

# Evaluation of a training for primary care professionals aiming at reducing stigma of mental disorders

Avaliação de uma capacitação de profissionais da atenção primária objetivando a redução de estigma aos transtornos mentais

*Evaluación de una formación para profesionales de atención primaria destinada a reducir el estigma con los trastornos mentales*

Marina Pinho Carneiro<sup>1</sup> , Livia Mota Veras<sup>1</sup> , Carla Salles Gazeta Vieira Fernandes<sup>1</sup> , Maria Clara de Souza Vieira<sup>1</sup> ,  
Giovana Barroso de Melo Rios<sup>1</sup> , Lourrany Borges Costa<sup>1</sup> 

<sup>1</sup>Universidade de Fortaleza – Fortaleza (CE), Brasil.

## Abstract

**Introduction:** Stigma against people with mental disorders is present in society as a whole, including among health professionals, harming both social relationships of these individuals and the health care provided to them. **Objective:** To analyze how Health Education alters the stigma of professionals in Primary Health Care (PHC) on people with mental disorders. **Methods:** Experimental study with pre- and post-intervention evaluation approach, conducted in four PHC Units in Regional Health VI in Fortaleza (Ceará), from June to December 2019, with professionals from the Family Health Strategy. Educational training based on the World Health Organization's Mental Health Gap Action Program manual was carried out by two researchers. The degree of stigma was assessed using the Attribution Questionnaire in Portuguese (AQ-9). **Results:** 64 health professionals participated, mostly women (92%, n=58) with completed higher education (56%, n=34), predominantly Community Health Agents (63%, n=39), with mean age of 43 years. The sums of responses of questionnaire items for each participant were compared before and after the intervention using the Wilcoxon test, and the value of  $p < 0.001$  was found. **Conclusions:** The intervention was able to reduce the stigma of health professionals in relation to people with mental disorders and may serve as basis for the creation of a municipal model for permanent professional education.

**Keywords:** Social stigma; Mental health; Primary health care.

### Corresponding author:

Lourrany Borges Costa  
E-mail: lourranybep@hotmail.com

### Funding:

No external funding.

### Ethical approval:

3.325.258

### Provenance:

Not commissioned.

### Peer review:

external.

Received: 10/26/2020.

Approved: 08/07/2021.

**How to cite:** Carneiro MP, Veras LM, Fernandes CSGV, Vieira MCS, Rios GBM, Costa LB. Evaluation of a training for primary care professionals aiming at reducing stigma of mental disorders. Rev Bras Med Fam Comunidade. 2022;17(44):2766. [https://doi.org/10.5712/rbmfc17\(44\)2766](https://doi.org/10.5712/rbmfc17(44)2766)



## Resumo

**Introdução:** O estigma dos portadores de transtornos mentais está presente na sociedade como um todo, incluindo os profissionais da saúde, prejudicando tanto as relações sociais desses indivíduos quanto a assistência à saúde que lhes é fornecida. **Objetivo:** Analisar como a educação em saúde altera o estigma dos profissionais da atenção primária em saúde sobre os portadores de transtornos mentais. **Métodos:** Estudo experimental com abordagem avaliativa pré e pós-intervenção, em quatro unidades de atenção primária em saúde na Regional de Saúde VI de Fortaleza (Ceará), de junho a dezembro de 2019, com profissionais da Estratégia Saúde da Família. Realizaram-se capacitações educativas baseadas no manual *Mental Health Gap Action Program*, da Organização Mundial da Saúde, por dois pesquisadores. O grau de estigma foi avaliado com o Questionário de Atribuição versão em português (*Attribution Questionnaire — AQ-9*). **Resultados:** Participaram 64 profissionais da saúde, a maioria mulheres (92%, n=58), com ensino médio completo (56%, n=34), predominando agentes comunitários de saúde (63%, n=39), com idade média de 43 anos. Comparou-se a soma das respostas de cada item do questionário para cada participante, antes e depois da intervenção, por meio do teste de Wilcoxon, e foi encontrado o valor  $p < 0,001$ . **Conclusões:** A intervenção educativa foi capaz de diminuir o estigma de profissionais da saúde em relação aos portadores de transtornos mentais, podendo servir para a criação de um modelo municipal de educação profissional permanente.

**Palavras-chave:** Estigma social; Saúde mental; Atenção primária à saúde.

## Resumen

**Introducción:** El estigma contra las personas con trastornos mentales está presente en el conjunto de la sociedad, incluidos los profesionales de la salud, perjudicando tanto las relaciones sociales de estas personas como la atención médica que se les brinda. **Objetivo:** Analizar cómo la Educación para la Salud altera el estigma de los profesionales de la Atención Primaria de Salud (APS) sobre las personas con trastornos mentales. **Métodos:** Estudio experimental con enfoque de evaluación pre y post intervención, en cuatro Unidades de APS de la Regional Salud VI del Fortaleza (Ceará), de junio a diciembre de 2019, con profesionales de la Estrategia de Salud de la familia. Dos investigadores llevaron a cabo una formación educativa basada en el manual del *Mental Health Gap Action Program* de la Organización Mundial de la Salud. El grado de estigma se evaluó mediante el Cuestionario de atribución en portugués (*Attribution Questionnaire- AQ-9*). **Resultados:** participaron 64 profesionales de la salud, en su mayoría mujeres (92%, n=58), que habían completado la escuela secundaria (56%, n=34), predominantemente Agentes de Salud Comunitarios (63%, n=39), con una edad media de 43 años. Se comparó la suma de las respuestas de cada ítem del cuestionario para cada participante, antes y después de la intervención, mediante la prueba de Wilcoxon, y se encontró un valor de  $p < 0,001$ . **Conclusiones:** La intervención educativa logró reducir el estigma de los profesionales de la salud con relación a las personas con trastornos mentales, y puede servir para crear un modelo municipal de educación profesional permanente.

**Palabras clave:** Estigma social; Salud mental; Atención primaria de salud.

## INTRODUCTION

The history of people with mental disorders was marked, for a long time, by social exclusion, labeling, and misunderstanding. They used to be considered crazy and dangerous, denominations that created a historical stigma for these patients.<sup>1</sup> The stigma about people with mental disorders is present in society as a whole and among health professionals, harming these individuals' social relationships and the health care provided to them, which is often less humanized and efficient.<sup>2</sup>

The definition of stigma is currently approached in several aspects, previously defined as a situation in which an individual who has a condition, sign or symptom that brings a depreciation of their state is judged as incapacitated and becomes target of less social acceptance.<sup>2</sup>

Mascayano et al. divide stigma into four types: public, personal, institutional, and familial. The first refers to the general population treating patients with mood disorders with prejudice and discrimination as classic manifestations. The second would be how the patient sees themselves within the society, often self-applying the stigma. At the institutional level, for example at the work environment, stigma can be extremely harmful, especially in activities that require interaction with groups. Familial stigma would have an impact on breaking the patient's expectations, as relatives should represent the greatest support for the treatment, establishing a harmonious and welcoming environment. The category "multiple

stigmas” is also used, to designate the patient who describes facing more than one of the four types described.<sup>3</sup>

The World Health Organization (WHO) and the World Psychiatry Association recognize that suffering, poverty and disability are related to the stigma placed on these patients.<sup>4</sup> In addition to the consequences directly related to mental health, higher rates of morbidity and mortality from diseases are perceived, as well as physical injuries due to the possible negligence by health professionals as a result of stigmatization.<sup>5</sup> Furthermore, the perception of some individuals with mental disorders of how people view their illness is proven to be the biggest impediment to their recovery.<sup>6</sup>

A qualitative study carried out by Nunes et al.<sup>7</sup> in Fortaleza (Ceará, Brazil) showed disagreements with the principles of the territorial psychosocial care model during the implementation of the Psychiatric Reform in the city. With regard to primary health care (PHC), its adoption, although not consolidated, was articulated with the support of matrix authorities. According to the authors, the lack of professionals in Psychosocial Care Centers (CAPS) tensions the demand in PHC, impairing the evaluation of users in their subjective dimension and limiting the care delivered to people with mental disorders to medical prescription, not considering possibilities for broader interventions.

The authors also claim that, to date, even CAPS professionals reproduce welfarism practices, induce segregation and stigma, which opposes the proposals for building autonomy, solidary bonds and rescuing the citizenship of people with mental disorders.<sup>7</sup>

PHC units are usually the environments where people with mental disorders receive their first care due to a greater stigma related to care in specialized centers. Therefore, stigmatization creates barriers to their follow-up.<sup>8</sup>

Some factors correlate with a higher rate of stigmatization by health professionals: “more years of practice”, “being a woman”, “working in a hospital”, “being employed in the public sector” and “not having a relative/friend with mental health problems”.<sup>9</sup>

Stigma should be approached broadly and holistically, as it is multifaceted and requires comprehensive strategies for its reduction, with consequent optimization of care of these people.<sup>10</sup>

The concept of health education stands out in this matter, as it corresponds to the practices of production and systematization of knowledge related to training, development and performance of health professionals. One of the initiatives of permanent education in health (PEH) worth emphasizing is learning actions at work based on the possibility of transforming practices, taking the health needs of communities as a reference.<sup>11</sup> Thus, PEH can help in the process of reducing the stigma on mental disorders among health workers.

Therefore, associating the scarcity of scientific papers on the subject in Fortaleza and the unevenness of public policies able to train mental health agents, and based on positive results reported in studies conducted in other cities and countries on intervention through health education, this study aimed to analyze how education interferes with the stigma of PHC professionals in relation to patients with mental disorders in the city of Fortaleza.<sup>8,12,13</sup>

## METHODS

The intervention initiative came from the researchers who worked in the PHC in Fortaleza, as they perceived in their experience the need to address the issue of stigma associated with mental disorders with the family health teams. Thus, the intervention was planned in the form of a research

project presented to the managers and workers of units and to the Municipal Health Department of Fortaleza.

An experimental study was carried out in four PHC Units with pre- and post-intervention evaluative approach, from June to December 2019, considering 64 professionals from the Family Health Strategy (FHS) (general practitioners, nurses, nursing technicians, dentists, and community health agents) and local managers, all aged over 18 years, of both sexes, working in the PHC units of Region VI in the city of Fortaleza. The participants and PHC units were selected in a non-probabilistic, convenience way. Participants were recruited at the units by invitation to all professionals who met the inclusion criteria and wanted to participate, after explaining the objectives and methodological procedures, and after they signed the Free Informed Consent Term. All selected individuals participated in the intervention. Workers with no employment relationship with the Municipal Health Department of Fortaleza were excluded.

The intervention was carried out in one visit to each PHC unit for an educational training lasting around 20 minutes; an expository class took place with the presentation of slideshows and two short videos showing mental health consultations simulated by the researchers. Health professionals were welcome to expose their perceptions about the videos and to share personal experiences and queries on the subject. Two disorders were addressed in detail in the training: major depressive disorder and bipolar disorder. The teaching material used was based on the manual of interventions in primary care of the WHO Mental Health Gap Action Program (MI-mhGAP)<sup>14</sup>, presented by two researchers.

Data collection was based on two self-completion questionnaires:

1. Sociodemographic questionnaire prepared by the researchers, containing the variables: gender, age, marital status, educational level, and profession;
2. Attribution Questionnaire (Portuguese version of the Attribution Questionnaire — AQ-9),<sup>15</sup> a shortened version of the Attribution Questionnaire — AQ-27.<sup>16</sup>

This instrument aims to assess stigma globally. The questionnaire briefly describes the story of a young person with schizophrenia and assesses the stigma about mental disorders with nine items that explore the feelings and behaviors of respondents, whose answers are marked using a Likert-type scale, from 1 to 9 (from 1: “none or not at all”, up to 9: “very or completely”). The items are grouped into nine dimensions: responsibility, pity, irritation, perception of danger, fear, help, coercion, segregation, and avoidance. The items are added together and the result is a score representative of each of the stereotypes, in which the stigma is directly proportional to the score. Thus, a result greater than 1 implies the existence of stigma. It should be noted that, originally, in the AQ-9, question 7 uses the inverted Likert scale.

The R Project for Statistical Computing software was used for the descriptive analysis of independent categorical variables (participants' characteristics). The sum of scores assigned to each respondent was used for each question of interest in the AQ-9 and in the questionnaire as a whole. The ideal situation (without stigma) of the sum of answers would be 9, and for each of the nine questions the respondent assigns a score of 1 on the scale, considering that any choice above 1 characterizes stigma to a certain extent. The sum of global values was analyzed before and after the intervention using the Wilcoxon test for paired data in order to verify any differences after educational qualification in the sample. A significance level of 5% was adopted. Respondents who failed to respond to any item were removed from the analysis, as this would entail bias in the sum value and could impact the test result. Finally, with density graphs for the sums of each question in hand, the Wilcoxon test for paired data was applied to each question and the confidence interval for the difference in the median location parameter was calculated.

The study was approved by the Research Ethics Committee of Universidade de Fortaleza (Opinion No. 3,325,258). The authors decided not to share data obtained in the study and codes used in the analyses.

## RESULTS

In total 143 professionals were invited to participate in the research, of which 42 worked at the PHC unit Alarico Leite; 30, at PHC unit Maria de Lourdes R. Jereissati; 58, at PHC unit Hélio Góes Ferreira and 13, at PHC unit Maria Grasiela Teixeira Barroso. Of all, 64 (45%) professionals participated. The sample characteristics are described in Table 1.

**Table 1.** Descriptive analysis of sociodemographic variables of participants enrolled in the professional training intervention. Fortaleza (CE), 2019.

Characteristics	Absolute frequency (n)	Relative frequency (%)
Biological sex (n=63)		
Male	5	8
Female	58	92
Age (n=60)		
30-39 years	17	28
40-49 years	25	42
50-59 years	16	27
60+ years	2	3
Marital status (n=63)		
Single	17	27
Married	35	56
Divorced	7	11
Stable union	3	5
Separate	1	2
Educational level (n=61)		
Complete elementary school	1	2
Complete high school	34	56
Incomplete high school	1	2
Complete higher education	23	36
Incomplete higher education	2	3
Profession (n=62)		
Community agent	39	63
Oral health assistant	2	3
Dentist	5	8
Nurse	4	6
Manager	2	3
Nursing technician	10	16

Regarding the distribution of participants in health units visited, greater adherence was observed in PHCU Alarico Leite (39%, n=25), followed by PHCU Maria de Lourdes R. Jereissati (25%, n=16); PHCU Hélio Góes Ferreira (20%, n=13); and PHCU Maria Grasiela Teixeira Barroso (16%, n=10).

Most participants were females (92%, n=58). The mean age of the interviewees was 43 years old, ranging from 31 to 61 years old. There was a predominance of people with high school education (53%, n=34), followed by people with higher education (34%, n=23). Only one interviewee had completed elementary school, one had incomplete high school, two had incomplete higher education, and three did not report their education. Some were postgraduates, mainly in public health, but other areas were also mentioned, including obstetrics, occupational health, health auditing, management, periodontics, and orthodontics.

As for marital status, most interviewees reported being married (56%, n=35), followed by single (27%, n=17), divorced (11%, n=7), in a stable union (5%, n=3), and separated (2%, n=1).

As for their profession, most were community health agents (63%, n=39), followed by nursing technicians (16%, n=10), dentists (8%, n=5), nurses (6%, n=4), oral health assistants (3%, n=2), and managers (3%, n=2). No physician took part during the interventions, either due to lack of interest or to incompatibility of their schedules with the days of interventions, so they were not quantified in the sample. Of 12 physicians invited, four were family and community physicians, while others were general practitioners.

All interventions took place as planned by researchers. When the responses to the AQ-9 questionnaire were analyzed globally, all post-intervention cases showed a reduction in the level of stigma related to mental health. This was confirmed by scores between 5 and 9, 86% in the pre-intervention test, and 83% in the post-intervention test. In the others, reduction of stigma was present as the percentage of scores increased from 1 to 4. According to question 7, one can perceive the antagonistic behavior in relation to the answers of others, which is positive and contributes to reducing stigma, as it involves the possibility of offering help to patients (Figure 1).

Among all professionals, greater stigma was observed in the pre-test questions regarding imposition of treatment (question 9), association of danger to mental patients (question 2), and feeling of pity for the patient (question 1). However, a marked reduction was noticeable, as confirmed by the result of the post-test, with a significant increase in lower values (from 1 to 4) when compared to the pre-test. This reduction occurred in all questions, more markedly in questions 1, 2, 3, 5 and 9, and subtly in items 4, 6, 7 and 8, as seen in Figure 1.

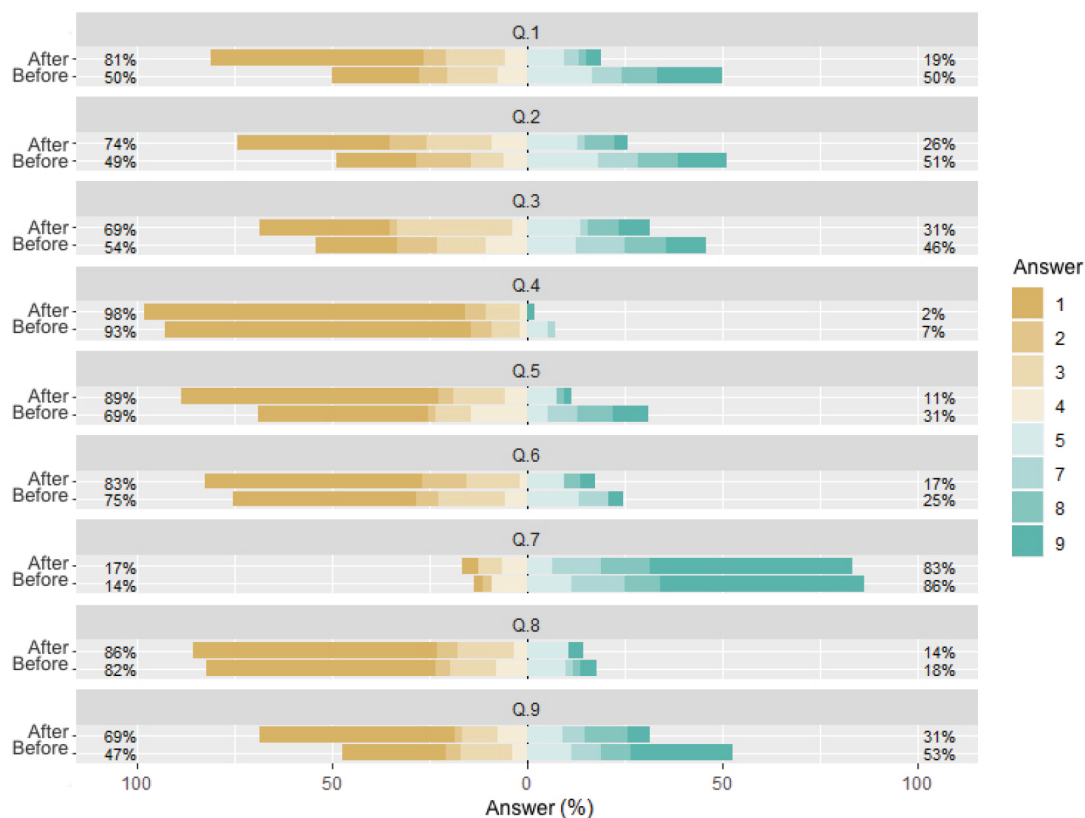
The post-test results express the effectiveness of the intervention, as we could see a decrease in stigma for all questions in the questionnaire used. We reinforce the contrary behavior of question number 7 ("How likely would I be to help José?") because it is an offer of help to the patient, not a preconceived judgment like the other declarations.

The Wilcoxon test for paired data was applied to the sum of the AQ-9 responses before and after the intervention, resulting  $p=0.0006409$ , that is, a significant difference with a significance level of 1%. Figure 2 shows the behavior of the sums of respondents before and after the intervention.

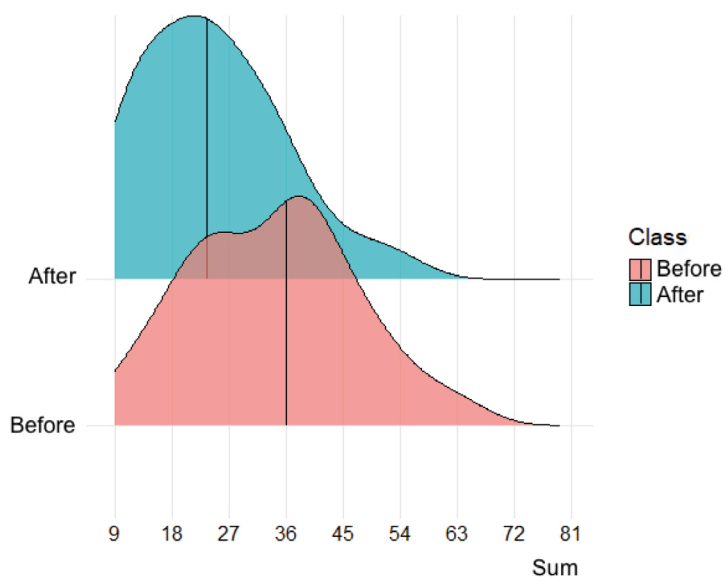
A shift in density on the X axis (sum) can be noted, that is, after the intervention, as there is a decrease in the sums closer to 20 compared to the previous values, which were closer to 40.

Another way of analyzing the matter is looking item by item, that is, if there was a change in answers before and after. Figure 3 presents density graphs as well as the p-values of the Wilcoxon tests for each item before and after response.

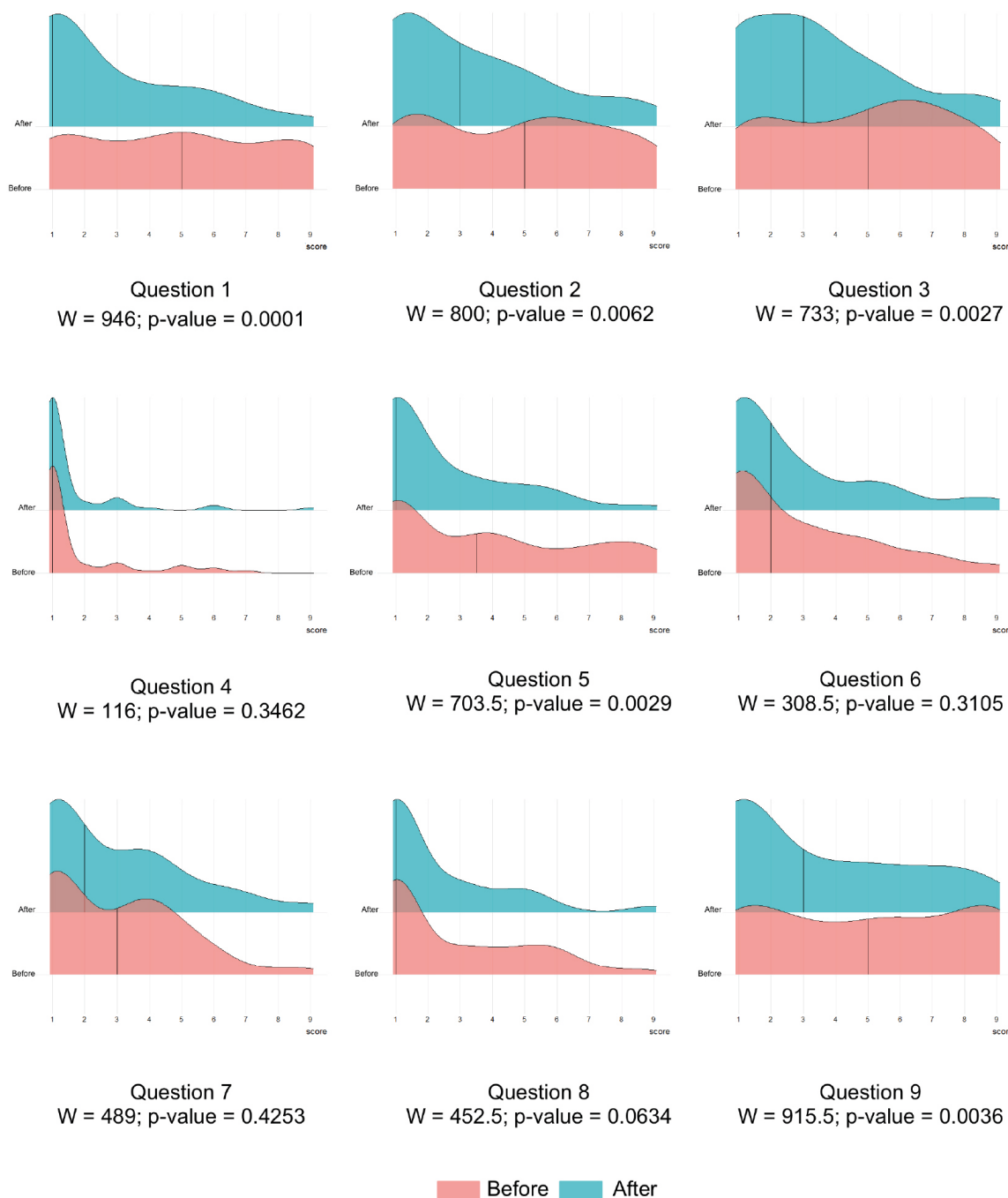
In the analysis of item-by-item tests carried out, significant results of 5% in relation to the median were noticed in some. However, in questions 4, 6, 7 and 8 did not present a significant difference from the median, but had values close to 1 from the start.



Q. 1 = I would feel sorry for José; Q. 2 = How dangerous do you think José is? Q. 3 = How scared for Jose would you be? Q. 4 = I think the fault of José’s present condition is his; Q. 5 = I think it would be better for José’s community if he were admitted to a psychiatric hospital; Q. 6 = How angry would you feel at José? Q. 7 = How likely would I be to help José? Q. 8 = I would try to stay away from José; Q. 9 = Do you think José should be forced to undergo medical treatment, even against his will?  
**Figure 1.** Distribution of relative frequencies of responses by AQ-9 question before and after the professional training intervention. Fortaleza (CE), 2019.



**Figure 2.** Graphs of the density of sum values of the AQ-9 results of all participants before and after the educational intervention. Fortaleza (CE), 2019.

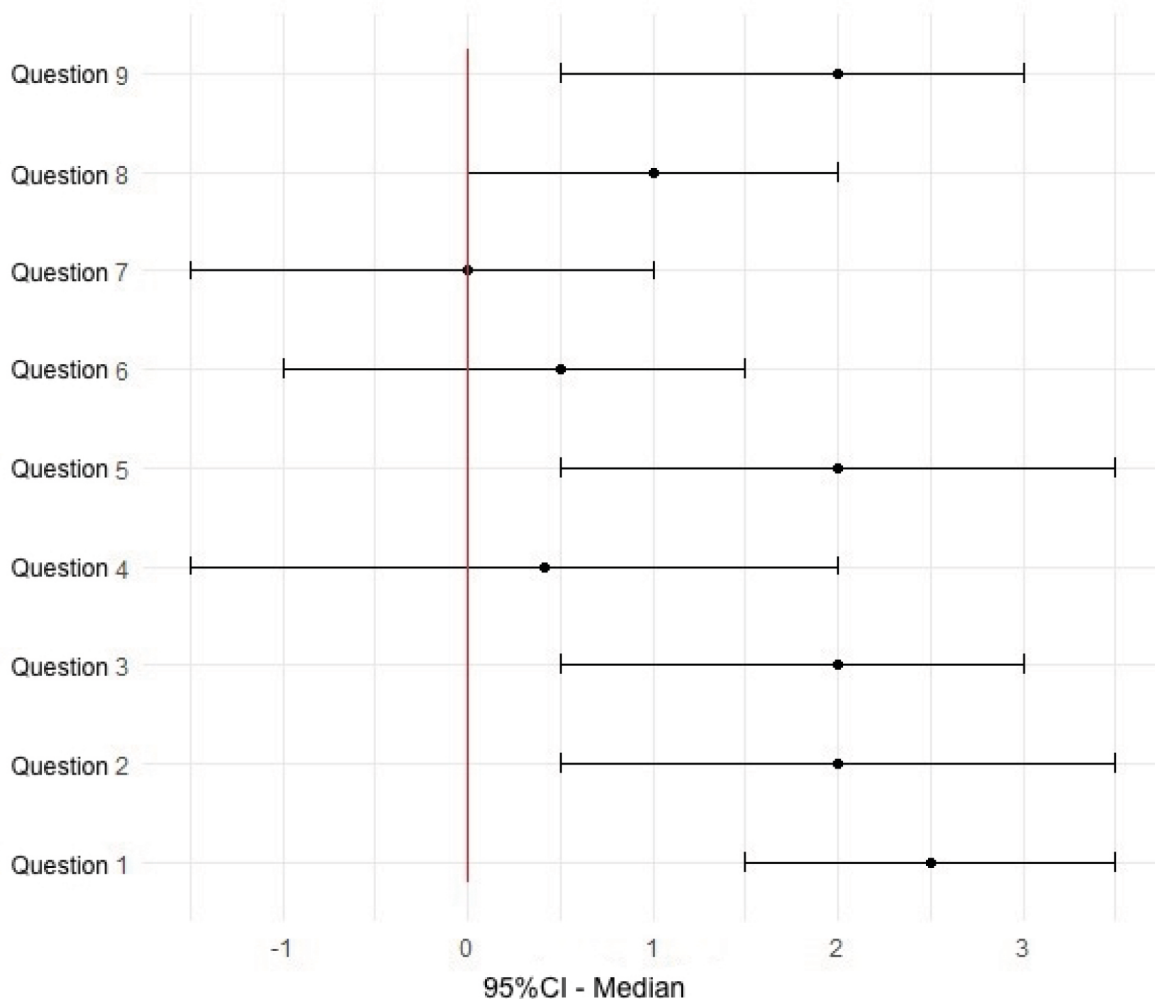


W = Wilcoxon test statistic value.

**Figure 3.** Graphs of densities of sum values of the results of each AQ-9 question of all participants before and after the educational intervention with respective p-values from the Wilcoxon test. Fortaleza (CE), 2019.

Then, the graph of the difference in the location parameter (median) before and after the intervention is presented (Figure 4). The graph was constructed based on a 95% confidence interval. Note that, if the intervention has reduced the stigma of respondents, they are shown on the positive side of the graph, to the right. If the intervention increased the respondents' stigma, they are to the left of the graph, among





**Figure 4.** 95% confidence interval for the median of each question assessed in AQ-9. Fortaleza (CE), 2019.

negative values. As for the intervals with zero value, it appears that such questions were not affected by the intervention.

Figure 4 leads us to conclusions similar to those already drawn in Figure 3. The 95% confidence interval for the sum presented in Figure 2 is [4.0; 15,5], indicating that, overall, the level of stigma for mental disorder decreased after pedagogical intervention.

## DISCUSSION

Over the years, several initiatives based on the National Mental Health Policy (PNSM) have been carried out to train professionals from the Psychosocial Care Network (RAPS) intersectorally and interdisciplinary, with the aim of better integrating patients with mental disorders into the community and breaking the stigma and social prejudice they face and that reinforce their isolation.<sup>17,18</sup>

Despite efforts, several barriers and challenges are faced by many health professionals to promote comprehensive mental health care: high demand for care, gaps in care coordination and articulation between primary care and specialized care, lack of support from matrix authorities and from local managers.<sup>8</sup>

In addition, many health professionals are still subjected to traditional training, which does not usually contemplate the complexity of clinical routine at services under the guidance of the Brazilian Psychiatric Reform and the guiding principles of psychosocial care based on freedom, territorial work, autonomy and basic rights.<sup>17</sup> Thus, a considerable amount of trainings are not based on the demands of mental health users, as academics are still conditioned to the perspective of psychiatric hospitals. Many do not know these institutions and are not familiar with the anti-asylum fight.<sup>19</sup>

It is important to highlight that the Unified Health System (SUS) is based on regulations that emphasize professional training. As an example, Ordinance No. 3088/2011 establishes the promotion of PHE dedicated to RAPS professionals.<sup>17</sup> This strategy was established by the Ministry of Health within the scope of SUS in 2004 as the National Policy on Permanent Education in Health.<sup>20</sup>

Several experiences related to the qualification of professionals regarding mental health, especially in PHC, have been carried out. In 2016, a model for a Training Workshop on Mental Health was developed as a part of PEH, bringing to light the mental health of professionals and the challenges of working as a team.<sup>21</sup> Kinker et al. built a mental health improvement course for RAPS members. The course addressed the daily experience of professionals with individuals in suffering.<sup>22</sup> Thus, the importance of dealing with mental health issues in a subjective way is confirmed, reaching the workers not only as professionals, but also as human beings, awakening their empathy with patients who suffer from mental disorders.

Another study carried out in the psychiatry service of a hospital in Portugal evaluated sociodemographic, psychosocial and stereotype issues associated with mental illnesses by means of the questionnaire. The population consisted of the community inhabiting the region of Lezíria do Tejo. As a result, 18% of the sample reported suffering or having already suffered from a psychiatric illness and 40% had already had contact with someone in the family with a mental illness. In the presence of a community member presenting severe mental illness, 59.2% of respondents said they were in favor of compulsory medical treatment and 44.5%, of their hospital admission.<sup>23</sup>

Some studies used the AQ to assess stigma among health students and proposed pedagogical interventions. In the research by Querido et al., 6.5% of students reported having been diagnosed with a mental disorder. Most of them (60.8%) reported never having had contact with mental illnesses within their families. The presence of low to moderate stigma was verified in all courses, with a moderate predominance of stigma in the expression of “pity” for the mentally ill, coercion and segregation.<sup>24</sup>

Similar to the intervention in the present study by means of an expository lecture, a work was carried out using videos in school environment as a strategy for destigmatization. The answers to the questionnaire by students who watched the video were compared with those who did not. The intervention was found to significantly reduce scores in the test group. Nurses and nursing technicians represented 22.6% of the participants in this intervention.<sup>12</sup>

A study applied a semi-structured interview to professionals in the mental health field, who showed a better understanding of violence, but were not familiar with the term “stigma”. However, there was agreement on the relationship between stigma and violence. It was recognized that this phenomenon is present in professional practices in a naturalized way, making it difficult to identify at the institutional level. According to the interviewees, stigma as an expression of violence interferes with the relationship between health and illness and can worsen mental suffering.<sup>25</sup>

Interventions used in low- and middle-income countries to reduce stigma were brought together in a review by Heim et al., with a predominance of theoretical lectures, interactive methods, case studies or

dramatizations. The effect of brief training interventions lasting one hour to one day was found to be null or too small, whereas longer training interventions, with more sophisticated methods, produced statistically significant changes in validated stigma questionnaires.<sup>26</sup> Contrary to the above, the present study was able to significantly reduce stigma with a specific intervention.

The review by Mehta et al. contemplated global methods of intervention with regard to mental health stigma. Most studies focused on short-term outcomes and were conducted in high-income settings. There is mild evidence of efficacy after four weeks of follow-up in terms of increasing knowledge and reducing stigmatizing attitudes. The evidence does not support the view that social contact is the most effective type of intervention when it comes to attitudes in the medium and long term.<sup>13</sup>

The importance of coordinated actions to reduce the stigma associated with psychiatric disorders is highlighted, with the understanding that mental and physical health are intertwined. Studies show that deinstitutionalization and integration of community mental health care with PHC services, which includes active community participation, have reduced stigma.<sup>9</sup>

An experience report produced by nurses documented the development of psychosocial interventions, contributing to discussions about stigma among health professionals and users of a basic health unit. Awareness was promoted about the indiscriminate use of psychotropic drugs and the openness to new models of care such as integrative and complementary practices.<sup>27</sup>

This study has limitations inherent to its design, which has a low generalization potential. It is not possible to exclude the existence of a selection bias, considering that a convenience sampling was used. Furthermore, the sample was not dimensioned for hypothesis testing, so  $p > 0.05$  does not exclude important educational effects. The influence of possible personal, professional and sociodemographic characteristics of participants on the presence and extent of stigma was not analyzed.

Important to point out that the behavior change in the work practices of the participating professionals was not evaluated after the educational intervention, but rather their responses to a questionnaire of attitude towards mental disorders change. Another limitation was the non-participation of physicians. It is worth mentioning that the Wilcoxon test only shows the difference, that is, we have no evidence to state to what level the intervention impacted the responses; all we know is that there was a significant decrease in the scores after intervention.

## CONCLUSION

Per the results, the intervention based on health education was able to reduce the stigma of participating primary care professionals about people with mental disorders, measured by responses to the AQ-9 questionnaire.

The study highlights the presence of stigma among participating health professionals and how educational interventions, even one-off, can be useful in reducing it. Further studies could also encompass actions such as the assessment of behavioral change in daily practice of these professionals and include the perception of patients and their relatives, contributing to a broader view of the stigma put on people with mental disorders.

The data obtained provide information that can improve the continuing education of health professionals and adjust municipal health policies. In the long run, removing stigma barriers in the care of people with mental disorders is important with a view to improving the quality of primary care, ensuring that this group receives comprehensive and adequate care.

## CONFLICT OF INTEREST

Nothing to declare.

## AUTHORS' CONTRIBUTION

MPC: conceptualization, data curation, Writing – original draft, resources. LMV: data curation, Writing – original draft, resources. CSGVF: data curation, Writing – original draft, resources. MCSV: data curation, Writing – original draft, resources. GBMR: data curation, Writing – original draft, resources. LBC: Project administration, formal analysis, conceptualization, data curation, writing – review & editing, investigation, methodology, funding acquisition, software, supervision, validation, visualization.

## REFERÊNCIAS

1. Martins GCS, Peres MAA, Oliveira AMB, Stipp MAC, Almeida Filho AJ. O estigma da doença mental e as residências terapêuticas no município de Volta Redonda-RJ. *Texto Contexto Enferm* 2013;22(2):327-34. <https://doi.org/10.1590/S0104-07072013000200008>
2. Silveira PS, Martins LF, Soares RG, Gomide HP, Ronzani TM. Revisão sistemática da literatura sobre estigma social e alcoolismo. *Estud Psicol* 2011;16(2):131-8. <https://doi.org/10.1590/S1413-294X2011000200003>
3. Mascayano F, Tapia T, Schilling S, Alvarado RN, Tapia E, Lips W, et al. Stigma toward mental illness in Latin America and the Caribbean: a systematic review. *Braz J Psychiatry* 2016;38(1):73-85. <https://doi.org/10.1590/1516-4446-2015-1652>
4. Weber CAT, Jurueña MF. Paradigmas de atenção e estigma da doença mental na reforma psiquiátrica brasileira. *Psicologia, Saúde e Doenças*. 2017;18(3):640-56. <https://doi.org/10.15309/17psd180302>
5. Corrigan PW, Mittal D, Reaves CM, Haynes TF, Han X, Morris S, et al. Mental health stigma and primary health care decisions. *Psychiatry Res* 2014;218(1-2):35-8. <https://doi.org/10.1016/j.psychres.2014.04.028>
6. Min SY, Wong YLI. Association between community contextual factors and stigma of mental illness in south Korea: a multilevel analysis. *Psychiatr Q* 2017;88(4):853-64. <https://doi.org/10.1007/s11126-017-9503-1>
7. Nunes JMS, Guimarães JMX, Sampaio JJC. A produção do cuidado em saúde mental: avanços e desafios à implantação do modelo de atenção psicossocial territorial. *Physis Rev Saúde Coletiva* 2016;26(4):1213-32. <https://doi.org/10.1590/s0103-73312016000400008>
8. Hirdes A, Scarparo HBK. The maze and the minotaur: mental health in primary health care. *Cienc e Saude Colet* 2015;20(2):383-93. <https://doi.org/10.1590/1413-81232015202.12642013>
9. Sapag JC, Sena BF, Bustamante IV, Bobbili SJ, Velasco PR, Mascayano F, et al. Stigma towards mental illness and substance use issues in primary health care: challenges and opportunities for Latin America. *Glob Public Health* 2018;13(10):1468-80. <https://doi.org/10.1080/17441692.2017.1356347>
10. Ungar T, Knaak S, Szeto ACH. Theoretical and practical considerations for combating mental illness stigma in health care. *Community Ment Health J* 2016;52(3):262-71. <https://doi.org/10.1007/s10597-015-9910-4>
11. Falkenberg MB, Mendes TPL, Moraes EP, Souza EM. Educação em saúde e educação na saúde: conceitos e implicações para a saúde coletiva. *Ciêns Saúde Colet* 2014;19(3):847-52. <https://doi.org/10.1590/1413-81232014193.01572013>
12. Gonçalves M, Moleiro C. Resultados de um programa piloto de desestigmatização da saúde mental juvenil. *Revista Portuguesa de Saúde Pública* 2016;34(3):276-82. <https://doi.org/10.1016/j.rpsp.2016.06.005>
13. Mehta N, Clement S, Marcus E, Stona AC, Bezborodovs N, Evans-Lacko S, et al. Evidence for effective interventions to reduce mental health-related stigma and discrimination in the medium and long term: systematic review. *Br J Psychiatry* 2015;207(5):377-84. <https://doi.org/10.1192/bjp.bp.114.151944>
14. Keynejad RC, Dua T, Barbui C, Thornicroft G. WHO Mental Health Gap Action Programme (mhGAP) Intervention Guide: a systematic review of evidence from low and middle-income countries. *Evid Based Ment Health* 2018;21(1):30-4. <https://doi.org/10.1136/eb-2017-102750>
15. Oliveira ARF, Azevedo SM. Estigma na doença mental: estudo observacional. *Rev Port Med Geral Fam* 2014;30(4):227-34. <https://doi.org/10.32385/rpmgf.v30i4.11347>
16. Corrigan PW. A toolkit for evaluating programs meant to erase the stigma of mental illness. Illinois: Inst Technol; 2012.
17. Scafuto JCB, Saraceno B, Delgado PGG. Formação e educação permanente em saúde mental na perspectiva da desinstitucionalização (2003-2015). *Comun Ciências da Saúde* 2017;28(03/04):350-8.
18. Brasil. Ministério da Saúde, Secretaria de Atenção à Saúde. Reforma psiquiátrica e política de saúde mental no Brasil. In: Conferência regional de reforma dos serviços de saúde mental: 15 anos depois de Caracas. Brasília: Ministério da Saúde; 2005. Available from: [http://bvsmms.saude.gov.br/bvs/publicacoes/Relatorio15\\_anos\\_Caracas.pdf](http://bvsmms.saude.gov.br/bvs/publicacoes/Relatorio15_anos_Caracas.pdf)

19. Assis JT, Scafuto JCB, Lenza RCP, Kinoshita RT. Percursos formativos na RAPS: aprendendo e ensinado entre pares. In: 12º Congresso Internacional da Rede Unida; 2016. *Revista Saúde em Redes* 2016;2(supl 1). Available from: <http://conferencia2016.redeunida.org.br/ocs/index.php/congresso/2016/paper/view/2654>
20. Brasil. Ministério da Saúde. Secretaria de Gestão do Trabalho e da Educação na Saúde. Departamento de Gestão da Educação na Saúde. Política nacional de educação permanente em saúde: o que se tem produzido para o seu fortalecimento? Brasília: Ministério da Saúde; 2018. Available from: [http://bvsmms.saude.gov.br/bvs/publicacoes/politica\\_nacional\\_educacao\\_permanente\\_saude\\_fortalecimento.pdf](http://bvsmms.saude.gov.br/bvs/publicacoes/politica_nacional_educacao_permanente_saude_fortalecimento.pdf)
21. Santos AA, Dalla Vecchia M. Oficina de formação em saúde mental como estratégia de educação permanente em saúde. *Saúde Transform Soc* 2016;7(2):69-82.
22. Kinker FS, Moreira MIB, Bertuol C. O desafio da formação permanente no fortalecimento das Redes de Atenção Psicossocial. *Interface Comunicação, Saúde e Educação* 2018;22(67):1247-56. <https://doi.org/10.1590/1807-57622017.0493>
23. São João R, Coelho T, Ferreira CS, Castelo AM, Massano MT. Estigma na doença mental: estudo observacional e piloto em Portugal. *Rev da UIIPS* 2017;5(2):171-85. <https://doi.org/10.25746/ruiips.v5.i2.14518>
24. Querido A, Tomás C, Carvalho D. O estigma face à doença mental nos estudantes de saúde. *Revista Portuguesa de Enfermagem de Saúde Mental* 2016;3(Spe. 3):67-72. <https://doi.org/10.19131/rpesm.0120>
25. Barretto RS, Figueiredo AEB. Estigma e violência na percepção dos profissionais de saúde mental de uma unidade psiquiátrica em hospital geral. *Cad Saúde Colet* 2019;27(2):124-30. <https://doi.org/10.1590/1414-462x201900020370>
26. Heim E, Kohrt BA, Koschorke M, Milenova M, Thornicroft G. Reducing mental health-related stigma in primary health care settings in low-and middle-income countries: a systematic review. *Epidemiology and Psychiatric Sciences* 2020;29:e42. <https://doi.org/10.1017/S2045796019000349>
27. Barbosa VFB, Lima CG, Simões JPS, Pedroza RM, Mello MG. Tecnologias leves para o cuidado de enfermagem na atenção psicossocial: contribuições à superação de estigmas sobre a doença mental. *Extensio Revista Eletrônica de Extensão* 2017;14(26):119-32. <https://doi.org/10.5007/1807-0221.2017v14n26p119>