- 0.75	0.000
	Employed (15)	- 0.70	0.003
Socio-economic status	Lower class (50)	- 0.72	0.000
	Middle class (10)	- 0.79	0.005

**Table 1. There is Significant Negative Correlation between Severity of Somatic Symptoms and Perceived Social Support in All Socio-Demographic Groups Except in Males and in Unmarried Persons**

**DISCUSSION**

Health can be influenced by various factors that include person’s psychological, behavioural and social well-being. Studies have shown a relationship between increased levels of social support and reduced risk for physical and mental disease. Social support can be perceived from different sources including family, friends and significant others like residential or day care providers, shelter operators, roommates and others. In the present study, a significant negative correlation has been found between severity of somatic symptoms and perceived social support in persons with somatoform disorder. Higher perceived social support was associated with less severe somatic symptoms. Our study also shows that there is significant negative correlation between severity of somatic symptoms and perceived social support in all socio-demographic groups except in males and in unmarried persons. In our study most of the persons with somatoform disorder belonged to 30- to 45-year age group. The mean age of persons with somatoform disorder was 40.55 (SD=9.85) years. Another study<sup>11</sup> found the mean age of persons with somatoform disorder to be 42.33 (SD=6.13) years.

Our study found that females were more affected than males. This finding is consistent with the results of previous studies.<sup>11,16</sup> A physiological difference between males and

females is proposed as a cause for it.<sup>17</sup> Accordingly, gender differences in brain function, hormones and reproductive processes were considered as possible factors related to the increased risk to complaint for somatic symptoms in women. In the present study, majority of persons with somatoform disorder were Muslims, belonging to rural background, married, un-employed and of lower socio-economic status. These findings are similar to those found in a previously conducted study by Arif Ali et al.<sup>11</sup> Similar findings are also reported by Barskey<sup>18</sup> who observed that somatization is more common among those who are of lower socioeconomic status, of rural background and among ethnic groups that discourage the direct expression of emotional distress.

Regarding educational level, only one patient was graduate. Many patients were illiterate, rest were educated upto secondary level. So, for statistical analysis they were grouped into two-illiterate and literate. Unlike findings revealed by previous studies, this study found that among patients with somatoform disorder, more patients were literate than illiterate.

**CONCLUSIONS**

There exists a significant negative correlation between severity of somatic symptoms and perceived social support in persons with somatoform disorder. Higher perceived social support was associated with less severe somatic symptoms. Social support helps to improve the well-being of persons with somatoform disorder.

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