

# Psychiatrists' stigma towards individuals with schizophrenia

O estigma atribuído pelos psiquiatras aos indivíduos com esquizofrenia

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Received: 11/8/2011 – Accepted: 15/8/2011

## Abstract

**Background:** Literature on how the general population stigmatizes individuals with mental disorders has increased considerably over the last decades. But the question remains if psychiatrists also stigmatize their patients. **Objective:** The present study aimed to assess Brazilian psychiatrists' attitude towards individuals with schizophrenia. **Methods:** Out of the approximately 6,000 participants of the 2009 National Psychiatry Congress in Brazil, 1,414 psychiatrists agreed to undergo the survey. Face-to-face interviews were conducted using a questionnaire that assessed stigma in three dimensions: stereotypes, social distance and prejudice towards a person with schizophrenia. Their opinion on psychotropic drugs and tolerance of side-effects were also assessed. Socio-demographic and professional data were collected. **Results:** Brazilian psychiatrists tend to negatively stereotype individuals with schizophrenia. More negative stereotypes correlated with a positive opinion on psychotropic drugs and with a higher tolerance of side-effects. Higher age was correlated with positive stereotyping and with less prejudice. **Discussion:** Psychiatrists stigmatize individuals with schizophrenia and possibly find it difficult to admit this fact. Anti-stigma campaigns among mental health professionals should be promoted.

Loch AA, et al. / *Rev Psiq Clín.* 2011;38(5):173-7

**Keywords:** Stigma, stereotypes, prejudice, social distance, schizophrenia, mental health professionals.

## Resumo

**Contexto:** A literatura acerca da maneira como a população geral estigmatiza indivíduos com distúrbios mentais aumentou consideravelmente nas últimas décadas. Mas a dúvida sobre se os psiquiatras também estigmatizam seus pacientes ainda permanece. **Objetivo:** O presente estudo visou avaliar as atitudes de psiquiatras brasileiros em relação aos indivíduos com esquizofrenia. **Métodos:** Dos cerca de 6.000 participantes do Congresso Brasileiro de Psiquiatria em 2009, 1.414 psiquiatras concordaram em participar do estudo. Entrevistas face a face foram realizadas utilizando um questionário que avaliava o estigma em três dimensões: estereótipos, distância social e preconceito, todas relacionadas a alguém com esquizofrenia. Opinião sobre medicações psicotrópicas e tolerância aos efeitos colaterais também foram avaliadas. Dados sociodemográficos e profissionais foram coletados. **Resultados:** Psiquiatras brasileiros tenderam a estereotipar negativamente pessoas com esquizofrenia. Estereótipos negativos correlacionaram-se com uma melhor opinião sobre medicações psicotrópicas e com maior tolerância a efeitos colaterais. Idade maior correlacionou-se com estereótipos positivos e com menor preconceito. **Conclusão:** Os psiquiatras estigmatizam indivíduos com esquizofrenia e possivelmente têm certa dificuldade em admitir esse fato. Campanhas antiestigma para profissionais de saúde mental devem ser promovidas.

Loch AA, et al. / *Rev Psiq Clín.* 2011;38(5):173-7

**Palavras-chave:** Estigma, estereótipos, preconceito, distância social, esquizofrenia, profissionais de saúde mental.

## Introduction

In the last decades literature on stigma towards individuals with mental disorders has increased significantly<sup>1-3</sup>. Most studies focused on the attitudes of the general population. One important conclusion from the numerous studies and from the experience gained with anti-stigma campaigns<sup>4-10</sup> is that opinion leaders such as the mental health professionals should be involved; they have a good reputation in the general population and as such they are highly credible. It is assumed that their openly proclaimed opinions may have a multiplying effect in the general population and also among other health professionals<sup>11</sup>. One can intuitively think that mental health professionals would be best-prepared to deal with individuals with mental disorders and therefore hold the least stigmatizing attitudes. However, at present, research has not succeeded to fully confirm this hypothesis<sup>12</sup>.

Lauber *et al.*<sup>11</sup> found that stereotyping individuals with psychiatric disorders was common among psychiatrists in private practice, and that their stigmatizing attitudes did not differ significantly from those of the general population. In another study of hospital-based mental health professionals these authors demonstrated that the professionals displayed more social distance from individuals with schizophrenia than the general population<sup>13</sup>. Magliano *et al.*<sup>14</sup> found that professionals' sanctions to civil rights of people with schizophrenia were equal or even greater to that expressed by the general population. In Australia, mental health professionals believed much more in a deteriorating course of the schizophrenic illness and had more negative attitudes towards persons with schizophrenia than the general public<sup>15</sup>. From the user's perspective, Schulze and Angermeyer<sup>16</sup> reported that families and patients felt mostly stigmatized by mental health professionals. Patients felt mainly stigmatized by

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the professionals' general lack of interest and their predominant focus on pharmacological treatment. Finally, further studies show that attitudes towards individuals with mental disorders are at least equal between professionals and the general public<sup>17,18</sup>. But it has also been reported that mental health professionals have more positive attitudes toward them in specific dimensions<sup>12</sup>.

In Latin American Countries in general and in particular in Brazil data on stigmatizing attitudes of mental health professionals is scarce<sup>19</sup>. Brazil, a country with the 5<sup>th</sup> largest population in the world, has undergone a health care reform during the last 40 years<sup>20</sup>. Also the mental health care sector has experienced radical reforms resulting in a dramatic reduction of psychiatric hospital beds over the last decades<sup>21,22</sup>. It is known that countries that have undergone such a far-reaching change to psychiatric community care have experienced more rejecting attitudes of psychiatric community patients<sup>23</sup>. Despite the importance of assessing stigmatizing attitudes in countries where this change is still in progress<sup>24</sup>, we still know very little about these processes, which significantly hamper the required health care reforms<sup>25-27</sup>.

The present study aimed to assess whether (i) psychiatrists in the largest Latin American country, i.e. Brazil, hold stigmatizing attitudes towards individuals with schizophrenia and, if so, (ii) which are the confounding factors on their attitudes.

## Methods

### Sampling and procedure

The study was conducted during the 27<sup>th</sup> Brazilian Congress of Psychiatry, in November 2009. The event was held in Sao Paulo and is considered the second largest national psychiatric congress in the world<sup>28</sup>. Participants include mainly psychiatrists and psychologists, but also social workers, nurses, residents, general practitioners, and other mental health professionals from all over the country.

Fifty interviewers were selected and trained by the study's investigators. To increase inter-rater reliability, 50 paired interviews were also conducted before data collection began. During the four days of the congress, the interviewers were positioned along the congress area and asked the visitors of the Congress to take part in the study. When an individual agreed to participate, a 15-minute long face-to-face interview was conducted. No personal identification was required; once he/she completed the questionnaire, the interviewer made a mark on the participant's credentials so to avoid double inclusion.

Around 6,000 individuals took part in the event, of which 2,549 were invited to participate; 954 (37.5%) refused to participate at all; 898 refused to start the interview, 38 refused to answer once they were informed about the topic of the survey and 18 did not complete the whole questionnaire. Thus, the initial sample comprised 1,595 individuals; of these 1,416 were psychiatrists, 68 were general practitioners, 44 were psychologists, 25 were neurologists, and 42 were other professionals. For the purpose of the present study, only the data of the psychiatrists were analyzed; 2 of participating psychiatrists were foreigners and were thus excluded. Hence final sample consisted of 1,414 Brazilian psychiatrists.

### Instruments and measures

We applied the same questionnaire that has been used in attitude-surveys in Switzerland<sup>13,29-31</sup> and in Brazil<sup>26</sup>. After adaption of the computer-assisted telephone interview for a face-to-face interview, it was tested in 20 medical students to guarantee an appropriate expenditure of time and a good understanding of that version.

Besides socio-demographic data, the instrument comprised seven different parts. Three parts addressed stigma, all referring to an individual with a stabilized schizophrenic illness: stereotyping (12 characteristics to be compared with someone in the general population); prejudice (interviewee's agreement with nine statements about general population's attitudes towards the referred individual) and social distance<sup>32,33</sup>. Two parts addressed medication issues; opin-

ions about psychotropic drugs and tolerance to their side-effects<sup>34</sup>. One part assessed contact with mental illness: presence of a family member with psychiatric disorder and frequency of contact with this relative, and individual search of professional help and if he/she ever received psychotropic drugs. In the last part professional data were assessed (place of work, time since end of residency in psychiatry, latest academic formation).

We used the following stigma scales:

To assess stereotypes participants were asked to respond on a 3-point Likert scale that compared stereotypes between the individual with schizophrenia and someone from the general population (1 signified "less present", 2 "equally present", and 3 "more present"). Scores on the 5 positive items were summed up to form the positive stereotypes scale and scores on the 7 negative were added to constitute the negative stereotypes scale. The sum-score of the positive and negative stereotypes scales ranged from 5-15 and from 7-21, respectively.

Social distance was assessed with an adaptation of the Social Distance Scale<sup>32</sup>. The Social Distance Scale measures how reluctant a respondent is to participate in certain social activities with a specific individual. For the present study the response scale was slightly modified and ranged from 1 to 3 (1 represented "certainly yes", 2 "maybe", and 3 "definitely not"). The item "would you rent a room to a person with schizophrenia" was replaced by "Would you invite a person with schizophrenia to a party, a meeting or a dinner?", since in Brazil it is quite uncommon to rent a room to another person. The total score was computed by adding the values of the single items; sum-score ranged from 7-21.

Prejudice was assessed with 9 items based on the social acceptance and social stigmatization scales<sup>35</sup>. Both scales measure general social attitudes towards persons with schizophrenia. Responses were assessed on a 3-point Likert scale representing: 1 "totally disagree", 2 "partly agree" and 3 "totally agree". The question "Do you agree that most people undervalue a person with schizophrenia?" was excluded from the analyses to increase the scale's internal consistency. We computed the total score by summing up the scores of all items. The sum-score ranged from 10-24.

To assess medication issues, two scales were used. Opinion on psychotropic drugs was assessed by 7 statements to which the respondents were required to use a 3-point Likert scale representing 1 "totally disagree", 2 "partly agree" and 3 "totally agree". We computed the total score by summing up the scores of all items. The sum-score ranged from 7-17. Acceptance of side effects scale consisted of 10 sideeffects, to which the possible responses were: 1 "should not tolerate", 2 "should tolerate for 2-3 weeks", and 3 "should tolerate for more than 3 weeks". Total score was computed by summing up all items. The sum-score ranged from 10-30.

Subsequently, all four stigma-scales were ranked in 10 equal deciles. A dichotomous variable for every scale was computed by grouping the first 9 deciles and comparing them with the 10<sup>th</sup> decile. Accordingly, the 10 percent of participants with the highest scores on the stigma-scales were compared with the other participants. The binary stigma variables were used for cross tabulation and logistic regression models.

We used the following 13 predictors (categories of variables indicated in brackets): age (aged up to 30; aged 31-40; aged 41-50; aged 51 and more), sex (male vs. female), having children (yes vs. no), formation (no doctoral degree vs. doctoral degree and post-doctoral degree), personal psychiatric experience (started working in psychiatry before 1980; started 1981-1990; started 1991-2000; started 2001 and later), experience with mentally ill family member (no ill family member or no contact with ill member; rarely sees ill member; sees ill member several times per month; sees ill member several times per week; sees ill member daily), personal prescription for psychopharmacological drugs (yes vs. no), working in a public hospital (yes vs. no), working in a private hospital (yes vs. no), working in a public outpatient institution (yes vs. no), working in an university hospital (yes vs. no), working in a private office (yes vs. no), and working for a mental health insurance (yes vs. no).

## Statistical analyses

Pearson coefficients were computed for the correlation matrix of the four continuous stigma scales and the two medication scales. Bivariate associations between the predictors and the dichotomous stigma scales were analyzed with cross-tabulations and Pearson Chi-square statistics to test for significance. All predictors that were significantly associated to a certain scale were entered as independent variables into a logistic regression model with the respective dichotomized stigma scale as the dependent variable (deciles 1-9 vs. 10<sup>th</sup> decile). We used the backward stepwise (Wald) method, which is appropriate for exploratory analyses with various predictors with potential inter-correlation. The percentage of total variance explained was provided with Nagelkerke R square estimates.

All statistical analyses were carried out with SPSS version 18 for Macintosh.

## Results

Descriptive statistics of the 4 stigma and 2 medication scales are reported in figure 1. Individuals with schizophrenia were less associated to positive stereotypes (mean = 1.64) and more associated to negative stereotypes (mean = 2.26) when compared to someone of the general population, considering that in the stereotypes dimensions the score of 2 meant that the stereotype was equally associated with schizophrenia and with the general population (see section Instruments and measures). Social distance's mean score was closer to the minimum value (mean = 1.48) while prejudice's mean score was closer to the higher end of the scale (mean = 2.60). Participants in general had a good opinion on psychotropic drugs (mean = 1.34); mean value on tolerance to side-effects scale was of 1.9.

All stigma dimensions were significantly correlated but the associations were weak (Table 1). Stereotype was the only stigma dimension related to medication issues; negative stereotyping was related to a more positive opinion on medication and to a greater

acceptance of side-effects; positive stereotype dimension was also related to both but in the opposite direction.

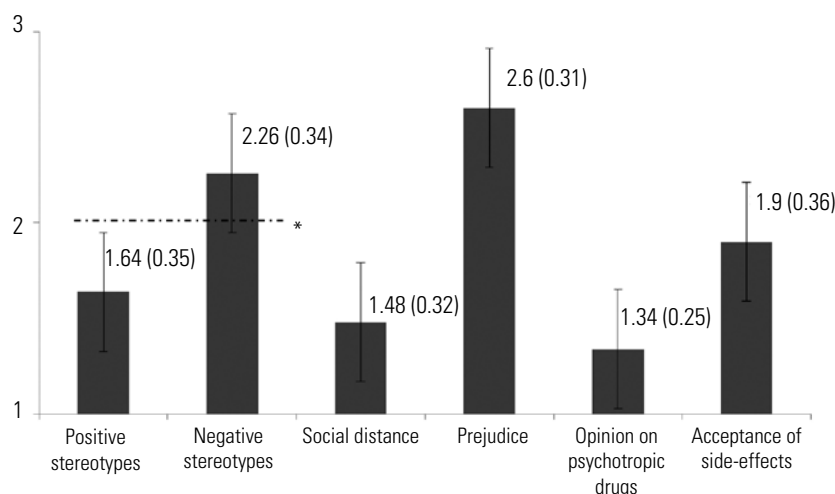
The bivariate associations between predictor variables and our stigma scales were as follows (Table 2).

The binary positive stereotypes scale was significantly associated with age (Pearson Chi-square = 10.960,  $df = 3$ ,  $p = 0.012$ ). The binary negative stereotypes scale was associated with none of the thirteen predictors assessed; a multivariate logistic regression model was therefore not executed. The dichotomized social distance scale was significantly associated with age (Pearson Chi-square = 8.819,  $df = 3$ ,  $p = 0.032$ ), sex (Pearson Chi-square = 4.622,  $df = 1$ ,  $p = 0.032$ ), and working in a university hospital (Pearson Chi-square = 6.873,  $df = 1$ ,  $p = 0.009$ ). The binary prejudice scale was associated with age (Pearson Chi-square = 23.934,  $df = 3$ ,  $p = 0.000$ ), sex (Pearson Chi-square = 5.367,  $df = 1$ ,  $p = 0.021$ ), and categories of personal experience with a family member with mental disorder (Pearson Chi-square = 18.958,  $df = 3$ ,  $p = 0.000$ ).

The logistic regression model for the positive stereotypes concluded after one step, the predictor sex accounted for 1.8% of total variance. The results indicate that the 10% of participants with the highest scores on the positive stereotypes scale were older than the other participants (for age 41-50: OR = 2,06, 95%-CI = 1,11-3,81,  $p = 0.021$  and for age > 50: OR = 1,91, 95%-CI = 1,05-3,44,  $p = 0.033$ ).

The logistic regression model for the sum-score of the social distance scale concluded after 2 steps. The two predictors that remained in the model (i.e. sex and working at a university hospital) explained 1.8% of total variance. Females (OR = 0,67, 95%-CI = 0,46-0,99,  $p = 0.043$ ) and psychiatrists that work at a psychiatric university hospital (OR = 0,58, 95%-CI = 0,38-0,89,  $p = 0.012$ ) reported less social distance than males and psychiatrists that don't work at a psychiatric university hospital.

The logistic regression model for the dichotomized prejudice scale concluded after 2 steps, the remaining predictors were age and sex, accounting for 3,8% of total variance. The oldest age group (aged 50 and older) reported the least prejudice (OR = 0.47, 95%-CI = 0.28-0.77,  $p = 0.003$ ), whereas the predictor sex failed to reach significance.



**Figure 1.** Mean scores and standard deviations of the stigmatization and medication scales.

\* Exclusively in the two stereotype scales, the score 2 represents a neutral position where stereotypes are equally associated with the individual with schizophrenia and with someone of the general population. Above this value stereotypes are more associated with schizophrenia, under this value stereotypes are less associated. Other 4 scales are one-dimensional.

**Table 1.** Correlation of the four continuous stigmatization scales, and of the two medication scales

	Positive stereotypes	Negative stereotypes	Social distance	Prejudice	Acceptance of side-effects	Negative opinion on medication
Positive stereotypes	-	<b>r = - 0.18</b> <b>p &lt; 0.001</b>	<b>r = - 0.21</b> <b>p &lt; 0.001</b>	<b>r = - 0.13</b> <b>p &lt; 0.001</b>	<b>r = - 0.11</b> <b>p &lt; 0.001</b>	<b>r = 0.07</b> <b>p = 0.01</b>
Negative stereotypes		-	<b>r = 0.15</b> <b>p &lt; 0.001</b>	<b>r = 0.09</b> <b>p &lt; 0.01</b>	<b>r = 0.09</b> <b>p &lt; 0.01</b>	<b>r = - 0.06</b> <b>p = 0.03</b>
Social distance			-	<b>r = 0.07</b> <b>p = 0.01</b>	r = 0.01 p = 0.60	r = 0.01 p = 0.70
Prejudice				-	r = 0.00 p = 0.60	r = - 0.04 p = 0.14
Acceptance of side-effects					-	<b>r = - 0.12</b> <b>p &lt; 0.001</b>
Negative opinion on medication						-

**Table 2.** Final models for backwards stepwise logistic regression of dichotomized stereotype, social distance, and prejudice scales (Deciles 1-9 vs. 10<sup>th</sup> decile)

Variable	Positive stereotypes OR (95% CI)	Social distance OR (95% CI)	Prejudice OR (95% CI)
Male sex	*	1,0	1,0
Female sex		<b>0,67 (0,46-0,99)</b>	1,33 (0,98-1,81)
Aged < 30	1,0	*	1,0
Aged 31-40	1,04 (0,54-2,00)		1,27 (0,83-1,94)
Aged 41-50	<b>2,06 (1,11-3,81)</b>		1,18 (0,75-1,84)
Aged > 50	<b>1,91 (1,05-3,44)</b>		<b>0,47 (0,28-0,77)</b>
Not working PUH	*	1,0	*
Working PUH		<b>0,58 (0,38-0,89)</b>	

PUH: Psychiatric University Hospital. \* Variable not present in the final model. **Bold:** p < 0.05.

## Discussion

This is the first study conducted in Latin America that analyzed stigma towards individuals with schizophrenia in a large sample of psychiatrists. The sample was recruited in 2009 during the second major national psychiatric congress of the world<sup>28</sup>, in Brazil, which provided us the unique opportunity to investigate a population usually difficult to reach.

We found that the psychiatrists negatively stereotyped individuals with schizophrenia. Concerning the other stigma scales, on average they showed a lower score on social distance when compared to the prejudice scale, indicating a higher presence of the last one. Contrary to our expectations, stigma dimensions were only slightly correlated, albeit significantly. Negative stereotyping was correlated with a positive opinion on psychotropic drugs and with a higher rate of acceptance of long-term side-effects. Observing the relationship between the various predictors and stigma, older individuals displayed more positive stereotypes and less prejudice; psychiatrists working at a university psychiatric hospital demonstrated less social distance while male psychiatrists had a greater social distance.

Regarding the question of whether psychiatrists stigmatize or not their patients, the first thing to be taken into account is that they possibly hold stigmatizing beliefs while giving socially desirable answers<sup>11,12</sup>. Some authors call this the "not in my back yard" (NIMBY) phenomenon, implying to be open-minded and tolerant as long as the individual's privacy or interests are not involved but if so, he or she becomes as stigmatizing and discriminating as everybody<sup>36</sup>. Brazilian psychiatrists stigmatize individuals with schizophrenia by attributing them negative stereotypes, but other stigma manifestations seemed to be biased by this phenomenon.

Stereotypes, prejudice and social distance are different dimensions of the same phenomenon, the stigma<sup>37</sup>. We feel therefore that the correlation between negative stereotyping and other stigma dimensions might have been weakened by a "congress effect" by providing socially acceptable answers. Furthermore, this resistance

in revealing personal stigmatizing beliefs could also be responsible for a lower social distance and a higher prejudice, since the first scale evolved the interviewees personal opinion, whereas the other assessed opinion about a third party's attitude.

Brazilian psychiatrists in general have positive opinions about psychotropic drugs. But the better the opinion the higher the negative stereotyping and also the higher their acceptance of side-effects. This possibly depicts the belief that undesirable patients should be higher medicated and tolerate long-term side-effects. Opinions on psychotropics as a source of stigma was also suggested by Rettenbacher *et al.*<sup>38</sup>, who described that almost all psychiatrists in their sample perceive pharmacotherapy to be helpful for their patients, but only 71,4% of them would be willing to take anti-psychotics themselves if they were to suffer from schizophrenia, another sign of the NIMBY phenomena.

It is of interest that, in our sample, younger psychiatrists presented more prejudice and stereotyped less positively. Three factors could contribute on explaining this finding.

The first one has to do with medical training. Over time psychiatry's explanatory models for mental disorder changed from bio-psycho-social models to more biological models<sup>39,40</sup>. Herewith, the risk of biological reductionism increases<sup>41</sup>, a belief commonly associated with dehumanizing feelings about individuals with mental disorders<sup>38,42,43</sup>. Thus, recently graduated psychiatrists could use a strict-biological misconception of mental illness to serve as an intellectual resource for stigma<sup>44-47</sup>. In the same way, psychiatric university hospitals would hold a better comprehension of the scientific advances on brain biology, with those working there demonstrating consequently less social distance.

The second factor has to do with professional practice. Older psychiatrists would supposedly show less stigma because of their experience. According to Corrigan and Penn<sup>48</sup>, contact with individuals with psychiatric disorder can help reduce stigma. As psychiatrists get older and accumulate experience from the day-by-day contact with individuals with mental disorders, stigma should decrease over time.

At last, the reasons why younger psychiatrists stigmatize their patients to a great extent could be in part the result of the current transfer of individuals with psychiatric disorders from hospital-based to community-based care currently occurring in Brazil. As this process is not being conducted very carefully, it leads to a patient overload of outpatient services and long waiting lists for psychiatric hospital treatments<sup>49</sup>. Many of these destabilized patients insufficiently treated in outpatient settings also contribute to this negative picture of psychiatric patients held by psychiatrists starting their career in this kind of setting.

A limitation of our study is the method by which information was gathered. Data were collected by face-to-face interviews during the yearly national psychiatry congress; this could generate a selection bias once the sample of psychiatrists selected would represent only the ones interested in updating their knowledge. Furthermore, this method could also stimulate socially desirable answers, distorting the evaluation of stigma in this difficult to reach population.

Concluding, we found that stigma towards persons with schizophrenia is present in psychiatrists too who live and work in countries which undergo radical mental health care reforms. This is worrying because mental health professionals should be in the best position to educate the general population concerning stigma and discrimination of the mentally ill. We feel, therefore, that before anti-stigma campaigns for the general population are started, we need more information why psychiatrists stigmatize their patients and how we could change their negative attitudes.

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