Psychological morbidity in primary health care in Oman
a preliminary study

Al-Lawati J1, Al-Lawati N2, Al-Siddiqui M1, Antony S X3, Al-Naamani A2, Martin R G3, Kolbe R4, Theodorsson T1, Osman Y4, Al-Hussaini A A3, *Al-Adawi S3

OBJECTIVE: To assess the prevalence of somatization and psychological morbidity presenting to primary health care in Oman and to examine the correlation between the indices of somatization and psychological disorders. METHOD - Consecutive primary care patients (n = 100) were screened with Bradford Somatic Inventory which gauges psychosomatic morbidity, and Self Reporting Questionnaire, which measures psychological distress. RESULT - Somatization disorder as defined by Bradford, and psychological morbidity were relatively common in primary care settings. There was significant positive correlation between indices of somatization and psychological morbidity. Conclusion - Omani patients seeking primary health care equally experience both psychological distress as well as somatic ones. This finding challenges the old notion that people in developing countries generally express distress somatically.

KEY WORDS: somatization, cross-cultural, psychological distresses, primary-health care, Oman

Doctors often meet patients who insist they are diseased despite repeated assurances to the contrary. Such patients who frequently seek care in primary as well as tertiary medical settings, and account for a large number of consultations, ‘doctor shopping’, unnecessary tests and multiple surgeries, cause what is sometimes called ‘fat file syndrome’. Patients, in their turn, come to believe that they receive neither clear diagnosis nor effective treatment. Since doctors tend to prescribe medication symptomatically, iatrogenic illnesses might ultimately result.

Although it is possible that such patients might be suffering from unidentified physical illnesses, empirical evidence suggests that they might be somatizing. As a clinical entity, somatization is a chronic, disabling syndrome that presents a physical facade hiding significant psychopathology. Somatic symptoms are common in affective and anxiety disorders. It is usually assumed that somatization occurs in response to psychological stresses on a background of predisposing personality factors, but in adopting the sick role, psychological equilibrium is achieved.

Clinical and epidemiological surveys over the past two decades suggest that acute forms of somatoform disorders are invariably present in all primary care settings. Naturalistic observations of somatization disorders have revealed that the condition begins before age 30, and most often during teenage. The disorder is inversely related to social position, occurs more often in communities with little urbanisation and literacy, and affects more women than men.

Using screening instruments thought to be sensitive to local idioms of emotional distress, Ohaeri & Odejide have found the incidence of psychological morbidity to range from 20% to 80% in various cultures among the developing countries. Complementing
surveys from developing countries, Goldberg and Blackwell in UK, Giel & Le Nobel in the Netherlands, and Katon et al in USA found similar patterns. The frequent association of somatization and affective disorders suggests that the latter is a predisposing factor and not simply a reaction to disability.21

In the Arab world, El-Rufaie et al22 and AlSubaie et al23 have reported high incidences of patients complaining of depression and anxiety and a variety of somatic symptoms, confirming previous anecdotal reports.24–26 However, these reports have relied on clinical impression and psychological scales that lack items to elicit somatic symptoms.8 Since various commentators in the field have suggested that non-western patients tend to use ‘somatopsychic’ idiom of distress rather than verbalize their distress in psychological concepts,27–29 it remains to be established whether Omanis, Arab/Muslim, follow this generalization.

The world over, psychological morbidity has been found to be very high among patients seeking primary healthcare.14,30 In Oman, such research has not been conducted despite the nearly 12 million visits per year to primary healthcare facilities, representing an average of 5.4 visits per year per person, in a population of slightly above two million.31

The interrelated aims of this study are to (a) determine the rate of psychological morbidity among Omani patients attending primary health care in Muscat urban conglomeration, the national capital region of Oman, (b) determine the prevalence of somatization in those patients and (c) explore whether there is a relationship between psychological distress and somatization.

METHOD

This research forms part of the studies conducted at the Department of Behavioural Medicine, College of Medicine, Sultan Qaboos University, with the aims to examine the rate of psychological disorders in Oman. The study was conducted in the newly built Bowsher Health Care Centre, serving mostly residents of suburban areas of Muscat.

SUBJECTS

This is a prospective, cross-sectional, study drawn from patients attending in a polyclinic for both male and female Outpatient care. Consecutive patients, 52 females and 48 males, who were able to speak Arabic and attending the clinics on a self-initiated visit for a new problem, were invited to participate in the study. Patients known to have sensory or cognitive impairments that would affect proper completion of the study questionnaires were excluded from the sample.

All subjects were able to speak Arabic. A brief explanation of the study was given to the patients and their oral consent taken. Some degree of privacy for the subjects was attempted whilst administering the questionnaires.

ASSESSMENT

Experienced staff members had produced Arabic-language versions of the questionnaires by the method of back-translation.32 In the pilot phase, interviewers (7th year medical students) were trained to reliably read out the items of the questionnaire in the local dialect of spoken Arabic, and rate the patients’ responses accordingly. In order to accommodate for illiteracy among some subjects, questions were read to all the patients. As a result, there was substantial inter-rater agreement on the various items of the questionnaires.

SOMATIZATION

Bradford Somatic Inventory (BSI)8 is a 44-item inventory for psychosomatically expressed psychological distress. It has cross-cultural validity as shown by studies carried out in Great Britain, Pakistan, India, Nepal, and Russia.18,33 ‘The BSI asks the subject on a wide range of somatic symptoms during the previous month, and whether or not the subject has experienced a particular symptom, on more or fewer than 15 days during the month (scoring 1 or 2 respectively). For the present purpose, the scoring was based on Mumford,18 where a score >40 is considered to be the ‘high’ range, 26–40, ‘middle’ range and 0–25, ‘low’ range.

PSYCHOLOGICAL MORBIDITY

Psychological morbidity was assessed using Self-Reporting Questionnaire (SRQ),30 consisting of 24 short questions concerning key phenomena related to mental disorders. The SRQ requires only a simple ‘yes’ or ‘no’ answer to each question. SRQ has been established to be a psychiatric case-finding instrument for detection of psychiatric patients among visitors of health care facilities23 and most of its questions had been selected from existing psychiatric questionnaires such as the Symptom Inventory,34 the General Health Questionnaire35 and the Present State Examination.36 Designed by the World Health Organisation, SRQ has been validated in various developing countries23,30,37 to determine the prevalence of ‘conspicuous psychiatric morbidity’ (CPM), without specific diagnoses.38 For the present analysis, the scores were categorised as follows: high range = 10–20; middle range = 6–9; lower range = 0–5.

RESULTS

SOCIO-DEMOGRAPHIC FEATURES

The interview sample consisted of 100 patients with a mean age of 26.03 ± 9.62, (52 females with mean age 25.65 ± 10.48 and 48 males with mean age 26.44 ± 8.68). There was no statistically significant age difference between males and females (t = 0.41, df = 96.89, p > 0.05).
Of the patients, 54% were single; 41% married and the remainder (5%) either divorced or widowed. As regards education, 7% each had university degrees 7% or professional diplomas, 39% had secondary school education, 34% primary education and 13% were illiterate, except one patient who had a cursory knowledge of Koran. While 42% were working, 15% were unemployed, 20% were students and 24% were housewives.

The patients complained of the following types of illnesses: musculoskeletal (23%), gastrointestinal (17%), respiratory (17%) cardiovascular (16%), genitourinary (10%), central nervous system (8%), and infectious (5%).

**Prevalence of Somatization**

Using cut-off points of 40 and above as ‘high’, 26–40 as ‘middle’ and 0–25 ‘low’ range, Figure 1 shows the percentage scores on BSI of whole sample as well as for males and females separately. 7% of the sample scored ‘high’, among whom there were more females (9.6%) than males (4.2%). 16% of the whole sample scored in the ‘middle’ range. Again females (21%) outnumbered the males (10.5%). The bulk of the subjects (77%) were in the ‘low’ range. Here males (88%) outnumbered females (68%). In terms of gender differences, women showed a trend towards somatization ($\chi^2, p = 0.05$).

**Figure 1. Performance on Bradford Somatic Inventory**

**Prevalence of Psychological Disorders**

Using a cut-off point of 10–20 as ‘high’ range, 6–9 as ‘middle’ range and 0–5 as ‘lower’ range, Figure 2 shows the percentage scores of SRQ for the whole sample, male and female patients. 18% of total sample scored in the ‘high’ range, 14% in the ‘middle’ and 48% in the ‘lower’ range. This means 32% were in psychiatric caseness. Among females, 15% were in the ‘high’ range, 11% in the ‘middle’ range and 20% in the ‘lower’ range. Among males, the figures were respectively 3%, 3% and 28%. In terms of gender differences, women appeared to have a higher propensity towards psychological distress ($\chi^2, p<0.0001$).

**Figure 2. Performance on Self-Reporting Questionnaire**

**Relationship Between Psychological and Somatization Indices**

The association between the SRQ and BSI were explored using bivariate correlation. The result shows a significant inverse correlation between somatization and psychiatric indices ($r = 0.77, p <0.001, n = 76$).

**Discussion**

The principal aim of this study was to assess the prevalence of somatization and psychiatric morbidity in patients seeking treatment in a typical urban primary health care centre. The study also aimed to be a pilot-screening instrument with multicultural validity.

The study found that somatization (as defined by Bradford Somatic Inventory) was present in 17% patient sample, a trend similar to those reported elsewhere. It is often reported that women are more susceptible to somatization than men, no matter where these studies are conducted. Prima facie, our present finding substantiates such view. However, this difference could also be due to the manner in which either sex responded to the screening questionnaires, as suggested by other researchers. Future studies need to examine how gender shapes responses.
In conjunction with the rate of somatic syndromes, this study also explored psychological morbidity using WHO’s screening scale, Self-Reporting Questionnaires. It was found that 32% of the sample was identified as psychiatric cases, a finding compatible with the earlier studies suggesting a high incidence of psychiatric morbidity in patients seeking treatment in primary health care. Again, women were the majority with the tendency towards conspicuous psychiatric disturbances.

It has generally been assumed that somatization is a subjective state, disguising distress in psychological idiom. Such conceptualisation has been an integral part of the theoretical model of somatization. From this perspective, an inverse relationship between the indices of somatization and psychiatric morbidity should be expected. Contrary to this, the present data suggests a significant and positive relationship between the indices of somatization and psychiatric morbidity and close association exists between the somatic and psychological scales, i.e., both scales are possibly measuring similar dimensions of emotional distress and psychological pathology. Mumford et al. have suggested that somatic and psychological symptoms are ‘two sides of the same coin of dysphoria’ and therefore it is viable to use either somatic or psychological items to screen for psychiatric morbidity depending on local idioms of emotional distress. Additionally, the situation in Oman may be parallel to those in the other developing countries where improved education has coincided with reduction of somatization. In the past decades, Oman has drastically improved education. However, it remains to be established whether rapid acculturation has affected how Omanis verbalise their emotional distress.

The limitation of this study was that it was conducted in a cultural setting where research is not usual and among patients who are not often studied. Indeed, it is difficult to show how representative is this patient sample of the general population in Oman; for example, ‘doctor-shoppers’ might have been over-represented. Secondly, the design of this study did not take into account the prevalence of major mental illnesses and did not obtain qualitative data that might shed light on the reasons for the patterns we observed. Thirdly, it is possible that some of these patients were suffering from some hitherto unsuspected physical disturbances, rather than presenting merely depression or anxiety. Therefore, before one can regard the symptoms as index of psychic distress, one needs to rule out myriads of other possibilities including Whitlock’s notion that manifestation of acute somatization is built into the central nervous system in order to protect it from overwhelming stress. Lastly, the present study relied on questionnaires. Although questionnaires are easy to apply, they might also elicit inflated number of positive responses. In a study conducted in rural Ethiopia, Korthmann noted that the participants often confused simple ‘yes’ or ‘no’ answer to each question on SRQ. Although both BSI and SRI have been previously established to have multicultural validity, one possible way to rule out this problem was to design a two-phase study in order to evaluate both sensitivity and specificity of the questionnaires. However, it was not logistically feasible in the present study, which was a ‘one-shot’ design. The study therefore should be viewed as preliminary and with cautions.

CONCLUSION

The present study suggests that people seeking treatment at primary health care in Oman, especially women, might also be suffering from psychological disorders. Inquiring about psychological symptoms in primary health care centres in Oman in patients who present initially with somatic symptoms is worthwhile, in their own language and idioms of distress. Also, screening scales consisting of only somatic symptoms is as effective as psychologically based questionnaires when screening for psychiatric morbidity. The findings of the study also suggest that the generally held view that in non-western countries psychological distress tends to be expressed exclusively in somatic language might not be true.

ACKNOWLEDGEMENTS

We are grateful to the men and women who voluntarily acted as subjects for this research.

REFERENCES


