Psychiatry Research 205 (2013) 185–191

Contents lists available at SciVerse ScienceDirect

Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

The more information, the more negative stigma towards schizophrenia: Brazilian general population and psychiatrists compared

Alexandre Andrade Loch [a,*], Michael Pascal Hengartner [b], Francisco Bevilacqua Guarniero [a], Fabio Lorea Lawson [a], Yuan-Pang Wang [a], Wagner Farid Gattaz [a], Wulf Rössler [b,c]

[a] Department and Institute of Psychiatry, School of Medicine, University of São Paulo, Brazil
[b] Psychiatric University Hospital Zurich, Department of General and Social Psychiatry, Zurich, Switzerland
[c] Collegium Helveticum, a Joint Research Institute between the University of Zurich and the Swiss Federal Institute of Technology, Zurich, Switzerland

ARTICLE INFO

Article history:
Received 4 February 2012
Received in revised form
8 September 2012
Accepted 15 November 2012

Keywords:
Social distance
Stereotype
Prejudice
Psychosis
Mental health professionals

ABSTRACT

Findings on stigmatizing attitudes toward individuals with schizophrenia have been inconsistent in comparisons between mental health professionals and members of the general public. In this regard, it is important to obtain data from understudied sociocultural settings, and to examine how attitudes toward mental illness vary in such settings. Nationwide samples of 1015 general population individuals and 1414 psychiatrists from Brazil were recruited between 2009 and 2010. Respondents from the general population were asked to identify an unlabeled schizophrenia case vignette. Psychiatrists were instructed to consider "someone with stabilized schizophrenia". Stereotypes, perceived prejudice and social distance were assessed. For the general population, stigma determinants replicated findings from the literature. The level of the vignette's identification constituted an important correlate. For psychiatrists, determinants correlated in the opposite direction. When both samples were compared, psychiatrists showed the highest scores in stereotypes and perceived prejudice; for the general population, the better they recognized the vignette, the higher they scored in those dimensions. Psychiatrists reported the lowest social distance scores compared with members of the general population. Knowledge about schizophrenia thus constituted an important determinant of stigma; consequently, factors influencing stigma should be further investigated in the general population and in psychiatrists as well.

1. Introduction

In the last decades, the literature on stigmatizing attitudes towards individuals with mental disorders has increased significantly (Henderson and Thornicroft, 2009). An important line of investigation concerns differences between attitudes of the general public versus mental health professionals (Lauber et al., 2006). In theory, mental health professionals would be expected to demonstrate low levels of stigma. However, in some surveys people with mental disorders reported that contact with these professionals was perceived as one of their most stigmatizing experiences (Schulze and Angermeyer, 2003).

Concerning previous studies on this topic, Lauber et al. (2004) found that psychiatrists were more in favor of community psychiatry than the general population, but levels of social distance towards an individual with schizophrenia did not differ significantly between the two samples. Lauber et al. later observed that negative stereotyping was common among mental health professionals (Lauber et al., 2006). In Italy, 85% of members of the general population and 76% of mental health professionals reported that people with schizophrenia are unpredictable (Magliano et al., 2004). Nevertheless, professionals and members of the general public showed rather benign opinions regarding the restriction of civil rights of individuals with the disorder. Arvaniti and colleagues (Arvaniti et al., 2009) reported in their study that psychiatric staff demonstrated positive attitudes towards mental illness when compared with other Greek University General Hospital professionals and a group of students. However, in Australia mental health professionals tended to endorse a deteriorating course of schizophrenia and had more negative attitudes towards persons with the disorder than did members of the general public (Jorm et al., 1999). Thus, the literature is inconclusive on this issue, and results vary depending on the stigma dimension studied and on the cultural background of the sample (Lepping et al., 2004; Schulze, 2007; Hori et al., 2011).

In developing countries and particularly in Brazil, data on stigma related to mental disorders are still scarce (Des Courtis

* Correspondence to: Laboratório de Investigação Médica 27 (LIM-27), Centro de Apoio à Pesquisa (CEAPESQ) - R. Dr. Ovídio Pires de Campos, 785 – 3o andar, ala norte, sala 1; São Paulo, SP, CEP 05403-000, Brazil. Tel.: +55 11 9620 1213; fax: +55 11 3881 2009.
E-mail address: alexandre.loch@usp.br (A.A. Loch).

0165-1781/$ - see front matter © 2012 Elsevier Ireland Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.psychres.2012.11.023

et al., 2008; Hengartner et al., 2012). Furthermore, as in many other countries of the world, Brazil has undergone healthcare reform during the last 40 years, including the mental healthcare system (Paim et al., 2011). The reforms were designed to shift patients from hospital-based to community-based treatment. Although the deinstitutionalization movement was intended to reduce stigma, whether societies undergoing this process are prepared to accept individuals with mental disorders is a matter of concern (Sadigursky and Tavares, 1998; Wright et al., 2000). Community-based care carries the risk of even possibly increasing the level of stigma towards these individuals (Scherl and Macht, 1979; Farina et al., 1992; Hinshaw and Stier, 2008; Loch, 2012). Moreover, the movement away from hospital-based care carries the risk of inadequate support for discharged patients if the evolving system of community care is inadequate (Gentil, 2011), which could also affect the level of stigma experienced by patients (Haraguchi et al., 2009). Lastly, it has been stated that an important factor in diminishing prejudice towards persons with mental disorders would be the availability of adequate public information about mental illness (Corrigan and Penn, 1999).

Therefore, it would be of interest to (1) assess stigma in both mental health professionals and members of the general population from a developing country where mental healthcare reform is occurring and (2) to see what effect information on mental illness exerts on stigma dimensions. The present study aimed to assess stigma towards schizophrenia in psychiatrists and in the general population of Brazil, also taking into account the population's degree of recognition of a vignette describing someone with schizophrenia.

2. Methods

2.1. Sampling and procedure

2.1.1. Psychiatrists

A sample of psychiatrists was recruited during the 27th 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. Fifty interviewers were selected and trained by the study investigators. During the Congress, interviewers were positioned throughout the Congress area and asked attendees to take part in the study. When an individual agreed to participate, a 15-min face-to-face interview was conducted. No personal identification was required; after completion of the questionnaire, the interviewer made a mark on the participant's credentials to avoid double inclusion.

Out of the approximately 6000 attendees, 2549 were invited to participate; 954 (37.5%) refused to take part. Thus, the initial sample ($n=1595$) comprised 1416 psychiatrists, 68 general practitioners, 44 psychologists, and 67 other professionals. For the present study, only the responses of psychiatrists were analyzed; two were foreigners and were excluded. Hence, the final sample consisted of 1414 Brazilian psychiatrists.

2.1.2. General population

A representative sample of 2001 individuals of the Brazilian general population was interviewed by telephone in April 2010. The selection procedure was performed in the following three stages: (1) Cities in each region of Brazil were probabilistically selected through the probability-proportional-to-size method, based on the 2000 Brazilian census (Instituto Brasileiro de Geografia e Estatística, 2000). (2) Within the designated cities, telephone numbers were randomly selected based the cities' telephone directories and on a random number generator. (3) The third stage was performed in two different ways: (a) For half of the sample, each adult inhabitant of the selected telephone's household was enrolled, and one was randomly selected (Kish-table). In case the respondent was absent, two more trials were done on different days and at different times. If failure persisted, another household was substituted. (b) For the other half of the sample, quota sampling was used for the individual who answered the telephone using as variables gender, age, education and occupation. Results were expanded to the population by a combination of these demographic variables and geographical region. The proportions used for expansion were established based on the latest Brazilian Census. These two different methods of sampling in the last stage were used for methodological comparison, which will be described in future reports.

Computer-assisted telephone interviews (CATI) were conducted. A pre-test of the electronic questionnaire was performed to ensure correct understanding of it. Interviewers were trained by the investigators during a 1-day course.

Specifically, for the general population sample, before the instrument was applied, a vignette was read. There were five different vignettes (Link et al., 1999); four described cases of psychiatric disorders according to DSM-IV (alcohol dependence, $n=229$; cocaine dependence, $n=275$; depressive disorder, $n=267$; and schizophrenia, $n=1015$) and one vignette was a control, describing a "troubled person" ($n=215$). To allow the comparison with the psychiatrists, only individuals exposed to the schizophrenia vignette were selected, resulting in a final sample of 1015 people.

2.2. Instruments

For the general population, respondents were asked after presentation of the vignette if they considered the case as a person with a mental disorder. Individuals responding "yes" were additionally asked which mental disorder was defined in the vignette. According to that appraisal, we defined the following three groups: (1) participants who did not consider the case described as a person with mental disorder were referred to as "individuals without recognition"; (2) participants who identified the vignette as pertaining to a mental disorder but who could not correctly name the disorder were referred to as "individuals with recognition"; (3) participants who recognized a mental disorder and correctly identified it as schizophrenia or psychosis were referred to as "individuals with identification".

For the sample of psychiatrists, they were told that they should respond to the questionnaire with reference to an individual with stabilized schizophrenia.

The questionnaire applied has been used in previous attitude surveys in Switzerland (Lauber et al., 2006) and was later translated and implemented in Brazil (Des Courtis et al., 2008; Loch et al., 2011). Along with sociodemographic information, the instrument includes questions on stereotypes, social distance and prejudice against the referred individual with schizophrenia as well as recommendations on treatment. We adapted 12 items on stereotyping, eight items measuring perceived prejudice based on the social acceptance and social stigmatization scales of Link et al. (1991), and seven items of the Social Distance Scale (Link et al., 1987).

Regarding stereotypes, participants were asked to respond on a 3-point Likert scale how various characteristics were present in an individual with schizophrenia compared with someone from the general population (1="less present", 2="equally present", 3="more present"). Stereotypes were divided into two subscales; positive stereotypes (5 items: "creative", "healthy", "self-controlled", "gifted", "reasonable") and negative stereotypes (7 items: "dangerous", "unpredictable", "stupid", "bedraggled", "abnormal", "unreliable", "weird").

Perceived prejudice measured general social attitudes towards persons with schizophrenia. Responses were assessed through a 3-point Likert scale (1="I totally disagree", 2="I partly agree", 3="I totally agree"). Seven items had the form of "most people…": "would accept a person with schizophrenia as a close friend", "believe that someone with schizophrenia is just as intelligent as an average person", "think that a school teacher with schizophrenia can continue teaching", "would not accept a person with schizophrenia to take care of their children", "would hire a person with schizophrenia if he or she was qualified for the job", "would treat a person with schizophrenia just as they treat anyone else" and "would take the opinion of a person with schizophrenia less seriously". One item was "most women would be reluctant to date a man with schizophrenia". Values of positive statements were inverted.

The Social Distance Scale assesses a respondent's willingness to interact with a person with schizophrenia. The response scale was slightly modified and used a 3-point Likert scale: 1="certainly yes", 2="maybe", 3="definitely not". Items were as follows, "would you": "move next door to a person with schizoprenia?", "like a relative of yours to marry a person with schizophrenia?", "trust a person with schizophrenia to take care of your children?", "like to start working with a person with schizophrenia?", "introduce a friend of yours to a person with schizophrenia?", "recommend a person with schizophrenia for a job?", "invite a person with schizophrenia to a party, meeting, or a dinner?".

For every stigma scale, we computed a mean score by summing up the values of all items and dividing the sum score by the number of items. Higher values indicated increased stigmatizing attitudes/beliefs.

2.3. Statistical analyses

Cross-tabulations were computed to analyze distribution of sociodemographic characteristics across groups. Significance testing relied on Pearson χ^2 test statistics. To complete data of the stigma scales, we conducted missing value analysis (MVA). The multiple imputation command was implemented, using the fully conditional specification (FCS) method; it is based on the iterative Markov Chain Monte Carlo method and is adequate for an arbitrary missing pattern. The settings were specified: imputations numbering=10, maximum model parameter draws=10, and upper limit for case draws=500. Variables with $>50\%$ missing values were excluded from the imputation process. By implementing MVA, we