Psychosocial Dysfunction in Somatising Patients

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Somatising patients present with a variety of psychosocial dysfunctions. Using the Dysfunctional Analysis Questionnaire and the Global Assessment of Functioning scale, we studied the nature and severity of psychosocial dysfunction in a group of somatising patients. Dysfunction was less marked in the cognitive area than in social, vocational, personal and familial areas. Patients with depressive disorders showed more dysfunction than those with somatoform disorders in all psychosocial areas except cognitive.

Somatisation refers to "a tendency to experience and communicate psychological distress in form of physical symptoms in the absence of any pathological findings, to attribute them to physical illness, and to seek medical help for them" (Lipowski, 1988). The phenomenon has been reported from all over the world, more commonly from the developing countries (German, 1972; Kirmayer, 1984; Lipowski, 1988), though some recent authors have contested this finding (Mumford *et al*, 1991). It is seen more commonly in females, in those from a low educational background, and in communities with poor psychological sophistication (Barsky *et al*, 1986; Escobar *et al*, 1987a; Escobar & Canino, 1989). Somatising patients form a high proportion of patients with multiple unexplained physical symptoms, attending various medical care settings (Bridges & Goldberg, 1985; Schurman *et al*, 1985; Wallen *et al*, 1987). The phenomenon is characterised by poor treatment response, tends to be chronic, and leads to significant disability and frequent use of medical services (Sigvardsson *et al*, 1984; Escobar *et al*, 1987b; 1989; Smith *et al*, 1986; Katon *et al*, 1991).

In most of the recent studies on disability in somatising patients, the criteria used to assess disability have been the frequency of use of health care services, inability to do work, and restriction in various activities (Escobar *et al*, 1987b, 1989; Smith *et al*, 1986; Katon *et al*, 1991). The present work was carried out to study the type and severity of dysfunction in various psychosocial areas in somatising patients, and to investigate how such patients with diagnoses of somatoform disorders differ from other somatising patients in the dysfunction suffered.

Method

The study was carried out in the out-patient facility of a teaching general hospital. Patients attending the out-patient clinic include self-referrals (29%), those brought by relatives (38%), referrals from other clinics of the hospital (30%), and others (3%). Psychiatric referrals from other clinics, where no physical disease had been detected to account for physical symptoms, were screened for the study by one of the investigators (SS) using the somatisation symptoms checklist of DSM–III (American Psychiatric Association, 1980). Patients screened for the study were referrals from medicine (78%), casualty (10%), dermatology (4%), and general surgery (8%). The inclusion criterion for the study was the presence of four or more symptoms in the case of males and six or more in the case of females. The criterion has been described as the abridged somatisation construct or Somatic Symptom Index (SSI) 4,6 by Escobar *et al* (1987a) and has been found useful by a number of authors (Escobar *et al*, 1987a,b, 1989; Escobar & Canino, 1989). The symptoms considered for the study were only those where no evidence of any physical cause was detected on examination or relevant investigation. These criteria are specified in DSM–III and DSM–III–R under somatoform disorders (American Psychiatric Association, 1980, 1987). The somatisation symptoms checklist of DSM–III rather than that of DSM–III–R was used because SSI 4,6 is based on the symptom checklist of DSM–III. We had to screen 959 patients over a period of nearly one year to find 50 patients suitable for the study.

The study instruments used were the Global Assessment of Functioning (GAF) scale of DSM–III–R (American Psychiatric Association, 1987) and the Dysfunctional Analysis Questionnaire (DAQ) (Pershad *et al*, 1985).

The GAF scale allows overall evaluation of a person's psychological, social and occupational functioning, with scoring from 90 to 1, the score descending in order of severity of functional impairment. The ratings reflect the current need for treatment and care.

The DAQ measures dysfunction in five areas of activity: social, vocational, personal, familial and cognitive. The instrument was developed and standardised in India (Pershad *et al*, 1983, 1985), and has been found useful by a number of research workers in India for studying psychosocial dysfunction in psychiatric as well as non-psychiatric patients (Chavan & Kulhara, 1988; Sabhesan *et al*, 1987; Varma *et al*, 1987; Pershad & Verma, 1989; Jain *et al*, 1990). It can be self-administered or interviewer-administered

in a structured clinical interview. There are 50 items in Hindi, ten in each of the five areas mentioned above. Each item is rated on a five-point scale (1–5), comparing the present level of functioning with that before the onset of illness. A score of 1 indicates functioning better than that present before the onset of illness, 2 indicates no impairment, and 3, 4 and 5 indicate mild, moderate and severe impairment respectively. Certain items may not be applicable for a particular patient. For example, in the vocational area there are items such as "Relationship with senior official at work" and "Opportunities for promotion at work" which are not applicable for housewives and the unemployed. Items which are not applicable in an individual case are excluded in the calculation of the total score. Since the functional status at the time of evaluation is being compared with that before the onset of illness, the patient himself serves as his control. The raw score is converted to a percentage, giving due weight to the items applicable to a particular subject:

$$\text{Attenuated percentage score} = \frac{100 \times \text{total score obtained on items}}{5 \times \text{number of items attempted}}$$

The new score (named attenuated percentage score by Pershad *et al* (1985)) has a range from 20–100. Since a score of 2 on each item indicates the same functioning as before, an attenuated score of 40 indicates no change in functioning from the pre-morbid level. An attenuated score of less than 40 indicates that functioning is better than the pre-morbid level. Anything more than 40 is an index of the level of dysfunction.

Detailed psychiatric assessment of patients fulfilling the selection criteria was carried out by the chief investigator (RKC). Diagnoses were made according to DSM-III-R criteria (American Psychiatric Association, 1987). The functional status of patients on the GAF scale was rated at the time of clinical evaluation by RKC. After this, the DAQ was administered by another investigator (MSB), who was blind to the rating on GAF.

Since the score on the GAF scale decreases and that on the DAQ increases with the severity of dysfunction, and the ranges of abnormality also differ on the two, being 41–100 on the DAQ and 90–1 on the GAF, the DAQ score

(average of the five subscale scores) was converted to a new score (DAQ Modified, to be referred to as DAQ-M), so that it could be compared with the GAF score. The conversion formula used was

$$DAQ-M = \frac{90 - DAQ - 40}{60}$$

Analysis was carried out to study the relationship between the DAQ-M and GAF scores, and the relationship of both with the diagnoses.

Results

The sample consisted of 50 patients with a mean age of 30.9 years (range 18–65). Females constituted 62% of the sample. The marital status of patients was 76% married, 20% single, and 4% widows. The sample was predominantly urban (94%). More than half (58%) of the patients were illiterate or just literate. Only 14% had received education of ten years or more. Various occupational groups included housewives (60%), skilled workers (12%), clerical employees (12%), small-scale businessmen (6%), students (4%), unemployed (4%), and unskilled workers (2%).

Table 1
Diagnostic distribution of the sample (n = 50)

Diagnosis	Number	%
Somatoform disorders		
Undifferentiated somatoform disorder	22	44
Somatoform disorder NOS[1]	5	10
Somatisation disorder	2	4
Conversion disorder	1	2
Depressive disorders		
Major depression	8	16
Dysthymia	4	8
Depressive disorder NOS[1]	5	10
Other		
Generalised anxiety disorder	1	2
Anxiety disorder NOS[1]	1	2
Adjustment disorder	1	2

1. NOS = Not otherwise specified.

Table 2
GAF and DAQ scores, and their relationship with diagnoses (low scores on DAQ-M and GAF, and high scores on DAQ subscales are indicative of more dysfunction)

Scale	All patients (n = 50)		Depressive disorders (n = 17)		Somatoform disorders (n = 30)		t value
	Mean score	(s.d.)	Mean score	(s.d.)	Mean score	(s.d.)	
GAF	68.0	(13.0)	66.2	(11.9)	68.2	(13.7)	−0.52
DAQ-M	56.2	(16.6)	45.6	(13.9)	61.2	(15.4)	−3.44*
DAQ Social	63.7	(13.9)	70.7	(11.7)	60.1	(14.1)	2.63**
DAQ Vocational	65.6	(16.4)	73.8	(16.4)	61.3	(14.8)	2.68**
DAQ Personal	68.4	(12.1)	74.3	(11.0)	66.1	(11.3)	2.41**
DAQ Familial	61.9	(15.0)	71.9	(12.7)	57.2	(13.8)	3.59*
DAQ Cognitive	53.1	(10.3)	57.2	(8.9)	51.3	(10.5)	1.94

*P<0.01, **P<0.05.

For 80% of the patients, per capita income was less than 1000 rupees a month.

The distribution of diagnoses in the sample is shown in Table 1. The most common diagnoses were undifferentiated somatoform disorder, major depression, somatisation disorder, depressive disorder not otherwise specified (NOS) and dysthymia. Diagnoses in the group of somatoform disorders applied to 60% of patients, and depressive diagnoses to 34%.

The mean DAQ-M and GAF scores were 56.2 and 68.0 respectively, and showed correlation of 0.50 ($P<0.001$).

To make the analysis more meaningful, we compared dysfunction scores for the depressive disorders group with those for the somatoform disorders group, excluding from the analysis the three patients with other diagnoses. Mean GAF, DAQ-M and DAQ subscale scores, and their distribution among patients with somatoform and depressive disorders, are shown in Table 2. DAQ-M scores were lower (more dysfunction) in the depressive disorders group than in the somatoform disorders group ($P<0.01$), but no significant difference emerged on GAF. The depressive disorders group showed more dysfunction than the somatoform disorders group on all subscales of the DAQ except the cognitive subscale.

Discussion

In this study, the DAQ-M and GAF scores showed statistically significant correlation. This could be because the GAF scale makes a global assessment of psychological, social, and occupational functioning along with the severity of mental illness, and DAQ-M scores are a measure of psychosocial functioning in social, vocational, personal, familial, and cognitive areas (DAQ being a measure of dysfunction).

Patients with depression as a part of their psychopathology are expected to show more psychosocial dysfunction than non-depressed patients. In the current study, patients with diagnoses of depressive disorders showed more severe dysfunction than patients with somatoform disorders. The difference was evident on DAQ-M and all subscales of the DAQ except the cognitive one. The difference was not observed on the GAF scale. However, the DAQ, being a structured instrument, is probably more reliable than the GAF scale to assess the psychosocial functioning of patients.

The DAQ has been used by a number of authors in India to measure the change in psychosocial functioning following illness and therapeutic intervention in a variety of conditions such as reactive psychosis, alcohol abuse, and post-head-injury phenomenon (Chavan & Kulhara, 1988; Sabhesan et al, 1987; Varma et al, 1987).

Our patients showed least dysfunction in the cognitive area. This may be because, having a predominantly somatic presentation, they had less severe psychological symptoms such as anxiety, slowness of thinking, difficulties in concentration, and forgetfulness, which could affect the cognitive subscale score. The most dysfunction was observed in the personal area, which is expected in such a group of patients. In a related Indian study (Jain et al, 1990) using the DAQ to study the psychosocial dysfunction in a broad group of psychiatric patients, patients with diagnoses of various types of neurosis showed dysfunction scores varying from 51.7 to 66.3 on different subscales of the DAQ. The most dysfunction was observed in the personal area and the least in the familial area.

The present study had some limitations such as small sample size and absence of a control group. A larger sample would have facilitated detailed study of the relationship of different types of psychosocial dysfunction with various sociodemographic and clinical variables. The presence of a control group would have been useful in investigating whether somatising patients differ from patients with physical illnesses (having physical symptoms due to a known physical illness) or psychiatric illnesses (without any physical symptoms), in type and severity of psychosocial dysfunction suffered.

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