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ETHNIC DIFFERENCES IN THE KNOWLEDGE, ATTITUDE AND BELIEFS TOWARDS MENTAL ILLNESS IN A TRADITIONAL FAST DEVELOPING COUNTRY

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SUMMARY

Background: *The aim of the study was to examine the ethnic differences in knowledge, attitude and practice towards mental illness in a sample of Qatari and non-Qatari Arabs.*

Subjects and Methods: *This is a cross sectional survey conducted in Primary Health Care centers, Qatar from October to June 2009. A representative sample of 3000 Qatari and non-Qatari Arabs above 20 years of age were approached and 2514 subjects (83.8%) gave consent to participate in this study.*

Results: *More than non-Qatari Arabs, a significant proportion of Qataris thought that mental illness can be a punishment from God (44.5% vs 50.6%; p=0.002) and that people with mental illness are mentally retarded (35.1% vs 45.1%; p<0.001). Qatari nationals had a poor knowledge about causes of mental illness compared to non-Qatari Arabs such as a belief that mental illness is due to possession of evil spirits (40.5% vs 37.6%) and psychiatric medication will cause addiction (61% vs 57.3%).*

Conclusion*: The study revealed that there is an ethnic diversity within Arab societies in their knowledge, attitude and practice towards mental illness.*

Key words: *mental illness – practice – knowledge – Qatari - Arab population*

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INTRODUCTION

Mental health is an issue of major concern in both the developed and developing world. For all individuals, mental, physical and social health are vital strands of life that are closely interwoven and deeply interdependent. Psychiatric disorders are estimated to account for 12% of the global burden of disease (WHO 2001). Today's multicultural reality necessitates recognition of the influence of culture influence on many aspects of mental health (U.S.Department of Health and Human Services 2001). Culture may impart unique explanatory models, or beliefs and attitudes concerning Mental Illness and can determine the motivations, barriers and pathways to help. Community researchers have consistently linked diverse cultural variables, such as concerns with personal dignity and prestige, willingness to disclose and acculturation with attitudes toward Mental Illness (Bernal & Saez-Santiago 2006, Nguyen & Anderson 2005).

The concept of mental health or illness has a problematic definition because it is largely subjective (Paterson 2006). The sufferers of mental illness are part of society, but are viewed differently by society. Different societies have different patterns of help seeking and some countries involve traditional healers in their health care systems. Therefore, societal reaction to the mentally ill varies from society to society, as the culture of people is also a model for human behaviour.

The term "Mental Health Literacy" was defined as knowledge and belief about mental disorders, which aid their recognition, management or prevention. However, mental health literacy may derive knowledge and beliefs from different sources such as superstitions or cultural, personal belief and appropriate health education programs. This shows that ethnicity or culture can influence the knowledge, attitude and beliefs of the population. The extent to which patients benefit from improved mental health services is influenced not only by the quality and availability of services, but also by their knowledge and belief systems (Kleinman 1991). Mental health practice in Arab countries is a broad and complicated topic, especially considering the diversity between specific Arab populations and the different ways that the various countries approach mental health issues (Okasha 2004, Bener et al 2006a, Bener et al 2006b).

As a country develops and urbanizes, life becomes more complex, and problems related to social, cultural and economic changes arise. The state of Qatar is a rapidly developing country with a change towards urbanization, particularly over recent decades. With this rapid growth of the country, the population especially living in urban cities often strives to cope with the fast

pace of change and persons face high stress and tension in their daily life. Stress and unhealthy life styles often contribute to more mental health problems. The population of Qatar includes large proportions of Arab expatriate workers and their life style is slightly different from nationals. There are few studies in the world dealing with the ethnic diversity in people's knowledge, and attitude towards major mental health problems. Paucity of such studies pertaining to the people's awareness and attitudes towards mental health problems in Qatar prompted the authors to undertake this study. Also, a previous study done by Ghuloum et al. (2010) found that knowledge about mental illness is poor among the Arab population in Qatar and that the majority of Qataries held a negative attitude towards people with mental illness.

Hence, this study aimed to examine whether ethnic differences exist in knowledge, attitude and practice of the population towards mental illness.

SUBJECTS AND METHODS

This is a cross-sectional study based on the Primary Health Care (PHC) Centers which was conducted among the Arab population residing in the State of Qatar during October 2008 – March 2009. A questionnaire was designed for this purpose and administered to the Arab adult population above 20 years of age who were attending primary health care centers (PHCs) for various reasons. All human studies have been approved by the Research Ethics Committee and have been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki. IRB approval was obtained from the Hamad Medical Corporation for conducting this research in Qatar.

Sample Size

The questionnaire covered socio-demographic information, knowledge about mental illness and attitude and practice towards people with mental illness. Allowing an error of 2.5%, level of significance (type 1 error) of 1%, and 99% confidence interval, the computer program indicated that a sample size of 3000 subjects was required to achieve the objective of our study. The EPI Info version 6 computer program indicated that a sample size of 3000 needed to achieve the objective of our study.

Sampling design

A multistage stratified sampling design was developed, using an administrative division of health centers in Qatar. There are 21 PHCs in terms of number of inhabitants. From the total 21 health centers, 12 health centers (9 urban and 3 semi urban) were selected. The subjects were selected by simple random sampling from the PHC Centre registry who visited the health centers for various reasons other than psychiatric treatment. Qualified Nurses and Health Educators were instructed to structurally interview and complete a questionnaire for the randomly selected Qatari and Arab expatriate population of age 20 years and above. A total of 3000 persons were approached and 2514 (83.8%) expressed their consent to participate in this study. 486 subjects were excluded from the study due to incomplete questionnaire or did not want to respond to the Questionnaire due to lack of time.

Questionnaires

The questionnaire and criteria for knowledge, attitude and practice towards mental illness were defined and developed by the investigators. A standard forward-backward procedure was applied to translate the English version of the questionnaire into Arabic and vice versa. The translated Arabic version of the questionnaire was checked by a bilingual consultant. The survey instrument was then tested on 100 randomly selected subjects visiting PHCs for its reliability and validity. Content validity, face validity and reliability of the questionnaire were tested using 100 subjects. These tests demonstrated a high level of validity and high degree of repeatability (kappa = 0.85).

Statistical Analysis

Student-t test was used to ascertain the significance of differences between mean values of two continuous variables and confirmed by non-parametric Mann-Whitney test. Fisher's exact Chi-square tests analysis was performed to test for differences in proportions of categorical variables between two or more groups. The level $p<0.05$ was considered as the cut-off value for significance.

RESULTS

Table 1 shows the socio-demographic characteristics of the studied subjects. Of the studied sample, 50.3% were Qataris and 49.7% were other non-Qatari Arabs. Most of the Qatari (54%) and Arab expatriate participants (46.7%) were in the age group 31-45 years. Male participants were significantly higher in non-Qatari Arabs (58.6%) than in Qataris (39.8%) ($p<0.001$). A significantly higher number of non-Qatari Arabs were university graduates (52.4%) and professionals (50.8%) ($p<0.001$).

Table 2 investigates the knowledge and beliefs of respondents about mental illness according to ethnicity. A significantly higher number of Qataris (50.6% vs 44.5%; P=0.002) than non-Qatari Arabs reported that mental illness was punishment from God and regarded these patients as mentally retarded (45.1% vs 35.1%; P<0.001). The knowledge that mental illness can be treated with Psychotherapy (86.8% vs 81.5%; P<0.001) and that people with mental illness can live in the community (82.9% vs 77.8%; P=0.001) was

significantly higher in non-Qatari Arabs than in Qataris. A higher number of Qatari nationals compared to non-Qatari Arabs had poor knowledge about mental illness attributing it to possession by evil spirits (40.5% vs 37.6%) and psychiatric medication will cause addiction (61% vs 57.3%). A higher number of non-Qatari Arabs reported that substance misuse like alcohol or drugs (86.6% vs 84.4%), and brain disease (80.6% vs 77.7%) could result in mental illness.

Table 1. Socio-demographic characteristics of the studied subjects (N=2514)

Variables	Qataris N=1264 n (%)	Non-Qatari Arabs N=1250 n (%)	p-value
Age group			
≤30	276(21.8)	395(31.6)	
31-45	682(54)	584(46.7)	
45-60	276(21.8)	228(18.2)	<0.001
60+	30(2.4)	43(3.4)	
Gender			
Males	503(39.8)	733(58.6)	<0.001
Females	761(60.2)	517(41.4)	
Marital Status			
Single	237(18.8)	315(25.2)	<0.001
Married	1027(81.3)	935(74.8)	
Education			
Illiterate	118(9.3)	27(2.2)	
Primary	117(9.3)	59(4.7)	
Intermediate	225(17.8)	98(7.8)	<0.001
Secondary	423(33.5)	411(32.9)	
University	381(30.1)	655(52.4)	
Occupation			
Not working/Retired	104(8.2)	108(8.6)	
Sedentary/Professional	498(39.4)	635(50.8)	
Manual	122(9.7)	193(15.4)	<0.001
Business plan	117(9.3)	55(4.4)	
Army/Police	138(10.9)	47(3.8)	
House wife	285(22.5)	212(17)	
Household income (QR)			
<5000	95(7.5)	313(25)	
5000-9999	359(28.4)	528(42.2)	
10000-14999	314(24.8)	232(18.6)	<0.001
15000-19999	291(23)	106(8.5)	
>20000	205(16.2)	71(5.7)	
Have children	1033(81.7)	874(69.9)	<0.001
No of bedrooms	5.7±2.4	3.4±1.8	<0.001
No of people living in the house	6.8±3.5	5.3±2.7	<0.001

Table 3 shows the attitudes of respondents towards mental illness according to ethnicity. A significant number of non-Qatari Arabs preferred psychiatrists for emotional problems (83.4% vs 75.3%;p<0.001), while more Qataris preferred (42.3% vs 36.4%; p=0.002) traditional healers. A positive attitude towards having conversation with mentally ill people (36.6% vs 31.9%; p=0.012) and having a neighbour with mental illness (42.3% vs 38.4%; p=0.044) were significantly higher in Non-Qatari Arabs compared to Qataris.

Table 2. Knowledge of respondents about Mental Illness (N=2514)

Variables	Qataris N=1264 N(%)	Non-Qatari Arabs N=1250 N(%)	p-value
Do you think substance misuse like alcohol or drugs could result in mental illness?	1067(84.4)	1083(86.6)	0.133
Do you think mental illness is due to possession by evil spirits?	512(40.5)	470(37.6)	0.135
Do you think poverty can be the cause of mental illness?	598(47.3)	600(48)	0.729
Do you think brain disease can be the cause of mental illness?	982(77.7)	1008(80.6)	0.069
Do you think mental illness can be punishment from God?	639(50.6)	556(44.5)	0.002
Do you think traumatic event or shock can be a cause of mental illness?	1049(83)	1048(83.8)	0.567
Do you think stress in daily life lead to mental illness?	949(75.1)	920(73.6)	0.396
Do you think genetic inheritance may be the cause of mental illness?	955(75.6)	933(74.6)	0.596
Do you think people with mental illness are mentally retarded?	570(45.1)	439(35.1)	<0.001
Do you think people with mental illness can live in community?	983(77.8)	1036(82.9)	0.001
Do you think people with mental illness can work in regular jobs?	429(33.9)	408(32.6)	0.489
Do you think traditional healers can treat mental illness?	510(40.3)	488(39)	0.503
Do you think people with mental illness can be successfully treated with medication?	916(72.5)	945(75.6)	0.073
Do you think people with mental illness ca be successfully treated using Psychotherapy?	1030(81.5)	1085(86.8)	<0.001
Do you think psychiatric medication will cause addiction?	771(61)	716(57.3)	0.058
Do you think people with mental illness are dangerous?	676(53.5)	702(56.2)	0.177

Table 3. Attitudes and practice of respondents toward Mental Illness according to ethnicity (N=2514)

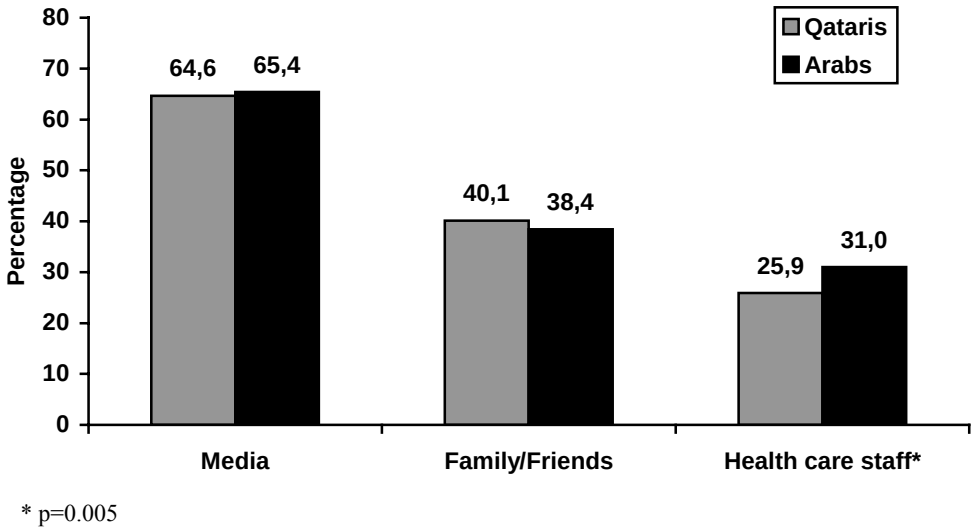
Variables	Qataris N=1264 N(%)	Non-Qatari Arabs N=1250 N(%)	p-value
Would you visit psychiatrist if you have emotional problem?	952(75.3)	1043(83.4)	<0.001
Would you visit a healer if you have emotional problem?	535(42.3)	455(36.4)	0.002
Are you afraid to have a conversation with someone with mental illness?	403(31.9)	458(36.6)	0.012
Are you willing to maintain a friendship with someone with mental illness?	296(23.4)	295(23.6)	0.914
Do you think that marriage can treat mental illness?	438(34.7)	413(33)	0.393
Are you willing to share a room with someone who has mental illness?	172(13.6)	141(11.3)	0.077
Are you ashamed to mention someone in your family who has mental illness?	434(34.3)	284(22.7)	<0.001
Are you disturbed to work in your workplace with someone who has mental illness?	635(50.2)	611(48.9)	0.496
Are you afraid of someone with mental illness who is staying next door?	485(38.4)	529(42.3)	0.044

Table 4 shows the recognition of common mental disorders in the studied subjects according to ethnicity. Recognition of common mental disorders was significantly higher in non-Qatari Arabs than Qataris, for example Schizophrenia (34.9% vs 21%), depression (28.2% vs 16.5%), autism (18.2% vs 9.2%), Stress (13.3% vs 7.6%;p=0.001), Obsession (11.8% vs 5.2%), Somatization (11.6% vs 5.1%;p=0.002), anxiety (11.5% vs 9.7%; p=0.145) and madness/psychosis (10.8% vs 6.2%) (p<0.001).

Figure 1 shows the source of knowledge about mental illness according to ethnicity. Non-Qatari Arabs gained more knowledge of mental illness from the media (65.4%), whereas Qataris learnt from family members and friends (38.4%).

Table 4. Recognition of common mental disorders in the Arab population according to ethnicity (N=2514)

Variables	Qataris N=1264 N(%)	Non-Qatari Arabs N=1250 N(%)	p-value
Schizophrenia	265(21)	436(34.9)	<0.001
Depression	208(16.5)	353(28.2)	<0.001
Autism	116(9.2)	227(18.2)	<0.001
Stress	96(7.6)	156(13.3)	0.001
Obsession	66(5.2)	148(11.8)	<0.001
Somatization	65 (5.1)	146 (11.6)	0.002
Anxiety	123(9.7)	144(11.5)	0.145
Madness/psychosis	78(6.2)	135(10.8)	<0.001
Epileptic	111(8.8)	125(10)	0.295
Hallucination	74(5.9)	114(9.1)	0.002
Hysteria	79(6.3)	105(8.4)	0.039
Mental retardation	73(5.8)	105(8.4)	0.010
Antisocial	69(5.5)	58(4.6)	0.349
Attention Deficit Hyperactive Disorders	61 (4.8)	89 (7.1)	0.012
Suspiciousness	57(4.5)	86(6.9)	0.010
Phobia	48(3.8)	77(6.2)	0.006
Paranoid	53(4.2)	69(5.5)	0.122
Split personality	46(3.6)	54(4.3)	0.383
Dementia	39(3.1)	55(4.4)	0.082
Aggression	34(2.7)	56(4.5)	0.016
Personality Disorder	34(2.7)	35(2.8)	0.866
Mania	35(2.8)	34(2.7)	0.940
Tension	35(2.8)	33(2.6)	0.842
Insomnia	26(2.1)	40(3.2)	0.073
Delusion of persecution	20(1.6)	44(3.5)	0.002
Neurosis	24(1.9)	25(2)	0.854
Amnesia	23(1.8)	24(1.9)	0.853



* p=0.005

Figure 1. Source of knowledge of mental illness according to ethnicity

DISCUSSION

Ethnic and racial disparities in health and health care are pervasive. Recognition of mental illness is just one aspect of mental health literacy that influences behaviours and attitudes towards the mentally ill. The extensive influence of culture on mental health was found to play a critical role in predicting community attitudes towards mental illness (Gong et al.2003). A study done by Al-Adawi et al. (2002) on the population of Oman reported that the extent of stigma varies according to the cultural and sociological background of each society. In the State of Qatar, the population includes large proportions of Arab expatriate workers that include mostly Palestinians, Jordanians, Egyptians, Syrians, Lebanese, Sudanese and people from other gulf countries. Considering the demographic pattern of the State of Qatar, the current study examined the diversity within Arab societies and the impact of ongoing social changes on mental health and illness.

The current study found that cultural attitudes and beliefs are closely linked with casual attributions of mental illness. Overall, the level of mental health knowledge was considerably lower in Qatari nationals than in non-Qatari Arabs. Results indicated that Qatari nationals typically reported greater misconceptions of mental illness than non-Qatari Arabs. For example, a significant number of Qataris when compared to other Arabs thought that mental illness can be a punishment from God (50.6% vs 44.5%;p=0.002) and that people with mental illness are mentally retarded (45.1% vs 35.1%;p<0.001). This shows that ethnicity influenced views of mental illness. The Arab expatriate population had significantly better knowledge about the treatment of mental illness with psychotherapy (86.8%; P<0.001). Typically, Qatari nationals in contrast to non-Qatari Arabs demonstrate higher levels of negative views of mental illness and psychotherapy. Similar to our study findings, prior studies (Whaley 1997, Okasha 2003) have consistently found differences in opinions of mental illness and psychotherapy across ethnicity. Traditional beliefs of each society about mental illness have to be eroded by exposure to a biomedical model of mental illness.

The current study findings revealed that Qataris had a poor knowledge about the causes of mental illness. More than non-Qatari Arabs, Qataris thought the causes of mental illness were due to possession by evil spirits (37.6% vs 40.5%). This concept was common in many other ethnic groups. Studies undertaken in Malaysia (Razali et al. 1996) and Ethiopia (Alem et.al. 1999) suggest that beliefs in supernatural causes of mental illness result in traditional sources of help being sought. Such superstitions are common in many non-western countries and may influence the type of treatment that is sought. Also, a majority of both the ethnic groups (84.4% vs 86.6%) reported that alcohol or drug abuse could result in mental illness. At the same time, more than half of the Qataris (53.5%) and non-Qatari Arabs in Qatar (56.2%) thought mentally ill people are dangerous. Even a study done by Whaley (1997) reported that that Asian and Hispanic respondents perceived that the mentally ill are more dangerous than white respondents. These differences show that knowledge about mental illness varies from population to population due to differences in culture. These study findings show that ethnic backgrounds are significantly related to either the respondent's knowledge or attitude towards mental illness.

Less than half of the study sample thought that traditional healers could treat mental illness; Qataris (40.3%) and non-Qatari Arabs (39%). However, more non-Qatari Arabs preferred psychiatrists for emotional problems (83.4%), but Qataris had a significantly lower preference for psychiatrists (75.3%) (P<0.001). In Pakistan (Karim et al.2004), traditional healers are the main mental health care providers for emotional problems.

A major finding of our study highlights a significant prevalence of negative attitudes in both the ethnic groups towards mental illness. Although most of the Qataris and other Arabs stated that they would probably visit psychiatrists for their emotional problems, a significant number of people from both the ethnic groups exhibited negative attitudes towards mentally ill people. Even though the non-Qatari Arabs showed a better knowledge about mental illness compared to Qataris, they displayed neutral attitudes significantly towards people with mental illness; especially in having a conversation with mentally ill people(36.6% vs 31.9%;p=0.012) as well as in having a mentally ill person as a neighbour (42.3% vs 38.4%; p=0.044). On the contrary, more than non-Qatari Arabs (22.7%), Qataris were ashamed of having someone in the family with mental illness (34.3%) (p<0.001). Although similar to previous studies (Corrigan 2000), the respondents in this study have subscribed to the common misconceptions about mental health which has led to a negative attitude towards mental health problems and discriminative reactions.

Another interesting study finding is that the negative attitudes of the respondents towards mentally ill people led them to take discriminative actions because only a minority of both the ethnic groups were willing to have friendship (23.4% & 23.6%) and share a room (13.6% & 11.3%) with them. Half of the respondents in both the ethnic groups were disturbed at the idea of working with mentally ill people (50.2% & 48.9%). This finding of our study complements a more recent investigation of another study done by Rao et al. (2007) that African Americans and Asians perceived people with mental illness as more dangerous and wanted more segregation than Caucasians. But, Latinos perceived people with mental illness are less dangerous and wanted less segregation than Caucasians. These findings support the notion that culturally constructed beliefs function as a prism in modulating attitudes to mental health issues and their negative attitudes to the mentally ill.

Recognition of mental illness influences a person's attitude and behaviour towards mentally ill people. A poor recognition of mental disorders was observed in Qatari nationals than in non-Qatari Arabs. Recognition rate for Schizophrenia as common mental illness was higher in the Arab population (34.9%) than in Qataris (21%) and similar results were found for depression (28.2% vs 16.5%). Recognition of common mental illness was higher in the U.S (Link 1999), as it was reported in a study on the public perceptions on mental illness that the majority of the public identified Schizophrenia (88%) and depression (69%) as a common mental illness. The possible explanation for this difference is the lack of health information on the symptoms and causes of mental illness in the studied Arab population.

It is evident from these study findings that ethnicity has an impact on the knowledge, attitude and practice towards mental illness. Arabian societies have a peculiar attitude towards mentally ill persons and this is evident in the rejection, scornful disposition and a negative perception of the sick individual. The study revealed that a substantial proportion of the community in Qatar is not sufficiently informed about the symptoms and causes of mental illness. With the high worldwide prevalence of mental disorders, there is a considerable need to improve the state of mental health literacy in developing countries. It was reported in the U.S (Parameshvara Deva 2004) that the mass media is a dominant influence and has been identified as the primary source for information about mental illness. If the cultural beliefs surrounding psychiatry are unchanged, the attitudes of people towards sufferers will remain far from being favourable as the present study has reported.

The limitations of the study need to be noted. The two ethnic groups of this study were Qataris and non-Qatari Arabs. Non-Qatari Arabs include various nationalities like Palestinians, Jordanians, Egyptians, Syrians, Lebanese, Sudanese and people from other gulf countries. Thus, they are heterogeneous and there are definitely slight differences in their culture and practice. Secondly, the time taken for patients to complete the questionnaire might vary from one patient to another which might affect the answers of the questions. Thirdly, the response rate might be low due to the long time taken for face-to-face interview.

CONCLUSION

The study findings revealed that there is an ethnic diversity within Arab societies in their knowledge, attitude and practice towards mental illness. Overall, the level of mental health knowledge was remarkably low in Qataris and non-Qatari Arabs in Qatar. A significant ethnic difference was observed in the knowledge, attitude and practice of Qatari nationals and non-Qatari Arabs towards mental illness. Recognition of common mental illness was lower in Qataris compared to non-Qatari Arabs. Although non-Qatari Arabs had better knowledge and recognition rate for common mental disorders than Qataris, they displayed more negative attitudes towards the mentally ill people. Steps should be taken to improve the public's understanding and attitude towards mental illness.

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