

Mental Morbidity in Primary Care in Al Ain (UAE): Application of the Arabic Translation of the PRIME-MD (PHQ) Version

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Abstract

Objective: The study examined the nature and prevalence of mental disorders in primary care in Al Ain, United Arab Emirates (UAE). **Methods:** Cross-sectional survey of a consecutive sample of attenders (N = 571) to three primary health care facilities were recruited, using the PRIME-MD questionnaire. **Results:** Two hundred and ten (37.8%) subjects satisfied the DSM-IV primary care version for mental disorders. Depression was the common presentation (73.1%) of all subjects with mental disorders. There were no significant gender differences in the frequency of mental disorders, but the intensity of depressive and anxiety symptoms was significantly higher in female subjects. Subjects with mental disorders showed significantly more somatic symptoms than subjects without mental disorders and they were also more significantly exposed to stress. Psychosocial impairment was found in over two thirds of subjects with mental disorders. PHC physicians recognized less than 1% of subjects with mental disorders. **Conclusions:** Subjects with mental disorders are commonly seen in primary health care settings. Utilization of reliable and valid self-report diagnostic instruments is one of the options to help identify a troublesome mental morbidity in primary care settings (German J Psychiatry 2005;8:32-35).

Keywords: Mental morbidity, Arabic PRIME-MD, cross-sectional survey

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Introduction

Occurrence of mental disorders in primary care is of increasing interest, especially since they involve significantly impaired functioning, increased health care utilization and marked deterioration among the different domains of quality of life (Spitzer et al., 1995, Philbick et al., 1996). Mental disorders have been estimated to be present in at least 20% of primary care patients (Philbick et al., 1996, Spitzer et al., 1994), yet they seem to go undetected and untreated in 50-75% of the cases (Spitzer et al., 1999, Williams et al., 1995). Psychiatric morbidity in primary care in Al Ain, United Arab Emirates, has also been documented (el-Rufaie & Absood, 1993), utilizing the Clinical Interview

Schedule (CIS) (Goldberg et al., 1970). The data from this study suggests that about 27.6% of patients attending primary care facilities suffer from minor psychiatric morbidity. The results of similar studies suggest that common mental disorders form a substantial proportion of the morbidity seen in primary care. In order to improve their recognition, Spitzer and colleagues have designed a diagnostic instrument for the detection of the most commonly encountered mental disorders in primary care as well as in the general population. This instrument, called PRIME-MD, is a standardized and rapid procedure with demonstrated diagnostic performance (sensitivity of 83%, specificity of 88% and positive predictive value of 80%) for the diagnosis of any psychiatric disorder (Spitzer et al., 1994). Spitzer and colleagues converted PRIME-MD, which consists of two phases, one self-report and the other the clinician's guide, to a Patient Health Ques-

tionnaire (PHQ), which is entirely a self-report scale (Spitzer et al., 1999). The aim was to have the patient answer the questions by her/himself, with assistance only when she or he has difficulty in reading or understanding. The clinician reviews the form completed by the patient, checks positive responses and makes a diagnosis following the diagnosis algorithm given at the bottom of the page using the answers given in the module. A self-report version of PRIME-MD was designed (PHQ) that has diagnostic validity comparable to the original clinician-administered PRIME-MD, and is more efficient to use. We examine the prevalence of mental disorders in the primary health care setting. Contemporary diagnostic criteria were applied to a representative sample of adult patients. The specific aims of the study were to estimate the rate of clinically significant somatoform, depressive, and anxiety disorders; to determine the socio-demographic risk factors and associated stressors, to assess associated functional impairment, and to assess the recognition of mental morbidity by PHC physicians.

Method

The study was conducted in Al Ain city, United Arab Emirates. Three primary care facilities were involved in the study. Three senior psychiatric nurses were familiarized with study protocol, and supervised the sampling and data collection procedures. PHC physicians recorded the clinical diagnoses and the presence or absence of mental disorder.

Sample

Consecutively, the first 20 patients who attended the three primary health care centers in Al Ain (morning and afternoon sessions) were recruited for the study five times a week. Informed consent was obtained. Subjects aged over 16 years and conversant in Arabic were included in the study. Subjects with mental retardation, psychoses, and hearing or severe language impairment were excluded from the study. A total of 571 patients met study eligibility criteria. The duration of the study was 6 weeks.

Rating Scales

Patients completed the Arabic translation PHQ before seeing their PHC physicians. Illiterate patients were assisted by the research team in completing the PHQ. Data on age, gender, marital status, educational attainment and employment status were also collected. Physicians then assigned their diagnostic judgment blind of PHQ ratings. Functional impairment (4-point scale) and associated psychosocial stressors were also recorded. PHQ-15 (somatic scale of PHQ) total score was calculated and t-test was used to test significant differences in somatization index between patients with and without psychiatric disorder. Similarly, significant differences in exposure to psychosocial stressors were tested between patients with and without PHQ psychi-

atric disorder, utilizing the PHQ subscale of psychosocial stressors.

Statistical analyses

All data were transferred to a computer, and statistical analyses used the SPSS program. For all categorical items, results are presented as a frequency table. Diagnostic algorithm of PHQ was followed to assign a diagnosis. Cross-tabulations were utilized to evaluate the association between PHQ psychiatric disorder and potential socio-demographic variables. Detection of mental morbidity by PHC physicians is expressed in a frequency table.

Results

The mean (SD) age of the patients was 32.3 (7.4) years with a range of 16 to 65 years; 52% were females; 67% were married; approximately 40% were gainfully employed; 23% were housewives, and 17% were illiterate. The most common type of physical disorders are shown in Table 1, which shows that respiratory (22.6%), musculoskeletal (13.7%), genito-urinary (13.4%), and gastrointestinal (11.9%) were the most frequently recorded physical disorders, while psychiatric diagnoses were made only in four cases by the primary care physicians.

Table 1. Diagnoses Made by PHC Physicians

| Body system | n | % |
|------------------|------------|--------------|
| Respiratory | 129 | 22.6 |
| Genito-urinary | 79 | 13.8 |
| Musculoskeletal | 78 | 13.7 |
| Gastrointestinal | 68 | 11.9 |
| Skin | 46 | 8.6 |
| Cardiovascular | 33 | 5.8 |
| Endocrine | 33 | 5.8 |
| CNS | 31 | 5.4 |
| Eye | 20 | 3.5 |
| Psychiatric | 4 | 0.7 |
| Investigations | 19 | 3.3 |
| Others | 31 | 8.9 |
| Total | 571 | 100.0 |

The prevalence of the different mental disorders is presented in Table 2. The PRIME-MD detected a mental disorder in 37.8% of the total sample. Most frequent diagnoses were depressive and anxiety disorders: 60% of detected cases received a single diagnosis and 40% of cases received more than one diagnosis. There were no significant gender differences in the frequency of depressive and anxiety disorders, but such a difference was found when the intensity of depressive and anxiety was compared ($P \leq 0.04$ and $P \leq 0.02$ respectively). Female subjects compared with male subjects were found to somatize more ($P \leq 0.001$). There were no

significant associations between total depressive symptoms and either educational or occupational status. However, there were significant associations between somatization index and both educational and occupational status. Illiterate subjects and unemployed persons tended to significantly somatize more than other subjects. Patients with mental disorders were found to have been exposed to more stress compared with those without mental disorders ($P \leq 0.001$) and showed more somatization ($P \leq 0.001$). Psychosocial impairment was found in 67.3% of the subjects with mental disorders.

Table 2. Prevalence of Mental Disorders detected by PRIME-MD (PHQ)

| DSM-IV diagnoses (Primary care version) | n | % |
|---|-----|------|
| Somatoform disorders | 50 | 8.8 |
| Depressive disorder | 35 | 6.1 |
| Other depression | 42 | 7.4 |
| Panic disorder | 37 | 6.5 |
| Other anxiety | 13 | 3.2 |
| Probable bulimia | 20 | 3.5 |
| Probable binge eating disorder | 2 | 0.4 |
| Probable alcohol abuse/dependence | 11 | 1.9 |
| Total | 210 | 37.8 |

Discussion

The present study highlights the high prevalence of psychiatric disorders among patients who consult in primary care. These results are largely in line with the original Prime-MD 1000 study (Spitzer et al., 1994, Ansseau et al., 2001). The prevalence rate goes up even higher than the rates reported by previous surveys conducted over the past 10 years in Al Ain (Abou-Saleh et al., 2001, el-Rufai & Absood., 1993). Several factors may explain these higher prevalences in Al Ain primary care. First, previous surveys were conducted on the local population, excluding the expatriates who constitute over 80% of the population. The locals are wealthier and have no significant financial or employment problems. It was not a surprise to find no significant associations between psychiatric disorder and employment status in this study, as our sample comprised both nationals and expatriates, while many studies confirmed the relationship between unemployment and mental illness (Patel et al., 1998, Pothen et al., 2003). Second, the differences in the design, diagnostic criteria and assessment of patients may have contributed to the different prevalence rates found among the three studies mentioned. Regarding the prevalence and nature of psychiatric disorder, the findings suggest that a significant proportion of primary care attenders do suffer from depressive and anxiety disorders. This is consistent with findings from previous Al Ain studies (Abou-Saleh et al., 2001, el-Rufai, 1993, Ghubash et al., 1992), other studies conducted in neighboring countries (Al-Haddad, 2001), and those from other parts of the world (Goldberg & Lecrubier, 1995). As found in this study and reported by previous investigators

(Abiodun, 1993; Harding et al., 1980), PHC workers often fail to detect a significant proportion of patients with mental abnormality who consult them in their various primary care facilities. The most thorough large-scale study is the World Health Organization study on psychological disorders in primary care (Sartorius et al., 1996). Over 25 000 consecutive adults were screened at 15 sites in 14 countries. A quarter had a recognizable mental disorder, the comment being a depressive disorder, or an anxiety disorder or both. Only half of the mental disorders were recognized by primary care physicians; among those patients with a recognizable mental disorder, half were offered drug treatment. There is thus an urgent need for improvement in mental health service provision. It has been suggested that part of the short-term strategies for improving the ability of existing simply trained PHC personnel for detecting mental morbidity in their patients may involve training them in the use of short screening instruments that have been validated as useful for detecting patients with mental abnormality. This approach was employed by some of the participating centers during the WHO study on strategies for extending mental health care in developing countries (Harding et al., 1983). The present study utilized a self-report diagnostic instrument which is as efficient as trained mental health personnel in detecting mental disorders. The high prevalence of unrecognized psychiatric disorders in patients consulting their PHC physicians clearly demonstrates the utility of a reliable and easy to use self-report version of the PRIME-MD (PHQ) (Spitzer et al., 1999), which also offers even more interesting perspectives for the accurate diagnosis of psychiatric disorders in a primary care setting. However, on a long-term basis, changes in the training curricula of the various cadres of PHC personnel in the respective country to reflect a significant increase in mental health input will be required. Health planners in third-world countries need to appreciate the many deleterious effects of mental ill health and thus the need to give adequate priority to the prevention, treatment, and rehabilitation of mental disorders at primary care and other levels of health care. The latter suggests that training in the recognition and management of depression and anxiety disorders should be a priority. This conclusion is supported by the low recognition of psychiatric disorder by PHC physicians in this population. Our estimate of the probable high rate of somatoform disorder in this study and the significant association between psychiatric disorder and somatization could have also contributed to the low recognition rate of psychiatric disorders.

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