

# Testing psychiatric stigma in a general hospital in Saudi Arabia

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## ABSTRACT

**الأهداف:** قياس وصمة المرض النفسي عند العاملين في المستشفيات العامة. قياس الصلة بين الأفكار الشائعة عند الناس عن المرضى النفسيين ككونهم السبب في مرضهم أو كونهم خطرين من جهة و كيف يمكن أن يؤدي ذلك إلى التفريق ضدهم من جهة أخرى.

**الطريقة:** تم إجراء استبيان استطلاعي من خلال البريد الداخلي لجميع موظفي المستشفى العام مستشفى الملك عبد العزيز للشؤون الصحية للحرس الوطني - الأحساء. تم توزيع الاستبيان في 1 فبراير 2008 وانتهت الدراسة في 12 مارس. مثلت العينة 860 موظف لهذه الدراسة. تمت الموافقة على هذه الدراسة عن طريق لجنة البحوث والأخلاق للشؤون الصحية للحرس الوطني بالمنطقة الشرقية.

**النتائج:** لقد أظهر العاملون في هذا المستشفى قيم عالية للنتائج في الأسئلة المتعلقة بمستوى عنايتهم بالمرضى النفسيين 6.8/9. كما أظهرت نتائج متوسطة في الأسئلة المتعلقة بمدى خوفهم من المرضى النفسيين 4/9، بمدى تجنبهم لهم 4.8/9، ومدى خطرهم 4.3/9. لقد أظهر العاملون نتائج ضعيفة لشعورهم بالغضب تجاه المرضى النفسيين 3.1/9. أن الخوف من هؤلاء المرضى أدى إلى التفريق ضد هم حينما وجد ولكن لم يؤدي إلى التفريق ضدهم حين لم يوجد الخوف، و ليس اعتبارهم مسؤولين عن مرضهم.

**خاتمة:** أظهر العاملون في المستشفى جانب الاهتمام تجاه المرضى النفسيين. لم تظهر فكرة أن المرضى النفسيين مسؤولين عن مرضهم ولكن حين وجود الخوف لدى العاملون في المستشفى من هؤلاء المرضى أدى ذلك إلى التفريق ضد هؤلاء المرضى.

**Objectives:** To measure the stigma of psychiatric illness in a general hospital setting, and to test the connection between common ideas people have of patients with psychiatric illness (personal responsibility, and dangerousness), and the generation of discriminatory behavior.

**Methods:** A cross-sectional survey through internal mail was carried out in all the hospital staff of King Abdulaziz Hospital in Al-Ahsa, Kingdom of Saudi

Arabia. The questionnaire was distributed on the 1st of February, and the study was finished on the 12th of March 2008. The sample size of 860 staff members was included for the study. This study was approved by the Eastern Region National Guard's Health Affairs Research and Ethical Committee.

**Results:** Hospital staff had high scores (6.8/9) for caring attitude for patients with psychiatric illness. They had medium scores for fear (4/9), avoidance (4.8/9), and dangerousness (4.3/9). They had low scores (3.1/9) for anger feelings toward these patients. Discriminatory behavior was found to be the result of feeling that these patients are dangerous, but not because they were held responsible for their illness.

**Conclusion:** Our staff had a caring attitude towards patients with psychiatric illness. The idea that the patients with psychiatric illness are to blame for their illness did not hold, while the idea that these patients are dangerous showed positive relationship with discriminatory behavior.

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Psychiatric disorders affect a significant proportion of the population globally with a significant impact on their quality of life. The Kingdom of Saudi Arabia (KSA) and its neighboring countries are no exceptions. In a study carried out on patients attending primary health clinics in KSA, the prevalence of psychiatric disorders was 18%, and was similar to diabetes.<sup>1</sup> This form of illness challenges individuals on 2 fronts. On

one hand, they have to deal with the illness symptoms and its disability, and on the other hand, they have to deal with the stigma attached to such illnesses, and the resulting un-equality in life.<sup>2,3</sup> An extensive literature review showed that there is a large number of studies in the USA and Europe, which have looked at the beliefs that individuals hold regarding people with mental illness, and the resulting discrimination. The same review showed a significant deficiency in the studies of stigma in the Middle East (especially the Arab world).<sup>4</sup> There is a need to address the stigma to improve mental health care, and in order to do so, we need to understand its processes. Jones et al<sup>5</sup> presented one of the most comprehensive theories on stigma processes. They postulated 6 dimensions of stigma. Our study will attempt to address 2 of these dimensions (origin and peril). Origin is studied using the Causal Attribution Model that was developed by Weiner in 1995,<sup>6</sup> who believed that attributing personal responsibility for a negative event lead to anger, and reduced helping behavior. The opposite attitude is to attribute no blame for the characteristic in question leading to pity and helping behavior. This model was subsequently further studied by Reizenzein in 1986,<sup>7</sup> Steins and Weiner in 1999,<sup>8</sup> and Corrigan et al in 2002.<sup>9</sup> This specific association between causal attribution, mediating anger or pity, and subsequent behavior has been validated in several samples.<sup>7,10,11</sup> The second dimension of stigma we studied is dangerousness. The model we used was adopted from Corrigan et al.<sup>9</sup> This model is based on the theory that the thought of a psychiatric patient as dangerous leads to the development of fear, which leads in its turn to the behavior of avoidance. Several studies connected the perception of patients with psychiatric illness as dangerous, and the resultant feelings of fear, and then the subsequent behavior of avoidance.<sup>12</sup> The main objectives of this study were: firstly, to measure stigma in a general hospital setting in KSA, and secondly, to test the path models that connect the 2 dimensions of stigma (origin and dangerousness) to discriminatory behavior.

**Methods.** The survey took place in King Abdulaziz Medical City, which is a 300-bed general hospital serving mainly the Saudi national guards stationed in the eastern region of KSA and their dependents. This study is a cross-sectional survey. The survey itself is adopted from Corrigan's study,<sup>9</sup> and called the Attributional Questionnaire. We felt that this would be suitable as it has been validated by university students, and most of the staff in the hospital are third level graduates, or more. The sampling frame included all hospital staff with direct contact with patients. The staff with no direct contact with patients were excluded. The number

of staff included was 860, which is the number involved in the second survey. Each of the surveys was attached to a letter giving full information on the study objectives, and it was mentioned clearly that the individuals have full freedom to choose whether to participate, or not. The distribution was anonymous, and was returned by internal mail. This study proposal was approved by the Institutional Regional Research Committee. As in the work of Corrigan,<sup>9</sup> we used the latent variable structural modeling technique. The theory of the model is to have a pathway of variables that are hypothetically connected as in **Figure 1**. To test this hypothesis we defined these variables as latent, and devised a number of questions for each latent variable. Each of these questions was regarded as a manifest variable. The questionnaire has 20 questions, and the respondents were asked to rate each question on a 9-point Likert scale. Initially, the questionnaire was pilot-tested in a sample of 25 hospital staff. This was followed by brief amendments. Each latent variable was tested for using 3 manifest variables (questions), except for the latent variable of personal responsibility, which was tested for by 2 manifest variables (questions).

**Statistical analysis.** Data were statistically analyzed using SPSS version 16 (SPSS Inc., Chicago, IL, USA). Descriptive statistics were carried out. Since most of the variables were categorical, non-parametric tests were used. The normally distributed data were analyzed by student t-test. For most non-parametric calculations, comparisons were made using cross tabs. The Chi-square test was used for significance testing, and significance level was set at  $\alpha=0.05$ . The data was stratified into various groups in order to look at the difference in attitude with experience gained during the career, gender, between different staff members, as well as between groups of specialties.

**Results.** The percentage of respondents was 49%, and the respondents' demographics are illustrated in **Table 1**. The main ethnicities were Arab/Middle Eastern, Filipino, Indian subcontinent, and Anglo-American. More than 50% of them had over 6 years professional experience, and 70% were females. The mean and standard deviation of answers to the questions are shown in **Table 2**. The highest scores were found in the 2



**Figure 1** - The dangerousness and personal responsibility pathways.

questions related to sympathy and concern (Q14-Q19). On the other hand, the questions testing dangerousness showed results in the middle (Q2, Q9, Q10). When latent variables were analyzed again they (Table 3) showed high scores for helping behavior with low standard deviation, and low scores for anger with again low standard deviation. The scores for dangerousness were in the middle. Interestingly, there was a significant difference ( $p=0.01$ ) between male and female in the 3 manifest variables of pity (females having higher pity). Also, there was a significant difference ( $p=0.02$ ) in the 3 manifest variables covering fear, according to the experience of the respondents (the more experienced the less fearful). Anger also showed a significant difference ( $p=0.03$ ) in 2 out of 3 of the manifest variables according to experience (more experience less anger). The connections between these different latent variables were analyzed using the Pearson correlation, and the results for each pathway is illustrated in Figure 2. The correlation in the first pathway is in the right direction except for the correlation between personal responsibility and pity, which shows positive correlation (though very weak and statistically insignificant). The statistically significant correlations were between personal responsibility and anger on one hand, and between pity and helping behavior on the other. The second pathway analysis showed that all the correlations are in the right direction, and statistically significant.

**Table 1 -** Demographic characteristics of participants.

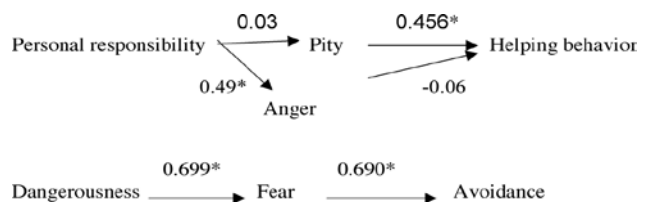
Characteristics (n=421)	Values
Age, mean (SD range)	36.24 (22-62)
Female, %	70.8
<b>Marital status, %</b>	
Single	28.1
Married	68.1
Divorced	2.2
Widowed	1.6
<b>Ethnicity, %</b>	
Arab	28.8
Urdu	5.8
English	10.1
Filipino	47.6
Other	7.8
<b>Profession, %</b>	
Physician	12.9
Nurse	64.3
Unit receptionist	6.2
Allied health care personnel	9.0
Others	7.6
<b>Years of experience, %</b>	
≤2	11.2
2-5	13.4
6-10	27.3
11-19	29.2
20-29	15.5
>30	3.4

**Table 2 -** Descriptive statistics of manifest variables.

Question	Manifest variables	Mean scores	Standard Deviation
1	Aggravated	3.1691	2.0838
2	Unsafe	4.1119	2.4219
3	Terrify	3.4904	2.2741
4	Angry	3.0073	2.0403
5	Hospitalize	4.4265	2.4961
6	Pity	6.3181	2.6191
7	Controllable	4.8913	2.2561
8	Irritated	3.3022	2.0179
9	Dangerous	4.7288	2.3096
10	Threatened	4.0239	2.4258
11	Scared	4.1295	2.3096
12	Help	7.1084	2.1060
13	Certainty	6.8213	2.1008
14	Sympathy	7.1148	2.1348
15	Responsible	4.3461	2.5466
16	Frightened	4.4530	2.3441
17	Sorry	6.9354	2.3038
18	Avoidance	5.9616	2.5549
19	Concern	7.0574	2.0087
20	Do not rent to	6.0000	2.7452

**Table 3 -** Descriptive statistics of latent variables.

Latent variables	n	Question numbers	Mean scores	Standard Deviation
Personal responsibility	2	Q7, Q15	4.6200	0.3818
Pity	3	Q6, Q14, Q17	6.8100	0.4279
Anger	3	Q1, Q4, Q8	3.1833	0.1106
Helping behavior	3	Q12, Q13, Q19	6.9967	0.1550
Danger	3	Q2, Q9, Q10	4.3367	0.4727
Fear	3	Q3, Q11, Q16	4.0233	0.4888
Avoidance	3	Q5, Q18, Q20	4.8021	0.9009



\*Correlation is significant at 0.01 level (2-tailed)

**Figure 2 -** The correlation between different latent variables in studied pathways.

**Discussion.** The results showed a high index of caring attitude by the staff, which shows that patients with psychiatric illness are treated without discrimination in this hospital. Index of fear amongst staff was also low. The results were less clear in addressing the issue of dangerousness, and one can conclude that different

members of staff had different ideas regarding this. The reason for this can be a very good question for further studies in this particular sample, or in other populations. In the analysis of the 2 pathways in question, the first as in Corrigan's paper<sup>9</sup> did not hold. From this, we may conclude that blaming patients with psychiatric illness for their own illness is not a very strong cause for discrimination against them, unlike for example, in the case of acquired immune deficiency syndrome (AIDS),<sup>13</sup> in which blaming and shaming plays a big role in stigma attached to it. An interesting study would be to compare AIDS and psychiatric illnesses on this pathway of personal responsibility.

The second pathway as in previous studies held through.<sup>9</sup> Having said that, the scores for the idea of dangerousness (especially in manifest variables) were mixed. So one can conclude that people in this sample had different opinions regarding dangerousness of this category of patient, but when the idea of dangerousness was present strongly it probably led to increased fear and avoidance.

The significant difference in gender on this questionnaire was in the pity latent variable, and would imply that females would have more feelings of pity towards these patients. Is this a real finding, or being confounded by the profession (nurses were mostly females) is left to speculation. There was no clear address on this issue of difference according to gender in previous research,<sup>4,5</sup> but it is certainly an interesting question for the future. Also, the difference in the fear latent variable according to professional experience is interesting, but makes sense.

The demographics of the respondents are representative of the general hospitals in KSA, or the Gulf region. This would mean that the results of this study could be generalized to most of the hospital staff working in this region. This study in general showed that there is a misunderstanding of psychiatric illness, as patients with such a predicament were thought to be dangerous, and as a result the potential of discrimination against them is present. The question that one would ask here is how to tackle this issue. Methods to tackle psychiatric stigma in general are many, and ranges from legal changes (like equality laws and equal employment opportunity laws), lingual (like changing the derogatory words used by clinicians) and targeting a specific population like in our case, the staff of this hospital. Methods to target specific population are mainly 3. The first is to confront the population in question with their erroneous ideation, and to tell them to change it, or what is called the "shame on you" method. This method has proven to be highly ineffective, and may produce increased stigma. The second method is the education of the population in question, and it has

shown moderate impact on stigma. The third method was the direct contact with patients with psychiatric illness, and this has shown to be quite effective and gave the best results.<sup>9,14-16</sup>

The main limitation of the study is the rate of response to the questionnaire, which raised the possibility of selection bias.

In conclusion, the best way to tackle this problem in the general hospital staff is both education and direct contact with patients with psychiatric illness.

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