

Stigmatizing attitudes of tertiary hospital physicians towards people with mental disorders in Saudi Arabia

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ABSTRACT

الأهداف: لقياس وصمة العار بين الأطباء في واحد من أهم المستشفيات المتخصصة في المملكة العربية السعودية.

الطريقة: أجريت هذه الدراسة مستعرضة في مدينة الملك عبد الله الطبية، جدة، المملكة العربية السعودية خلال الفترة من أكتوبر ونوفمبر 2018م. اشتملت الدراسة على 80 طبيباً. وزع المشاركون استبيان الحالة الاجتماعية والديموغرافية وكذلك اتجاه الأطباء للأمراض العقلية الإصدار الرابع (MICA 4).

النتائج: تراوحت النتيجة الكلية MICA بين 31 و61 بمتوسط يبلغ 45.75 ± 7.54 . وكانت النتيجة المبلغ عنها الأعلى بين الأطباء الخارجيين (51.33 ± 6.66)، بينما كانت النتيجة الأقل بين المستشارين/المستشارون المساعدون (43.17 ± 7.82).

الخلاصة: أظهرت نتائج هذه الدراسة أن درجة MICA-4 مرتفعة نسبياً والتي قد تشير إلى ارتفاع اتجاه الوصمة بين الأطباء تجاه المرضى الذين يعانون من الأمراض العقلية مقارنة مع دراسات MICA-4 الأخرى. وبالتالي، ورش العمل التدريجية يمكن أن تحسن الموقف في المدى القصير.

Objectives: To measure stigma among doctors in one of the major specialized hospitals in Saudi Arabia.

Methods: This cross-sectional study was conducted at King Abdullah Medical City, Jeddah, Saudi Arabia between October and November 2018. Eighty physicians were recruited in this study. The participants administered the sociodemographic questionnaire as well as the Mental Illness Clinicians' Attitude 4th version (MICA 4).

Results: The overall MICA score ranged between 31 and 61 with a mean±SD of 45.75 ± 7.54 . The highest reported score was among outpatient physicians (51.33 ± 6.66), while the lowest score was among consultants/assistant consultants (43.17 ± 7.82).

Conclusion: The results of this study showed a relatively high MICA-4 score that could indicate a high stigmatizing attitude among physicians toward patients with mental illnesses compared with the other MICA-4 studies. Thus, training workshops could improve the attitudes in the short-term.

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Mental diseases are a major international health issue nowadays in the world, and the prevalence of many mental disorders is increasing. According to statistics from Saudi mental health hospitals in 2007, approximately 25% of the Saudi Arabia population suffers from various mental health problems.¹ According to Al-Khathami et al,² almost one-fifth of primary health care patients in Saudi Arabia have mental illness. Another study mentioned that 19% of adults who visited a clinic at a public health center in Saudi Arabia had symptoms of moderate or severe depression.³ Even though many people are affected by different mental disorders, the different types of stigma connected to mental health disorders is common and strong, and people with mental health problems experience prejudicial attitudes in all areas of their lives. Research suggests that mental illness is more stigmatizing than physical illnesses,⁴ and mental illness stigma continues to be a major barrier for people with mental disorders in many aspects of their

life.⁵ A recent study of a group of the general public in Saudi Arabia found that approximately quarter of participants thought that patients with mental diseases should not be married or even have children, and 16.4% of the respondents thought that one should avoid all contact with them.⁶ Mental illness stigma is very prevalent in Saudi society.^{7,8} Physicians in any society are part of the same culture, and people around them affect their opinions.⁹ Stigmatizing views about mental health disorders are not limited to the public members of the society; these views affect people working in the medical fields as well as those in contact with the patients in the hospitals.¹⁰ One of the pillars of stigma is that groups that have greater power in any social gathering most often drive it,¹¹ and doctors have the greatest influence at any health facility. This realization helps understand how stigmatization occurs on multiple levels throughout the health care sector. Studies show that it is common for workers in the medical field to believe that patients with mental diseases are dangerous and could be aggressive.¹² Another study showed that many health professionals use discriminating terms to describe people with mental diseases such as crazy.¹³ Consequently, negative attitudes of workers in the medical field against patients with mental disorders may cause different types of stigma; this can result in difficulties with looking for treatment and remission from mental health disorders; furthermore, mental illness stigma may result in even poorer quality of care for physical health problems of patients with mental disorders.¹⁴⁻¹⁶ Increasing levels of stigma against patients with mental illness can worsen their self-esteem,¹⁷ social adjustment,¹⁸ and quality of life.¹⁹ This high level of stigma among health workers against patients with mental illness can lead to incomplete diagnostic investigations and weak medical care when patients have purely physical symptoms.²⁰ Even physical symptoms of such patients may be interpreted based on their mental illnesses, which cause delays in diagnosing and treating their physical symptoms.²¹

To better protect the rights of patients with mental health disorders and create better services, it is important to get a better understanding about the frequency and nature of stigma among physicians. The aim of this cross-sectional study is to detect the level of stigma among physicians towards patients with mental illnesses at a tertiary hospital in Saudi Arabia.

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Methods. This cross-sectional survey aimed to detect if attitudes towards patients with mental illness differed as a physician age, gender, his/her specialty, how many years in the medical fields, range of the physician's power of admission, financial satisfaction, psychiatric history or family history of mental illness, and site of work. The determinant scale in this study was scores on the Mental Illness Clinicians' Attitude 4th version (MICA 4), examining the physicians stigmatizing behaviors against people with mental illness.

The total number of the physicians in the hospital during the study were 192 physicians at King Abdullah Medical City (KAMC) during our data sampling using RAOSOFT calculator (<http://www.raosoft.com/samplesize.html>), assuming 50% probability, 95% confidence level, and 5% sampling error. The minimum measured sample was 129. The sample was proportionally stratified based on gender. Interviewing 129 physicians was expected to give us a chance to reach 95% confidence level with a $\pm 5\%$ margin of error. Unfortunately, many physicians refused to participate in this study due to the sensitivity of the subject or they were busy, so in the final only 80 physician complete the questionnaire and participate in this study which gave margin error of 8.39% instead of 5.

The study was conducted at the KAMC between October and November 2018. King Abdullah Medical City is a nonprofit tertiary and quaternary health care organization. King Abdullah Medical City is the largest medical city in Saudi Arabia with a bed capacity of 1500 beds. It provides services to citizens, residents, and pilgrims who came to the holy city of Makkah.

Eighty physicians working at KAMC recruited in this study. The participants included all levels of physicians, consultants, assistance consultants, specialists, residents, and medical house-officers. Due to the nature of the tertiary care at the hospital, the majority of physicians at KAMC, as well as in the subjects, are medical and surgical consultants, assistance consultants, and specialists.

Physicians were included in the study if they: (i) worked as physicians in KAMC during the time of the study; (ii) had a direct contact with the patients and worked in a diverse range of settings, including inpatient care, outpatient care and emergency department. The physicians who worked in administrative jobs and psychiatrists way from KAMC were excluded from this study.

The data were collected by 4 persons (namely, 3 students from the health education college at the Umm Al-Qura University and one social worker performing

her training at KAMC hospital). A cover page explained the goal of the study and invited the physician to take part voluntarily and at his/her own leisure was given to participants. Data collectors verbally explained the scale to the physicians. The questionnaire and the scale were answered individually by physicians, and the data collectors were available to answer any questions. The questionnaires did not show any personal identifiers. Thus, confidentiality of physicians was maintained.

The first set of questions consists of demographic factors such as age, gender, specialty, years of clinical practice, range of his/her power of admission, financial satisfaction, psychiatric history or family history, and site of work. The second set of questions was the validated Mental Illness Clinicians' Attitudes (MICA-4) scale. The MICA-4 Scale is created to measure attitudes of health care workers toward patients with mental health illness.²² The MICA-4 contains 16 statements for which the participants are asked to rate their level of agreement about every statement. For scoring of MICA-4, items 3, 9, 10, 11, 12 and 16 were directly scored on a 6-point Likert scale (strongly agree=1, agree=2, somewhat agree=3, somewhat disagree=4, disagree=5, strongly disagree=6). Items 1, 2, 4, 5, 6, 7, 8, 13, 14, 15 were reverse scored (strongly agree=6, to strongly disagree=1). A total score for each participant was calculated for each responder. The possible score was range from 16 to 96. A high overall score indicates a more negative (stigmatizing) attitude. The MICA-4 scale has good internal consistency (Cronbach's alpha=0.79) with test-retest reliability (concordance) of 0.80 (95% CI: 0.68 to 0.91).²² The MICA-4 scale was found to be both reliable and valid.²³

The data collectors introduced and explained the goals of the study to the physicians. All the physicians were informed that their contribution was voluntary and very valuable. Written consent was not required because there were no personal identifiers. Consent was obtained orally from each physician while interviewing them. The data collectors did not get the physician's name and/or contact information. Ethical approval from the ethical committee at KAMC (Registration no. H-02-K-001) was obtained.

Statistical analysis. Data entry and statistical analysis were performed using the Statistical Package for Social Sciences software, version 25 (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp). The overall MICA score was normally distributed as shown by non-significant Kolmogorov-Smirnov test ($p=0.200$). Therefore, parametric statistical tests were used for comparisons. Student's t-test was used for comparison of means of

2 groups, whereas the one-way analysis of variance (ANOVA) test was applied for comparison of means of more than 2 groups. Spearman correlation was made between total score and the demographic characteristics of the participants. P-value of ≤ 0.05 was statistically significant.

Results. Table 1 summarizes their sociodemographic characteristics. The age of 42.5% of them ranged between 33 and 40 years, whereas that of 17.5% of them exceeded 40 years of age. Most of the subjects (83.8%) were male. 15:1 male to female ratio. Specialists represented 37.5% of physicians, while residents represent 30%. More than half of physicians (50%) work in both inpatient and outpatient departments, whereas 46.3% work only in inpatient departments. Almost two-thirds of physicians (65%) claimed that they had a satisfactory financial level of living. More than one-third of participants

Table 1 - Sociodemographic characteristics of the participants (n=80).

Characteristics	n	(%)
<i>Age (years)</i>		
≤25	10	(12.5)
>25-32	22	(27.5)
>32-40	34	(42.5)
>40	14	(17.5)
<i>Gender</i>		
Male	67	(83.8)
Female	13	(16.2)
<i>Job title</i>		
Consultant/assistant consultant	18	(22.5)
Specialist	30	(37.5)
Resident	24	(30.0)
Medical house-officers	8	(10.0)
<i>Work setting</i>		
Inpatient	37	(46.3)
Outpatient	3	(3.8)
Both	40	(50.0)
<i>Satisfying financial level of living</i>		
Yes	52	(65.0)
Kind of	25	(31.3)
No	3	(3.8)
<i>Family/personal history of diagnosis with mental problems</i>		
Yes	22	(27.5)
No	55	(68.8)
Don't know	3	(3.8)
<i>Decision to admit</i>		
Yes	40	(50.0)
No	40	(50.0)
<i>Work experience in the medical field (years)</i>		
<5	26	(32.5)
5-10	22	(27.5)
>10	32	(40.0)
<i>Specialty</i>		
Medicine	43	(53.8)
Surgery	13	(16.3)
Others	16	(20.0)
Medical house-officers	8	(10.0)

Table 2 - Factors associated with MICA score among physicians.

Characteristics	Mean±SD	P-value
Age (years)		0.485
≤25 (n=10)	48.30 ± 8.92	
26-32 (n=22)	44.59 ± 6.82	
33-40 (n=34)	45.12 ± 7.63	
>40 (n=14)	47.29 ± 7.49	
Gender		0.250
Male (n=67)	46.18 ± 7.44	
Female(n=13)	43.54 ± 7.97	
Job title		0.148
Consultant/assistant consultant (n=18)	43.17 ± 7.82	
Specialist (n=30)	46.97 ± 6.87	
Resident (n=24)	44.88 ± 7.24	
Medical house-officers (n=8)	49.63 ± 9.04	
Work setting		0.267
In-patient (n=37)	46.41 ± 7.11	
Out-patient (n=3)	51.33 ± 6.66	
Both (n=40)	44.73 ± 7.89	
Satisfying financial level of living		0.991
Yes (n=52)	45.71 ± 7.92	
Kind of (n=25)	45.88 ± 6.93	
No (n=3)	45.33 ± 8.33	
Work experience in the medical field (years)		0.098
<5 (n=26)	45.15 ± 7.10	
5-10 (n=22)	48.64 ± 8.49	
>10 (n=32)	44.28 ± 6.84	
Specialty		0.201
Medicine (n=43)	45.05 ± 7.07	
Surgery (n=13)	48.00 ± 7.55	
Others (n=16)	43.88 ± 7.60	
Medical house-officers(n=8)	49.63 ± 9.04	
Family/personal history of diagnosis with mental problems		0.906
Yes (n=22)	45.64 ± 6.56	
No (n=55)	45.69 ± 8.01	
Not sure (n=3)	47.67 ± 7.10	
Have power to admit or refuse admission of a patient to the hospital		0.837
Yes (n=40)	45.85 ± 7.76	
No (n=40)	45.93 ± 7.40	

Table 3 - Correlation between demographic data and total score of attitude towards mental illness (n=80).

Characteristics	Attitude towards persons with mental illnesses	
	r	P-value
Age (years)	0.046	0.683
Gender	-0.126	0.267
Job title	0.106	0.351
Work setting	-0.092	0.415
Satisfying financial level of living	-0.002	0.987
Family history of mental illness	0.014	0.899
Decision to admit	-0.008	0.947
Work experience in the medical field (years)	-0.045	0.690
Specialty	0.112	0.323

had experience in the medical field for fewer than 5 years (32.5%) or more than 10 years (40%). Almost half of physicians specialized in medicine (53.8%). More than one-fourth of physicians (27.5%) reported family and/or personal history of mental problems. Half of physicians (50%) had power to admit or refuse admission of a patient to the hospital.

The overall MICA score ranged between 31 and 61 with a mean±SD 45.75±7.536. None of the studied factors were found to be significantly associated with either the highest or the lowest MICA score, and thus with the most or least negative attitudes. However, the highest score was reported among physicians who worked only in outpatient setting (51.33±6.66), while the lowest score was found among consultants/assistant consultants (43.17±7.82), as shown in Table 2. There is a small difference in the score between male and female physicians. Specifically, male physicians have a higher score (46.18±7.44) compared with female physicians (43.54±7.97). Only 13 surgical physicians participated in the study compared with 43 medicine department physicians. However, the score of surgical physicians was higher (48.00±7.55) than that of medical physicians (45.05±7.07).

No significant correlation was found between demographic characteristics of the physicians and the total score of attitude towards mental illness (Table 3).

Discussion. Typically, the total scores range from 16 to 96, and a high total score indicates a more stigmatizing attitude. In this study, the mean of the MICA-4 score was 45.75, and the standard deviation (SD) was 7.54. There are no established thresholds for interpretation of scores on MICA-4. When comparing the results of this study with other MICA-4 studies, the results of this study showed a relatively high MICA-4 score that could indicate a high stigmatizing attitude among physicians toward patients with mental illnesses. Compared with the results of this study and based on the MICA-4 score, other studies revealed a moderately positive attitude towards patients with mental health problems.^{24,25} Another large study, which included 550 primary care physicians from 4 Latin American countries, reported a low level of stigma, significantly lower than our results, among primary care physicians with a mean MICA score of 36.3 and SD of 8.3.²⁶ Our scores reflect also higher levels of stigma than estimates from the development paper of MICA-4 where a mean±SD 34.55±7.11 was reported.²² However, a higher level of stigma was shown in many studies that used MICA-4 scale^{27,28} and other scales.^{29,30}

In this study, there was no association between MICA-4 scores and demographic factors. However, this study has both similar and different findings compared with earlier studies in this area, and these results will be discussed next. Our findings agree with the study of Alamri, which demonstrated that there was no correlation between attitudes and person's socioeconomic status.⁸ Our results contradict the results obtained by a study in Saudi Arabia, which examined the relationship between mental health literacy and participant's sociodemographic characteristics, level of awareness and attitudes; the researchers found a significant difference in educational level, age and having a history (familiarity) of mental illness.³¹ Similarly, a study conducted by Dawood et al¹ in Saudi Arabia found that level of the participants' education, age, having someone in the relatives or knowing someone who diagnosed with mental illness significantly correlated with the attitude towards mental health illness and people diagnosed with this illness. Many other studies in other countries confirm this observation.³²⁻³⁴

The highest score was reported in our study only among physicians in outpatient setting. Furthermore, different studies, which were mentioned in a review article, found that primary health physicians had a high level of stigmatizing behaviors, followed by other primary care workers and mental health workers.³⁴⁻³⁶

In this study, consultants/assistant consultants had the lowest score, which correlates with an Australian study.³⁷ A Hong Kong study³⁸ and another systematic review³⁹ reported that more experienced physicians held more negative attitudes. Newer health workers had more negative and stigmatized behaviors due to lack of experience with mental health patients and the fear as well.⁴¹ However, based on different studies, mental healthcare professionals had the lowest stigmatizing attitude compared to other health professionals.^{24,41,42} This observation can be explained by the low familiarity with treating mental illness by other health professionals, which was a source of higher stigma.⁴³

In the Saudi general population, males showed significantly higher negative attitude scores than females.⁶ This is in agreement with this study because male physicians are also part of this population. These results are supported by the results of other studies, which found that female non-mental health workers had less stigmatizing social distance from people with mental health illness compared to male non-mental health worker.⁴⁴ In addition, female health workers tended to view those with mental health illness as being more creative compared to how male workers them.⁴⁵

Study limitation. One aspect that reduces the strength of our study is that we only measured stigma in one hospital from the region, and the sample size was not large, although it represented approximately 41.7% of the number of physicians in the hospital. The amount of contact between physicians at the King Abdullah Medical City in Makkah with patients who have mental illnesses is relatively limited due to the lack of psychiatric inpatient departments. There is a psychiatric department, weekly clinics and monthly referrals to the psychiatric department, which can reach more than 40 referrals. This amount of contact ensures that during their answers physicians in our study already had a model or an example for evaluating their contact with patients with mental illnesses. However, this is not as strong as having a psychiatric inpatient department at the hospital.

One of the most important strengths of this study is that, to our knowledge, it could be the first study in Makkah that measures stigmatization attitudes of physicians towards patients with mental illnesses at a tertiary hospital

In conclusion, the results showed a relatively high MICA-4 score that could indicate a high stigmatizing attitude among physicians toward patients with mental illnesses compared with the other MICA-4 studies. Thus, training workshops or campaigns could improve attitudes toward people with mental illness in the short-term.⁴⁶ In addition, future research is required to focus on professionals' attitudes toward different patient groups.

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