ORIGINAL ARTICLE

Alexithymia and illness behaviour among female Indian outpatients with multiple somatic symptoms

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ABSTRACT

Sixty Indian Muslim women outpatients with multiple somatic complaints of nonorganic origin were assessed for alexithymia and abnormal illness behaviour using the Toronto Alexithymia Scale (TAS) and the Illness Behaviour Assessment Schedule (IBAS). Alexithymia represented by TAS scores correlated best with the IBAS variables of communication of affect, somatic illness causal beliefs and denial. Correlation with other IBAS variables was modest to poor. There was no correlation of IBAS variables with age of patient, duration of illness or nature of diagnosis: somatoform disorder or anxiety and depressive disorders. The study showed that alexithymia and illness behaviour are overlapping constructs and confirmed the usefulness of TAS as an instrument to discriminate between patients with anxiety/depressive disorders and somatoform disorders.

Key words: Alexithymia, Illness behaviour, Somatization

Somatic symptoms with no physical explanation are often seen in the clinical setting (Escobar 1987). In non-western cultures especially, psychological distress is often communicated through multiple somatic complaints. Factors that have been considered to be contributory to such an expression have included lower levels of emancipation (Narang and Aggarwal, 1971), social acceptance of such symptoms (Kastogi et al, 1976) and a perceptual style of bodily preoccupation as a dominant response to stress (Kiehnman, 1982). Alexithymia, a cognitive-affective disturbance that affects the way in which individuals experience and express their emotions (Simeos, 1973) may be another factor contributing to a somatic experience and expression of psychological ill—health. Indeed studies of psychiatric patients (Bagby, Taylore & Isom, 1988; Cux et al 1984 and normative population such as students (Bagby, Taylor & Ryan, 1986; Rodrigo, Lusardi & Normey 1989), have revealed that alexithymic individuals score higher on various measures of somatization and hypochondriasis. Such individuals show a striking difficulty in recognizing and verbalizing their feelings and discriminating between emotions and bodily sensations (Nemla, Freyberger & Simeos, 1976).

Patients with multiple somatic complaints (Bridges et al 1981; Bhandari, 1989) and hypochondriasis (Pilowsky & Spence, 1976) have also been found to demonstrate abnormal illness behaviour. Socio-cultural background has been reported to influence illness behaviour patterns such that Asian patients (Japanese) are more likely to display a fearful attitude toward their illness and health status than Caucasian (Australian) patients (Guo et al, 2000). Abnormal illness behaviour (AIB) arises out of Mechanic's view of how individuals perceive, interpret and behave when somatically distressed. Pilowsky and Spence, have described it as the “persistence of an inappropriate mode of perceiving, evaluating and acting (or not acting in relation to one's health, despite the fact that a doctor (or an appropriate social agent) has offered a reasonably lucid explanation of the nature of the illness and the appropriate course of management to be followed (based on a thorough examination and assessment of all parameters of functioning, including the use of special investigations wherever required) if any; with opportunities for discussion, negotiations and clarification based on adequate assessment of all biological, psychological, social and cultural factors. AIB consists of seven major dimensions: 1) general hypochondriasis reflecting a fearful attitude towards illness, 2) disease conviction; a belief that there is something seriously wrong with one's body; 3) psychological versus somatic perception of illness, 4) affective inhibition; indicating difficulty in expressing personal feelings to others, 5) affective disturbance indicating acknowledgement of the presence of a negative mood state, 6) denial and 7) irritability.

As both alexithymia and AIB have been implicated as associated factors in patients with somatic complaints, we arranged to explore their relationship in a sample of Indian women with somatic complaints that were medically unexplained. We further wished to explore if membership of a particular diagnostic group - somatoform or anxiety/depression, was associated with differential patterns of illness behaviour, and possessor of differing service of alexithymia. Also expected based upon the description by Pilowsky and Spence, that patients with a longer duration of illness exemplified by being followed-up by psychiatric services, would exhibit a more entrenched pattern of illness behaviour compared to patients that were newly registered. To control for aspects of socio-cultural experience that can act as a potential confounder, subjects belonging to one particular religion with its own cultural nuances, i.e. Muslims, were included in the study.

MATERIAL & METHODS

Subjects

Subjects comprised a consecutive series of Muslim female psychiatric outpatients of 18-65 years of age presenting with five or
more medically unexplained somatic complaints, who were either new referrals to the psychiatry services (new group, n=30) or had been receiving treatment already (follow-up group, n =30). These patients had been referred either by their general practitioners, by medical and surgical specialists or were self referred. Those with an organic illness, psychosis or substance were excluded.

The subjects were diagnosed by one of the authors (JS) using ICD-10 criteria (Freyberger 1977). The patients were later assessed by the other author (PSC) who was blind to initial diagnosis. Inclusion in the study depended on agreement in diagnosis between these two authors. Patients belonged to one of two diagnostic groups; somatoform disorders and anxiety or depressive disorders.

Instruments
Besides collection of socio-demographic data, subjects completed the 26 item Toronto Alexithymia Scale -TAS (Talor, Ryan Bagby 1985) as a measure of alexithymia. TAS has demonstrated adequate internal consistency; good test-retest and split-half reliability and construct and criterion validity. The authors suggest that a score of 74 and above is indicative of presence of alexithymia while a score of 58 and below negates its presence. AIB was assessed using the illness Behavior Assessment Schedule - IBAS, a 19 item interviewer rated instrument (Pilowsky & Spence, 1983). It has a high inter-rater reliability and concurrent validity studies of IBAS in relation to the Illness Behavior Questionnaire, IBQ, have shown similar pattern of profile on both instruments (Pilowsky & Spence, 1983).

ANALYSIS

Analysis focused upon the inter-group differences using Student’s t-test with respect to age, duration of symptoms and TAS scores. Relationship between IBAS items with variables such as age, duration of illness, diagnostic group and TAS score were analyzed by Pearson's correlation analysis. The following IBAS items were selected as they collectively represent the seven primary dimensions on which illness behaviour is assessed by the IBQ (except for the general hypochondriasis factor). The items selected were: i) disease conviction -somatic, ii) disease conviction -psychological, iii) disease phobia, iv) preoccupation with somatic symptoms, v) illness causal beliefs, vi) communication of affective disturbance, vii) attribution of affective disturbance, viii) denial of life stresses and ix) displacement of life stresses onto somatic illness.

RESULTS

The mean age was 37.7 years (SD = ± 10 years) and the mean duration of symptoms 57.9 months (SD ± 53.7 months) for the entire group of sixty subjects. The mean TAS score for the sample was seventy-six. Twenty-seven patients scored above the cutoff value of 74 on the TAS establishing a prevalence of alexithymia at 45% in this sample.

Twelve ICD-10 diagnoses were attracted by the subjects. The three commonest diagnoses were somatization disorder (n=16), dysthymia (n=11) and undifferentiated somatoform disorder (n=10). Overall there were 32 patients with a diagnosis of one or the other somatoform disorders and 28 with one or the other anxiety or depressive disorders. Abnormal illness behaviour as measured by the items of IBAS, was not associated with either the age of the patient, the length of experience of somatic symptoms or the diagnosis of the patient. Using Pearson’s product moment correlation analysis, the correlation between the IBAS items and age ranged between -0.2 and + 0.2. The figures were similar for duration of symptoms (r = -0.12 to + 0.29) and diagnosis (r = +0.32 to 4 + 0.20). There was relatively better association between TAS scores and certain IBAS items although a majority of association can best be described as modest. TAS correlated best with inhibition in communication of affect (r = ± 0.5), followed by somatic illness causal beliefs (r = ± 0.44) and denial of life stresses (r = ± 0.43). The figures were more modest for psychological disease conviction (r = ± 0.37) and displacement of life stresses on to somatic problems (r = ± 0.36). The correlation with other IBAS items were relatively poor (r = ± 0.23 to - 0.003).

The only significant difference between patients belonging to either the somatoform group or the anxiety/depression group was that the patients belonging to the former displayed higher scores on TAS. The mean TAS score in the somatoform group was 80.7 (S.D. ± 17.6) while it was 70.7 (S.D. ±

| TABLEI |
|--------|
| DIAGNOSIS | ICD-10 code | n(%) |
|----------|-------------|------|
| Somatization disorder | F45.0 | 16 (27) |
| Somatoform autonomic dysfunction | F45.3 | 1 (2) |
| Persistent somatoform pain disorder | F45.4 | 5 (8) |
| Somatoform disorder - undifferentiated | F45.1 | 10 (17) |
| Mild depressive episode - without somatic symptoms | F32.00 | 1 (2) |
| Moderate depressive disorder with somatic symptom | F32.10 | 1 (2) |
| Recurrent depressive episode - current episode mild with somatic symptoms | F33.01 | 2 (3) |
| Recurrent depressive episode - current episode moderate with somatic symptoms | F32.11 | 4 (7) |
| Dysthymia | F34.1 | 11 (18) |
| Panic disorder | F41.0 | 6 (10) |
| Generalized anxiety disorder | F41.1 | 2 (3) |
| Agoraphobia with panic disorder | F40.01 | 1 (2) |
| SOMATOFORM DISORDERS | 32 (56.7) |
| DEPRESSIVE/ANXIETY DISORDERS | 28 (44.3) |
TABLE 2: Age in years Duration of symptoms in TAS score

| (n=30) | (n=30) | P <0.05 |
|--------|--------|---------|
| mean, S.D. | mean, S.D. | Not Significant |
| 36.6, + 8.8 | 38.9, + 11.0 | Not Significant |
| 31.5, + 5.2 | 84.3, + 11.0 | p=0.0001 |
| 71.0, 14.7 | 81.0, 19.3 | Not Significant |

TABLE 3: Age in years Duration of symptoms in TAS score

| Somatoform | Anxiety/depression | Significance |
|------------|-------------------|--------------|
| Mean, S.D. | Mean, S.D. | P < 0.05 |
| 39.5 + 10.7 | 35.7 + 8.9 | Not Significant |
| 66.8 + 62 | 47.4 + 40.5 | Not Significant |
| 80.7 + 17.6 | 70.7 + 16.7 | P = 0.027 |

TABLE 4: Correlation coefficients for IBAS items with TAS scores and diagnostic category.

| TAS score | Somatoform disorder |
|-----------|---------------------|
| IBAS items | Disease conviction - somatic | - 0.357 + 0.198 |
| | Disease conviction - psychological | + 0.370 - 0.264 |
| | Disease phobia | + 0.011 + 0.189 |
| | Disease preoccupation | - 0.003 + 0.149 |
| | Illness causal beliefs - somatic | + 0.437 - 0.099 |
| | Communication of affect | + 0.503 - 0.328 |
| | Attribution of affective disturbance | + 0.235 - 0.234 |
| | Denial | + 0.431 - 0.246 |
| | Displacement | + 0.364 - 0.233 |

16.7) in the anxiety/depression group. Nineteen parents of the somatoform group scored above the cut-off score of 74 indicating the presence of alexithymia categorically, whilst only eight patients from the anxiety/depression group did so. These two groups of patients did not differ significantly in terms of age or duration of symptoms experienced although there were trends for those with a diagnosis of somatoform disorder to be older (39.5 years) and have a longer duration of illness (66.8 months) than those who were diagnosed with anxiety/depression (35.7 years and 43-4 months) respectively.

There was no difference between the follow-up and new groups with respect to belonging to a particular diagnostic group. Each group included 16 patients with a diagnosis of somatoform disorder and 14 patients with one of the anxiety or depressive disorders. There was an over representation of patients with somatization disorder (n=13) in the follow-up group as opposed to new group (n=3). However, there was an excess of diagnosis of undifferentiated somatoform disorder in the new group (n=9) in contrast to the follow-up group (n=1). Dysphoric patients were found more commonly in the follow-up group whilst there were similar numbers of patients with this diagnosis and that of moderate depression with somatic symptoms in the new group.

There was no significant difference in the mean age of patients in the follow-up and new groups although there was a trend for patients in the follow-up group to be older. The mean age of patients following up was 38.9 years while that of the new group was 36.6 years. The follow-up group had a significantly longer duration of symptoms than the new group, which was to be expected. The mean TAS score was significantly higher in the follow-up group (81.0 as opposed to 71.0 in the new group) suggesting higher rates of alexithymia on a dimensional scale. Using the cut-off score of 74 to discriminate between those with and without alexithymia, eighteen patients on the follow-up group scored above this threshold whilst only nine patients from the new group did so. Thus, even at a categorical level there was an overrepresentation of alexithymia in the follow-up group compared with the new group.

DISCUSSION

The prevalence of alexithymia in a sample of female Indian outpatients with multiple somatic symptoms of non-organic origin is 45% (27 out of 60). It is comparable to the prevalence rates found in a sample of psychiatric outpatients (Taylor et al, 1992) and in a sample of somatizing patients (Cox et al, 1984). However individual TAS scores in this sample was high with a mean score of 76.

The mean TAS score was higher in patients with a longer duration of illness. It has been suggested that alexithymia is a primary personality trait, the possession of which predisposes patients to longer lasting somatic illnesses (Salmiren et al 1984). Alternatively; patients who have a longer duration of a somatic illness may develop alexithymic characteristics, a secondary state phenomenon, due to associated depression and stress (Freyberger, 1977).

It is not possible to definitively state with confidence whether the alexithymia determined in this study is a primary or a secondary phenomenon. However, it is more likely that the construct is a primary feature in other patients as those with anxiety and depression displayed a mean TAS score that was lower than the mean for the entire group (71 versus 76) and indeed significantly lower than those with a somatoform
disorder diagnosis (71 versus 81), suggesting that being anxious or depressed perhaps did not influence the presence of alexithymia to any significant degree. The lack of correlation between TAS score and affective disturbance dimension of IBAS further strengthens this conclusion.

Patients with somatoform disorders displayed a significantly higher mean TAS score in comparison to those with anxiety or depression suggesting that TAS may be an useful instrument to employ in patients that present with multiple somatic complaints. It has clearly demonstrated the ability to discriminate between these two diagnostic groups among patients who present with multipal somatic complaints of a non-organic origin that may appear to represent a homogenous disorder, which in reality is not always the case.

Presence of alexithymia correlated with a longer duration of illness experience suggesting that it is vitally important to determine personality factors, such as alexithymia, such that management strategies could incorporate these issues. Such a process would hopefully allow a more holistic approach to patients who present in this manner.

The age of a patient, having a longer duration of somatic illness and the nature of diagnosis do not appear to alter a person’s way of perceiving, interpreting and behaving when somatically distressed as illustrated by the lack of correlation between these variables with IBAS items. Our results seem to indicate that it is the presence of alexithymic characters alone that impact upon dimensions of illness behaviour. The strongest correlations of TAS scores were with inhibition of communication of affective disturbance, somatic illness causal beliefs and denial of life stresses. There are valid reasons for such correlations. The literal Greek translation of the word alexithymia is the lack of (a: lack of) words (lexos: words) for emotions (thymos: emotions). This feature of the construct is similar to the IBAS dimension of inhibition of affective disturbance which implies a lack of verbal endorsement of affective disturbance that the patient is experiencing. Alexithymia also relates to a difficulty in discriminating between emo-
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