

# Social stigma towards people with mental disorders in Spanish adolescents: a cross-sectional study

Estigma social hacia personas con trastornos mentales en adolescentes españoles: un estudio transversal

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## Abstract

*Introduction:* Stigma and mental health literacy play an important role in individuals' trajectories with mental disorders who are often stigmatised and suffer adverse consequences such as social isolation and limited life chances. Stigma towards people with mental disorders can occur in adults but also in adolescents.

*Objective:* We aimed to determine the social stigma towards people with mental disorders in a group of adolescents and to establish any possible relationships with personal variables.

*Methods:* We conducted a cross-sectional study. A total of 144 adolescents were recruited from a secondary school in Spain by the convenience sampling method and completed a demographic questionnaire and the Community Attitudes toward the Mentally Ill scale.

*Results:* Female adolescents had fewer stigmatising attitudes ( $p = 0.003$ ). Females and Higher academic year students scored less in the *Authoritarianism* subscale ( $p < 0.001$  and  $p = 0.001$ , respectively). Differences in scores of the *Benevolence* subscale were found depending on the academic level of the mother ( $p = 0.013$ ).

*Discussion:* Gender, age and academic year are factors related to social stigma in the adolescent population. Mothers' academic level is related.

*Implications to clinical practice:* Our results can contribute to focusing anti-stigma interventions on those adolescents with more stigma levels.

*Keywords:* adolescent, attitudes, mental disorders, social stigma.

## Resumen

*Introducción:* El estigma y la alfabetización en salud mental juegan un papel importante en las trayectorias de los individuos con trastornos mentales, que a menudo son estigmatizados y sufren consecuencias adversas como el aislamiento social y la limitación de sus oportunidades vitales. El estigma hacia las personas con trastornos mentales puede darse en personas adultas, pero también en adolescentes.

*Objetivo:* Nos propusimos determinar el estigma social hacia las personas con trastornos mentales en un grupo de adolescentes y establecer las posibles relaciones con variables personales.

*Métodos:* Realizamos un estudio transversal. Un total de 144 adolescentes fueron reclutados en un centro de enseñanza secundaria de España por el método de muestreo de conveniencia y completaron un cuestionario demográfico y la escala denominada Community Attitudes Toward the Mentally Ill.

*Resultados:* Las adolescentes tenían menos actitudes estigmatizantes ( $p = 0,003$ ). Las adolescentes y los estudiantes de cursos académicos superiores puntuaron menos en la subescala de *Autoritarismo* ( $p < 0,001$  y  $p = 0,001$ , respectivamente). Se encontraron diferencias en las puntuaciones de la subescala de *Benevolencia* en función del nivel académico de la madre ( $p = 0,013$ ).

*Discusión:* El género, la edad y el curso académico son factores relacionados con el estigma social en la población adolescente, así como el nivel académico de las madres.

*Implicaciones para la práctica clínica:* Nuestros resultados pueden contribuir a focalizar las intervenciones antiestigma en aquellos adolescentes con más niveles de estigma.

*Palabras clave:* adolescente, actitudes, trastornos mentales, estigma social.

## Introduction

Stigma and mental health literacy play an important role in individuals with mental disorders trajectories, who are often stigmatised and suffer adverse consequences, such as social isolation and limited life chances<sup>1</sup>. Stigma has been defined as a profoundly discrediting attribute associated with a given condition, directed towards those considered to be of lower social standing<sup>2</sup>. It involves three key components: stereotypes, prejudice and discrimination<sup>3</sup>. Stereotypes are learned, oversimplified and often negative attitudes embedded in society (the cognitive component). Prejudices are endorsed by stereotypes (feelings), meaning negative emotional reactions accompany them. This inevitably leads to discrimination (social distance)<sup>4</sup>.

Historically, individuals experiencing a mental health condition have been subjected to stigmatising behaviours and discrimination from the general population<sup>5</sup> known as social stigma<sup>2</sup>. Social stigma is defined as a set of negative attitudes that a social group maintains with other minority groups because they present some type of differential feature that allows to identify them. Individuals with a mental disorder are different from the rest of their social group<sup>2</sup>, blameworthy or dangerous<sup>6</sup>. These negative stereotypes and prejudices generate more social stigma and social rejection than other social groups<sup>7,8</sup>, far above other medical conditions, political and economic situations<sup>4,9</sup>. However, all individuals do not internalise negative attitudes, the self-stigmatisation leads to demoralisation, feelings of embarrassment and reduction of self-esteem, which leads to isolation and the difficulty to ask for help<sup>4</sup>. Approximately 40% of people with a mental disorder show high self-stigma levels<sup>10</sup>.

Evidence examining gender differences generally supports more significant stigma among boys and that these attitudes develop at younger ages and last as adults<sup>11</sup>. The systematic review by Kaushik, Kostaki and Kyriakopoulos<sup>12</sup> about the stigma of mental disorders in children and adolescents, shows that children as young as 6 appear to grasp simple terms associated with mental disorders and are well familiarised with cultural stereotypes by the age of 10, or even earlier if they are part of a stigmatised group. Stigmatising views in them are believed to develop as the assimilation of parent/carer views, media representation and cognitive development. Salerno's systematic review

points out that many adolescents report moderate to high levels of mental health stigma and low levels of mental health literacy, indicating the importance of mental health education for adolescents to prevent negative attitudes<sup>1</sup>. School environments are a setting to implement educational interventions targeting adolescents<sup>13</sup>. The effectiveness of efforts to reduce stigma in mental health lies in the scientific understanding of the mechanisms that originate and maintain this process of stigmatisation. For this, the possibility and capacity to observe and measure this phenomenon are decisive. There are several studies about stigma towards people with mental health problems worldwide<sup>7,14</sup>. However, there are few studies on the adolescent population, and most of them have been limited to studies that employ qualitative research methods and focus on youth in treatment<sup>11</sup>.

Therefore, this present study's main aim was to determine the social stigma towards people with mental disorders in a group of adolescents and to establish any possible relationships with personal variables.

## Methods

### *Design and participants*

We designed a cross-sectional descriptive study using a convenience sampling method. Potential participants were identified via key informants (Secondary School Principal). A total of 700 secondary school students received the invitation to participate. Of those who responded to the invitation and agreed to participate ( $n=150$ ; 21.4%) 144 completed the questionnaire (figure 1). Adolescents were enrolled in a public secondary school in Alicante (Spain), aged 12 to 18 years and with no difficulties in understanding or reading the Spanish language. The absence of informed consent by students in coming of age or by parents/tutors in the case of a minor was an exclusion criterion. The study sample was representative of the institution school aggregate demographic across age, gender, and socioeconomic status.

### *Measures*

An ad hoc questionnaire was used to gather socio-demographic data on age (years), gender (female/male), academic year (1<sup>st</sup>-4<sup>th</sup> of compulsory secondary education. 1<sup>st</sup>-2<sup>nd</sup> baccalaureate), nationality (Spanish and others), family level of education (no primary studies, primary studies, secondary studies,

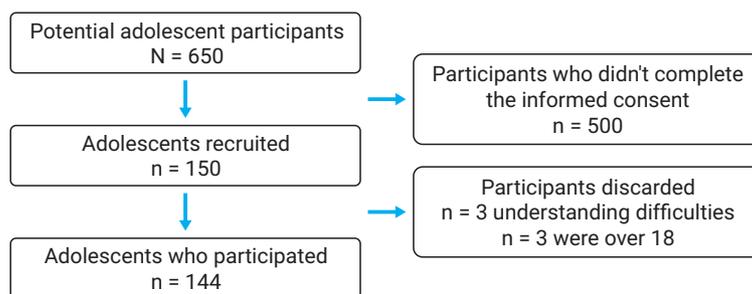


Figure 1. Recruitment flow diagram

non-university studies, university studies) and family occupation (no/yes and which job). Participants were asked if they had previous contact with someone with a mental disorder (no/yes and after they marked if it was family, friend, partner or acquaintance) and having gone to a psychologist, psychiatry or nursing mental health services consultation (no/yes) sometime in their life. The description of the study and the informed consent sheet were included.

To predict and explain community reactions to people with severe mental disorders, we used the validated Spanish version<sup>8</sup> of the Community Attitudes toward the Mentally Ill scale (CAMI) developed by Taylor and Dear<sup>15</sup>. This 4-factor 40-item scale has a 5-point Likert response system (from strongly agree to strongly disagree). Each dimension contains 10 statements referring to opinions about how to treat and take care of individuals with a severe mental disorder. Five of the 10 items are expressed positively, while the other 5 are written negatively. The score of each subscale is the sum of positive items and the inverse of the negative ones<sup>8</sup>. The *Authoritarianism* and the *Social restrictiveness* subscale were negative subscales (more punctuation meant more stigma and the positive subscales were the *Benevolence* and the *Community mental health ideology* (the more punctuation, the less stigma). The dimension *Authoritarianism* (Cronbach's  $\alpha = 0.68$ ) measures whether people with mental disorders are considered an inferior class of individuals to healthy people. The dimension *Benevolence* (Cronbach's  $\alpha = 0.76$ ) evaluates the acceptance of attitudes towards people with mental health issues, although the statements involved could give rise to paternalism. The dimension *Social restrictiveness* (Cronbach's  $\alpha = 0.80$ ) measures the danger the people with mental disorders pose to society. Lastly, the dimension *Community mental health ideology* (Cronbach's  $\alpha = 0.88$ ) estimates attitudes regarding

people's reinsertion with mental disorders back into the community and broader society.

#### Data collection

Participants and their relatives were informed and requested to give their consent by their teachers. A pilot test was carried out with ten students on April 2019. After the pilot test, a maximum completion time of 30 minutes was decided. The above self-reported questionnaire was administered by paper-and-pencil during school hours on May 10<sup>th</sup> 2019. Then, the researcher gave instructions for completing it. The questionnaire was fully comprehended. The participants' assessment was positive both in terms of their comprehension and speed of completion.

#### Ethical consideration

All participants signed their informed consent to the study conducted by the Helsinki Declaration and European Union Good Clinical Practice and was approved by the San Juan of Alicante University Hospital ethics research committee (committee code: 19/309). The confidentiality of the data was guaranteed and participants were assured that they could withdraw from the study at any time without prejudice.

#### Data analysis

The punctuations of the positive and negative items of the subscales *Benevolence* and *Community mental health ideology* were reverted before entering the scores into the database, so we were able to make the higher the score the higher the stigma in all the subscales.

A descriptive analysis of the response frequency was performed for each of the categorical items, and

<b>Variables</b>	<b>N (%)</b>
<b>Age (mean ± standard deviation)</b>	14.93 ± 1.67
<b>Gender</b>	
Female	92 (64.3)
Male	51 (35.7)
<b>Nationality</b>	
Spanish	128 (91.4)
Non-Spanish	12 (8.6)
<b>Academic course</b>	
1st obligatory secondary education	14 (9.7)
2nd obligatory secondary education	48 (33.3)
3rd obligatory secondary education	16 (11.1)
4th obligatory secondary education	24 (16.7)
1st Baccalaureate	26 (18.1)
2nd Baccalaureate	16 (11.1)
<b>Academic level of the mother</b>	
No primary studies	4 (2.8)
Primary studies	12 (8.5)
Secondary studies	43 (30.3)
Non-university studies	45 (31.7)
University studies	38 (26.8)
<b>Academic level of the father</b>	
No primary studies	3 (2.1)
Primary studies	20 (14.2)
Secondary studies	43 (30.5)
Non-university studies	43 (30.5)
University studies	32 (22.7)
<b>Mother's employment</b>	
Unemployed	31 (22.6)
Employed	106 (77.4)
<b>Father's employment</b>	
Unemployed	11 (8.1)
Employed	125 (91.9)
<b>Contact</b>	
No	20 (14.2)
Yes	121 (85.8)
<b>Mental health services consultation</b>	
No	96 (68.6)
Yes	44 (31.4)

Table 1. Sociodemographic characteristics of the sample (N=144)

the mean and standard deviation ( $\bar{x} \pm SD$ ) were calculated for the continuous variables. For the variables “employment and contact” we only used the answers “yes/no” for the statistical analysis. Pearson’s linear correlation coefficient ( $r$ ) was calculated to assess the association between participants’ age and global scale scores and subscales. For independent samples, Student’s  $t$ -test was used to contrast the means according to sex for the correct minimum correct response pattern. The Social Sciences Statistical Package (IBM SPSS statistics 26.0) was utilised for storing data, tabulating and generating descriptive statistics. Missing data was less than 5%.

We did an inferential statistical analysis through Student’s  $t$ -test or those dichotomous independent qualitative variables and analysis of variance (ANOVA) for polytomous independent variables. Our dependent assigned variables were the different punctuations in scales and the total punctuation of stigma. The comparisons between groups for those statistically significant results in the ANOVA test were made through posthoc analysis using the statistics Bonferroni and Games-Howell as required. Correlation statistical analyses between different quantitative variables were made using Pearson’s  $r$  correlation coefficient. Lastly, a multivariate analysis was

performed using multiple linear regression to observe how each variable influenced each subscale and the total punctuation of stigma.

## Results

A total of 150 people participated in this study, of which 6 (4%) were excluded because they were over 18 ( $n=3$ ) or had understanding difficulties ( $n=3$ ) (figure 1). As shown in Table 1, the participants’ mean age was  $14.93 \pm 1.67$ . Up to 64.3% ( $n=92$ ) were female; 91% were Spaniards and 33% ( $n=48$ ) were enrolled on the second year of Compulsory Secondary Education. Up to 85.8% had previous contact with someone with a mental disorder, and 31.4% had been to a psychologist, psychiatry or nursing mental health services consultation sometime in their life.

Table 2 indicates the mean scores according to CAMI scale and subscale. In terms of students’ age, a moderate negative correlation was found with *Authoritarianism* subscale ( $r = -0.380$ ;  $p < 0.001$ ). As shown in Table 3, statistically significant differences were found by gender. Males scored higher for CAMI ( $t = -3.027$ ;  $p = 0.003$ ), *Authoritarianism* ( $t = -3.266$ ;  $p < 0.001$ ) and *Social restrictiveness* ( $t = -3.012$ ;  $p = 0.003$ ) than females.

Variable	M	SD	CI 95%
<b>Authoritarianism</b>	24.41	4.61	23.64 – 25.18
<b>Benevolence</b>	17.89	3.88	17.24 – 18.53
<b>Social restrictiveness</b>	18.25	3.88	17.60 – 18.90
<b>Mental health ideology in the community</b>	20.11	4.63	19.33 – 20.88
<b>CAMI</b>	80.65	13.71	78.36 – 82.94

Note: CAMI: Community Attitudes toward the Mentally Ill; M: mean; SD: Standard deviation; CI: confidence interval

Table 2. Mean and standard deviations according to CAMI scale and subscale

	CAMI	Authoritarianism	Benevolence	Restriction	Community
<b>Gender</b>					
<b>Female</b>	$78.73 \pm 12.81$	$23.62 \pm 4.24$	$17.65 \pm 3.83$	$17.67 \pm 3.64$	$19.78 \pm 4.53$
<b>Male</b>	$85.84 \pm 14.56$	$26.18 \pm 4.89$	$18.84 \pm 4.01$	$19.67 \pm 4.05$	$21.16 \pm 4.95$
<b>Contrast*</b>	$-3.027$ ( $p = 0.003$ )	$-3.266$ ( $p = 0.000$ )	$-1.690$ ( $p = 0.093$ )	$-3.012$ ( $p = 0.003$ )	$-1.681$ ( $p = 0.095$ )
<b>Academic course**</b>	$1.777$ ( $p = 0.122$ )	$9.529$ ( $p = 0.001$ )	$1.372$ ( $p = 0.238$ )	$0.284$ ( $p = 0.921$ )	$0.382$ ( $p = 0.921$ )
<b>Academic level of the mother**</b>	$1.493$ ( $p = 0.208$ )	$0.566$ ( $p = 0.688$ )	$3.279$ ( $p = 0.013$ )	$0.933$ ( $p = 0.447$ )	$1.363$ ( $p = 0.250$ )
<b>Academic level of the father**</b>	$0.696$ ( $p = 0.596$ )	$1.116$ ( $p = 0.352$ )	$1.154$ ( $p = 0.334$ )	$0.229$ ( $p = 0.922$ )	$1.039$ ( $p = 0.390$ )

\*Student’s  $t$ -test:  $t$  ( $p$ ); \*\*ANOVA:  $F$  ( $p$ )

Table 3. Differences in means for CAMI scale and subscales ( $\bar{x} \pm SD$ )

Besides, statistically significant differences were found in the *Authoritarianism* subscale score based on the academic year ( $F=9.529$ ;  $p=0.001$ ) (Table 3). In a posthoc analysis, those participants who were in their first year of secondary school scored 4.637 more on average in the *Authoritarianism* subscale than those in their first year of baccalaureate (95% CI 0.62 - 8.65;  $p=0.011$ ) and those who were in the second year of secondary school scored 5.736 more on average in the subscale of *Authoritarianism* than those in the first year of baccalaureate (95% CI 2.79 - 8.68;  $p<0.001$ ). Nationality did not show statistically significant differences. Significant differences were identified in the *Benevolence* subscale score according to the academic level of the mother. Bonferroni test showed that participants with uneducated mothers scored 5.434

more on average on the *Benevolence* subscale than participants whose mothers had a university education, although the result is not statistically significant ( $p=0.083$ ). According to the employment of parents, contact and consultation variables, we did not find differences between groups.

The results of the multiple linear regression model suggested that to be male gender increased the punctuation of global stigma (beta 6.911;  $p<0.01$ ), *Authoritarianism* (beta 2.280;  $p<0.01$ ) and *Restriction* (beta 1.754;  $p<0.05$ ) subscale. Also, we found that a higher education of the mother was associated with better attitudes in the *Benevolence* and *Community* subscales (Table 4).

	<b>CAMI</b>	<b>Authoritarianism</b>	<b>Benevolence</b>	<b>Restriction</b>	<b>Community</b>
<b>Age</b>	1.056 (-2.531 – 4.643)	-.373 (-1.543 – 0.797)	-0.059 (-1.1 – 0.981)	0.449 (-.601 – 1.5)	1.039 (-0.165 – 2.242)
<b>Gender</b>	6.911 (2.032 – 11.789)**	2.280 (.688 – 3.872)**	1.261 (-.155 – 2.676)	1.754 (0.326 – 3.182)*	1.616 (-0.021 – 3.253)
<b>Nationality</b>	-3.685 (-12.392 – 5.022)	0.157 (-2.684 – 2.998)	-1.783 (-4.309 – 0.743)	-0.564 (-3.113 – 1.985)	-1.496 (-4.417 – 1.426)
<b>Contact</b>	1.946 (-4.609 – 8.501)	1.286 (-.853 – 3.424)	0.495 (-1.407 – 2.397)	0.171 (-1.748 – 2.090)	-0.006 (-2.205 – 2.194)
<b>Consultation in Mental Health Services</b>	.304 (-4.867 – 5.474)	0.150 (-1.537 – 1.837)	0.258 (-1.242 – 1.758)	-0.193 (-1.707 – 1.321)	0.089 (-1.647 – 1.824)
<b>Academic course</b>	-2.687 (-6.467 – 1.093)	-0.869 (-2.103 – 0.364)	-0.307 (-1.404 – 0.790)	-0.460 (-1.567 – .647)	-1.050 (-2.319 – 0.219)
<b>Academic level of the mother</b>	-2.393 (-4.969 – 0.183)	0.093 (-0.748 – 0.933)	-0.983 (-1.731 – -0.236)*	-0.619 (-1.373 – .135)	-0.883 (-1.748 – -0.019)*
<b>Academic level of the father</b>	-.825 (-3.292 – 1.642)	-0.443 (-1.248 – 0.362)	-0.296 (-1.012 – 0.419)	-0.069 (-0.791 – 0.653)	-0.017 (-0.845 – 0.811)
<b>Mother's employment</b>	-.503 (-6.077 – 5.071)	-0.914 (-2.733 – 0.905)	-0.083 (-1.7 – 1.535)	0.350 (-1.282 – 1.982)	0.144 (-1.727 – 2.014)
<b>Father's employment</b>	1.125 (-7.497 – 9.747)	-0.4 (-3.213 – 2.413)	0.684 (-1.817 – 3.185)	-0.245 (-2.769 – 2.279)	1.087 (-1.807 – 3.980)

\*Result is significant at  $p < 0.05$ ; \*\*Result is significant at  $p < 0.01$

Table 4. Linear regression model (beta (IC95%))

## Discussion

The effectiveness of efforts to reduce stigma in mental health lies in the scientific understanding of the mechanisms that originate and maintain this process of stigmatisation. Thus, the possibility and capacity to observe and measure this phenomenon are decisive.

The present study determined the social stigma towards people with mental disorders in adolescents and established any possible relationships with personal variables. Our findings support those from a study in the Spanish adolescent population at baseline<sup>16</sup>, with the results for all subscales being slightly less stigmatising in our study. In line with the study by Vila-Badia et al.<sup>16</sup>, participants evaluated that people with a mental disorder are considered a lower social class of individuals than healthy people (Authoritarianism). Social Stigma research in the United States, Latin America, Greece, India, or Japan<sup>17</sup> has previously identified a social distance and discriminatory beliefs related to mental health problems associated with violence, unpredictability and disability.

Our results have identified age, gender and academic year as factors related to social stigma in the adolescent population. In terms of age, the oldest showed the most positive scores<sup>18,19</sup>. In our study, boys reported more stigmatising attitudes than girls, as in previous Spanish literature<sup>16,20</sup> and non-Spanish<sup>12,21,22</sup>. Related to the academic year, the most positive scores are found in a higher grade in line with Sari and Yuliastuni<sup>19</sup> and Tesfamariam et al.<sup>23</sup>

Differences in terms of nationality were not found, probably related to the fact that most participants were Spanish and good comparability between groups does not exist. Previous studies found statistically significant differences in Spanish adults<sup>24</sup> or young people internationally<sup>22,25</sup>.

No significant differences were identified between groups according to CAMI and the parents' academic level. Even though the mother's academic level in the univariate analysis influenced the *Benevolence* subscale and in the multivariate analysis influenced both the *Benevolence* and the *Community* subscale. A higher score of stigma was observed in those participants whose mothers did not have studies or had primary studies<sup>26</sup> compared to the respective higher academic levels, but the differences were not statistically significant<sup>24</sup>. The father's academic level influenced

the attitude towards people with a mental disorder in a statistically significant way in another study<sup>23</sup>. There were no differences in attitudes related to the academic level of the father. According to parents' employment, significant differences were not found<sup>19</sup>. However, Chang et al.<sup>27</sup> and AlAzzam and Abuhammad<sup>26</sup> reported that lower monthly incomes were associated with worse attitudes in a statistically significant way.

Knowing someone who suffered a mental disorder was not associated with different scores in our study, in contrast with previous evidence<sup>16,19,23,24,26</sup>. In the study by Lanfredi et al.<sup>13</sup> with a secondary school sample, where the contact with people who suffered a mental disorder improved attitude. Additionally, in a nursing students' sample, a voluntary experience with mental health patients decreased negative attitudes towards people with mental disorders<sup>14,28</sup>. Most of the participants marked that they knew an acquaintance, so this could have influenced our results to be different to the literature, since close personal contact (family or friend) is associated with less stigma<sup>4</sup>.

Our results have identified attending to previous mental health services consultations as a factor related to social stigma in the adolescent population, whilst not being statistically significant. The lower scores were found in those who had attended it<sup>20</sup>.

Given the data, it becomes evident that there is a need to design and implement awareness and education programmes<sup>1</sup> about mental health. In this study, we evaluated the social stigma towards people with mental disorders in general. In this line, we can include the stigmatisation towards adolescents with mental disorders too. Stigma has been identified as an especially important barrier to help-seeking more in young people than among adults<sup>17,29</sup>. In addition, positive peer relationships are important for promoting self-esteem, adjustment and resilience<sup>12</sup>. So that, the education programs could have the benefit to reduce social stigma towards adults with mental disorders and towards adolescents with mental disorders too, including the self-stigmatization that could contribute to avoid the help-seeking process.

## Limitations

One of the limitations is that we applied self-reported questionnaires. In addition, it is possible that students answered what they felt we wanted to get<sup>30,31</sup>. Furthermore, our results are limited to a small area of Spain, so

the results may not be extrapolable for cultural or economic reasons. Finally, this study did not use a randomized sample. Further studies of representative and randomized samples of students are needed to verify these results.

## Conclusions

Stigma towards people with mental disorders varies in adolescents depending on certain gender, age and academic level. Also, mothers' academic level is related. This study further contributes to the evidence on the adolescents' stigma towards people with mental disorders.

## Relevance to clinical practice

It would be interesting to continue studying this field because knowing which adolescents have the most stigma depending on personal variables, can be an advantage in focusing on anti-stigma interventions. Mental health nurses can play an important role as social agents in these interventions against stigma at different levels. On the one hand, they can educate on how are mental health problems, through activities of mental health promotion and prevention. On the other hand, psychoeducation is crucial on people who suffer a mental disorder and in the rehabilitation process.

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The material used was based on: a computer, the program Microsoft Excel (for the development of the database), the program SPSS (version 25), printed copies of the questionnaires and other project documents. The research team provided the material. We did not receive any public or private funding.

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