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Social Psychology

Mental Health Stigma Associated Among Professionals of Primary Health Care

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Abstract: This study seeks to analyze the association between stigma towards people with mental health problems among Primary Health Care professionals in relation to sociodemographic, contact, and participation variables in mental health actions. The sample was composed of 289 professionals from Rio Grande do Sul/Brazil. We used a sociodemographic questionnaire; Mental Health Knowledge Questionnaire (MAKS-BR); Attribution Questionnaire (AQ-26B); and Mental health items of the National Program for Access and Quality Improvement in Primary Care (PMAQ-AB). Less attribution of stigma is related to greater knowledge in mental health, having mental health training, and performing mental health activities. Among the variables that most influence the relationship between knowledge and the attribution of stigma are personal contact, training, and performing mental health actions. Results point to the importance of mental health practices in Primary Care and team training to reduce stigma.

Keywords: mental health, stigma, public health services

Estigma Associado à Saúde Mental Entre Profissionais da Atenção Básica à Saúde

Resumo: Este estudo teve como objetivo analisar a associação entre estigma a pessoas com problemas de saúde mental entre profissionais da Atenção Básica em relação a variáveis sociodemográficas, de contato e de participação em ações de saúde mental. Participaram 289 profissionais do Rio Grande do Sul/Brasil. Utilizaram-se Questionário sociodemográfico; Questionário de Conhecimento em Saúde Mental (MAKS-BR); Questionário de Atribuição (AQ-26B); Itens de saúde mental do Programa Nacional de Melhoria do Acesso e da Qualidade da AB. Menor atribuição de estigma está relacionado a maior conhecimento em saúde mental, ter formação em saúde mental e realizar atividades de saúde mental. As variáveis que mais influenciam a relação entre conhecimento e atribuição de estigma são: o contato pessoal, formação e realizar ações de saúde mental. Os resultados apontam a importância das práticas de saúde mental na Atenção Básica e da formação das equipes para a redução do estigma.

Palavras-chave: saúde mental, estigma, serviços de saúde pública

Estigma Asociado a la Salud Mental Entre los Profesionales de Atención Primaria de Salud

Resumen: Este estudio tiene como objetivo analizar el estigma a las personas con problemas de salud mental entre los profesionales de Atención Primaria y su asociación con las variables sociodemográficas, de contacto y participación en acciones de salud mental. Participaron 289 profesionales de Rio Grande do Sul (Brasil). Se utilizaron el cuestionario sociodemográfico; el Cuestionario de Conocimientos sobre Salud Mental (MAKS-BR); el Cuestionario de Asignación (AQ-26B); y los Ítems de salud mental del Programa Nacional de Mejora del Acceso y la Calidad de la Atención Primaria. Una menor atribución de estigma se relacionó con mayor conocimiento sobre salud mental, tener formación en salud mental y realizar actividades de salud mental. Entre las variables que más influyen en la relación entre conocimiento y atribución de estigma se encuentran el contacto personal, la formación y la realización de acciones de salud mental. Los resultados muestran la importancia de las prácticas de salud mental en Atención Primaria y la formación de equipos para reducir el estigma.

Palabras clave: salud mental, estígma, servicios de salud pública

From Goffman's classic concept (1970), stigma translates into social disapproval based on certain personal characteristics, beliefs, or behaviors that are in conflict with the sociocultural norm. Contemporary authors categorize stigma as a complex phenomenon, associated with a series of elements that compose it, such as knowledge, attribution, attitudes, stereotypes, prejudices,

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discriminations, social distance, and social identity. Generally, the concept of stigma converges to the idea of restricting one's image to unwanted characteristics in a given context. These traits indicate some fault, defect, or even disadvantage (Corrigan et al., 2014, 2017; Link & Hatzenbuehler, 2016; Thornicroft, Rose, Kassam, & Sartorius, 2007).

Thus, Corrigan et al. (2017) indicate, the stigmatization process establishes a causal relationship between stigma signs, negative stereotypes, and discriminatory behavioral responses. In relation to people who have a mental disorder, signs are provided through their symptoms. Based on this, people generate impressions and expectations about these subjects, often seen as dangerous or responsible for their illness (control and responsibility). Thus, negative beliefs give rise to discriminatory attitudes, including coercion (forcing some form of treatment); segregation (treatment away from their community/context), avoidance, and hostile behavior (maltreatment and threats).

In this perspective, the World Health Organization (WHO) points to the devastating consequences of stigmatization, such as social exclusion and isolation, restrictions on access to health, work, and education, damage to family relationships and human rights violations (World Health Organization [WHO], 2001). Stigma is one of the barriers to effective access to health, as well as to the development of mental health programs and actions. Studies indicate that the stigma associated with mental health contributes to health problems of all kinds, in addition to compromising the exercise of citizenship and the right to health (Major, Dovidio, Link, & Calabrese, 2018). Furthermore, stigma can be considered as a social determinant of health, as well as a harmful factor associated with inequalities over time, despite changes in health/disease processes, risk factors, and health interventions (Hatzenbuehler, Phelan, & Link, 2013).

Alongside the general social stigma, studies show that a great—more than expected—stigma toward mental health users among health professionals and students, due to the supposed knowledge on the subject (Corrigan et al., 2014). A review study indicates that stigma among health professionals is a common phenomenon, which varies by culture, gender, and the level of non-professional contact with people with mental disorders (Vistorte et al., 2018). In this sense, there is evidence that mental health knowledge, contact, and interaction with users have positive effects in reducing stigma (Nyblade et al., 2019; Thornicroft et al., 2016).

The relevance of the articulation of health networks and the strengthening of mental health in Primary Care are considered. However, one of the challenges in ensuring access to and quality of services is the potential stigma of health professionals (Corrigan et al., 2014; Nyblade et al., 2019; Sapag et al., 2018). In Brazil, the Psychosocial Care Network (RAPS) in the Unified Health System (SUS) establishes the points of care for treating people with mental disorders. Primary Care (PC) forms the first axis of RAPS, serving as a basis for organizing and implementing comprehensive care (Ministério da Saúde, 2011). Brazilian research has shown that the perception of PC professionals on mental health are anchored in stereotypes of psychic normality and in the perspective of absence of disease. Studies show that professionals understand medication as one of the only treatments for users, which can be read as little comprehension and knowledge in mental health (Moro, Ferreira, & Rocha, 2020; RMP Pereira, Amorim, & Gondim, 2020).

Stigma related to mental health is a recurring theme in the scientific literature; however, especially in the context of PC, studies are insufficient. Considering that PC is a strategic locus of RAPS, with greater contact and proximity to people, greater capillarity and problem-solving potential, this study aimed to analyze the association between stigma towards people with mental health problems among Primary Care professionals in relation to sociodemographic variables, contact, and participation in mental health actions.

Method

Participants

The research used a convenience and non-probabilistic sample of 289 professionals from different areas that compose the Primary Care Unit teams in the state of Rio Grande do Sul. As an inclusion criterion, professionals should be working in a PC unit, in any type of service, in any professional category, including resident professionals. Not working directly in a PC unit was defined as an exclusion criterion.

Instruments

Sociodemographic questionnaire: questionnaire designed for the study, including general variables such as gender, age, schooling level, professional category, as well as undertaken mental health actions, and contact with those with mental health problems.

Mental Health Knowledge Schedule (MAKS-BR): corresponds to a 12-item questionnaire, in which six were of stigma-related mental health knowledge (help-seeking, recognition, support, employment, treatment, and recovery), and the other six were designed to establish levels of recognition and familiarity with mental health conditions. Items are distributed on a 5-point Likert-type scale, from 1 for "strongly disagree" to 5 for "strongly agree." Items 6, 8, and 12 are scored in reverse. The score is calculated by adding the answers given to the items, indicating that the higher the score, the greater the knowledge.

The instrument was adapted from the original Mental Health Knowledge Schedule – MAKS questionnaire (Evans-Lacko et al., 2010) by the researchers of this study. The translation followed the guideline of steps required by the authors of the instrument: translation, back-translation, and group evaluation. The Portuguese version was administered through an anonymous online self-administered survey, with a convenience sample of 273 individuals. The reliability value for items 1–6 calculated by Cronbach's alpha was 0.61 (similar to the original study), which is considered acceptable. In assessing the adequacy of the data matrix, the value in the KMO index was 0.71, which is considered good (Hair, Black, Babin, Anderson, & Tatham,

2009). The results of Bartlett's tests of sphericity were significant (Bartlett = 205.5, $p < 0.001$). Results indicate that the MAKS-BR instrument maintained adequate validity and reliability parameters, and that it can be a useful tool to assess mental health knowledge in the Brazilian context.

Attribution Questionnaire (AQ-26B): Questionnaire adapted and validated for Brazil (general Cronbach's alpha for the scale of 0.83) (Pereira, Santos, & Faria, 2016). The Brazilian version consists of a questionnaire that briefly describes, as a vignette, the history of an adult with schizophrenia and 26 items that explore the attitudes, feelings, and behaviors of the respondents, whose responses are marked on the Likert scale from 1 to 9. The items are grouped into eight factors: Fear, Help, Segregation, Avoidance, Pity, Anger, Blame, and Coercion. The higher the score, the greater the stigma attribution.

National Program for Access and Quality Improvement in Primary Care in Primary Care (PMAQ-AB): items related to the provision of care and actions in mental health from the external evaluation questionnaire that are part of the National Program for Access and Quality Improvement in Primary Care (PMAQ-AB). The items correspond to consultation for users with different mental health problems, registration of cases in the territory, implementation of specific strategies to deal with cases, and registration of users with seriousness/risk referred to other points of care. The instrument serves as an indication of the service team performance. One study evaluated that the total Cronbach's alpha of mental health items was 0.87 (Rocha, Santos, Reis, Santos, & Cherchiglia, 2018).

Procedures

Data collection. The health services were contacted by telephone call in order to explain the research purposes; then, dates were scheduled for data collection. The survey was conducted at the health facilities at a scheduled time. This face-to-face stage corresponds to 17% of the total sample ($n = 49$). Due to the COVID-19 pandemic, collections were interrupted for three months. The survey underwent adjustments, and the questionnaires were organized into a single online self-administered form via the Qualtrics platform. The professionals were invited to participate in the research by telephone call to the services, email, and dissemination in specific groups on social networks. As soon as the participants clicked on the access link, the informed consent form was generated, requiring confirmation of reading and agreement with the consent form before answering the survey.

Data analysis. Data were tabulated and analyzed using the Statistical Package for Social Sciences (SPSS) (version 22.0) and R Studio (partykit package - version 1.2) software. Descriptive analyses of sociodemographic variables, of individual participation in mental health actions, of each PMAQ item, of the average total scores of the MAKS-BR, as well as of the AQ-26B instruments and their respective factors were performed. Then, the correlations of the means of the two instruments that assess some element of stigma (i.e., MAKS-BR and AQ-26B), were calculated using Pearson's linear correlation.

Student's *t*-test (independent samples) was used to compare the means of stigma attribution (AQ-26B) between groups according to the existence of training/specialization in mental health and participation in mental health actions. To analyze the variance of the mean of stigma attribution according to the schooling level, age group and professional category, one-way analysis of variance (ANOVA) tests were conducted. Differences between groups were determined by Tukey's post hoc test (p-value was considered significant when < 0.05).

Furthermore, analyses were conducted to assess covariates that function as moderators of the relationship between mental health knowledge and stigma attribution. We chose to focus on the variation of the association between knowledge in mental health and attribution of stigma in terms of other variables of interest, such as sociodemographic variables and health service-related variables. As the number of potential moderators (variables) was too large to consider a linear regression model, we chose to use the model-based recursive partition algorithm – MOB (Hothorn, Hornik, van de Wiel, & Zeileis, 2008), implemented in the partykit package (version 1.2) in the R Studio software. The algorithm allows, simultaneously, to identify subgroups with differences in the functioning of the association between the main variables and to estimate the magnitude and sign of the parameters of interest for each subgroup. All sociodemographic variables were chosen, including those related to work aspects and personal contact with people with some type of mental disorder, in addition to the items and variables derived from the PMAQ. Pearson's correlation and linear regression slope coefficient were used to assess the association.

Ethical Considerations

This study was approved by the Research Ethics Committees of PUCRS (CAAE nº 12233719.8.3001.5338). All participants were informed about the nature and objectives of the study and included after confirmation of the informed consent. The procedures are in accordance with the Regulatory Guidelines and Norms involving research with human beings, provided for in Resolution No. 510/2016, of the National Health Council and in Resolution No. 016/2000 of the Federal Council of Psychology.

Results

Sample characterization. Participants' age ranged from 21 to 64 years, with a mean of 39.6 years ($SD = 9.61$). There was a predominance of women (90.3%), self-declared white (74.7%), aged from 30 to 39 years (37.7%), working in the metropolitan area of Porto Alegre (65.7%). Regarding the professional category, 66.5% corresponds to the minimum PC team (physician, nurse, and community health agent), consisting of 31.5% nurses, 22.5% community health agents and 12.5% of physicians. The average working time in Primary Care was 8.75 years ($SD = 7.68$). Among the participants, 70.2% reported that a family member had or has a mental health problem, and in most cases, it was a member of the nuclear family (parents,

siblings, or children). Moreover, 92.7% of the sample stated that they knew and maintained contact with other people with a mental health problem outside the family sphere, mostly friends, colleagues, and neighbors. Regarding schooling level, 54% of the sample had complete or incomplete graduate studies and 77.2% had no training in mental health. Notably, 60.6% of the participants reported having already undergone or were undergoing psychological or psychiatric treatment.

Mental health knowledge and stigma attribution. The mean mental health knowledge was 47.8 (*SD* = 3.89), and the mean stigma attribution was 90.4 (*SD* = 28.5). Among the scores of the AQ-26B factors, considering the minimum and maximum values as well as each factor mean, it is noteworthy that the factors with the highest scores were Fear (*M* = 24.9; *SD* = 13.9), Coercion (*M* = 13.7; *SD* = 3.7), and Avoidance (*M* = 13.4; *SD* = 5.38). Intermediate factors were Help (*M* = 11.2; *SD* = 5.3), Pity (*M* = 8.4; *SD* = 4.9), and Intolerance (*M* = 5.1; *SD* = 3.4). The factors Blame (*M* = 4.1; *SD* = 2.9) and Segregation (*M* = 9.7; *SD* = 5.9) had the lowest values. Pearson's correlation analysis between the total scores of MAKS-BR and AQ-26B shows a significant, negative, and weak association, with a coefficient of 0.25 ($p < 0.001$), indicating that the correlation has the opposite direction: the higher the mental health knowledge, the lower the stigma attribution score.

Training and participation in mental health activities. Regarding participation in mental health activities, 69.9% (*n* = 202) of professionals stated that they perform some type of mental health activity, including reception, consultation/service, groups, matrix support actions and interventions in the territory. Regarding the mental health items of the PMAQ-AB, the participants answered according to what they consider that their team performs (Table 1). Most participants (94.1%) stated that the team performs some type of consultation for users in psychological distress (general) and users in chronic use of psychiatric medications. Regarding the record, 76.5% of the sample states that the team has a record of the users served in the territory and 78.5% has a record of users with greater risk/severity referred to another service. In addition, 84.8% of the participants reported that the team uses some specific strategy to take care of mental health cases, with a higher prevalence of specialized care provided by a matrix support team (56%), clinical and life history records (50.2%) and specific consultation of longer duration (43.3%).

Table 1
Description of the variables of participation in mental health actions and mental health items of the PMAQ-AB

Characteristic	Yes		No	
	N	%	*N*	%
Individual participation in your unit's mental health actions				
Participates in some action/activity	202	69.9	87	30.1
Performs reception	132	45.7	157	54.3
Perform consultations	94	32.5	195	67.5
Conducts groups	73	25.3	216	74.7
Participates in matrix support actions	69	23.9	220	76.1
Conducts actions and interventions in the territory	52	18	237	82
Pmaq – The team conducts mental health consultations				
Consultation for users in psychological distress (general)	236	81.7	53	18.3
Consultations for users of crack cocaine, alcohol, and other drugs	177	61.2	112	38.8
Consultations for users on chronic use of benzodiazepines, antipsychotics, mood-stabilizing antidepressants	231	79.9	58	20.1
Performs some sort of consultation	272	94.1	17	5.9
Pmaq – The team has a record of users in the territory				
Registration of users in psychological distress (general)	186	64.4	103	35.6
Registration of users of crack cocaine, alcohol, and other drugs	152	52.6	137	47.4
Registry of users who make chronic use of benzodiazepines, antipsychotics, antidepressants, mood stabilizers	184	63.7	105	36.3
Has some type of registration of users in the territory	221	76.5	68	23.5
Pmaq - The team uses a specific strategy to take care of these cases				
Specific consultation with longer time	125	43.3	164	56.7
Life history record (clinical, family history, medical record)	145	50.2	144	49.8
Group service offer	87	30.1	202	69.9
Specialized mental health care (NASF or other type of matrix support)	162	56.1	127	43.9
Conducts some strategy	245	84.8	44	15.2
Pmaq - The team has a record of users with higher risk/severity referred to another point of care				
Registration of users in psychological distress (general)	188	65.1	101	34.9
Registration of users of crack cocaine, alcohol, and other drugs	152	52.6	137	47.4
Registry of users who make chronic use of benzodiazepines, antipsychotics, antidepressants, mood stabilizers	170	58.8	119	41.12
Has some kind of record of the received users	227	78.5	62	21.5

Student's *t*-test (Table 2) shows that participants who have training had lower scores for attributing stigma than those who do not. Regarding the variables of participation in mental health actions, professionals who participate in such actions of their service showed less stigma attribution compared to professionals who do not participate. This difference was statistically significant for those who perform consultations, groups, matrix support actions and interventions in the territory. Performing reception did not present a significant difference.

ANOVA. The ANOVA results identify statistically significant difference in the means of attribution between the groups in the three analyzed variables: age group, schooling level, and professional category (Table 3). Tukey's test indicates that the age group 30–39 years, which has the highest mean attribution, differs significantly from the means of the groups 20–29 years and 50–64 years, which have the same mean. This can be considered a peculiar result, as there is no logical understanding of the growth or reduction of stigma according to age. Regarding schooling level, it is possible to notice a decreasing gradient in the attribution means according to the level: as schooling increases, stigma attribution decreases. The means show a significant difference, mainly in relation to the group "Elementary school to incomplete secondary education" and "complete and incomplete graduate studies," which have the highest and lowest averages, respectively.

Regarding professional category, it is noteworthy that psychologists and doctors obtained the lowest scores, with means of 60.7 and 80.1, respectively. Psychologists showed a significant difference in relation to other occupations, except for the medical category. The position of nursing assistant and technician had the highest average attribution.

Table 2
Comparison between means of stigma attribution (Score AQ-26B) between groups, by calculating the t-test of independent samples

	Yes		**No**			
	***M* (AQ-26B)**	***SD***	***M* (AQ-26B)**	***SD***	***P***	**IC**
Mental health training/specialization	81.2	28.9	93	27.9	0.004	3.85 – 19.8
Participates in the unit's mental health actions	86.3	26.5	100	30.8	0.001	6.45 – 2.82
Performs reception	87.5	25.9	92.8	30.4	0.121	-1.40 – 12
Perform consultations	79.2	26.4	95.8	27.9	0.001	9.73 – 23.5
Conducts groups	82.92	26.4	93.04	28.8	0.009	2.56 – 17.6
Conducts matrix support actions	81.38	25.6	93.30	28.8	0.003	4.20 – 19.6
Conducts actions and interventions in the territory	79.62	27.4	92.86	28.2	0.002	4.75 – 21.7

Table 3
One-way ANOVA test of comparison between means of stigma attribution (Score AQ-26B) according to categorical variables

Characteristic	**Mean**	***SD***	***p***	**Df**
Age group				
21 – 29	81.9	27	0.004	3
30 – 39	95.2	31.6		
40 – 49	94.7	26.1		
50 – 64	81.9	22.5		
Schooling level				
Incomplete elementary school to incomplete high school = A (e)*	116.8	45.3	0.005	4
Complete high school = B (e)*	99.9	31.3		
Incomplete higher education = C	90.5	21.9		
Complete higher education = D	87.5	25.6		
Complete and incomplete postgraduate studies = E (a, b)*	86.8	27.4		
Professional category				
Community Health Agent (CHA) = A (f)*	93.4	28.0	0.001	7
Nursing technician or assistant = B (cef)*	106.5	30.2		
Physician = C (b)*	80.1	23.3		
Dentist = D (f)*	92	28.9		
Nurse = E (f)*	89.4	26.8		
Psychologist = F (a, b, d, e, h)*	60.7	18.4		
Service manager = G	88.6	24.2		
Others = H (f)*	95	28		

Note. *The variance is significant in relation to the groups according to the identification of the corresponding category by the letters of the alphabet ($p < 0.05$).

Model Based Recursive Partition Algorithm Analysis (MOB). According to the MOB analysis, the algorithm identified six subgroups in which the association between mental health knowledge and stigma attribution behaves differently. The size of these groups varied, from 14 to 58 subjects. In total, we identified seven variables that function as moderators of this association and that define the subgroups: Knowing someone with a Mental Health problem; Participating in appointments/consultations; Age group; Having training in Mental Health; Frequency of contact with an acquaintance with a Mental Health problem; Being on a team that conducts consultations for users in chronic use of medication; Having a friend with a mental health problem.

The association between mental health knowledge and stigma attribution varied between each subgroup. Although the correlation remains negative in most subgroups (as well as in the general sample), there are situations in which the sign of the relationship is inverted (Table 4). Regression model parameters for each subgroup (intercept and slope coefficient) and Pearson's correlation values were reported (traditionally calculated p-values are not consistent with the way the fitting model).

Table 4
Identification of subgroups and coefficients of regression models and correlations

	Characteristic	Inclination (B)	EP	Correlation (r)
Sub-group 1 (*n* = 41)	Does not know anyone with a mental health problem does not have training/specialization in mental health	1.89	2.29	0.19
Subgroup 2 (*n* = 50)	Knows someone with a mental health problem; Does not perform consultation; 30 – 49 years old; Nursing assistant/technician, nurse, or doctor; Daily and weekly contact frequency; Belongs to a team which assists users with chronic use of medication; Has a friend with a mental health problem	–4.03	0.80	–0.58
Subgroup 3 (*n* = 43)	Knows someone with a mental health problem; Does not perform consultation; 30-49 years, daily to weekly contact frequency; Belongs to a team which assists users on chronic medication use, No friend with mental health problem	–1.88	0.90	–0.31
Subgroup 4 (*n* = 35)	Knows someone with a mental health problem; does not participates in consultation; 30-49 years; less than monthly contact frequency	–2.40	1.59	–0.25
Subgroup 5 (*n* = 58)	Knows someone with a mental health problem; does not perform consultation; 19-29 and over 50 years old	–0.61	0.59	–0.15
Subgroup 6 (*n* = 58)	Knows someone with a mental health problem; performs consultation; No training/specialization in mental health	–1.09	1.28	–0.21

The results show that subgroups 2, 3, 4, 5, and 6 present a correlation in the same direction as the general sample, that is, with a negative sign. The results indicate that, as knowledge increases, the attribution of stigma decreases. Subgroup 1 ($n = 41$) is the only one in which this correlation is inverted with respect to the general sample (0.19) and the slope coefficient is 1.89, that is, for each additional point of knowledge in mental health, a 1.89 point increase on the stigma attribution scale. The moderating variable for this group is not knowing anyone with mental health problems.

Subgroup 2 ($n = 50$) is characterized by those who know someone with mental health problems; does not conduct appointments/consultations for mental health; are aged 30–49 years; the frequency of contact with the acquaintance is daily or weekly; belongs to a team which assists users with chronic use of medication; and has a friend with a mental health problem. The correlation was negative and moderated at 0.58, the highest value among all groups and higher than the general correlation of the sample. The slope coefficient was also the highest among the subgroups, indicating that for each point of knowledge in mental health, a decrease of 4.03 points in the attribution of stigma is expected.

Subgroup 3 ($n = 43$) differs from group 2 in terms of not having a friend with a mental health problem. The correlation between mental health knowledge and stigma attribution is negative, but lower in relation to group 2 ($r = –0.31$). Subgroup 4 ($n = 35$) differs from groups 2 and 3 regarding the frequency of contact with the acquaintance, which is lower than monthly. The correlation between knowledge and attribution is relatively lower than in group 3 ($r = –0.25$).

Subgroup 5 ($n = 58$) corresponds to those who know someone with mental health problems; does not conduct consultations in their professional activities; is aged 20–29 years or over 50 years ($r = −0.15$; $B = −0.61$). Finally, subgroup 6 ($n = 58$) is characterized by those who know someone with mental health problems; conducts consultations in their professional activities; but do not have any training in mental health, with correlation and slope coefficient close to the previous groups ($r = −0.21$; $B = −1.09$).

Discussion

The attention that has been given to PC contexts is growing, in line with the urgency of integrating mental health and articulating the care network. In particular, this article focused on analyzing and describing the presence of stigma among professionals, its relationship with individual aspects and practices in the services. The results indicate that the averages of mental health knowledge and stigma attribution can be considered moderate among PC professionals. Furthermore, there was a negative correlation between them, which means that the greater the knowledge in mental health, the lower the stigma attributed. These findings were consistent with other research that evaluated this association (Eksteen, Becker, & Lippi, 2017).

Among the stigma attribution factors, it is noteworthy that professionals attribute higher averages in relation to fear, coercion, and avoidance. Considering PC's role in RAPS, fear and avoidance can create barriers for people with mental health problems in accessing the services that should be the front door for these users. The results are in the same direction as a survey conducted in Portugal that evaluated stigma among medical students and professionals, reaching equal results in relation to the four factors mentioned above (Oliveira et al., 2020). Other studies indicate coercion and fear as the most important factors observed among health professionals (Del Olmo-Romero et al., 2019; Pingani et al., 2016).

These findings corroborate studies that associate dangerousness, fear, and social avoidance related to stigma (Corrigan et al., 2017). The high score of Coercion, regarding mandatory treatment, suggests the existence of a thought on the part of professionals of control and psychic stability of the user, especially in relation to the possible negative consequences that non-treatment can cause.

Note that, the attribution of stigma was lower among those who had some training in mental health and among those who performed mental health activities. It was possible to perceive that the higher the schooling level, the lower the attribution of stigma. The difference between the attribution of stigma according to the professional category is evident, with psychologists and physicians having the lowest averages compared to other professionals. The assistant or technician categories presented significantly higher stigma attribution averages. This result may be associated with the variables of training and schooling level, in which it is expected that professionals with a technical level have training with technicist biases. Similar results were found in a study which indicated that professionals considered "clinical" (physicians, nurses, psychologists) had less discriminatory attitudes than professionals of technical work, with psychologists and social workers being the professionals who least attributed stigma (Del Olmo-Romero et al., 2019).

When jointly analyzing mental health knowledge and stigma attribution, we highlight that the relevant individual variables in the model were age group and training in mental health; all other variables refer specifically to characteristics of the team, or the work developed by the professional. Knowing someone with mental health problems and the frequency of contact were also relevant. Among the six subgroups, subgroup 2 stands out, formed by professionals who know someone with a mental health problem, with daily to weekly contact frequency, aged from 30 to 49 years, who do not perform individual consultations, and did not belong to a team attending mental health users. It can be seen that three of these moderating variables refer to the contact element. In this sense, the contact variable presented a greater magnitude in relation to the other moderating variables.

A controversial result refers to group 1, which showed an inverted correlation; as knowledge increased, stigma also increased. It is noteworthy that the moderating variable was not knowing anyone with mental health problems, which again seems to point to the influence of the contact variable to reduce stigma. In this sense, knowing someone with a mental health problem is associated with knowledge, attitudes, and behaviors related to mental health. The results show this association, which is in line with other findings that demonstrate that the greater the contact with people with psychological distress, the less stigma (Eksteen et al., 2017; Felix & Lynn, 2021; Thornicroft et al., 2016) .

As demonstrated in one study, older people are more likely to engage in stigmatizing attitudes towards subjects with a mental disorder (Hansson, Stjernsward, & Svensson, 2016). This study, however, showed different results, since age appeared as a moderating factor between knowledge and stigma, especially in the intermediate age group, between 30 and 49 years.

It is noteworthy that the items that evaluated the supply and mental health care of the PMAQ-AB did not present the expected magnitude in relation to the moderation of stigma attribution and mental health knowledge. However, the variables that describe the mental health care provided by professionals included in the sociodemographic questionnaire showed significant results. This leads to the understanding that professionals may have subjectively indicated the performance of mental health actions but may not indicate that similar actions occur in their work team.

In view of the results in relation to training in mental health, it is clear that it is essential to train teams through permanent activities to discuss cases with mental health teams, allowing strategies and practices linked to the multiple determinations of the health-disease process, which potentially promote stigma-reducing effects. In this sense, it is worth highlighting the importance of matrix support and continuous professional training through Permanent Health Education (EPS) in this context. These work tools can provide an increase in the actions offered, more sensitive care in cases of people in psychological distress, increased accountability in cases of greater complexity, as well as contributing to the construction of other conditions of care linked to the production of subjectivity (Lima & Dimenstein, 2016).

Among the limitations of the study, the mixed composition of the sample stands out, which took place in person and remotely. It is necessary to consider the possibility that the participants of the online stage have answered the survey according to their personal interest and greater

sensitivity to mental health issues. It is noteworthy that the study evaluates elements that make up the stigma, such as knowledge and attribution, in addition to participation in mental health activities; however, it was not evaluated and analyzed specifically how these actions were conducted.

The results show the association of training in mental health and contact with people with mental disorders in the manifestation of knowledge and attribution of stigma. The high rate of performance of mental health actions in the daily routine of the services, in addition to its association with less stigma, may be an indication of the functionality of the RAPS, or even that the performance and contact with people on a daily basis can work as an element of stigma reduction. However, it is necessary to understand and evaluate in future studies how these actions occur, to propose improvements in access and care.

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