A study on nonpsychiatric management of psychiatric patients in Minia governorate, Egypt

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Background

The world is suffering from an increasing burden of mental disorders and a widening gap in treatment. About 450 million people suffer from mental or behavioral disorders; yet, only a small minority receives even the most basic treatment.

Objectives

The objective of the study was to assess nonpsychiatric treatments and traditional and folklore management of psychiatric disorders and examine the nature of communication between psychiatric and nonpsychiatric care providers in Minia Governorate, Egypt.

Participants and methods

A total of 1134 patients [638 male (56.2%) and 496 female (43.8%)] were recruited from the outpatient psychiatric clinic of Minia University Hospital. They were interviewed using an unstructured open-ended technique to assess the previous methods by which their psychiatric illness was handled.

Results

The number of patients who reported that they had undergone nonpsychiatric medical and cultural traditional treatment methods was 985 (82% of the sample). Nonpsychiatric medical management techniques used by the patients (530, 53.8%) included medical treatment and investigations advised by general practitioners in primary healthcare units (231 patients, 43.5%), internal medicine (123, 23.2%), pediatric services (101, 19.1%), neurosurgery (25, 4.8%), and others including emergency room services (50, 9.4%). Nonpsychiatric cultural traditional interventions (455 patients, 46.2%) included following the Holy Koran (274 patients, 60.2%), using herbs and plants (91, 20%), Hegab (written words on a piece of paper, 55, 12.1%), Hegama (23, 5.4%), and physical interactions (12, 2.3%). The rate of referral of these patients from nonpsychiatric to psychiatric attention was limited (119 patients, 12%).

Conclusion

Our results highlighted the need to enhance communication between psychiatrists and providers of nonpsychiatric care to psychiatric patients.

Keywords:

Egypt, Minia governorate, nonpsychiatric management

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Introduction

In our country, psychiatric diagnosis started very early in time. Pharaonic medicine considered psychiatric disease as a medical problem needing a physician's service. A case of senile dementia was reported on a papyrus in 1500 BC – that is, earlier than the hippocrates doctrine. A case of hysteria was also reported on a Kahun papyrus (Shaheen and Rakhawy, 1971). These disorders carried no stigma, as in those days there was no demarcation between psyche and soma (Okasha, 2001). Egypt is currently suffering from serious problems such as illiteracy (especially among women), lack of job opportunities (especially for young people), and slow economic growth because of loss of traditional economies, low productivity, and lack of innovation and competitiveness (Okasha, 2004). Despite the rapid social change in Egypt,

the majority of people, especially in rural areas, belong to an extended family hierarchy. It is considered shameful to care for psychiatric patients away from family surroundings. Traditional and religious healers have a major role in primary psychiatric care in Egypt (Okasha, 1966). At any time, almost half of the patients consulting traditional religious healers in an Egyptian rural community have diagnosable psychiatric disorders. In contrast, many psychiatric patients tend to seek nonpsychiatric medical help, particularly those with minor neurotic and psychosomatic symptoms (El-Amin and Refaat, 1997).

Participants and methods

The population of the sample was recruited from the Psychiatry and Neurology outpatient clinic of Minia

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University Hospital during the period from 1 March 2011 to 31 August 2011. The total number of patients who attended the clinic during these 6 months was 1791, ranging between 285 and 312 patients per month (mean \pm SD = 298.5 \pm 9.81). The age range of the patients was 6-70 years; patients belonging to both genders, whether referred or visiting on their own, with a diagnosis of any psychiatric disorder based on the Diagnostic Research Criteria of the ICD-10 were included. Patient's consent to participate in the study procedures was a prerequisite.

Patients who came with neurological disorders including epilepsy (n = 542, 30.8% of the primary sample) or who were referred to other departments of the hospital (68 patients, 3.7% of the primary sample), as well as those who refused to participate in the study procedures (47 patients, 2.5% of the primary sample), were excluded from the final study sample.

The final studied sample included 1134 patients who had had psychiatric manifestations (secondary sample). The results of the study are confined to this secondary sample with psychiatric illness. Patients were interviewed by the researchers after explaining the purpose of the study and after obtaining their consent to participate. Interviews were carried out in an open-ended manner to assess patients' awareness of psychiatric services, treatmentseeking behavior, and experiences with traditional or religious healers. Special emphasis was placed on their current reasons for seeking psychiatric help.

Diagnosis was carried out according to the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems, Diagnostic Criteria for Research (ICD-10) (World Health Organization, 1993). The criteria for each patient were revised independently by the research team members to reach a consensus on diagnosis. However, the diagnoses of 27 patients were still deferred after revision and joint discussion (2.4% of the secondary sample).

The total secondary sample was divided into two groups:

Group A consisted of patients who were referred by nonpsychiatric medical or traditional providers and/or had a history of previous nonpsychiatric care (n = 895, 87% of the secondary sample).

Group B consisted of patients who came for psychiatric help without a history of seeking nonpsychiatric management (n = 149, 13% of the secondary sample).

Statistical methods

The data were collected, checked, and finally analyzed using SPSS (version 20; SPSS Inc., Chicago, Illinois, USA). Descriptive statistics were used to determine the demographic and clinical variables. The tests used were the γ^2 -test, the unpaired t-test, and the Mann-Whitney test, where appropriate. Pearson's correlation coefficient was used to find different correlations between the studied variables. A P-value of less than 0.05 was considered statistically significant.

Results

Sociodemographic characteristics

The sample consisted of 1134 patients, of whom 638 (56.2%) were men and 496 (43.8%) were women. Thirtyeight percent of the patients belonged to the age group of 18-30 years, whereas 27.3% were in the age group of 31-40 years. The age group below 18 years was the least in number (96 patients, 8.4% of the sample).

Forty-two percent of the patients were single. A total of 827 (72.9% of the sample) patients came from rural areas, whereas the rest of the patients were urban. Illiteracy and unemployment were prevalent in our sample (56 and 46%, respectively) (Table 1).

Patient diagnoses

The most common diagnoses included in our sample were neurotic, stress-related, and somatoform disorders (58.3%), followed by schizophrenia and related disorders (15.2%). Mental and behavioral disorders due to psychoactive substance use (1.3%) were the least prevalent. In 2.3% of the cases, the diagnosis was deferred (Table 2). The duration of psychiatric illness ranged from 2 days to 9 years (Table 3).

Treatment seeking as a first contact and reasons

A total of 530 patients (53.8%) consulted nonpsychiatric physicians and 455 patients (46.2%) consulted nonpsychiatric traditional healers as their first contact before coming to our clinic. In contrast, 149 patients (13.2%) attended our outpatient psychiatric clinic as their first contact. Of the group of patients who sought nonpsychiatric care, general practitioners were chosen by 231 patients (43.5%), followed by internal medicine (123 patients, 23.2%), pediatric services (101 patients, 19.1%), emergency room services (50 patients, 9.4%), and neurosurgical services (25 patients, 4.8%; Table 4).

As regards the nonpsychiatric traditional care techniques, the majority of patients in this sector (274, 60.4%) reported following the Holy Koran for treatment, followed by use of herbs and plants (91 patients, 20%), Hegab (55 patients, 12.1%), Hegama (23 patients, 5.4%), and finally physical methods (12 patients, 2.5%).

The most important reason for choosing nonpsychiatric therapeutic services was easy accessibility (34.3% of the patients; Table 5).

Psychiatric care was selected as a first contact for reasons such as visiting the specialist (64.4%), recommendation by someone else and belief system (20.1%), and popularity of the service or its providers (15.5%; Table 6). The reasons for seeking psychiatric help after consulting nonpsychiatric care providers were progression of symptoms (58.9%), nonimprovement of symptoms (15.2%), recurrence of symptoms (13.9%), and finally referral (12%; Table 7).

Discussion

Information about culture and tradition and the treatment-seeking behavior of psychiatric patients could

Table 1 The relationship between age, gender, and marital status and the selected type of management

| Variables | Number (n=1134) | TH [n (%)] | NPP [n (%)] | PP [n (%)] | <i>P</i> -value |
|----------------|-----------------|------------|-------------|------------|-----------------|
| Age (years) | | | | | NS |
| <18 | 96 | 62 (64.5) | 32 (33.1) | 2 (2.4) | |
| 18-30 | 432 | 232 (53.7) | 188 (43.5) | 12 (2.8) | |
| 31-40 | 310 | 85 (27.5) | 102 (32.9) | 123 (39.6) | |
| 41-50 | 197 | 73 (35.5) | 113 (58.3) | 11 (6.2) | |
| >50 | 99 | 9 (9) | 89 (89.8) | 1 (1.2) | |
| Gender | | | , , | , , | 0.001** |
| Male | 638 | 353 (55.3) | 161 (25.2) | 124 (19.5) | |
| Female | 496 | 102 (20.5) | 369 (74.3) | 25 (5.2) | |
| Marital status | | , | , | , | 0.05* |
| Single | 484 | 255 (52.6) | 150 (30.1) | 84 (17.3) | |
| Married | 463 | 117 (25.2) | 298 (64.4) | 48 (10.4) | |
| Divorced | 86 | 21 (24.4) | 58 (67.4) | 7 (8.2) | |
| Widow | 101 | 67 (53.4) | 24 (23.7) | 10 (22.9) | |

NPP, nonpsychiatric physician; PP, psychiatric physician; TH, traditional healers.

Table 2 The relationship between residence, occupation and the selected type of management

| Variables | Number (n=1134) | TH [n (%)] | NPP [n (%)] | PP [n (%)] | <i>P</i> -value |
|----------------------|-----------------|------------|-------------|------------|-----------------|
| Residence | | | | | NS |
| Rural | 827 | 404 (48.8) | 411 (49.7) | 12 (1.5) | |
| Urban | 307 | 51 (17.3) | 119 (38.1) | 137 (44.6) | |
| Occupation | | | | | NS |
| Unemployed | 637 | 312 (48.9) | 323 (50.7) | 2 (0.4) | |
| Part-time work | 269 | 123 (45.7) | 134 (49.8) | 12 (4.5) | |
| Full-time work | 228 | 20 (8.7) | 73 (32.1) | 135 (59.2) | |
| Education level | | | | | NS |
| Illiterate | 523 | 267 (51.5) | 232 (44.3) | 24 (4.2) | |
| Can read and write | 279 | 120 (43.1) | 141 (50.5) | 18 (6.4) | |
| Scholastic education | 232 | 59 (25.4) | 129 (55.6) | 44 (19) | |
| Higher education | 100 | 9 (9) | 28 (28) | 63 (63) | |

NPP, nonpsychiatric physician; PP, psychiatric physician; TH, traditional healers.

Table 3 The relationship between patient diagnoses according to ICD-10 and the selected type of management

| Diagnoses | Number $(n=1134)$ | TH [n (%)] | NPP [n (%)] | PP [n (%)] | <i>P</i> -value |
|---|-------------------|------------|-------------|------------|-----------------|
| F42.1 generalized anxiety disorder | 51 | 10 (19.7) | 19 (37.2) | 22 (43.1) | NS |
| F41.0 panic disorder | 170 | 52 (30.5) | 115 (67.4) | 3 (1.7) | NS |
| F42 obsessive-compulsive disorder | 126 | 89 (70.3) | 30 (23.8) | 7 (5.5) | NS |
| F43.1 posttraumatic stress disorder | 18 | 8 (44.5) | 1 (5.5) | 9 (50) | NS |
| F45.0 somatization disorder | 198 | 9 (4.5) | 188 (94.9) | 1 (0.6) | NS |
| F44 dissociative (conversion) disorder | 99 | 79 (79.7) | 19 (19.1) | 1 (1.2) | 0.01** |
| F32 depressive episode | 82 | 20 (24.3) | 25 (30.4) | 37 (45.1) | NS |
| F30 manic episode | 27 | 9 (33.3) | 3 (11.1) | 15 (55.6) | 0.05* |
| F20 schizophrenia | 100 | 50 (50) | 25 (25) | 25 (25) | NS |
| F23 acute and transient psychotic disorder | 73 | 59 (80.8) | 1 (1.3) | 13 (17.9) | NS |
| F00-F09 organic, including symptomatic and mental disorders | 60 | 22 (36.6) | 32 (53.3) | 6 (10.1) | NS |
| F66.2 sexual relationship disorder | 48 | 34 (70.8) | 14 (29.2) | 0 (0) | NS |
| F20 mental retardation | 22 | 6 (23) | 12 (54.5) | 4 (22.5) | NS |
| F90 hyperkinetic disorder | 18 | 4 (22.2) | 12 (66.6) | 2 (11.2) | NS |
| F10-F19 mental and behavioral disorder caused by psychoactive substance use | 15 | 2 (13.3) | 10 (66.6) | 3 (20.1) | NS |
| Diagnosis was deferred | 27 | 2 (7.4) | 24 (88.8) | 1 (3.8) | NS |
| Total | 1134 | 455 (40.1) | 530 (46.7) | 149 (13.2) | |

NPP, nonpsychiatric physician; PP, psychiatric physician; TH, traditional healers.

reflect the status of knowledge and attitudes toward mental illness. According to Dien (1998), each culture provides its members with ways of explaining mental illness. He added that, in the west, emphasis is placed on psychological factors, life events, and effects of stress, but in many parts of the east explanation of mental illness takes into account wider social and religious factors.

The majority of our patients (86.8%) were treated by nonpsychiatric medical and traditional services before they sought psychiatric care. This finding is concordant with that reported by El-defrawy et al. (2000), who reported that 77.5% of psychiatric patients in Ismailia, Egypt, had attended nonpsychiatric care providers as a first step in seeking help. A possible explanation for this

^{*}Statistically significant.

^{**}Highly statistically significant.

^{*}Statistically significant.

^{**}Highly statistically significant.

Table 4 Duration of current illness when seeking outpatient psychiatric treatment

| Duration of illness (months) | n (%) | | |
|------------------------------|------------|--|--|
| <1 month | 453 (39.9) | | |
| 1–6 months | 283 (24.9) | | |
| 7–12 months | 204 (17.8) | | |
| >12 months | 194 (17.4) | | |

Duration of illness: 2 days to 9 years: median=1 year.

Table 5 Patients' reasons for going to nonpsychiatric physicians and traditional healers first (n=985)

| Reasons | n (%) |
|--|---|
| Easy accessibility Recommendation by someone and belief systems Popularity of care providers and the effect of media Fear of stigma associated with psychiatric services Total | 338 (34.3) 242 (24.5) 205 (20.8) 200 (20.4) 985 (100) |

Table 6 Patients' reasons for attending psychiatric services as a first visit (n = 149)

| Reasons | n (%) |
|--|-----------|
| Being a specialist | 96 (64.4) |
| Recommendation by someone else and belief system | 30 (20.1) |
| Popularity of care providers and the effect of media | 23 (15.5) |
| Total | 149 (100) |

Table 7 Patients' reasons for attending psychiatric outpatient clinics after consulting nonpsychiatric services (n = 985)

| Reasons | n (%) |
|--|--|
| Symptom progression Symptoms did not change Symptom recurrence after improvement Referral by nonpsychiatric care providers | 581 (58.9) 148 (15.2) 137 (13.9) 119 (12) |
| Total | 985 (100) |

finding could be that traditional and nonpsychiatric medical care providers offer a culturally accepted explanation more often than do psychiatric care providers who rely on medications and/or investigation (Patel et al., 1997). According to Rakhawy (1996), most psychiatrists rarely encountered a patient who did not consult, in one way or another, a traditional healer.

In the present study, a large proportion of our patients with psychiatric problems had consulted nonpsychiatric medical care providers as the first contact for their problems (46.1%). This finding was in agreement with the work of Nagpal et al. (2011), who found that 44% of their patients had first chosen nonpsychiatric physicians for relief from their symptoms. General practitioners remain an important resource of help for psychiatric patients in our study. They represent 43.5% of nonpsychiatric healthcare providers attended by patients of the study. This finding is consistent with the figure reported by Richard et al. (2005), who found that about 40% of their patients first sought care from a doctor, usually a general practitioner.

Forty-one percent of the patients in our study consulted the nonpsychiatric traditional healers first. This result is similar to that reported by Razali and Mohd Yasin (2008). They stated that 44.2% of their patient sample with mental illness in Malay (Singapore) consulted traditional healers as the first contact. Our findings showed that many psychiatric patients consulted sheikhs or other local religious figures for treatment of mental illnesses. This finding could be explained on the grounds that, in Arabic countries, social and religious beliefs have a powerful influence that is stronger than civilization. Patients who go to sheikhs believe that their symptoms are due to evil spirits or a jinn and that sheikhs may be able to cure them by controlling the jinn and forcing it to leave their bodies. This also could explain why the majority of patients who sought help from traditional healers were treated by following the prescriptions in the Koran (60.2%).

Psychiatric services were chosen as the first step in seeking help by 13.2% of our patients. Our finding is comparable to that of Chong et al. (2012), who reported that 15.7% of the patients with mental illnesses in the multiethnic Asian population in Singapore had sought help from psychiatric healthcare providers from the beginning of onset.

Factors affecting health-seeking behavior: we do not have an exact explanation for the selective tendency to choose a psychiatrist or a nonpsychiatric physician to begin with, but a probable one could be that, if the health problem was conceptualized in physical terms, medical services would be sought; however, if the problem was conceptualized in emotional or psychological terms, traditional healers would be consulted (Tables 8 and 9). This probable explanation is partially supported by the results of the study on immigrant Chinese-American women suffering from major depression (Ying, 1990).

In our study female patients were significantly more prevalent than male patients in the group that sought help from nonpsychiatric medical care providers (369, 74.3%, P = 0.001). This finding has been supported by many studies. The Australian National Survey of Mental Health and Wellbeing found that being female was associated with the use of healthcare services and female patients were also more likely than male patients to use services provided by other healthcare professionals rather than by mental healthcare professionals (Parslow and Jorm, 2000); Leaf and Livingston Bruce (1987) similarly found that women were more likely to consult general practitioners but not psychiatrists or psychologists. In addition, Chong et al. (2012) found that the women in their sample were more likely to seek help from professionals who were not in the mental healthcare sector but in the medical sector.

Marital status also contributed to the predilection to take on a more active help-seeking role. Single patients in our study were more likely to seek help from nonpsychiatric traditional healers than were married, divorced, and widowed patients (P = 0.05). Thus, being female and being single were associated with higher rates of seeking nonpsychiatric traditional and medical care.

Table 8 Types of reported nonpsychiatric traditional management (n = 455)

| Traditional managements | n (%) |
|---|---|
| Holy Koran Plants and herbs Hegab Hegama Physical methods (including Zar and beating) Total | 274 (60.2) 91 (20) 55 (12.1) 23 (5.4) 12 (2.3) 455 (100) |

Table 9 Types of reported nonpsychiatric medical services (n = 530)

| Nonpsychiatric medical services | n (%) |
|---------------------------------|------------|
| General practitioners | 231 (43.5) |
| Internal medicine | 123 (23.2) |
| Pediatrics | 101 (19.1) |
| Emergency room | 50 (9.4) |
| Neurosurgery | 25 (4.8) |
| Total | 530 (100) |

This finding could be explained by the fear of stigma associated with mental illness. Female patients, especially those single, would fear that their chances of getting married might be threatened if they were known to have a psychiatric illness and to have attended psychiatric care services. In contrast, in our native culture of upper Egypt it is not very stigmatizing to be a victim of envy, witchcraft, or a Jinn. Two-hundred patients (20.4%) of our sample reported that fear of stigma was the reason for not consulting psychiatric providers. This is in concordance with the results of Kenneth et al. (1996), who suggested that little was known about alternative routes to recovery from mental illnesses because stigma on mental treatment continued to be a substantial barrier for seeking treatment. They reported that fear of what others might think was a common barrier.

We found no other sociodemographic correlates (including place of residence and education levels) with seeking help from nonpsychiatric traditional and medical care providers. This finding is in agreement with the results previously reported by Kua et al. (1993).

People may tolerate many psychological symptoms for some time without seeking psychiatric help until it causes distress and impairment in their relationship or work (Galbaud Du Fort et al., 1999). This seems to be the case in our study, as we found a significant association between help seeking and the type and severity of the presenting symptoms or psychiatric condition. Those presenting with manic episodes were significantly more likely to seek psychiatric help from the start rather than visiting nonpsychiatric care providers (P = 0.05). In contrast, a significant proportion of patients presenting with dissociation (conversion) disorders started with visiting traditional healers rather than psychiatric and nonpsychiatric physicians (P = 0.01).

In the present study, only 119 (12%) of the 985 patients seeking psychiatric help after nonpsychiatric services were referred to psychiatric attention. This finding suggests that the tendency of nonpsychiatric care providers to consult or refer psychiatric patients to psychiatrists is inadequate. This inadequacy of referral may be partially because of insufficient recognition of psychiatric disorders by general practitioners in primary care units (Blacker and Clare, 1987). In contrast, the psychiatrists' attitude, in general, may tend to devaluate, warn, and/or condemn all such nonpsychiatric consultations (Rakhawy, 1996). Psychiatrists tend to view traditional healers and their practices as being distinctly unhelpful (Parker et al., 2000). This conservative attitude of psychiatrists may be one reason for the lack of communication between nonpsychiatrist care providers and psychiatrists and the low rates of referral of psychiatric patients to psychiatric care.

Conclusion

The majority of people with mental illness in Minia governorate tend to seek nonpsychiatric services as a first step in seeking help. Nonpsychiatric medical care was found to be provided mostly by general practitioners, whereas sheikhs were the most common nonpsychiatric traditional service providers. Female gender, being single, and suffering from dissociation (conversion) were significantly associated with seeking help from nonpsychiatric traditional healers. Having a manic episode was significantly associated with seeking psychiatric care at first contact. The rate of referral of psychiatric patients to psychiatric services seems to be inadequate.

Recommendations

- (1) To closely identify our social and cultural norms and tendencies and their effect on healthcare-seeking behavior.
- (2) To update and review the current undergraduate and postgraduate courses in different departments of the Faculty of Medicine to equip graduates with the necessary knowledge and drive to identify and refer psychiatric patients.
- (3) To establish communication with nonpsychiatric medical and traditional care providers. Community healthcare providers should be encouraged to have knowledge, skills, and the ability to detect, manage, or refer those with mental illness to specialists whenever indicated.

Limitations

- (1) The image of psychiatry in the minds of patients and their expectations and impressions about psychiatrists and psychiatric services were not explored in this study.
- (2) The attitudes and opinions of nonpsychiatric medical care providers toward psychiatry and psychiatric practice were not directly approached in the study design.

- (3) The use of traditional cultural interventions among patients with medical illness in the same culture was not studied, and thus a comparison could not be made between the attitudes of psychiatric patients and those of medical patients regarding this issue.
- The reported rate of referral was relatively low; however, some psychiatric patients may have been referred by nonpsychiatric physicians or traditional healers and they may have refused to comply with the advice of seeking psychiatric help.

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

References

- Blacker CVR, Clare AW (1987). Depressive disorder in primary care. Br J Psychiatry 150:737-751.
- Chong SA, Abdin E, Vaingankar JA, Kwok KW, Subramaniam M (2012). Where do people with mental disorders in Singapore go to for help? Ann Acad Med Singapore 41:154-160.
- Dien S (1998). Mental health in a multi-ethnic society in: ABC of mental health. In: Davis S, Craig TKJ, editors. BMJ Books. London: BMJ Publishing Group, BMA.
- Galbaud Du Fort G, Newman SC, Boothroyd LJ, Bland RC (1999). Treatment seeking for depression: role of depressive symptoms and comorbid psychiatric diagnoses. J Affect Disord 52 (1-3):31-40.
- El-Amin MH, Refaat AR (1997). Role of traditional (religious) healing in primary psychiatric care in Sharkia. Egypt J Psychiatr 20:25-35.
- El-defrawy MH, Sobhy SA, El-Sheikh E, Tantawy A, Embaby AM (2000). Non-psychiatric traditional and folklore management of schizophrenia reported by patients in Ismailia. Egypt J Psychiatr 32:215-222.

- Kenneth IH, Thomas AC, John SL, John TV, Robert JL, Stephen MS (1996). **Patterns** of mental health services utilization. Arch Gen Psychiatr 53: 696-703.
- Kua EH, Chew PH, Ko SM (1993). Spirit possessing and healing among Chinese psychiatric patients. Acta Psychiatr Scand 88:447-450.
- Leaf PJ, Livingston Bruce M (1987). Gender differences in the use of mental health-related services: a re-examination. J Health Soc Behav 28:171-183.
- Nagpal SJS, Mishra N, Chadda RK, Sood M, Garg R (2011). Changing trends of services used as first contact by patients with mental health problems. Natl Med J India 24:148-150.
- Okasha A (1966). A cultural psychiatric study of El-Zar cult in U.A.R. Br J Psychiatry 112:1217-1221.
- Okasha A (2001). History of mental health in Arab World. In: Okasha A, Maj M, editors. Images in psychiatry: an Arab perspective. Switzerland: World Psychiatric Association. pp. 1-20.
- Okasha A (2004). Focus on psychiatry in Egypt. Br J Psychiatry 185:266-272.
- Parker G, Chen H, Kua J, Loh J, Jorm AF (2000). A comparative mental health literacy survey of psychiatrists and other mental health professionals in Singapore. Aust N Z J Psychiatry 34:627-636.
- Parslow RA, Jorm AF (2000). Who uses mental health services in Australia? An analysis of data from the National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry 34:997–1008.
- Patel V, Simunyu E, Gwanzura F (1997). The pathways to primary mental health care in high density suburbs in Harare, Zimbabwe. Soc Psychiatry Psychiatr Epidemiol 32:97-103.
- Rakhawy Y (1996). Recent development in the uses and abuses of traditional healing of psychiatric patients in Egypt and Arab World. Egypt J Psychaitr 19:7-10.
- Razali SM, Mohd Yasin MA (2008). The pathway followed by psychotic patients to a tertiary health center in a developing country: a comparison with patients with epilepsy. Epilepsy Behav 13:343-349.
- Richared G, Vesna J, Nadja M, Valbona M, Maja B (2005). Pathway to psychiatric care in Eastern Europe. Br J Psychiatry 186:535-592.
- Shaheen O, Rakhawy Y (1971). ABC of Psychiatry. Cairo: Al-Haram Press.
- World Health Organization (1993). International statistical classification of diseases and related health problems. 10th revision. Geneva.
- Ying Y-W (1990). Explanatory models of major depression and implications for help-seeking among immigrant Chinese-American women. Cult Med Psychiatry 14:393-408