

A study of the attitudes towards mentally ill people among a sample of primary health care physicians in Saudi Arabia

Abstract

Background: Psychiatric illnesses are a public health problem worldwide, affecting people of all age groups. Mental health is an important sector of primary health care services. An increasing number of Saudi citizens and residents utilize primary healthcare services for mental health concerns; hence, there is a need to objectively assess these doctors' attitudes towards people with mental illness.

Objectives: Assessment of the attitudes toward mentally ill people among a sample of primary health care physicians in Saudi Arabia & determination of risk factors associated with bad attitudes.

Methods: A cross-sectional study was conducted over a period of 30 days (1st September 2021 to 30 September 2021). The study has been conducted on Convenient Sample of Arabic speaking physicians working in primary health care centers in Saudi Arabia who accepted to share in research. Demographic Data was gathered using an electronic self-administered questionnaire and physicians' attitudes towards mentally ill people have been evaluated by an Arabic previously validated Questionnaire.

Results: This study included 214 physicians, 114 male physicians and 100 females. 72% of participants have a highly positive attitude toward mentally ill patients with a mean score (50 ± 4) and only 28% of participants have a negative attitude with a mean score (38 ± 4). Better attitudes were significantly associated with being female, having (Board, PhD or Fellowship), working for less than a year and having a history of involvement in the care of a mentally ill person. There were no statistically significant differences regarding participants age, nationality, marital status, place and mode of residency, specialty, and having current or past history of mental illness.

Conclusions: Primary health care physicians in Saudi Arabia have positive attitudes toward mentally ill patients, female physicians, having (Board, PhD or Fellowship), working for less than a year and having a history of involvement in the care of a mentally ill person were significantly associated with better attitudes.

Recommendations: Further larger studies are needed on large number of primary health care centers physicians in Saudi Arabia and other Arab countries. Additional research and programmatic work are needed to understand the reasons for negative attitudes. Effective teaching and training programs is necessary to bring in positive attitude change towards mentally ill people among primary health care physicians.

Keywords Attitudes, mentally ill, and physicians.

Introduction .1

Psychiatric illnesses are a public health problem worldwide, affecting people of all age groups, psychologically and socially.¹ The lifetime prevalence of developing a mental illness, as reported in the Saudi National Mental Health Survey, is estimated to be about 34.2%.² Mental health is an important sector of primary health care (PHC) services³. Regarding Saudi Arabia studies have found that one-third of primary health care patients have psychiatric illnesses⁴.

In Saudi Arabia, the Ministry of Health (MOH) is the major governmental agency entrusted with providing preventive, curative and rehabilitative healthcare for the population of Saudi Arabia. The MOH with its chain of primary health care (PHC) centers provides medical care to the citizens and residents of the Kingdom⁵.

The primary function of PHC centers is to provide primary care services, both preventive and curative, referring cases that require more advanced care to public hospitals (the secondary level of care) while cases that need more complex level of care are transferred to central or specialized hospitals (the tertiary level of health care). The World Health Organization (WHO) recommend all countries to make PHC centers the point of first contact for those with mental disorders.

In situations where PHC physicians cannot handle these patients, recommendation was to refer to psychiatrists in general hospital (secondary level) and if psychiatrists in those settings could not manage patients then they were referred to specialty psychiatric hospitals or teaching hospitals (tertiary level)⁶.

Often in general health facilities, once patients are examined by physicians; they are then infrequently referred to psychiatrists or other mental health professionals. One reason for this behavior is that patients are often more comfortable with physicians because they do not want to be stigmatized by others for visiting a psychiatrist. Hence, general practitioners (GPs) and specialists have a pivotal role in the management of psychiatric patients⁷.

Anxiety and depression are the most common mental disorders and are not easy to diagnose in primary care because of complex barriers. These barriers are usually classified as the patient, physician and health system or organizational factors⁸.

Attitudes toward psychiatry patients may affect clinical practice. Physicians' attitudes likely mirror those of the general population, although, unlike the general population, physicians come into contact with psychiatrists and psychiatry patients during their formal training or practice. Thus, a physician may develop a more objective perception of psychiatry than society as a whole⁹. Negative attitude toward people with mental illness is the greatest barrier to recovery, development of effective care, treatment, and prevention of mental illness⁹.

Other barriers to effective care include lack of resources, lack of trained health providers and social stigma associated with mental disorders¹⁰.

While primary health care physicians' attitudes toward mental illness may influence the ability of physicians to identify, treat, and refer patients with mental disorders, there are few numbers of published trials which have studied the primary health care physicians' attitudes towards mentally ill people in Saudi Arabia. Al-Atram study conducted on Riyadh Province of Saudi Arabia, reported that GPs and non-psychiatric specialists showed a negative attitude towards psychiatric patients, but family practitioners showed a positive attitude⁵.

A South African study has investigated attitudes towards mental illness of a group of non-specialist medical doctors working in primary healthcare services, the study found that more than (50%) of the

study sample had a positive attitude towards mental illness, male physicians reported feeling less comfortable when dealing with mentally ill patients¹¹.

Baptista et al¹² found that female medical students tended to display a more positive attitude toward psychiatry than male students.

An Indian study by Kodakandla et al¹³ reported that majority of medical interns considered mentally ill patients as dangerous, unpredictable, cannot take up major responsibilities, cannot be a good parent, have poor interpersonal or social skills.

A study conducted in Kenya revealed that non psychiatric physicians aged 40 years and older have positive attitudes towards mental illness than younger physicians⁷. Another study conducted in Nepal found that overall attitudes towards mental illness and psychiatry among the medical students and interns were positive or neutral¹⁴. A Nigerian study assessed health workers attitudes towards psychiatric patients, more than half of the study population held positive attitudes towards persons with mental illness¹⁵. Another study reported that undergraduate medical students have a neutral attitude to psychiatry and people having mental illness¹⁶.

Another study reported that Over 70% Postgraduate Indian resident physicians accepted mentally ill patients as friends and felt they were equally employable. Whoever they showed a negative attitude towards patients with schizophrenia¹⁷.

Familiarity with mental illness was associated with less stigma, physicians who had friends or family members who suffered from mental illness or they themselves suffered from a mental illness had less stigma¹⁸.

Japanese study revealed that healthcare professionals with prior exposure to mental illness should more favorable attitudes toward the mentally ill¹⁹.

An increasing number of Saudi citizens and residents utilize primary healthcare services for mental health concerns; hence, there is a need to objectively assess these doctors' attitudes and knowledge of mental illness.

The general aim of the study was to improve attitude toward mental illness among primary health care physicians in Saudi Arabia. While the study specific aims were: To assess the attitude toward mentally ill people among a sample of primary health care physicians in Saudi Arabia, to detect the differences in attitudes towards mental patients according to(age, gender, nationality, marital status, work status, number of work years, residency, and academic qualification) and to compare between the different subgroups of the study (those who have past history of mental illness, those who have been exposed to mentally ill people, and those who have not).

We hypothesized that Arabic speaking physicians working in primary health care centers in Saudi Arabia have bad attitudes toward mentally ill people.

Sample and Methods

A cross-sectional study has been conducted over a period of 30 days (1st September 2021 to 30 September 2021). This study was approved by Eradah Complex & Mental Health Najran Research Committee, Najran, Saudi Arabia before data collection.

This study has been conducted on Convenient Sample of Arabic speaking physicians working in primary health care centers in Saudi Arabia who accepted to share in research.

Two electronic questionnaires have been distributed by link through Telegram, and WhatsApp for Arabic speaking physicians working in primary health care centers in Saudi Arabia who have been invited to share in our research, Invitations explaining the purpose of the study were sent through private messages. Questionnaire links have been open from 1st September 2021 to 30 September 2021, and reminders have been sent every 7 days for non-responders.

Each item had to be answered for the questionnaire to be validated. Participation was voluntary and anonymous and took place online. Completing the survey was considered implied consent to participate in this study.

The first one is a self-administered questionnaire for collecting demographic data and characteristics (age, gender, nationality, marital status, work status, number of work years, residency, academic qualification, history of having mental disorder and history of knowing mental patient or participating in mental patient caring).

The second one is an Arabic previously validated Questionnaire has been used to achieve research purpose (Attitudes toward mental illness Scale by Zainab Choucair), which is composed of three axes consist of 20 sentences²⁰.

Our Inclusion criteria were, being an Arabic speaking physician working in primary health care centers in Saudi Arabia who accepted to share in research. Our sample included males and females without discrimination. We have excluded Non-Arabic speakers, Physicians working in hospitals and non-physician medical staff.

Data were analyzed using R version 4.0.5. Numerical variables; were described using mean, standard deviation, median, interquartile range, minimum and maximum. For categorical variables; frequency and percentage were applied. For data analysis, Wilcoxon rank-sum test, the Kruskal-Wallis rank sum test followed by Dunn's post hoc test, and Spearman's rank correlation test were performed. All tests were two-tailed. A p-value of less than 0.05 was considered statistically significant with a 95% confidence interval (CI).

Results .2

This study included 214 physicians, 114 (53%) male physicians and 100 (47%) were female, with median age 31 years and interquartile range (27:41) years.

One hundred forty-one (66%) of the participants were Saudi citizens, while seventy-three (34%) were Non Saudi. Of our sample 124 (58%) were married, 77 (36%) single, 10 (4.6%) divorced, and 3 (1.4%) were widows.

Regarding residency, 94 (44%) of the study sample were from Saudi Arabian southern region, 65(30%) from the western Region, 27(13%) from the central region, 16(7.4%) from the northern region, and 12(5.6%) were from the eastern Region. Of the study population 171(80%) of the sample were living with their families, while 43(20%) were living alone.

Highest academic qualifications of the sample population were: Bachelor of Medicine 131 (61.2%), Post-graduation Diploma 12 (5.6%), Master degree 27 (12.6%) and Board / PhD / Fellowship 44(20.6%).

Regarding number of work years, 39 (18%) participants had Less than a year of work, 39 (18%) participants had 1-2 years, 55 (26%) participants 3-5 years, 38 (18%) participants 6-10 years, and 43 (20%) participants had more than 10 years of work.

One hundred twelve (52%) participants were family medicine physicians, 87 (41%) were General Practitioner and 15 (7%) participants had other specialties. Forty-eight participants (22%) have current or past history of mental illness, while 166 participants (78%) haven't. One hundred sixty-two participants (76%) have the experience of involvement in care of a mentally ill person, while 52 participants (24%) haven't.

Socio-demographic distribution of the study sample is shown in Table (1).

Table (1)

		Frequency	Percent
Gender	Male	114	53%
	Female	100	47%
Nationality	Saudi	141	66%
	Non Saudi	73	34%
Marital status	Married	124	58%
	Single	77	36%
	Divorced	10	4.6%
	Widow	3	1.4%
Place of residency	Southern region	94	44%
	Western Region	65	30%
	Central Region	27	13%
	Northern region	16	7.4%
	Eastern region	12	5.6%
Residency style	Live with family	171	80%
	Alone	43	20%
Highest academic qualification	Bachelor of Medicine	131	61.2%
	Board / PhD / Fellowship	44	20.6%
	Master's	27	12.6%
	Post-graduation Diploma	12	5.6%
Number of years of work	Less than 1 year	39	18%
	1-2 years	39	18%
	3-5 years	55	26%
	6-10 years	38	18%
	More than 10 years	43	20%
Specialty	Family medicine	112	52%
	General Practitioner	87	41%
	Other specialties	15	7%
Current or past history of mental illness	No history of mental illness	166	78%
	Has history of mental illness	48	22%
History of involvement in care of a mentally ill person	Involved	162	76%
	Not involved	52	24%

Evaluation of the attitude items showed that 72% of participants have a highly positive attitude toward mentally ill patients with a mean score (50 ± 4) and only 28% of participants have a negative attitude with a mean score (38 ± 4).

Table (2) showed that there was weak negative significant correlation between age of the participants and their attitudes toward mentally ill patients it means that younger participants have better attitudes than older participants [$p < 0.001$].

Table (2): Attitude score correlation with Age

Characteristic	Age, [23,67] ¹	p-value ²
Attitude score	48 (42, 51.8)	<0.001

¹Median (IQR)

²Spearman's rank correlation test

As shown in table (3), female participants showed statistically significant better attitudes toward mentally ill patients in comparison with male participants [p= 0.003].

There was no significant difference between Saudi and Non Saudi participants.

There was no significant difference between single, married, divorced and widow sub groups.

There was no significant difference between participants live in Saudi Central Region, Eastern region, western region, Northern region and Southern region sub groups.

There was no significant difference between participants live alone and those live with their families.

Regarding the highest academic qualifications groups, by performing Dunn's post hoc test, we found a statistically significant difference between Bachelor of Medicine's median (48) and Master's median (42) with a p-value (0.035). Also, we found a statistically significant difference between Board / PhD / Fellowship's median (49) and Master's median (42) with a p-value (0.031).

Regarding years of work, by performing Dunn's post hoc test, we found a statistically significant difference between Less than a year's median (52) and 1-2 years' median (47) with a p-value (0.0037) and a statistically significant difference between Less than a year's median (52) and 3-5 years' median (48) with a p-value (0.0133). Also, results show a statistically significant difference between Less than a year's median (52) and 6-10 years' median (46) with a p-value (0.0016) and a statistically significant difference between Less than a year's median (52) and more than 10 years' median (46) with a p-value (0.0053).

There was no significant difference between participants in different specialties.

There was no significant difference between participants having current or past history of mental illness and those who have not.

Participants who have a history of involvement in the care of a mentally ill person showed statistically significant better attitude toward mentally ill patients in comparison with participants who have not [p< 0.001].

Table (3): Statistical analysis results for differences in attitude toward mentally ill patients between the sample sub groups.

			Attitude score		p-value
			Median	IQR	
Gender	Male	N=114 (53%)	46.5	39.2 : 50	0.003
	Female	N=100 (47%)	49	45 : 52	
Nationality	Saudi	N=141(66%)	49	43 : 52	0.235
	Non Saudi	N=73 (34%)	46	40 : 51	
Marital status	Married	N=124 (58%)	47	41.8 : 50.2	0.587
	Single	N=77 (36%)	48	44 : 52	
	Divorced	N=10 (4.6%)	44.5	38.2 : 52.8	

	Widow	N= 3 (1.4%)	48	47 : 52	
Place of residency	Southern region	N= 94(44%)	48	43 : 52	0.394
	Western Region	N= 65(30%)	47	40 : 50	
	Central Region	N=27(13%)	49	46.5 : 50.5	
	Northern region	N=16(7.4%)	45.5	38.8 : 51.2	
	Eastern region	N=12(5.6%)	44.5	40.8 : 50	
Residency style	Live with family	N=171(80%)	48	42 : 52	0.306
	Alone	N= 43(20%)	47	39 : 50	
Highest academic qualification	Bachelor of Medicine	N=131(61.2%)	48	43 : 52	0.05
	Board / PhD / Fellowship	N= 44(20.6%)	49	45.5 : 50.2	
	Master degree	N= 27(12.6%)	42	39 : 47	
	Post-graduation Diploma	N=12(5.6%)	43	40.8 : 50	
Number of years of work	Less than 1 year	N= 39(18%)	52	47 : 54.5	0.002
	1-2 years	N= 39(18%)	47	40 : 49.5	
	3-5 years	N= 55(26%)	48	43: 50.5	
	6-10 years	N=38(18%)	46	39 : 50	
	More than 10 years	N= 43(20%)	46	40.5 : 51	
Specialty	Family medicine	N=112(52%)	48	42 : 50.2	> 0.9
	General Practitioner	N= 87(41%)	48	40:52	
	Other specialties	N=15 (7%)	47	46 : 49	
Current or past history of mental illness	No history of mental illness	N=166 (78%)	48	42:51	0.7
	Has history of mental illness	N=48 (22%)	47.5	41:52	
History of involvement in care of a mentally ill person	Involved	N=162(76%)	49	43:52	<0.001
	Not involved	N=52 (24%)	44	38:48	

Discussion .3

The purpose of this study was to examine primary health care physicians' attitudes toward mentally ill people and to determine some factors related to their attitudes.

The current study revealed that most of participants have a highly positive attitude toward mentally ill patients. This is consistent with results estimated by [Minty et al¹¹](#) and [Risal et al¹⁴](#). Similar to this

study, it appears from the literature that doctors and other healthcare professionals exhibit positive attitudes towards people with mental illness. However, some studies showed that physicians have negative attitudes towards people with mental illness^{21,22,23}.

Our study found that younger primary health care physicians have better attitudes toward mentally ill patients than older primary health care physicians. This is in line with results estimated by **Minty et al¹¹**, in the other hand it is different from the findings of **Noblett et al.²³** **Ewalds-Kvist et al.** reported that even though older individuals were more open-minded towards mentally ill people, they were less likely to be supportive of community psychiatric services and integration²⁴.

In our sample, female participants showed statistically significant better attitude toward mentally ill patients in comparison with male participants. This is in line with the findings of **Noblett et al²³**, **Minty et al¹¹** and **Stuber et al²⁵**. This could be explained by the emotional nature of female gender and their tendency to sympathize. But is different from results reported by **Saeed and McCall¹⁰**, **Sujaritha et al²⁶** and **Sri et al²⁷**

Our study reported that primary health care physicians having (Board, PhD or Fellowship) showed statistically significant better attitude toward mentally ill patients in comparison with other qualifications. This is different from results reported by **Sujaritha et al²⁶** and **Sri et al²⁷** who reported that level of qualification did not influence mental illness attitudes. Findings of our study could be explained by exposure to psychiatry at the post graduate level, which increased awareness of mental illness.

Our study revealed that primary health care physicians who worked for less than a year showed statistically significant better attitude toward mentally ill patients in comparison with other subgroups. This is in line with results reported by **Lam et al²⁸** who found that physicians having longer years of practice tended to have more worries or stigma on mental health patients. On the other hand it is different from the findings of **Mukherjee et al²⁹** who found that those with more clinical experience are more sympathetic towards the mentally ill people, and results of **Vistorte et al³⁰** who found that years of experience did not hold any association with stigmatizing attitudes.

Our study found that there was no significant difference between participants having current or past history of mental illness and those who have not, this is different from results found by **Eksteen et al¹⁸**

Our study reported significant correlation between involvement in the care of a mentally ill person and attitude toward mentally ill patients, this is consistent with result estimated by **Fujii et al¹⁹**, **Vistorte et al³⁰** and **Lam et al²⁸**. However, it is different from that reported by **Chandramouleeswaran et al⁴⁷** who found that personal contact with an individual with a psychiatric condition did not increase the positivity of mental illness attitudes.

Our study reported that there was no significant difference between participants in different specialties, this is in line with the findings of **Saeed and McCall¹⁰**.

Within available literature, the overall impression is that there is no consistent sociodemographic predictor of mental illness attitudes as the relationship between variables and attitudes differs across studies, suggesting that these interactions may be complex and multifaceted. The interplay between demographic factors and cultural influences is also likely to play a role in how mentally ill people are viewed by others¹¹.

Conclusions .4

Primary health care physicians in Saudi Arabia have positive attitudes toward mentally ill patients, female physicians, having (Board, PhD or Fellowship), working for less than a year and having a history of involvement in the care of a mentally ill person were significantly associated with better attitudes in comparison with other subgroups.

Recommendations .5

Further larger studies are needed on large number of primary health care centers physicians in Saudi Arabia and other Arab countries. Additional research and

programmatic work are needed to understand the reasons for negative attitudes. Effective teaching and training programs is necessary to bring in positive attitude change towards mentally ill people among primary health care physicians.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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UNDER PEER REVIEW