

Clinical patterns of mood disorders in a sample of mood disorder patients in the United Arab Emirates

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Background

There are several conflicting findings on symptom manifestations of mood disorders in different cultures. Indeed, cultural elements appear to influence the expression of a number of secondary manifestations of the syndrome.

Aim

The aim of this study was to investigate the clinical presentations of mood disorders in a sample of mood disorder patients in the United Arab Emirates with reference to rural versus urban areas.

Patients and methods

A cross-sectional study was carried out in a sample of mood disorder patients in rural and urban areas. Nearly 300 participants were taken equally from two sites of a rural area and nearly 200 were taken equally from two urban areas. This study was carried out on a sample of United Arab Emirates population representing 65 rural (155 patients) and 60 urban (82 patients) areas.

Results

As regards manic symptoms, irritable mood was significantly more prevalent in the urban population, whereas disruptive behavior was more common in the rural population. As regards the symptom profile of major depressive disorders, depressed mood, lost appetite, low energy, suicidal thoughts, motor retardation, and somatic symptoms were significantly more frequent in the rural population, whereas lack of pleasure, insomnia, lack of concentration, and agitation were significantly more common in the urban population.

Conclusion

Retardation, somatic symptoms, low energy, and loss of appetite were more common among depressive patients of the rural population. Agitation, lack of pleasure, and insomnia were more common among depressive patients of the urban population. Both populations had nearly the same percentage in all manic symptoms, with the exception of disruptive behavior, which was more common in the rural population, and irritable mood, which was more prevalent in the urban population.

Keywords:

BAD profile, rural versus urban, somatic symptoms, varying cultures

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Introduction

Mood disorders are among the most common mental disorders around the world and account for a large amount of disability. Furthermore, the Global Burden of Disease Study estimated that unipolar depression and bipolar depression are the first and sixth leading causes of disability, accounting for nearly 15% of the total years lived with disability worldwide (Murray and Lopez, 1996). There are several conflicting findings on symptom manifestations of mood disorders in different cultures and nations. It seems that depression as a disorder has an image in Eastern cultures that contrasts with that of Western researchers' (Seifasafari *et al.*, 2013). Murphy (1977) tried to draw profiles of depressive symptoms reported from different European countries. It was noticed that the French have a rather low incidence of suicide with a high incidence of somatic preoccupation, the Germans a high incidence of anorexia, and the Polish a higher

incidence of preoccupation with poverty and suicide. Berkman *et al.* (1971) concluded that the diagnostic criteria of depressed neurotic psychopathology seemed to be much stricter in the Swiss population than in Italian one and that some manifestations of anxiety and depression are tolerated more readily in an Italian context than in a Swiss one. Cross-cultural studies of affective disorders have not been systematically attempted, and information such as that we have derives more from epidemiological than from nosographic enquiry. However, it is hardly possible to separate the diagnosed incidence of the disorder from its clinical presentation, as the distinction of morbid from normal effect is essentially a matter of degree and also

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much influenced by sociocultural factors (Cairns *et al.*, 2005). In an African study, Asuni (1962) found a lightness and short duration of depression with an absence of sin and guilt ideas, a relative frequency of manic pictures, a common association with confusional symptoms, and a very low suicide ratio. Carothers (1988) identified involuntional depression in Kenya, and Savage (1963) and Adewuya and Ologuny (2006) in Nigeria, although in the former case it was not considered typical. Both Lambo and Field pointed out that depression might be missed because of the veneer of psychosomatic symptoms. It has been increasingly recognized that the illness is not in fact rare, being masked often by hypochondriacal (psychosomatic) and confusional symptoms. Caballero *et al.* (2008) studied a population of Spanish patients with major depressive disorders, finding that 93% of the patients had at least one somatic symptom, which was fully or partially related to depression. For instance, 45% of patients had four to nine symptoms. Seifsafari *et al.* (2013) posed the necessity of 'somatization' in a group of depressed patients who appeared to have no word for their feelings. This inability can be attributed to low education, a rural cultural background, and sex. The answer 'I do not know' was more prevalent in people with rural cultural backgrounds as it was the only way of revealing their inner emotional state. In a rural family, men have an authoritative role, whereas women often have little information about their rights and their interests. The importance of somatic symptoms in depressed patients has also been shown in many studies, especially those performed in Eastern countries (Kleinman, 2004). Nieuwsma (2009) pointed out that social stigma is the main reason behind the somatization of depression. Fear of stigmatization and reluctance to appear as psychiatric patients are important factors that allow for expressing their emotional pain through a somatic route. The pattern of somatization, as Kleinman (2004) noted in his study on Chinese patients, may be unfamiliar to Western clinicians and may further complicate the concept of depression. For the Chinese, it is easier to talk about somatic complaints rather than emotional status. One reason for this apparent disregard may be the stigma that is attached to psychiatric symptoms in Chinese culture, compared with the relative acceptance of physical complaints (Parker *et al.*, 2001). In Chinese culture, in which psychiatric symptoms are usually stigmatized, somatic symptoms are accepted more than a direct presentation of emotional symptoms. Patients exhibited less psychiatric symptoms, when referred to a private physician, than those who were visited by a general primary care physician (Yeung and Kam, 2005). Pfeiffer (1963), in

his studies on Indonesian patients, did not find more mania than endogenous depression in his cases, although he thought that there was a tendency to euphoric moods in all of his patients. Statistics on affective disorders in patients in Shanghai have been published by. Their patients included manic depressive as well as involuntional depressive cases. In Taiwan, it was found that the expectancy for manic depressive illness was low, although not as low as that in Churingia. Yap (1998) found a moderately high rate of suicide among Hong Kong Chinese. The absence of delusions of sin in Chinese as well as Japanese depressives has been noted and the rarity of severe self-reproach is frequent in most non-Christian patients. International studies have identified a core of depressive syndrome in patients in diverse geographical and cultural areas, regardless of developmental, socioeconomic, or political status (Sartorius and Jablensky, 1997). Cultural elements appear to influence the expression of a number of secondary manifestations of the syndrome. Guilt and suicidal tendencies, for example, have been found to be rare in depressed individuals from developing cultures (Singer, 1995); however, an excess of somatization or hypochondriacal features has been found to be common in those countries (Racy, 1980). Unfortunately, methodological problems limit generalization of these reports. Two recent studies using more sophisticated methods have reinforced the original observations of increased somatization in developing societies (World Health Organization, 1992). Stefanson *et al.* (2002) showed that a significant majority of psychiatric patients attending primary health facilities in four developing countries (Colombia, the Philippines, Sudan, and India) complained about physical symptoms only. Perrise *et al.* (1981) reported that Italian patients experience motor retardation, hypochondriasis, hopelessness, loss of interest, and dissatisfaction, whereas Swedish patients experience agitation, weight loss, and tachycardia.

Aim of the work

The aim of this study was to find out the prevalence of mood disorders in two communities in United Arab Emirates, rural versus urban, and to differentiate between the two communities as regards clinical symptom profile of mood disorders.

Patients and methods

Study design

This study was carried out during the period from January 2013 to December 2013. The sample was picked from a randomly selected geographical area in Dubai governorate representing both the rural and the

urban population. The sample was not designed to represent the whole United Arab Emirates population.

Methodology and sample size

A cross-sectional study was carried out on a suitable sample size of rural and urban areas.

As the first step of the study, two centers were chosen randomly, Dubai center representing urban area and Hata center representing rural area.

Sampling technique from rural areas

A sample from rural areas was selected using the multistage random sampling technique as follows.

First stage of the study: Two centers were chosen randomly from all centers in the Hata center. They were Hata and Meshref, whose populations were 29 442 and 79 202, respectively.

Second stage: Two villages were selected using the simple random method from the two centers above. These villages are Hata from Hata center and Masroof from Meshref center, whose populations were 6645 and 5432, respectively.

Third stage: Houses were selected. All houses were enumerated and a systematic random sample was obtained by choosing every 10th house.

Sampling technique from urban areas

A sample from urban areas was chosen using the multistage random sampling technique as follows.

First stage: The East and West districts of Dubai governorate, whose populations were 202 834 and 322 710, respectively, were divided into multiple locations.

Second stage: Two locations, one from each district, were chosen randomly. The locations were Elhamraa and Bur-Dubai, whose populations were 32 793 and 40 493, respectively.

Third stage: Each location was divided into streets. The streets under investigation were chosen randomly. Each street was divided into houses, which were chosen using systematic random sampling, in which the house numbered the 10th was the one chosen.

The second step of the study: determination of the sample size.

The sample size was calculated using the total population in Dubai (4121 million people). The expected frequency of mood disorder was 18% according to Weissman and

Shaffer (1988); the worst expected frequency was 20% at the 95% confidence level. Thus, the sample size was 1417 according to Epi info (World Health Organization, 1992). The sample size used was nearly 1000 to avoid error default dropout of cases. The sample was divided in two groups according to the population in which the percentage of rural to urban areas was two-third: one-third of total sample size, and hence nearly 300 were taken equally from two sites of rural areas (Hata and Meshref) and nearly 200 were taken equally from the two urban areas (Elhamra and Bur-Dubai) (Epi Info version 5.01 October 2000). Four Public Domain software for epidemiology and disease surveillance.

Data collection: Data were collected after obtaining informed consent from health centers concerned with these areas and also from chosen people after discussing with them the aim of the study. A survey study was conducted using Mini International Neuropsychiatric Interview (Mercer University (1992).

Depth study: All patients who were diagnosed with mood disorder according to *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., text revision (DSM IV TR) criteria (as concluded from the results of Mini-International Neuropsychiatric Interview) and fulfilling the following criteria were taken for the in-depth study.

Inclusion criteria

- (1) Age above 18 years.
- (2) Both sexes.

Exclusion criteria

- (1) Mental subnormality.
- (2) Dementia.
- (3) Delirium and other cognitive disorders.
- (4) Mood disorder due to general medical condition and mood disorder due to substance use.

Those diagnosed as having disorders from the previous steps were subjected to the following.

- (1) Complete physical and neurological examination to exclude organic causes.
- (2) Clinical symptom profile of mood disorders in rural and urban population, according to DSM IV TR.

A total of 237 patients were diagnosed as having disorders, 83 depression and 26 manic patients; 155 patients were from rural areas and 82 were from urban areas.

Results

There were statistically significant differences between rural and urban populations as regards sociodemographic profile of both groups, such as age, sex, and marital status (Table 1). There were also statistically significant differences between rural and urban populations as regards the prevalence of major depressive disorder (9.5 and 6.6%, respectively; $P=0.023$), whereas there were no statistically significant differences as regards other mood disorders (Table 2). There was a significant statistical difference between rural and urban populations as regards the symptoms of depression. Depressed mood, lost appetite, low energy, suicidal thoughts, motor retardation, and somatic symptoms were significantly more common among the rural patients, whereas lack of pleasure, insomnia, lack of concentration, and agitation were significantly more frequent among the urban patients (Table 3). There was no significant statistical difference between rural and urban population as regards manic symptoms among bipolar patients, with the exception of disruptive behavior, which was

significantly more common among rural patients, and irritable mood, which was significantly more common among urban patients (Table 4).

Discussion

Sociodemographic data of mood disorder patients

The present study found statistical significance in terms of age, sex, and marital status between the urban and rural groups. William *et al.* (2013) found that sociodemographic factors have no significant difference among urban and rural mood disorder patients. However, previous US studies have reported a slight but significantly higher prevalence of depression in rural areas than in metropolitan area (Probst *et al.*, 2006).

Prevalence of mood disorders

In the present study, the prevalence of mood disorder was 25.8% in the rural population compared with 20.5% in the urban population, and this is in agreement with most of the previous studies conducted earlier (Okasha, 1995;

Table 1 Sociodemographic profile of mood disorder patients

	Rural [N=155 (65)] [n (%)]	Urban [N=82 (35)] [n (%)]	Overall (N=237) [n (%)]	χ^2	P
Age (years)					
18–29	35 (22.5)	53 (64.6%)	88 (37.1)	14.474	0.01
≥30	120 (77.5)	29 (35.4%)	149 (62.8)		
Sex					
Male	73 (47)	45 (54.8%)	118 (49.8)	40.572	0.05
Female	82 (53)	37 (45.2%)	119 (50.2)		
Marital status					
Single	21 (13.5)	34 (41.5)	55 (23.2)	57.809	0.05
Married	127 (82)	40 (48.8)	167 (70.5)		
Separated	7 (4.5)	8 (9.7)	15 (6.3)		
Level of education					
High	21 (13.5)	45 (54.9)	66 (27.8)	56.471	0.052
Low/trade	81 (52.3)	20 (24.4)	101 (42.6)		
No qualification	53 (34.2)	17 (20.7)	70 (29.6)		
Socioeconomic class					
Professional	3 (1.9)	9 (10.9)	12 (5.1)	99.623	0.064
Intermediate	33 (21.3)	32 (39.1)	75 (31.6)		
Manual	97 (62.6)	27 (32.9)	114 (48.1)		
Never worked/missing	22 (14.2)	14 (17.1)	36 (15.2)		

Table 2 Prevalence of mood disorder in rural versus urban

	Rural (n=155) [n (%)] N=600	Urban (n=82) [n (%)] N=400	Overall (n=237) [n (%)] N=1000	χ^2	P
Hypomanic	1 (0.08)	0 (0)	1 (0.05)	0.667	0.4140
Manic	15 (2.5)	13 (3.3)	28 (2.8)	0.843	0.3586
Mixed	12 (1.9)	6 (1.4)	34 (1.7)	0.843	0.3586
Major depressive episode	57 (9.5)	26 (6.6)	167 (8.4)	5.184	0.023*
Cyclothymic disorder	13 (2.2)	7 (1.8)	40 (2.0)	0.425	0.514
Dysthymic disorder	57 (9.5)	30 (7.4)	174 (8.7)	2.947	0.086
Total mood disorder	155 (25.8)	82 (20.5)	237 (23.7)	10.931	0.001***

SE, Self-Esteem; “*” refers to the power of data significance. The more stars, the more significant the data is.

Table 3 Depressive symptom profile among patients in rural and urban areas

	Rural (n=57) [n (%)]	Urban (n=26) [n (%)]	Total (n=83) [n (%)]	χ^2	P
Depression mood	55 (95.6)	18 (69.8)	73 (87.4)	21.911	0.000***
Lack of pleasure	8 (13.0)	13 (49.2)	21 (25.3)	26.911	0.000***
Lost appetite	37 (64.3)	8 (28.8)	45 (52.3)	19.737	0.000***
Increased appetite	4 (7.0)	1 (5.7)	5 (6.6)	0.108	0.742
Insomnia	24 (41.2)	15 (58.5)	39 (46.7)	4.331	0.037 [†]
Hypersomnia	3 (6.1)	2 (7.5)	5 (6.6)	0.116	0.733
Low energy	45 (78.1)	13 (50.9)	58 (69.5)	12.551	0.000***
Low SE	18 (31.6)	9 (34.0)	27 (32.3)	0.094	0.759
Lack concentration	34 (58.8)	20 (75.5)	54 (64.1)	4.383	0.036 [†]
Death ideas	8 (14.9)	1 (3.8)	9 (11.4)	4.452	0.035 [†]
Agitation	13 (22.8)	10 (37.7)	23 (27.5)	4.040	0.044 [†]
Motor retardation	23 (39.5)	5 (20.8)	28 (33.5)	5.688	0.017 [†]
Somatic	25 (43.9)	7 (26.4)	32 (38.3)	4.658	0.031 [†]
Guilt feeling	7 (11.4)	2 (9.4)	9 (10.8)	0.13	0.71

SE, Self-Esteem; "***" refers to the power of data significance. The more stars, the more significant the data is

Table 4 Manic symptom profile among bipolar patients in rural versus urban areas

	Rural (n=15) [n (%)]	Urban (n=13) [n (%)]	Total (n=26) [n (%)]	χ^2	P
Elevated mood	11 (70.9)	7 (57.6)	18 (64.3)	0.565	0.452
Irritable mood	4 (29)	7 (53.8)	11 (39.3)	1.648	>0.05
Grandiosity	6 (41.7)	6 (45.5)	12 (42.9)	0.044	0.833
Increased motor activity	14 (95.8)	12 (90.9)	26 (94.3)	0.339	0.560
Increased pleasure activity	8 (50.0)	8 (63.6)	16 (54.3)	0.565	0.452
Decreased need to sleep	14 (95.8)	13 (100.0)	27 (97.1)	0.472	0.492
Talkativeness	15 (100.0)	13 (100.0)	28 (100.0)	–	–
Flight of ideas	10 (66.7)	9 (72.7)	19 (68.6)	0.129	0.720
Distractibility	9 (58.3)	7 (54.5)	16 (57.1)	0.044	0.833
Disruptive behavior	8 (50.0)	3 (18.2)	11 (40.0)	3.182	0.047

Okasha, 1977). The high percentage of affective cases in the rural population may be attributed to the fact that the rural areas are closed societies and have increased marital consanguinity. However, the prevalence of mood disorders in rural and urban populations was less obvious in this study than that in the previous study by Okasha (1995), who found that the percentage of affective disorder in the rural area was about 37%, whereas it was about 32% in the urban area. This discrepancy may be explained by the variability in culture or different sampling.

Prevalence of major depressive disorders

Depression is the most common emotional disorder affecting ~3% of world population according to the World Health Organization (1992). Depressive syndrome is the problem in approximately half of all admissions to psychiatric institutions. In Egypt, the overall estimate of depressive disorder is 15.3%, and this percentage seems to be not much higher than that of third world countries (Okasha *et al.*, 1988). In the present study, depression was more common in the rural than in the urban population (9.5 and 6.6%, respectively), which is contradictory to the previous study conducted by Okasha (1995), who found that

the prevalence of depression in a selected sample of urban and rural population was found to be 11.4 and 19.7%, respectively. However, the differences were because of the randomness of the constitution of the sample and time differences (early vs. later), which were associated with high orientation of psychiatric morbidity and hence early intervention and low prevalence. However, our result contradicted with the Canadian study by Romans *et al.* (2011), who confirmed a lower risk for depression among rural residents, which was related to a stronger sense of society belonging. Abdel Hameid *et al.* (1988) reported that the prevalence of major depressive disorders was 10.9% in rural individuals and 8.1% in urban ones, whereas Seham *et al.* (2003) found that the prevalence of major depressive disorders in a rural village was 7.3 and 5% among urban individuals in a sample from Menoufya governorate. These results are in agreement with those of the present study. Essam *et al.* (2001) found that the prevalence of major depressive disorder was 17.1% in a rural village.

Prevalence of bipolar disorder

The prevalence of bipolar disorder in the general population was 2% in the rural population and 1.8% in the urban population. This is in agreement with the

findings of Abd El Hamid *et al.* (1988), who found that the prevalence of bipolar disorder in the general population was 2.6% in the rural population and 1.4% in the urban population. However, Seham *et al.* (2003) reported that the incidence of bipolar disorder was 1.3% in the urban population and 1.5% in the rural population.

Depressive symptoms in patients with depression and dysthymia in rural versus urban population

The present study found that low energy, insomnia, and depressed mood are more common than other depressive symptoms in both populations. This result gives more evidence to the previous studies, which reported that these symptoms have a biological base other than cultural factors. Studies such as that of Seifsafari *et al.* (2013) noted that the loss of appetite symptom can be a subjective feeling rather than a true anorexia, leading to weight loss and somatic symptoms. Headache and pain in other areas of the body especially have a considerable weight in the symptom profiles of depressed patients. This is in agreement with the findings of Pfeiffer (1963), who found that no marked variations could be observed across different cultures. He reviewed 40 reports from non-Western countries and concluded that in these countries the core symptomatology of depression is quite comparable to the depressive symptoms described in the West. He identified mood changes, loss of sleep, appetite, and libido, and variation in diurnal-rhythm as the core depressive symptoms, and he found that guilt, hopelessness, and hypochondriasis were modified by culture. More recently, the WHO collaborative study on depression identified a core of depressive symptoms in the majority of cases in the five participating centers. These include sadness, joylessness, anxiety and tension, lack of energy, loss of ability to concentrate, and thoughts of inadequacy and worthlessness. The study assessed 573 patients, and showed that feelings of guilt and self-reproach were most prevalent in Basel and Montreal and least prevalent in Tehran, where suicidal ideation was rare. In contrast, somatic symptoms were more common in Tehran and least common in Basel and Montreal (Tseng, 2007). A comparison of depression in Western and non-Western societies noted that disorders of conduct and somatic complaints were more common in non-Western cultures (Aichberger *et al.*, 2008). Agitation, insomnia, and lack of concentration were more common in urban depressive and dysthymic patients, whereas motor retardation, lost appetite, depressed mood, and low energy were more common in rural depressive patients; however, this result was expected to some extent and may be explained by the reason that

the urban population is subjected to many stressors, such as overcrowding, pollution, and low financial resources, in comparison with the increasing need for civilization. This result contradicts with that of the Iranian study by Seifsafari *et al.* (2013), which declared that insomnia is more common among the less-educated people in rural areas and is related to somatic symptoms. Somatic symptoms are more common in major depression and dysthymia patients of rural population than in those of urban population. This finding is well supported by Seifsafari *et al.* (2013), who pointed that pain and bodily complaints were more prevalent in patients with a rural cultural background. This may be due to the fact that rural participants tend to translate their feelings into body language as the rural society usually has greater social tolerance for physical complaints than for psychological complaints, which are either not taken seriously or rarely believed to recover with some rest or extra prayer. Rural patients often mask their disorders with multiple somatic symptoms, which occupy the foreground, and the affective component of their illness recedes to the background. Accordingly, they either resort to the general practitioner or the primary healthcare physician, asking unneeded investigations, which are costly for a developing country or asking the traditional healers to alleviate their sufferings. This finding is consistent with that of Seifsafari *et al.* (2013), who asserted that general practitioners and other specialists are still primary physicians for individuals with lower education or with rural cultural background. This can be related to the unavailability of psychiatrists in rural areas. Another study, conducted by Bhui *et al.* (2004), emphasized that South Asians are more prone to visit their general practitioners and less likely to have a recognized mental disorder compared with White groups, and, even if a mental disorder is recognized, they are least likely to be referred to a specialist by general practitioners. A considerable number did not ask for help at all, especially in rural population, in which absenteeism from work or inability to face day-to-day affairs are not much criticized by their community. Lack of pleasure was more common in urban than in rural populations, with highly significant differences, which may be due to the availability of means of entertainment to urban populations and its unavailability in rural life. The incidence of guilt feeling and suicidal ideation was less common compared with other depressive symptoms in both populations; however, Tseng (2007) noted that the higher prevalence of guilt feeling in patients with urban cultural background is a finding comparable to the results of the WHO collaborative study, which

showed the highest prevalence of this symptom in Western societies. In some patients, the somatic manifestations are a self-punishment strategy. In Western countries, the idea of original sin rooted in the Christianity teachings plays a major role in the guilt feeling of depressed patients (Seifsafari *et al.*, 2013). In agreement with our study, El-Islam *et al.* (1988) found that guilt feelings and suicidal ideation and behavior were not frequently present in Kuwait. Two explanations have been provided – namely, the persisting influence of Islam compared with the declining presence of Christianity in the West and a different social fabric allowing cohesiveness and reinforcing belonging rather than individuality and social alienation as in the West. A third explanation is related to religion – namely, the marked prevalence of alcohol use in Western cultures compared with that in Islamic countries. In Britain, alcohol and drug use is involved in almost 15% of suicides in individuals in contact with mental health services (El Rashidi, 1992). In our study, suicidal ideation was more common in rural population than in the urban population despite religious attitude, as religion seems to suppress the actions but not the thoughts. This finding is bolstered by Seifsafari *et al.* (2013), who noticed that suicidal ideation was more common among rural dwellers but found no difference in suicidal attempt between urban and rural populations. This difference may be attributed to the hesitation of rural people in clearly expressing their emotions. This is in agreement with previous studies conducted by Gawad and Arafa (1980) and Okasha *et al.* (1988). Okasha *et al.* (1988) revealed some differences between Western and Egyptian populations. In Egypt, depression is manifested mainly by agitation, somatic symptoms, hypochondriasis, physiological changes such as decreased libido and anorexia, and insomnia, which is not characterized by early morning awakening symptoms. Moreover, ideas of guilt, sin, and reproach are not common in Egyptian patients. Gawad and Arafa (1980) compared the Egyptian study with a similar Indian study and two British studies and found variable qualitative differences between the Egyptian depressive and others. Symptoms of depressed mood, anxiety, somatic complaints, and suicidal tendency were significantly more frequent among Egyptians compared with the British. In contrast, guilt, insomnia, and hypochondriasis were significantly more frequent in the British study. However, no significant difference was found with regard to initial insomnia, retardation, diurnal variation, and paranoid trends. Nevertheless, the comparison between the Egyptian and Indian studies indicates that symptoms of guilt, insomnia, retardation,

agitation, and hypochondriasis are significantly more frequent in the Indian sample. However, the Iranian study by Seifsafari *et al.* (2013) showed that the higher frequency of hypochondriac ideations in rural and urban areas may show that this symptom is less influenced by cultural backgrounds. In the Arab Emirates, Waziri (1973) revealed marked differences in the frequency of depressive symptoms. There was a higher incidence of retardation, somatic anxiety, and hypochondriasis, and a lower incidence of morning worsening of symptoms, suicide, guilt, and delayed insomnia.

Manic symptoms among bipolar patients in rural versus urban population

As regards manic symptoms, talkativeness, decreased need to sleep, and increased motor activity were the most common symptoms in bipolar patients of both populations (100, 95.8, and 95.8%, respectively). However, distractibility, flight of ideas, and grandiosity were nearly equal in both populations, which can be attributed to the fact that the biology of this disorder plays a greater role compared with cultural and environmental factors, whereas disruptive behavior was more common in rural patients than in urban patients (50 and 18.2%, respectively). This discrepancy may be explained by the fact that low levels of education and social classes were more prevalent in the rural population, and have a major influence the type of behavior. Murphy *et al.* (1986) revealed that the variations in the symptomatology of mania are less easy to assess due to the unavailability of diagnosis in the past and overlap with reactive psychosis and schizophrenia. However, there are a lot of research studies that suggest that there is not much of a difference in manic symptoms across different cultures. Indian bipolar patients have preponderance of mania in contrast to patients in Western countries (Chopra *et al.*, 2006). Indian studies have found a higher prevalence of grandiose delusions, delusions of persecution and reference, and those related to sexual and religious themes than that in the West (Sethi and Khanna, 1993). Hostile irritability is the predominant affect in Indian manic individuals. There are reports of seasonal occurrence of mania in summer season, which is not reported in the West. Recurrent unipolar mania is more common in India and tropical countries than in temperate Western countries (Avashthi *et al.*, 1996).

Summary

Retardation, somatic symptoms, low energy, and loss of appetite were more common in the depressive group of the rural population. Agitation, lack of concentration, lack of pleasure, and insomnia were more common in the depressive group of the urban population. Suicidal

ideation was still prevailing, especially in rural population, despite our religious attitude and our conservative countries. Both populations had nearly the same percentage in all manic symptoms except that disruptive behavior was more common in the rural population and irritable mood was more common in the urban population.

Recommendations

- (1) Further studies in different governorates should be performed, with the intentions to cooperate different governmental studies, to reach a full organized mental health policy in Egypt and to actually assess the morbidity risk, and hence effective policy should address the primary, secondary, and tertiary prevention approaches.
- (2) Therapists need to pay attention to the numerous types of presentation of bipolar disorder in various cultures to understand the symptom profile of such patients. Hence, more extensive studies in other areas of the country are needed to obtain a more reliable profile of psychiatric disorders in the Egyptian population.
- (3) Comparative studies between the epidemiology of psychiatric and Arab countries could be performed in relation to data obtained from Western countries that have different urbanization profiles.
- (4) We should improve the orientation of the general practitioners about psychiatric disorders, especially mood disorders. They should be trained for early detection and interference for those cases. They should be provided with an index on nearby psychiatric centers, to provide psychiatric help to patients, instead of performing various investigations and giving many medical drugs, which are expensive, and spare time.

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Conflicts of interest

There are no conflicts of interest.

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