



# Public Awareness and Prevalence of Depression Symptoms among Patients Attending Primary Health Care Centers in Qatar

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## Authors' contributions

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

## Article Information

DOI: 10.9734/AJMAH/2023/v21i6818

## Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/97808>

**Original Research Article**

**Received: 22/01/2023**

**Accepted: 25/03/2023**

**Published: 30/03/2023**

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## ABSTRACT

**Background:** Public awareness is a key element in the management of depression, public awareness campaigns have contributed to the improvement of public knowledge attitudes, and to reduction of stigma towards depression.

**Aim:** The aim is to identify public awareness towards depression and to estimate prevalence of depression among participants

**Methods:** Descriptive cross-sectional study, this study was conducted in (West Bay Health Center, Al-Rayan Health Center and Al-Dayen Health Center) affiliated to Primary Health Care Corporation in Qatar, it included all selected patients attending three randomly chosen health centers, with total response rate representing 82 % with total sample size 316 participant conducted during from January to March 2021, self-administered validated questionnaire including basic demographic data, awareness about symptoms of depression, risk factors, attitudes, treatment and help seeking behaviors also completing the PHQ-9 screening for depression questionnaire.

**Results:** The general awareness about depression among participants lies within the range of 48% to 95.7%, participants attitudes towards depression revealing that good attitudes regard willing to work with depressed people (88.9%) and willing to make friends with them ( 82% ) while 39.4% agree to marry from them, participants preferences regard whom to seek advice regard depression revealing that in order psychologist (89.1%) then psychiatrist (87.8%) while family physicians (66.7%), PHQ-9 score among participants revealing average prevalence of depression reaching 19.7% at the cut point score of 10 with males reaching 17% and females 20.7%.

**Conclusions:** Generally, in Qatar the level of public awareness of depression among participants was acceptable and they had positive attitudes towards depressed people also there is some statistical significant awareness results related to females in comparison to males. However, further efforts must be done to build public health educational programs related to depression in order to further raise its awareness in the community.

*Keywords: Public; awareness; prevalence; depression; PHCC; Qatar.*

## 1. INTRODUCTION

The WHO global estimates suggest mental disorders affect more than 1 in 4 people in the course of their lives, and about 1 in 10 adults at any one time [1]. A study of Qatari nationals attending Primary Health Care Centers [2], revealed that the almost one-quarter of all Qatari adults who attended the primary health care setting presented with at least one type of mental disorder.

In 2010 showing disease burden [3] revealing that: mental health disorders account for 15% of the global disease burden, Depression is considered the main cause of disability globally, Mental disorders represent four of the top ten causes of disability globally .Worldwide, mental health issues are well recognized as the most bothersome of all classes of disorders because of their high rate of prevalence, with early age of onset, its chronicity and associated functional impairment [4]. In Qatar, a study of public perceptions of mental health issues conducted in Primary Health Care Centers [5] revealed that the level of mental disease knowledge in Qatar was low and that misconceptions exist around

the causes of mental illnesses and also the capabilities of people with mental health problems. Stigma can deny individuals with a mental health issues from learning, employment, and fulfilling relationships [6]. In Qatar, some people have experienced negative impacts associated with mental illness, including reduced marriage concepts and employment opportunities, as well as social isolation. In most cases, primary health care physicians will provide the first point of contact for service users and their families. Integrating mental health services into primary health care systems can be an important solution to addressing human resource shortages to deliver mental health interventions [7] that is why primary health care workers will facilitate the early identification of mental problems and the treatment of mild common mental disorders such as depression and anxiety. Public awareness is a key element in the management of depression [8]. Public awareness campaign has contributed to the improvement of public knowledge and attitudes, and to reduction of stigma towards depression [9]. Almost every person, during their lifetime, will have direct contact with a mental disorder patient [10]. Thus, knowledge about mental disorders is

necessary as it directly affects a person's approach and behavior towards those patients [11].

In this study, we will assess the degree of public awareness regarding major depression, its associated symptoms, contributing factors, beliefs and attitudes towards depressed patients, as well as available treatment options.

The rationale of the study is that increasing awareness towards depression among community as well as policy makers in order to build strong policies based on research done within community.

## 2. METHODS

### 2.1 Study Design

Descriptive cross-sectional study.

### 2.2 Study Setting

This study was conducted in (West Bay Health Center, Al-Rayan Health Center and Al-Dayen Health Center) affiliated to Primary Health Care Corporation in Qatar.

### 2.3 Study Subjects

It included all selected patients attending three randomly chosen health centers. With total response rate representing 82% with total sample size 316 participant conducted during from January to March 2021.

### 2.4 Data Collection Methods

Self-administered validated questionnaire including basic demographic data, awareness about symptoms of depression, risk factors, attitudes, treatment and help seeking behaviors also completing the PHQ-9 screening for depression questionnaire.

For illiterate people there is help from an interviewer was done. The questionnaire is available upon request.

### 2.5 Data Analysis

Data were entered into a personal computer and were analyzed using SPSS version 15. Frequency analysis responses was carried out and the results were tabulated and compared

using the chi-square goodness of fit test. Tests of significance (i.e. Fischer exact test) were applied. P-values less than 0.05 were considered as statistically significant.

## 3. RESULTS

Table 1 shows the sociodemographic characters of participant where females represent 64.9%, Qatari represents 27.7%, married in 69.9%, well educated in 95% of participant, and governmental work represent 62.2%.

Table 2 shows the general awareness about depression among participants which reveals that participant are aware about tested items within the range of 48% to 95.7% and females agree with statistical significance regard treatment of depression by will power.

Table 3 shows the awareness regard symptoms of depression revealing that participant are aware about tested symptoms within a range of 71% to 93.5% with no statistical significant difference between males and females.

Table 4 shows the awareness regard risk factors about depression revealing that participants are aware about tested items within a range of 54.1% to 85.6% with no statistical significance differences between males and females.

Table 5 shows the awareness regard treatment of depression revealing that participants are aware of tested treatment options in a range of 49.5% to 98.7% and females agree with statistical significance regard choosing vitamins and analgesics as options of treatment.

Table 6 shows participants attitudes towards depression revealing that good attitudes regard willing to work with them (88.9%) and willing to make friends with them (82%) while 39.4% agree to marry from them and 10.6% consider them mentally retarded also males agree with statistical significance regard consideration of mental retardation among depressed people.

Table 7 shows awareness regard whom to seek advice regard depression revealing that in order psychologist (89.1%) then psychiatrist (87.8%) while family physicians (66.7%) and females agree in statistical significance regard psychiatrist seeking and self-help.

Fig. 1 shows PHQ-9 score among males and females revealing nearby score in moderate depression score, predominant female in

**Table 1. Sociodemographic data among sampled population**

<b>Demographic data</b>	<b>N</b>	<b>%</b>
<b>Age (in years)</b>		
18-30	79	25.30%
31-40	107	34.30%
41-50	76	24.40%
>50	50	16.00%
Total	312	
<b>Gender</b>		
Female	198	64.90%
Male	107	35.10%
Total	305	
<b>Nationality</b>		
Qatari	86	27.70%
Non-Qatari	225	72.30%
Total	311	
<b>Social status</b>		
Single	76	26.00%
Married	204	69.90%
Divorce or widow	12	4.10%
Total	292	
<b>Education level</b>		
literate	6	1.90%
Primary	12	3.80%
Secondary	70	22.30%
Bachelor	149	47.50%
Postgraduate	77	24.50%
Total	314	
<b>Occupation</b>		
Governmental	178	62.20%
Non-governmental	58	20.30%
Not employed/housewife/retired	50	17.50%
Total	286	
<b>Income</b>		
Enough	193	68.40%
Not enough	89	31.60%
Total	282	

moderately severe category and predominant male in severe category. It also shows PHQ-9 score among participants revealing average prevalence of depression reaching 19.7% at the cut point score of 10 with males reaching 17% and females 20.7%.

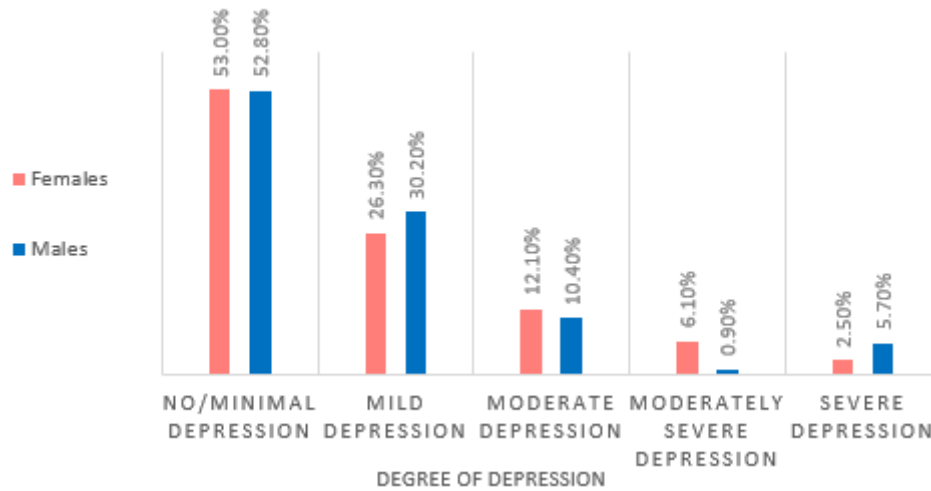
Fig. 2 shows overall PHQ-9 score among participants with total prevalence of 19.7% at cut point of 10 (moderate, moderately severe and severe depression).

#### 4. DISCUSSION

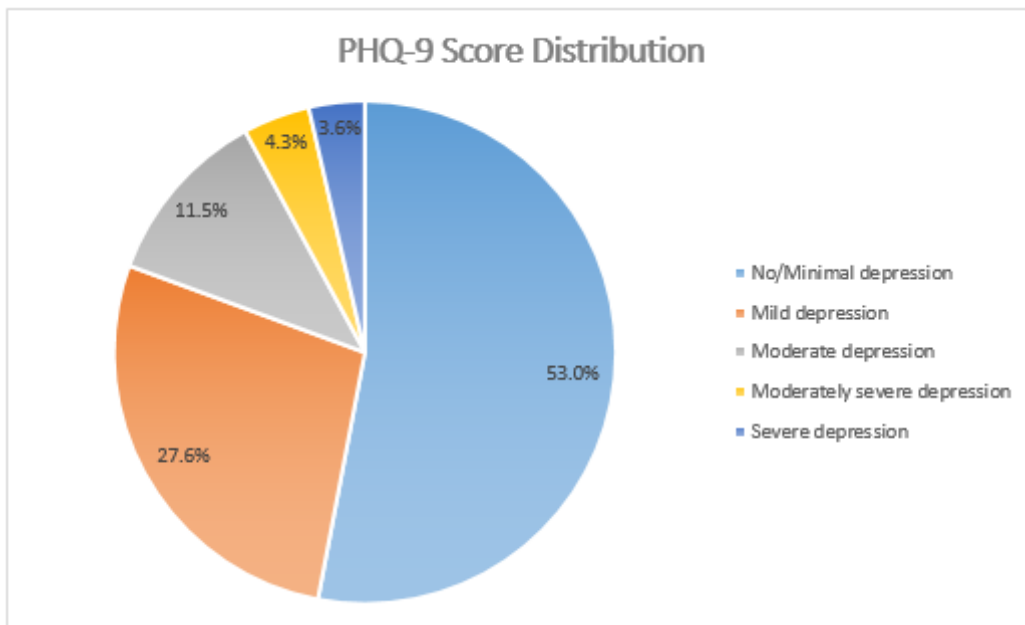
The sociodemographic characters of participant where that females represent 64.9%, Qatari represents 27.7%, and married in 69.9%, well educated in 95% of participant, and governmental work represent 62.2%.

This study indicated acceptable public awareness about major depression, its symptoms, risk factors, available treatments, and attitudes. With female respondents having higher degree of awareness regard depression, this matched study done in Jordan revealing significant higher degree of awareness among females regard depression compared to male respondents in Jordanian study [12]. Women and younger people have more substantial knowledge about key aspects of depression and its treatments in Australian study [13]. Awareness was significantly higher in young females and those with high educational levels in our study. These results are consistent with previous studies that have assessed the determinants of awareness and attitudes toward mental illnesses in Saudia Arabia [14].

**PHQ-9 DISTRIBUTION BETWEEN FEMALES AND MALES**



**Fig. 1. PHQ – 9 score distribution between females and males**



**Fig. 2. PHQ – 9 score among sampled population**

The significant gender differences may be associated with the lower prevalence of depression in males and consequent lack of exposure to this disorder. Another possible factor is also that males may find it more difficult to discuss emotional factors that may limit them opening up on any symptoms they may experience.

Regard awareness towards treatment options despite good awareness score still females believe in vitamins and analgesics as modality of

treatment which may be due to beliefs that drugs for depression may have side effects or addiction properties [15] another belief in our study reveal that females agree with statistical significance regard treatment of depression by will power.

That is why we have to change these beliefs about treatment of depression by different methods through campaigns or communication with public through social media emphasizing need for support highlighting role of support clinics in Primary Health Care Corporation.

**Table 2. General awareness about depression among sampled population**

General awareness	N (%)			p-value
	Total	Male	Female	
Depression is a treatable disease	286 (95.7)	99 (95.2)	187 (95.9)	0.772*
Depression can be treatable by will power	258 (88.7)	81 (81.0)	177 (92.7)	0.003
Depression may affect any age	257 (88.3)	86 (86.0)	171 (89.5)	0.373
Causes of depression are well known scientifically	177 (62.1)	58 (58.6)	119 (64.0)	0.372
Depression run in families	137 (48.2)	52 (53.1)	85 (45.7)	0.238

\*Fisher's exact test

**Table 3. Awareness about symptoms of depression among sampled population**

Symptoms	n (%)			p-value
	Total	Male	Female	
Loss of interest	256 (88.0)	90 (89.1)	166 (87.4)	0.664
negative feelings	267 (92.7)	92 (92.0)	175 (93.1)	0.736
sadness	274 (93.5)	92 (91.1)	182 (94.8)	0.221
change in behaviours	268 (92.4)	99 (96.1)	169 (90.4)	0.077
drug abuse	198 (71.0)	71 (72.4)	127 (70.2)	0.688
suicide	225 (80.1)	79 (81.4)	146 (79.3)	0.676

**Table 4. Awareness about risk factors of depression among sampled population**

Risk factors	n (%)			p-value
	Total	Male	Female	
Unemployment	250 (85.6)	88 (87.1)	162 (84.8)	0.592
poverty	231 (81.1)	80 (81.6)	151 (80.7)	0.856
drug abuse	222 (80.7)	74 (78.7)	148 (81.8)	0.544
divorce	218 (78.1)	74 (77.1)	144 (78.7)	0.758
heavy work	208 (73.0)	70 (69.3)	138 (75.0)	0.301
severe disease	235 (84.8)	84 (87.5)	151 (83.4)	0.368
marriage	146 (54.1)	44 (48.4)	102 (57.0)	0.179
others	152 (76.0)	50 (78.1)	102 (75.0)	0.629

**Table 5. Awareness of treatment of depression among sampled population**

Treatments	n (%)			p-value
	Total	Male	Female	
family support	295 (98.7)	102 (98.1)	193 (99.0)	0.612*
exercise	282 (95.6)	94 (93.1)	188 (96.9)	0.143*
antidepressants	233 (81.2)	82 (82.8)	151 (80.3)	0.605
vitamins	173 (62.2)	50 (52.6)	123 (67.2)	0.017
herbs	135 (49.5)	41 (45.6)	94 (51.4)	0.367
analgesics	109 (40.7)	28 (30.8)	81 (45.8)	0.018

\*Fisher's exact test

This illustrates also the effect of religion and cultural background on beliefs regarding mental illnesses. Indeed, in non-Western cultures, the causal underpinnings of psychiatric disorders are commonly attributed to the power of supernatural phenomena [16].

Participant attitudes regard low rate of agreement regard marriage from depressed in

addition to believing that they may have mental retardation (significant towards male respondents), these negative attitudes may underestimate the depressive disorders in the community and clinical setting [17] this in concordance with Turkish study [18] revealing female respondents had less stigmatizing attitudes.

**Table 6. Public attitude towards depression**

Public attitude	n (%)			p-value
	Total	Male	Female	
I am willing to work with them	264 (88.9)	93 (88.6)	171 (89.1)	0.898
I am willing to make friends with them	237 (82.0)	80 (80.0)	157 (83.1)	0.518
I am willing to marry one with depression	108 (39.4)	43 (43.9)	65 (36.9)	0.259
they are mentally retarded	30 (10.6)	16 (16.0)	14 (7.7)	0.029

**Table 7. Awareness about whom to seek for help among sampled population**

Person to seek help from	n (%)			p-value
	Total	Male	Female	
family and friends	267 (94.3)	92 (93.9)	175 (94.6)	0.804
psychiatrists	231 (87.8)	76 (81.7)	155 (91.2)	0.025
self help	207 (80.5)	61 (68.5)	146 (86.9)	<0.001
psychologist	228 (89.1)	78 (86.7)	150 (90.4)	0.366
family physician	162 (66.7)	54 (63.5)	108 (68.4)	0.447
pharmacist	70 (29.8)	21 (25.9)	49 (31.8)	0.348

Participants agree upon considering family and friends as first choice for support in case of depressive symptoms followed by professionals (psychologists and psychiatrists) with low rank in comparison regard family physician and pharmacists, this is in contradictory with the Australian study which reveal choice of general practitioners as the first choice [13], this difference actually may be due to cultural issues favoring family support in Arab communities. But we have to raise awareness regard mental health services in the community and role of family physicians as key leaders in managing mental health issues with appropriate knowledge and appropriate referral systems in place.

In this study, PHQ-9 score among participants revealing average prevalence of depression reaching 19.7% at the cut point score of 10 with males reaching 17% and females 20.7%. This matches study done in Qatar [19] revealing that the most common ICD-10 disorders were specific generalized anxiety disorders (20.4) %, and major depression (19.1%), with a higher prevalence in women, this agreement about the prevalence despite use different tools and study population confirm that the prevalence is actually around 19% which warrants further efforts to tackle the problem and its consequences ,another important observation is that the prevalence is constant from 2014 to 2022 despite changing community and challenges such as covid-19 epidemics .

## 5. CONCLUSIONS

Generally, in Qatar the level of public awareness of depression among participants was

acceptable and they had positive attitudes towards depressed people also there is some statistical significant awareness results related to females in comparison to males. However, further efforts must be done to build public health educational programs related to depression in order to further raise its awareness in the community.

## 6. RECOMMENDATIONS

We still have room of improvement dealing with mental health problems specially depression and its awareness by focusing on repeated audits regard community awareness and also correcting beliefs regard issues related to stigmatization and modalities of treatment, also modify help seeking behaviors favoring family physicians consultation and early recognition of depressive symptoms before affecting persons quality of life.

## 7. LIMITATIONS

The limitations of the study could be related to small sample size in comparison to other studies, there is some participants who cannot read and write so they need help in completing the questionnaire, this study include Qatari and non-Qatari people as well which may affect the results in the form of culture differences, the female sampled population were more than males which may give result differences, finally the dependence upon PHQ-9 questionnaire as key in depression diagnosis may be better done after face to face consultations despite referral to mental health services was done for whom score revealed moderate or severe depression.

## CONSENT

It is not applicable.

## ETHICAL APPROVAL

This research project is approved from Institutional Review Board (IRB) in Primary Health Care Corporation, Qatar.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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