Socio-demographic study of major depression in Qatar

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ABSTRACT

Objective: To evaluate the socio-demographic characteristics of major depressive disorders in the State of Qatar, which has a high percentage of expatriates.

Method: Out of 7460 outpatient psychiatric clinic attendees at Hamad Medical Corporation, Doha, Qatar, between November 1993 through December 1998, 2483 patients met the diagnosis of depressive disorder. Prospectively, we interviewed 1114 patients who met the diagnosis of Depressive Episode and Recurrent Depressive Disorder according to International Classification of Disease-10 (major depressive disorder according to Diagnostic and Statistical Manual-IV). The data was coded and analyzed by using Statistical Package for Social Sciences under windows.

Results: Thirty-three point three percent of the patients met the diagnosis of depressive disorder and those with major depressive disorder were 14.9% of the total. Of those with major depressive disorder approximately 2/3rd had a single depressive episode and one 3rd had recurrent attacks. Major depressive disorder is significantly equal in both sexes, married patients of both sexes have a significantly higher rate than others. There is a remarkable consistent rise in the frequency of recurrent depression, compared with significant decline in frequency of single depression with age. Major depressive disorder is significantly more among the unemployed. Among the employed, skilled workers have significantly higher rate of major depressive disorder than non-skilled and professionals.

Conclusion: In nonhomogeneous societies such as Qatar and the Arabian Gulf in general, where men outnumber women, the distribution of major depressive disorder among outpatients is inconsistent with other studies. Age, sex and occupation are the important risk factors for major depressive disorder. Marriage has no protective effect in major depressive disorder.

Keywords: Major depression, recurrent depression, socio-demographic.

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Depression has an extensive history since Hypocrites first described it as a medical illness. The historical classification of depressive disorders (DD) (the term “affective” disorders was introduced by Manfred Bluler in the 1930s) has undergone many fascinating transformations through the centuries and now has been replaced by the term "mood" disorders in the 4th edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)[1] and in the 10th edition of the International Classification of Diseases (ICD-10).[2] Mood disorders have been consistently demonstrated to have a high prevalence in the community. They are commonly untreated, frequently have a chronic course and often associated with serious social and emotional disabilities, including suicide. All sub-classifications of depression such as endogenous, neurotic, reactive, involutional, psychogenic, psychotic, unipolar, the depressed type of manic-depressive illness, and depression not otherwise specified have been

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aggregated into one group called nonbipolar major depression.[3] A "major depressive episode" is defined in DSM-IV as a period lasting for at least 2 weeks that is marked by dysphoric mood and is accompanied by some of the following symptoms: a disorder of sleep, appetite, loss of energy, psychomotor agitation or retardation, loss of interest, self-reproach, difficulty in concentrating, and thoughts of death or suicide.[1] Major depressive disorder (MDD) has been recently found to be associated with high medical utilization and more functional impairment than most chronic medical illnesses. Major depressive disorder is a common illness among persons in the community (2%-4%), in primary care clinics (5%-10%) and inpatient medical care (10%-14%).[4-6] The lifetime prevalence of rates for MDD were 17.8% (8%-12% in males, 20%-26% in females) and the rate for all depressive sub-groups including dysthymia, minor depression and recurrent brief depression were 35.4%.[7] The age of onset for the first major depressive episode is usually by the mid-twenties (18-44 age group).[8] Major depressive disorder is more common in women than men, and in subjects, who were widowed, divorced or had poor family relationships. Major depressive disorder is not related to race, ethnicity, educational level, income, social class or living conditions.[9-13] Major depressive disorder does not increase in the post-menopausal period or with age.[14] Depression is more common among the unemployed,[15] but is not clearly related to socio-economic indices.[16,17]

Methods. This is a prospective study to evaluate the socio-demographic differences between the patients who had a single depressive episode and those who had recurrent ones. Seven thousand four hundred and sixty patients attended the psychiatric outpatient clinic at the Department of Psychiatry in Hamad Medical Corporation, Doha, Qatar, between November 1993 up to June 1998. Two thousand four hundred and eighty three patients met the diagnosis of DD. We interviewed all the patients (1114) who met the diagnosis of depressive episode and recurrent depressive disorder (RDD) according to ICD-10 criteria (MDD according to DSM-IV). The patients who were considered to have RDD had at least 3 depressive episodes during the period of the study and those who did not fulfill these criteria were excluded. Our Department of Psychiatry is the main specialized facility offering clinical psychiatric care in the state of Qatar including inpatient and outpatient services. Arabian Gulf countries with a total population of 550,000, of whom 2/3rd are expatriates. The socio-demographic data taken into account includes age, sex, nationality, marital status, and occupation. The data was coded and entered into the computer for analysis using the Statistical Packages for Social Sciences (SPSS) under windows. Pearson chi-square analysis was performed to test for differences in proportions of categorical variables between 2 or more groups. In 2x2 tables, Fishers exact test (2-tailed) was computed to replace the chi-square test, namely in case of small sample size. The level of $P<0.05$ was considered as the cut-off value for significance.

Results. From the total of 7460 outpatient attendees during the period of the study, we found that approximately 2483 (33.3%) patients had met the diagnosis of DD according to the ICD-10 criteria. Those patients with the diagnosis of MDD were 1114 (14.9% of the total). Among patients with DD in general, patients with single depressive episode (32.7%) had the highest rate of depression, then followed by patients with mixed anxiety and depressive disorder (30.2%) and patients with RDD (12%) **(Table 1)**. Patients with MDD (depressive episode and RDD according to ICD-10) constitute approximately 44.9% of the total DD, and other DD constitute 55.1% (**Table 1**). For this study, we concentrated on MDD. **Table 2** outlines the demographic data of patients with major depression, in which 73% had single depressive episode, and 27% had recurrent attacks of depression. Interestingly, the distribution of single depressive episode is significantly higher than RDD in all the demographic data studied except in divorced people which is equal. Major depressive disorders are almost equal in both sexes (men 51.1%, women 48.9%) and it is significantly higher in non-Qatari (61%) than native Qataris (39%). When major depression is broken down by sex and nationality, the result is that; MDD among expatriates is significantly higher in men (56.9%) than women (43.1%), while among native Qataris, MDD is significantly more in women (58.1%) than men (41.9%). Major depressive disorder is significantly higher in older adults (40-60 years) (45.2%) and younger adults (20-40 years) (39.55%) relative to very young < 20 years (3.4%) and old people >60 years (11.9%). One of our significant findings is that there is a remarkable consistent rise in the frequency of recurrent depression with age (from 7.9% in patients below 20 years, to 19.5% in the 20-40 year group, to 32.4% in the 40-60 year group, to 37.1% in patients above 60 years), compared with a significant decline in the frequency of single episode with age (from 92% in patients below 20 years, to 80.5% in the 20-40 year group, to 67.6% in the 40-60 year group, to 62.9% in patients above 60 years). Married persons (78.9%) are found to have the highest rate of MDD, relative to single persons (14.1%), divorced (2.5%) and widowed (4.5%), when major depression is broken down by marital status and sex. Ranked from highest to lowest, major depression rates show the following distribution: among men, married (80.7%), single

Table 1 - Distribution of depressive disorders in Qatar, 1993-1998.

Depressive Episode (F32)	Recurrent depressive disorder (F33)	Dysthymia (F34.1)	Mixed anxiety and depression (F41.20)	Brief depressive reaction (F43.20)	Prolong depressive reaction (F43.21)	Mixed anxiety and depressive reaction (F43.22)
33%	12%	3%	30%	4%	7%	11%
F = five						

Table 2 - Socio-demographic data of major depressive disorders.

Data	Depressive episode	Recurrent depressive disorder	Total	P-value
Sex				**0.000**
Male	438 (77)	131 (23)	**569 (51.1)**	
Female	375 (68.8)	170 (31.2)	**545 (48.9)**	
Age				**0.000**
<20	35 (92.1)	3 (7.9)	**38 (3.4)**	
20-40	354 (80.5)	86 (19.5)	**440 (39.5)**	
41-60	340 (67.6)	163 (32.4)	**504 (45.2)**	
>60	83 (62.9)	49 (37.1)	**132 (11.9)**	
Nationality				**0.000**
Qataris	290 (66.8)	144 (32.2)	**434 (39)**	
Non-Qataris	523 (76.9)	157 (23.1)	**680 (61)**	
Marital Status				**0.003**
Single	129 (82.2)	28 (17.8)	**157 (14.1)**	
Married	634 (72.1)	245 (27.9)	**879 (78.9)**	
Divorced	14 (50)	14 (50)	**28 (2.5)**	
Widowed	36 (72)	14 (28)	**50 (4.5)**	
Occupation				**0.001**
Professional	54 (66.7)	27 (33.3)	**81 (7.3)**	
Skilled	285 (76.2)	89 (23.8)	**374 (33.6)**	
Non-skilled	67 (89.3)	8 (10.7)	**75 (6.7)**	
Nil	407 (69.7)	177 (30.3)	**584 (52.4)**	
Total	**813 (73)**	**301 (27)**	**1114 (100)**	

(17.4%), divorced (1.4%), widowed (0.5%). Among women, married (77%), single (10.6%), widow (8.6%), divorced (3.7%), when MDD is broken down by marital status and nationality. Ranked from highest to lowest, MDD shows the following distribution: among Qataris, married (73.3%), single (15.9%), widow (6.7%), divorced (4.1%). Among expatriates, married (82.5%), single (12.9%), widow (3.1%), divorced (1.5%). Unemployed persons (52.4%) are more prone to develop depression than employed persons. Among employed people, skilled workers (33.6%) were the highest in developing major depression, followed by professionals (7.3%) and the least were non-skilled (6.7%).

Discussion. This is the first outpatient study in the state of Qatar to evaluate the socio-demographic characteristics of MDD. These disorders are among the most common DD where they occupy the first and third positions in the distribution of DD in general, while mixed anxiety and DD come in the second place. We found that approximately one third of the patients (33.3%) attending outpatient Psychiatric Clinics have DD which is consistent with local and international studies. El-Eryrani,[18] reported that 32% of outpatient psychiatric clinic attendees have DD in a general hospital in Sana'a, Yemen. Latiaief[19] reported that 40% and 20% have DD among outpatient psychiatric attendees in a general hospital and private hospital. Seva[20] also reported that 32.2% and 34.6% of the total patients attending the Department of Psychiatry in a university clinic hospital for 1981 and 1982 had DD. This percentage of patients seem critical based on the fact that one 5th of depressed patients are treated by psychiatrists in general hospitals,[20] which means that most of the depressed patients are vastly under recognized, under diagnosed and under treated.[21-23] An estimated 70% of depressed patients do not receive treatment for their depression.[24] The rates of single attacks (73%) of MDD are higher than the rates of recurrent attacks (27%), which are inconsistent with the range of rates reported in other studies; 20%-60% for single attacks and 40%-80% for recurrent attacks.[25] This could be explained by the fact that many depressed outpatients left the country after the first attack. Most community and international studies showed the prevalence rates of MDD for women are at least 2 times greater than those for men, in the ratio of 2:1. Our findings revealed that men and women in general, have equal rates of MDD. However, when we studied MDD among Qataris, Qatari women were (58.1%) found to have higher rates than Qatari men (41.9%) in the ratio of 1.3:1. While the opposite is true among expatriates where men (56.9%) have higher rates than women (43.1) in the ratio of 1:1.3. Seva[20] reported 56% of women and 44% of men had major depression, which matches what we found among Qatari subjects. We also found expatriates in general are significantly more prone to develop MDD than Qataris. This could be explained by the fact that Qatar and perhaps other Arabian Gulf countries have a large number of male expatriates who out-number females.

Another finding which is statistically significant but exceeds the rates reported in other studies[26] is that married people in general (Qataris and expatriates) have the highest rate of MDD (78.9%) compared to single, divorced and widowed. Married people of both sexes, either married Qataris (73.3%) or married expatriates (82.5%) have more MDD than others. Married expatriates are more prone to develop MDD due to stress than others; they left their spouse and children in their home country, they face job insecurity, have competition at work and unsatisfactory working conditions. Larsely[27] reported a different increase in depressive illness among Canadian immigrants. These findings might suggest that marriage itself has no protective factor among temporary immigrants. Conducting a comprehensive community study in Qatar and comparing the findings with other studies from the region is crucial to explain the high percentage of MDD in married Qatari people. The single people came 2nd in the hierarchy in developing MDD after married people, which supports the fact that marriage has no protective value from depression. The low percentage of divorced and widowed persons (7%) could be explained by the fact that many of them seek traditional healers more than psychiatric services. Regarding age distribution many studies reported that the rates of DD did not increase with age and the young adults (20-40 years) are more prone to develop depression than others.[3,14] In our study, older adults (40-60) years have significantly the highest rate of depression compared with other age groups. The high rate in this age group could be related to the high percentage of expatriates and married people who have high rate of MDD. Major depression is common among the unemployed. Seva[20] reported that levels of depression affect 67% of the unemployed people, with 13% of the total being seriously affected. In our study, we found that unemployed people, (52.4%) the majority of them are housewives and students have significantly the highest rate of MDD than employed people. This high percentage is due to the fact that most Qatari women are housewives. Among the employed, skilled worker are more prone to develop depression than non-skilled and professionals.

In conclusion, patients with depression constitute one 3rd of the total outpatient attendees in the outpatient clinic of a general hospital and those with MDD were 14% of the total. Age, sex and occupation proved to be the important sociodemographic factors for liability of major depression in the state of Qatar. Marriage was found to have no protective effect for MDD. There is a remarkable consistent rise in the

frequency of recurrent depression, compared with significant decline in frequency of single depression with age. However, there are 2 limitations to this study. First, due to temporary immigrants, the drop out rate is expected to be high for patients who attend the clinic once. Second, being an outpatient study it does not reflect the true prevalence rates of major depression in Qatar. The limitation of our study is the duration, which is a 5 year period. For this reason we did not use survival analysis. Also, we did not consider the time factor due to the large number of the sample, but we relied on the operational criteria of DSM-IV and ICD-10 for defining single and recurrent depression. A further follow-up study is recommended to clarify these limitations.

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