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Suicidal risk, hopelessness and depression in patients with schizophrenia and internalized stigma

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Background. Internalized stigma has negative consequences on subjective and objective aspects of the recovery in people diagnosed with mental disorders. Despite its relevance, it has been poorly studied in patients with schizophrenia.

Methods. A sample of 71 outpatients with a diagnosis of schizophrenia who attended Psychosocial Rehabilitation Centers of Gran Canaria, Spain, were evaluated. We assessed the prevalence of internalized stigma and its possible association with sociodemographic, clinical, psychological and psychopathological variables, as well as suicidal behaviour and suicidal ideation.

Results. 21.1% of the patients had internalized stigma. Internalized stigma was associated with higher prevalence of suicidal ideation during the last year, higher number of suicide attempts, higher current suicidal risk, worse self-compassion, higher self-esteem, higher scores on depression, higher prevalence of depression and higher hopelessness. After multivariate analysis, hopelessness and the existence of depression were independently associated with internalized stigma, although depression showed trend towards significance.

Conclusions. The association between internalized stigma and higher hopelessness, depression and higher suicidal risk suggests the necessity to systematically assess internalized stigma in patients with schizophrenia, and to intervene to reduce it.

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Keywords: Internalized stigma, Schizophrenia, Hopelessness, Suicidal risk, Suicide, Psychosocial rehabilitation

Actas Esp Psiquiatr 2018;46(2):33-41

Riesgo suicida, desesperanza y depresión en pacientes con esquizofrenia y autoestigma

Introducción. El autoestigma tiene efectos negativos en aspectos subjetivos y objetivos de la recuperación en las personas con trastornos mentales. A pesar de su importancia, ha sido poco estudiado en la esquizofrenia.

Metodología. Evaluamos el autoestigma en 71 pacientes diagnosticados de esquizofrenia, en Centros de Día de Rehabilitación Psicosocial de Gran Canaria. Se evaluó su prevalencia y su posible asociación con variables sociodemográficas, clínicas generales, psicopatológicas y aspectos psicológicos, así como la conducta suicida e ideación suicida.

Resultados. El 21,1% de los pacientes presentaron autoestigma. El autoestigma se asoció a mayor prevalencia de ideación suicida en el último año, mayor número total de tentativas suicidas, mayor riesgo suicida actual, peor autocompasión, mayor autoestima y peores puntuaciones en depresión, mayor prevalencia de depresión y mayor desesperanza. En el análisis multivariante, la desesperanza y la existencia de depresión se asociaron de manera independiente con el autoestigma, si bien la depresión lo hizo con tendencia a la significación.

Conclusiones. La asociación entre autoestigma y mayor desesperanza, depresión y riesgo suicida sugiere la necesidad de evaluar sistemáticamente el autoestigma en los pacientes con esquizofrenia, e intervenir para su reducción.

Palabras clave: Autoestigma, Esquizofrenia, Desesperanza, Riesgo suicida, Suicidio, Rehabilitación psicosocial

INTRODUCTION

In recent years there has been growing interest about the effect of stigma on well-being of patients with mental disorders. Besides, it has been found that internalized stigma has negative effects on the subjective and objective components of recovery of patients with mental disorders[1,2].

Internalized stigma refers to the degree in which patients with a mental disorder accept and internalize society's stigmatising beliefs[2,3], which entails emotional reactions, such as lower self-esteem and self-efficacy[1,3]. The psychological process begins with stereotype awareness; namely, the person is aware of the general negative beliefs about mental illness held by one's culture. Self–stigma begins with stereotype agreement: endorsing the same stereotypes perceived to be common in the public. Finally, the process becomes harmful with the addition of self–concurrence in which people believe that culturally internalized beliefs in fact apply to them[1].

Internalized stigma has been found to be a moderating factor between insight and demoralization, in such a way that the higher internalized stigma, the stronger association between insight and demoralization[4]. In the same vein, other authors have found internalized stigma as a mediator between insight and elements of demoralization, such as hopelessness and lower self-steem[2], Thus, patients with high insight and moderate stigma were those who presented worse hopelessness and self-esteem, compared to those with low insight and mild stigma and those with high insight and minimal stigma[2]. For its part, an association between internalized stigma and worse well-being has also been found[5]. Furthermore, the association between stigma and hopelessness with lower self-esteem conditions worse outcomes, including depressive symptoms, social avoidance and a preference for avoidant coping strategies[6].

Despite the potential importance of internalized stigma as mediator or moderator of the effect of insight in various psychopathological and psychological features and outcomes, studies in the literature are still scarce. On the other hand, to our knowledge there are no studies that specifically evaluate the possible association between stigma and suicidal behaviours in schizophrenia. In fact, in systematic reviews on schizophrenia and suicide[7,8] there is no mention to its possible role.

We therefore conducted a study with the following objectives:

1. To assess the prevalence of internalized stigma in patients diagnosed with schizophrenia who attend psychosocial rehabilitation programs.
2. To assess the relationship between internalized stigma and sociodemographic, general clinical, psychopathologic, psychological and suicidal behavior variables in patients with schizophrenia.

METHOD

Subjects

A sample of 71 outpatients with a diagnosis of schizophrenia, who consecutively attended any of the Psychosocial Rehabilitation Centers (PRC) of Gran Canaria, Spain, between March and July 2014, were evaluated. Inclusion criteria were age of 18 years or greater and diagnosis of schizophrenia according to *International Classification of Diseases, 10th Revision* criteria. Patients with intellectual disability, cognitive deficit or low educational level in such degree that it would hinder necessary understanding to adequately answer the questions and obtain data, were excluded. Patients were evaluated by six clinical psychologists. The study was in accordance with the Helsinki Declaration of 1975, and was approved by the Research Ethics Committee of the Insular University Hospital of Gran Canaria. All participants gave written informed consent.

Procedure

All of the patients were evaluated at the PRC of Gran Canaria; specifically, Maspalomas, Vecindario, Telde, Teror, Gáldar, Pino, San Francisco I, San Francisco II and Casa del Mar centers. These centers attend to patients from eight Community Mental Health Units which cover a population of 847,830 people. The clinical evaluation and administration of scales was performed in a single clinical interview and included sociodemographic variables, clinical variables, psychopathological features (depression, hopelessness, insight, and psychotic, negative and cognitive symptoms), psychological aspects (internalized stigma, self-esteem, self-compassion), previous suicidal behaviour and current suicidal ideation. Sociodemographic variables included age, sex, marital status, education, working status, socio-economic level. General clinical variables included duration of the disorder, number of previous psychiatric admissions, substance use or abuse (past and current) clinical severity and type of treatment.

Internalized stigma was evaluated using Internalized stigma of mental illness scale (ISMI)[9]. It is self-administered. It includes subscales that assess alienation, stereotype endorsement, discrimination experience, social withdrawal and stigma resistance. All subscales use a Likert-type scoring system that ranges from 1 (strongly disagree) to 4 (strongly agree). We used the translation produced by the Andalusian

Health Service[10], which has been previously used in other research studies in Spain. We established the cut-off point at the intermediate point of the scoring range to determine the existence or not of internalized stigma, as it has been previously done[11]. Thus, a scoring of 2.5 or greater was considered internalized stigma.

Self-esteem was evaluated with the Rosenberg Self-Esteem Scale, by means of the Spanish validated version[12,13]. It is simple, self-administered and has been widely used. The scoring ranges from 10 to 40. The higher the score, the higher the self-esteem. Self-compassion was evaluated by means of the Self-compassion scale[14]; specifically, with the 26-item version, validated in Spain[15]. It is self-administered. Each item scores from 1 to 5. The higher the score, the higher the self-compassion. The scale assesses three components of self-compassion through six factors: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. Insight was evaluated with the first three items of the Scale to Assess Unawareness of Mental Disorder (SUMD)[16]. The scale used was the validated Spanish version[17]. It is clinician administered. The first three items assess general disorder awareness and may be used separately. There are no cutoff points. The higher the score, the poorer the insight[18]. Depression was evaluated by the Calgary Depression Scale[19], by means of the Spanish validated version[20]. It is clinician administered and comprises 9 items. The recommended cutoff scores are 0–5 (no depression) and 6–27 (depression)[18]. Hopelessness was evaluated by the Beck Hopelessness Scale[21]. It is clinician administered and comprises 20 items. The scoring ranges from 0 to 20. The higher the score, the higher the hopelessness. The recommended cutoff points are 0–3 (none or minimal), 4–8 (mild), 9–14 (moderate) and 15–20 (severe)[18]. Psychopathology was evaluated through the severity subscale of the Clinical Global Impression-Schizophrenia scale (GCI-SCH)[22]. It is clinician administered and assesses five dimensions: positive symptoms, negative symptoms, depressive symptoms, cognitive symptoms and overall severity. Scoring is Likert-type and ranges from 5 to 35. Each item ranges from 1 (Normal, not ill) to 7 (Among the most severely ill). We evaluated previous suicide attempts, which were defined as "self-injurious behavior with a nonfatal outcome accompanied by evidence (either explicit or implicit) that the person intended to die"[23], previous deliberate self-harm, defined as "willful self-inflicting of painful, destructive, or injurious acts without intent to die", and previous suicidal ideation, defined as "thoughts of serving as the agent of one's own death"[23]. Current suicide risk was assessed using the item number 8 of the Calgary Depression Scale.

Data analysis

In this cross-sectional observational study, quantitative variables whose distribution was similar to normal are described by means of the arithmetic mean±standard deviation. Quantitative variables without normal distribution are described by median and 25th and 75th percentiles. The normality hypothesis was tested using the Shapiro-Wilk test. Qualitative variables are described by means of the absolute frequency and corresponding percentage presented in parentheses.

Comparisons between the patients with and without self-stigma for qualitative variables were performed by means of the Chi-squared test or Fisher's exact statistic when no criteria were met for the first, and the Chi-square test of linear trend in the case of ordinal variables. Comparisons for quantitative variables and dichotomous variables were performed by means of the t-test or the Mann Whitney U test, respectively, according to whether normality assumptions were met or not.

The risk of self-stigma was analyzed using a logistic regression model that included all variables that showed at least marginally significant differences in bivariate analyses, as well as the variables age and length of illness, which were necessarily included in the model.

The level of statistical significance was set at $p<0.05$, and the trend for significance at p between 0.05 and 0.1. The statistical program used was R Core Team (2014), R: A language and environment for statistical computing, R Foundation for Statistical Computing, Vienna, Austria. (URL, http://www.R-project.org/).

RESULTS

A total sample of 71 patients was obtained. The sample had a higher proportion of men (80.28%), the mean age was 40.07±9.85 years and the length of illness had a median of 17 years; 78.26% of the patients were diagnosed with paranoid schizophrenia; 12.68% of the patients had current substance use, abuse or dependence (alcohol, cocaine, cannabis, heroin, nicotine or other drugs); 30.43% of the patients had previous suicide attempts and 49.28% had previous suicidal ideation. The characteristics of the total sample in all evaluated variables are shown in Table 1.

Internalized stigma was identified in 21.13% of the patients. Internalized stigma did not show association with any sociodemographic or general clinical variable. In relation to previous suicidal behaviour, patients with internalized stigma had a higher prevalence of suicidal ideation in the last year (p=0.007), as well as a greater total number of suicide attempts (p=0.03). Results were marginally significant in relation to the prevalence of suicide attempts (p = 0.054) and deliberate self-harm (p=0.097). Regarding the Self-compassion scale, patients with internalized stigma showed lower scores (p <0.001). Statistically significant results were also

Table 1	Characteristics of the total sample (n=71)
Sociodemographic variables	
Age	40.07±9.85
Sex, males	57 (80.28)
Marital status	
Married or stable relationship	0 (0)
Single	62 (87.32)
Separated, divorced or widowed	9 (12.68)
Education level (n=70)	
Illiterate	1 (1.43)
Primary school	15 (21.43)
Secondary school	32 (45.71)
Higher education or University	22 (31.43)
Employment situation (n=70)	
Active or sick leave	1 (1.43)
Unemployed	17 (24.29)
Disability due to mental disorder	52 (74.29)
Socioeconomic level (n=68)	
Low (less than 1000 € per month)	40 (58.82)
Medium (between 1000-2500 € per month)	21 (30.88)
High (more than 2500 € per month)	3 (4.41)
NR/DK	4 (5.88)
General clinical variables	
Diagnosis (n=69)	
Paranoid schizophrenia	54 (78.26)
Schizophrenia, other type	15 (21.74)
Length of illness (years) (n=67)	17 (11–24.5)
Number of prior psychiatric hospitalizations	1 (1–3)
Present substance use, abuse or dependence	
No	62 (87.32)
Substance use or abuse	5 (7.04)
Dependence	4 (5.63)
Past substance use, abuse or dependence	
No	27 (38.03)
Substance use or abuse	27 (38.03)
Dependence	17 (23.94)

Table 1	Continuation
Previous suicidal behaviour	
Suicide attempts (n=69)	21 (30.43)
Total number of suicide attempts (n=65)	0 (0-0)
Number of suicide attempts in the last year (n=69)	0 (0-0)
Suicidal ideation (n=69)	34 (49.28)
Suicidal ideation in the last year (n=68)	11 (16.18)
Deliberate self-harm (n=68)	6 (8.82)
Total number of deliberate self-harm episodes (n=68)	0 (0–0)
Number of deliberate self-harm episodes in the last year (n=68)	0 (0–0)
Internalized stigma of mental illness scale (ISMI)	
Total score	58 (48–69.5)
Mean score	10.36±2.68
Alienation, mean	2 (1.5–2.5)
Stereotype endorsement, mean	1.85 (1.42–2.14)
Discrimination experience, mean	2.2 (1.4–2.4)
Social withdrawal, mean	1.99±0.64
Stigma resistance, mean of the inverse	2.48±0.71
Self-compassion Scale	19.26±3.35
Rosenberg Self-Esteem Scale	21.25±5.26
Beck Hopelessness Scale	6 (3–10)
Calgary Depression Scale	3 (1–6.5)
Calgary Depression Scale, dichotomous scoring, depression	28 (39.44)
Current suicidality according to the Calgary Depression Scale	13 (18.3)
Clinical Global Impression - Schizophrenia scale (GCI-SCH), severity subscale	
Positive symptoms	2 (2–4)
Negative symptoms	3 (2–3)
Depressive symptoms	2 (1–3)
Cognitive symptoms	2 (2–3)
Overall severity	3 (2–4)

Table 1 Continuation	
SUMD scale	
Total score	4 (3–5)
Awareness of mental disorder	1 (1–2)
Awareness of achieved effects of medication	1 (1–1)
Awareness of social consequences of mental disorder	1 (1–3)

Qualitative variables are shown as frequency (percentage), while quantitative variables that deviate significantly from normal distribution are presented as median (25th percentile - 75th percentile) and those with normal distribution, as mean ± standard deviation. Substances included are alcohol, cocaine, cannabis, heroin, and other.

found in all subscales and subconstructs of this scale, except for the Common Humanity subscale (p=0.14).

On the other scales, patients with internalized stigma showed higher scores on the Rosenberg Self-esteem Scale (p<0.001), Beck's Hopelessness Scale (p<0.001), and Calgary Depression Scale (p=0.001). Subsequently, this scale was dichotomized according to the recommended cut-off point, where a statistically significant result was also obtained (p<0.001). Patients with internalized stigma showed a higher prevalence of current suicide risk according to the item 8 of the Calgary Depression Scale (p=0.004) (Table 2).

In the model resulting from the multivariate analysis (Table 3), the predictor variables that remained independently associated were Beck Hopelessness Scale (OR 1.46, 95% CI [1.20-1.88], p<0.001), and, with a marginally significant result, the dichotomized Calgary Depression Scale (OR 4.76, 95% CI [0.99-28.42], p=0.06).

DISCUSSION

In this study we found a considerable prevalence of internalized stigma in patients with schizophrenia (21.1%). This finding is similar to that of 26.1% of another study of patients with schizophrenia or schizoaffective disorder, who mostly attended psychosocial rehabilitation centers[24]. The prevalence in our study is lower than the prevalence range found in the literature, between 26 and 44%[24-28]. One possible explanation is that our sample is composed entirely of patients who attend Psychosocial Rehabilitation Centers, where rehabilitation interventions may have a positive effect on internalized stigma. In fact, interventions aimed at recovery and empowerment have been found to reduce internalized stigma[29]. On the other hand, consistently with other studies, the participants had the lowest score (lower internalized stigma) in the subscale of "stereotype endorsement"[9,24,25,29].

Regarding the relation between internalized stigma and other variables, we did not find relationship with sociodemographic variables, as in most studies[27,28,30,31]. Patients with internalized stigma had a higher prevalence of suicidal ideation in the last year, more previous suicide attempts, greater depression and hopelessness, less self-compassion, greater self-esteem and, with a tendency towards significance, higher prevalence of previous suicide attempts and deliberate self-harm episodes. After multivariate analysis, the predictor variables were hopelessness and depression. According to the established cut-off points for the depression and hopelessness scales, patients with internalized stigma showed depression and moderate hopelessness scores, compared to those without internalized stigma, who showed non-depression and mild hopelessness scores. Other studies have found an association between internalized stigma and suicide risk[32], between internalized stigma and history of suicide attempts[27,33], and between internalized stigma and depression and lower self-esteem[34]. However, it is an area that is still scarcely studied, since there are few studies that have evaluated the possible association between internalized stigma and suicidal behavior in schizophrenia[27]. High levels of internalized stigma in people with mental disorders are associated with hopelessness, lower quality of life and lower social integration and support[30]. In an ecological study on data from 25 European Union countries, an inverse relationship was found between social acceptance of people with mental disorders and suicide rates in the country[35]. The association between stigma and suicidal risk could be explained in several ways. Stigma may prompt reactions of emotional withdrawal, social isolation and hopelessness[36]. Hopelessness and depression are suicide risk factors firmly established in schizophrenia[8] and social isolation has also been found to be a risk factor[37]. Stigma, and especially internalized stigma, is a barrier to seeking help for mental health problems[38], which may increase suicidal risk[35]. Finally, it has been pointed out that insight can have both positive and negative consequences, and internalized stigma has been found to be a moderating variable between insight and demoralization[2,4]. In light of our findings and those of the literature, it seems necessary to identify and to treat internalized stigma for the reduction of suicidal behaviour in this population. In addition to individual interventions, there are intervention programs that reduce internalized stigma, mainly those with psychoeducational, narrative and cognitive approaches[39,40].

Contrary to our expectations, patients with higher internalized stigma presented higher self-esteem. Most studies have found an inverse correlation between internalized stigma and self-esteem[6,28,30,34]. However, several previous

Table 2 Differences between patients with and without internalized stigma

	No internalized stigma (N=56)	Internalized stigma (N=15)	p
Sociodemographic variables			
Age	39.8 ± 10.17	41.07± 8.82	0.66
Sex, Males	45 (80.4)	12 (80)	1
Marital status, single	50 (89.3)	12 (80)	0.39
Education level (n=70); secondary school	24 (43.64)	8 (53.33)	0.76
Employment situation (n=70); disability due to mental disorder	41 (73.21)	11 (78.57)	1
Socioeconomic level (n=68); low	31 (57.41)	9 (64.29)	0.61
Diagnosis (n=69); paranoid schizophrenia	42 (77.78)	12 (80)	1
General clinical variables			
Length of illness (years) (n=67)	17 (11–25)	16.5 (11.3–23.3)	0.95
Number of prior psychiatric hospitalizations	1 (0.75–2)	2 (1–3)	0.18
Present substance use, abuse or dependence			0.67
No	48 (77.42)	14 (22.58)	
Substance use or abuse	5 (100)	0 (0)	
Dependence	3 (75)	1 (25)	
Past substance use, abuse or dependence			0.43
No	24 (88.89)	3 (11.11)	
Substance use or abuse	18 (66.67)	9 (33.33)	
Dependence	14 (82.35)	3 (17.65)	
Previous suicidal behaviour			
Suicide attempts (n=69)	13 (24.1)	8 (53.3)	0.054
Total number of suicide attempts (n=65)	0 (0–0)	0 (0–1)	0.03
Number of suicide attempts in the last year (n=69)	0 (0–0)	0 (0–0)	0.453
Suicidal ideation (n=69)	25 (45.5)	9 (64.3)	0.244
Suicidal ideation in the last year (n=68)	5 (9.3)	6 (42.9)	0.007
Deliberate self-harm (n=68)	3 (5.6)	3 (21.4)	0.097
Total number of deliberate self-harm episodes (n=68)	0 (0–0)	0 (0–0)	0.29
Number of deliberate self-harm episodes in the last year (n=68)	0 (0–0)	0 (0–0)	0.611
Clinical Global Impression - Schizophrenia scale (GCI-SCH), severity subscale			
Positive symptoms	2 (2–4)	3 (2–4.5)	0.55
Negative symptoms	3 (2–3)	3 (2.5–3.5)	0.34
Depressive symptoms	2 (1–2)	3 (1–3)	0.30
Cognitive symptoms	2 (2–3)	2 (1–3)	0.16
Overall severity	3 (2–4)	3 (2–4)	0.74

Table 2 Continuation

	No internalized stigma (N=56)	Internalized stigma (N=15)	p
SUMD scale			
Total score	4 (3–5)	4 (3.5–4.5)	0.39
Awareness of mental disorder	1 (1–1.25)	2 (1–2.5)	0.09
Awareness of achieved effects of medication	1 (1–1.25)	1 (1–1)	0.66
Awareness of social consequences of mental disorder	1 (1–3)	2 (1–2)	0.69
Other scales for the assessment of psychological and psychopathological features			
Self-compassion scale	19.98±3.26	16.56±2.13	< 0.001
Self-kindness component	6.83±1.57	5.64±1.58	0.01
Common humanity component	6.48±1.11	5.63±1.03	0.01
Mindfulness component	6.5±1.46	5.28±1.01	0.003
Rosenberg Self-Esteem Scale	20 (16.75–23)	27 (25–29)	< 0.001
Beck Hopelessness Scale	5 (2–7)	12 (10–14)	< 0.001
Calgary Depression Scale	2 (0–5.25)	7 (5.5–9)	0.001
Calgary Depression Scale, dichotomous scoring, depression	16 (28.6)	12 (80)	< 0.001
Current suicidality according to the Calgary Depression Scale	6 (10.7)	7 (46.7)	0.004

SUMD: Scale to Assess Unawareness of Mental Disorder

Table 3 Multivariate model (n=71)

Predictive Variables	B	Standard error	*p*	OR [IC 95%]
Calgary Depression Scale, dichotomous scoring	1.56	0.83	0.06	4.76 [0.99–28.42]
Beck Hopelessness Scale	0.38	0.11	< 0.001	1.46 [1.20–1.88]
Constant	-5.44	1.27	< 0.001	

The dependent variable is "internalized stigma"

studies have found this association, and it has been hypothesized that being stigmatized may favor a phenomenon of opposition to negative evaluations (psychological reactance), with the emergence of positive self-perception[41]. In this line, it has been pointed out that patients with mental disorders use different psychological strategies to protect their self-esteem against stigma[42]. In addition, positive experiences in group, humour and relationship with stigmatized peers have been related with a beneficial outcome for self-esteem[42]. These latter aspects are likely to occur during interventions in Psychosocial Rehabilitation Centers. Finally, according to the proposed model of the psychological process that leads to self-stigma[1], it would be expectable to find lower self-esteem only when stereotype agreement and self–concurrence occur, whereas the mere acceptance of these stereotypes would not be enough to be associated with lower self-esteem[1].

To our knowledge, this is the first study that relates internalized stigma to self-compassion in patients diagnosed with schizophrenia. Self-compassion is a way of relating to oneself in a kind and understanding way, seeing mistakes as

part of the human condition and being aware of the situation one is experiencing. It is related to self-esteem but not based on positive judgments or comparisons with others[14]. Our results indicate that patients with internalized stigma present worse self-compassion in all subscales and constructs, except for the common humanity subscale. In a recent study, no association was found between internalized stigma and self-compassion in patients with bipolar disorder, although the study sample was small[43]. There are interventions that improve self-compassion and depressive symptoms in patients with psychotic disorders[44,45]. Compassion Focused Therapy[45] is aimed at strengthening compassion in highly self-critical people with high feelings of shame, so it could be useful in individuals with high internalized stigma. Feelings of shame have been considered as mediators between insight and internalized stigma[46].

This study has several limitations and strengths. The sample of patients was drawn exclusively from patients who attended Psychosocial Rehabilitation Centers. Therefore, the results may not be generalizable to the entire population of patients with schizophrenia. However, it sheds light on the presence of internalized stigma in this subpopulation and its relationships with other variables. To date, there are few studies in this population in Spain. On the other hand, since it is not a prospective study, it is not possible to firmly establish the causal relations that have been hypothesized among the studied variables, but according to their plausibility. Another limitation is that the diagnosis of patients was not established through a structured psychiatric interview. Finally, the size of the group that showed internalized stigma according to the established cut-off point was small. The strengths of the study include the extensive evaluation of a wide range of variables, including psychological aspects commonly neglected in the literature, such as internalized stigma itself, self-esteem and self-compassion, or other important variables such as suicidal behaviour. For its part, many psychometric scales of contrasted validity were used, although we could not use the internalized stigma validated scale in Spain which has been recently published[24], since at the time of the study there was no available validation.

As a conclusion, a considerable proportion of people with schizophrenia have internalized stigma. In our study, the association between internalized stigma and greater hopelessness, depression and suicidal risk suggests the need to systematically evaluate internalized stigma in patients with schizophrenia and to intervene to reduce it.

CONFLICT OF INTEREST

The authors have nothing to disclose regarding financial issues and report no conflicts of interest.

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