SCIENTIFIC CULTURE

www.sci-cult.com

SCIENTIFIC CULTURE, Vol. 12, No. 5, (2026), pp. 2063-2071
Open Access. Online & Print

DOI: 10.5281/zenodo.21301257

COMMUNITY ATTITUDES TOWARD MENTAL ILLNESS IN VULNERABLE POPULATIONS: A MIXED-METHODS STUDY USING THE CAMI SCALE AND SEMI-STRUCTURED INTERVIEWS

Andrea Mora-León[1], Adriana Montaño-Martínez[2], Robert Solar-Taboada[3], and Arturo Hernández-Sandoval[4*]

[1]Professor, University of Sinú, Cartagena, Colombia. Email: Andrea.mora@unisinu.edu.co Orcid ID: https://orcid.org/0000-0002-0480-5688
[2]Professor, University of Sinú, Cartagena, Colombia. Email: adrianacmontano@unisinu.edu.co Orcid ID: https://orcid.org/0009-0003-7880-7920
[3]Professor, University of Sinú, Cartagena, Colombia. Email: robertsolar@unisinu.edu.co Orcid ID: https://orcid.org/0000-0003-2504-3974
[4]Professor, University of Sinú, Cartagena, Colombia. Email: arturo.hernandez@unisinu.edu.co Orcid ID: https://orcid.org/0009-0001-0512-2010

Received: 03/04/2026
Accepted: 09/05/2026

Corresponding Author: Arturo Hernández-Sandoval (email@somewhere.com)

ABSTRACT

Stigma associated with mental illness is a major barrier to access to mental health services and social inclusion. There is still scarce evidence about community attitudes in vulnerable urban communities in Colombia. To analyze attitudes and stigma levels towards people with mental illness in vulnerable communities of Cartagena, Colombia. Convergent mixed-methods design. A descriptive, cross-sectional, convergent mixed-method study was conducted. The 40-item Community Attitudes toward Mental Illness (CAMI) scale validated in Spanish was applied to 144 participants of two neighborhoods (El Líbano, n = 70; Los Cerros, n = 74). Content analysis was used for semi-structured interviews. Ambivalent attitudes were observed, benevolent dispositions co-existed with perceptions of dangerousness and social restriction. Qualitative analysis showed emerging categories of fear, empathy, exclusion and conditional acceptance. Integration of both components showed convergence between scale scores and community discourses. The communities studied exhibit stigmatizing patterns rooted in perceptions of dangerousness and functional incapacity, coexisting with attitudes of companionship and protection. Contextualized community interventions aimed at reducing stigma and promoting community mental health care models are needed.

KEYWORDS: Stigma; Mental Health; Social Inclusion; Health Education; Mixed Methods; Social Perceptions; Public Health; Vulnerable Groups.

1. INTRODUCTION

Mental health constitutes one of the main global public health challenges due to its impact on quality of life, social functioning, and the global burden of disease. According to the World Health Organization's (WHO) World Mental Health Report 2022, approximately 970 million people live with a mental disorder, and 82% of them reside in low- and middle-income countries [1]. Furthermore, mental disorders rank among the leading causes of disability-adjusted life years (DALYs) globally, with a burden that has progressively increased since 1990 [2].

However, in addition to the clinical manifestations characteristic of mental disorders, people living with them frequently face social stigmatization, discrimination, and community exclusion. Stigma toward mental illness has been defined as a set of negative beliefs, attitudes, and behaviors directed toward people with mental disorders, based on perceptions of danger, incapacity, or inferiority [3], and operationalized by Corrigan and Watson as three interconnected elements—stereotypes, prejudice, and discrimination—that manifest within unequal power relationships [4]. A landmark report found that there is no country, society or culture in which people with mental illness have the same social value as people without mental illness [5].

Stigma has a profound and far-reaching impact on people with mental illness. Stigmatizing attitudes have been shown to contribute to social isolation, reduce employment and educational opportunities, and impede access to mental health services and treatment adherence [6, 7]. Moreover, the persistence of stigma in the community contributes to the perpetuation of institutional models based on hospitalization and isolation to the detriment of care in the community [8]. Stigmatizing attitudes may be explicit, such as active rejection and overt discrimination, or subtle, such as paternalistic and overprotective behaviors that restrict the autonomy of the target group [9].

A particularly relevant subtype of subtle stigma is benevolent or paternalistic stigma, which the Stereotype Content Model explains as the product of perceiving a group as high in warmth but low in competence [27]. According to the Behaviors from Intergroup Affect and Stereotypes (BIAS) map, this combination elicits pity and active helping, while simultaneously fostering passive harm through exclusion from positions of responsibility, autonomy, and decision-making [27]. We have seen this pattern reliably emerge in research on mental illness: mental health labels tend to be associated with perceptions of warmth relative to competence, in contrast to the more common perception of groups stigmatized by perceived hostility or dangerousness [28,29,30]. Benevolent stigma is seldom questioned in clinical, family or community settings because it is perceived as caring rather than discriminatory, but it can restrict self-determination, limit participation in valued social roles and ultimately work against rather than for genuine social inclusion.

This ambivalence also occurs at the regional level, as stigma and mental health studies in Latin America describe communities in which an increased awareness of mental health coexists with continuing perceptions of dangerousness and dependence [10]. More recent region-specific evidence, however, muddies the waters. In Colombia, knowledge of mental illness (e.g., having a close friend who suffers) has been shown to be a protective factor against stigma-related discrimination among adolescents, suggesting that community attitudes are not uniform, but vary considerably depending on personal proximity to mental illness [22]. A similar heterogeneity has been reported among health personnel themselves; for example, a 2024 study of mental health staff in Chilean outpatient and community centers revealed generally low stigma in terms of comfort and support behaviors, but markedly reduced intimacy and trust towards users, showing that even professionalized, ostensibly destigmatized settings reproduce subtler forms of social distance [23]. Brazilian qualitative research goes further, locating stigma not so much as an attitudinal deficit to be rectified through awareness but as a product of structural inequality. Moral explanations of mental illness among lay communities, families and health professionals in Minas Gerais were found to displace blame onto individuals, while obscuring the structural vulnerabilities of the health care system that sustain exclusion [24]. This critique was supported by ethnographic evidence from mental health centers in the Biobío region of Chile that demonstrated how tension between the community mental health model proposed by national policy and a still dominant biomedical practice actively reproduces stigma in the day-to-day clinical encounters, rather than simply reflecting it [25]. Taken together, these studies suggest that ambivalent attitudes in Latin American communities are not simply the result of limited awareness or treatment gaps, but rather are rooted in institutional practices and structural conditions that cannot be fully understood through community measures based strictly on survey data. This regional

pattern is consistent with broader LMIC evidence: a synthesis of stigma research across Asian and other low- and middle-income settings concluded that, despite numerous anti-stigma interventions, these remain largely population-level, education-based, and lack long-term effectiveness data — a gap also evident in the Latin American literature [26]. In Colombia, the Ministry of Health and Social Protection has identified stigma as a significant barrier that hinders many people with mental illness from receiving timely clinical care, against a backdrop of a treatment gap estimated at over 77.9% for mental disorders in Latin America and the Caribbean [11]. Law 1616 of 2013 establishes mental health as a fundamental right in Colombia; however, as the studies above illustrate, the scarcity of research on community attitudes in vulnerable urban contexts reflects not only a data gap but a need for structurally informed approaches to measuring and addressing stigma [12].

In this context, it is important to assess community attitudes and perceptions toward persons with mental illness through an integrative approach that combines quantitative and qualitative data, providing a more comprehensive understanding of social phenomena and enabling the identification of measurable patterns of attitudes alongside the meanings and experiences expressed by the community [13]. The Community Attitudes toward Mental Illness (CAMI) scale by Taylor and Dear [14] is the most widely used international instrument for assessing community stigma toward people with mental illness, with validated versions in multiple languages, including Spanish [15,16].

In the city of Cartagena, available evidence on community attitudes toward mental illness is scarce, which limits the design of context-specific interventions in community mental health. Although the CAMI scale has previously been applied in Colombia, this prior use was limited to health profession students assessed through a purely quantitative design [31]; to our knowledge, no previous study has applied this instrument within a mixed-methods design among community members in vulnerable urban settings on the Colombian Caribbean coast. The objective of this study was to analyze attitudes and the level of stigma toward people with mental illness in vulnerable communities in Cartagena using a convergent mixed-methods approach that integrates the CAMI scale and semi-structured interviews.

2. METHODOLOGY

2.1. Study Design

A cross-sectional, descriptive, convergent mixed methods study was conducted. The design is based on the simultaneous collection of quantitative and qualitative data, the separate analysis of each type of data and the integration of the results obtained in the interpretation phase to find convergences and divergences between the two components [13]. The quantitative component was used to assess community attitudes towards mental illness using the CAMI scale and the qualitative component was used to explore social perceptions and community experiences related to mental health stigma through semi-structured interviews.

2.2. Context And Population

The study was conducted in the neighbourhoods of El Líbano and Los Cerros, in the city of Cartagena, Colombia. Both communities have fragile socio-economic conditions, limited access to health services and limited coverage of community mental health programmes. The study population included residents 18 years and older who lived in these neighborhoods.

2.3. Sample And Participant Selection

The participants were selected by the non-probability sampling method of voluntary participation. The number of people that participated was 144, of which 70 were from El Líbano neighborhood and 74 from Los Cerros neighborhood. Study inclusion criteria were adults aged 18 years or older, lived in the study neighborhoods, agreed to participate voluntarily, and signed an informed consent form. Minors, other area residents and incomplete data form were excluded.

2.4. Instruments

CAMI Scale. For the quantitative component, the 40-item version of the Community Attitudes toward Mental Illness (CAMI) scale was used, originally developed by Taylor and Dear in 1981 [14] and validated in Spanish [15,16]. The instrument assesses attitudes toward mental illness through four dimensions: (1) Authoritarianism, which measures the perception of people with mental illness as an inferior group; (2) Benevolence, which reflects attitudes of acceptance with paternalistic components; (3) Social Restriction, which assesses the desired level of social distancing; and (4) Community Ideology in Mental Health, which measures support for community-based care. Each item is rated on a five-point Likert scale, ranging from "strongly disagree" to "strongly agree."

Semi-structured interviews. The qualitative part involved semi-structured interviews to explore the community perceptions, experiences and attitudes towards people with mental illness. The questions concerned aspects of social interaction, perceptions of mental disorders, inclusion in the community and experiences of discrimination

2.5. Data Collection

Data were gathered from community spaces in both neighborhoods from January to March 2026. Participants completed the CAMI questionnaire first, under the supervision of trained research assistants.

In the qualitative part, a purposive sub-sample of participants was selected from those who agreed to be interviewed. The sample was intended to include variation in age, sex, educational level, and previous contact with mentally ill people. Semi-structured interviews were conducted face-to-face in private settings, lasted approximately 25–40 minutes and were audio-recorded with the permission of the participants. Interviews continued until thematic saturation was reached, meaning that no substantially new themes emerged from the data.

All recordings were transcribed verbatim and anonymized before analysis.

2.6. Data Analysis

Quantitative data were entered into databases and descriptive analysis was done by means of frequencies, percentages and measures of central tendency and dispersion. The scores obtained on each dimension of the CAMI scale were interpreted according to the parameters proposed by Taylor and Dear [14]. The interviews were transcribed and analyzed by manual content analysis, identifying categories related to fear, empathy, social exclusion, perception of danger and community acceptance. The interpretive phase was characterized by the integration of both components through a convergent triangulation procedure [13].

2.7. Ethical Considerations

The study was approved by the university's institutional review board. All participants signed an informed consent form to voluntarily participate in the study. The study was carried out under the ethical principles for research involving humans established by the Colombian Ministry of Health in Resolution 8430 of 1993, and the Declaration of Helsinki.

3. RESULTS

3.1. Participant Characteristics

A total of 144 participants from two vulnerable urban communities in Cartagena, Colombia, were included in the study. Of these, 70 participants (48.6%) were from El Líbano neighborhood and 74 participants (51.4%) were from Los Cerros neighborhood. Participants' ages ranged from 18 to 90 years with a mean age of the whole sample of 46.2 years (SD = 18.2). El Líbano had a mean age of 47.2 years (SD = 18.0) and Los Cerros had a mean age of 45.2 years (SD = 18.4). The wide age range reflects the inclusion of participants from different stages of adulthood and older age, providing a variety of perspectives shaped by different life experiences, social contexts and cultural beliefs. This diversity in demographic characteristics is particularly important to understand community attitudes towards mental illness, as perceptions of mental health and social inclusion might differ according to age and accumulated personal experiences.

Regarding sex distribution, women constituted the majority of participants in both communities. 80.3% of respondents were female and 19.7% were male in El Líbano. Similarly, women made up 55.4% (n = 41) and men 44.6% (n = 33) of participants in Los Cerros. The higher rate of participation among women may be related to their increased involvement in community activities, their family caregiving roles, and health promotion programs.

The socioeconomic profile of the participants showed social vulnerability conditions in both communities. In El Líbano, 85.7% of the participants were from socioeconomic stratum 1 and 14.3% from stratum 2. Similarly in Los Cerros, 79.7% of the respondents were from stratum 1 and 20.3% from stratum 2.

In the total sample, 82.6% of participants were in the lowest socioeconomic stratum, followed by stratum 2 (17.4%). These results suggest that the study was carried out mainly with low-income populations, with characteristics of socioeconomic vulnerability and limited access to resources. The socioeconomic status seen in both neighborhoods is also seen in the occupational profile of the study participants who were homemakers, self-employed, informal workers, small merchants, and retirees. These are characteristics that are typical of urban communities in which informal economic activities are an important source of livelihood and in which social and economic inequalities may affect access to healthcare, educational opportunities and social support networks.

These socioeconomic conditions are particularly relevant to attitudes about mental illness from a public health perspective.

Prior studies have shown that populations in economically disadvantaged settings tend to have more barriers to mental health services, less mental health literacy, and more exposure to stigmatizing beliefs and misconceptions about mental disorders . The socio-economic profile of the participants thus provides an important contextual frame to the attitudes and perceptions identified in this study and highlights the need for community-based interventions targeting mental health awareness, social inclusion and stigma reduction.

3.2. Quantitative Results: Cami Scale

The analysis of the scores obtained on the CAMI scale showed an ambivalent profile of attitudes in both communities. The highest scores were in the Benevolence dimension, indicating positive attitudes toward the protection and care of people with mental illness, but with paternalistic components. The Social Restriction and Authoritarianism dimensions evidenced attitudinal patterns that reflect the persistence of perceptions of dangerousness, functional incapacity and desire for social distancing.

The Community Ideology dimension in Mental Health was rated at an intermediate level, with moderate acceptance of models of mental health care based on community participation, but with some reservations concerning coexistence and safety, and no statistically significant differences were found between the scores of the two neighborhoods, which suggests a relatively homogeneous pattern of attitudes in the context studied.

3.3. Qualitative Results: Semi-Structured Interviews

Thematic analysis of the interviews yielded five major categories that influence community discourse about mental illness:

- Fear and sense of danger: several participants connected mental illness with unpredictable and violent behaviors and stated being afraid of coexisting with people with mental disorders in public and residential spaces.
- Empathy and conditional compassion: Living with fear is an empathic position to the mentally ill, especially when they are family members or known neighbors. But this empathy often occurs in paternalistic ways.
- Social exclusion and explicit stigma: Some participants explicitly rejected the idea of being near people with mental illness at work, in schools and in residential settings.
- Perception of functional incapacity: The common perception is that people with mental illness are people who cannot work, make decisions or be integrated into community life independently.
- Community acceptance (conditional): Some participants were positive about inclusion if the individual is treated, supervised by family or does not exhibit disruptive behaviors.

3.4. Integration Of Results

The triangulation of quantitative and qualitative data allowed for the identification of significant convergences: high scores on Benevolence on the CAMI scale correspond to the discourses of empathy and protection identified in the interviews, although both components share the paternalistic nature of these attitudes. Likewise, high scores on Social Restriction and Authoritarianism converge with the discourses of fear, distancing, and perception of danger recorded qualitatively. Intermediate scores on Community Ideology correspond to the conditional acceptance identified in the participants' discourses.

4. DISCUSSION

The findings of this study reveal an ambivalent attitudinal profile toward mental illness in vulnerable communities in Cartagena, consistent with patterns previously described in Latin American contexts [10,17]. These findings extend the application of the CAMI scale in Colombia beyond the academic and clinical populations previously assessed [31], offering, to our knowledge, the first mixed-methods characterization of community-level attitudes toward mental illness in a vulnerable urban context on the Colombian Caribbean coast. The co-existence of benevolent and restrictive attitudes among the same participants suggests the complexity of social representations of mental illness. These representations are not associated with linearly positive or negative dispositions, but are systems of contradictory beliefs that are influenced by sociocultural, educational and contextual factors [18].

The high score on the Benevolence dimension, consistent with findings in other Ibero-American studies [15,16], indicates a favorable disposition toward the care and protection of people with mental illness. However, this attitude has an eminently paternalistic character which, although it may translate into family or community support, limits the autonomy and agency of those affected. This pattern is consistent with what the Stereotype Content Model describes as a high-warmth, low-competence profile, which elicits pity and active helping while simultaneously fostering passive

exclusion from autonomy-affirming roles [9,27,28]. Because this combination is experienced as care rather than discrimination, it tends to be normalized within families and communities rather than challenged, which may help explain its convergence with the protective, paternalistic discourses identified in the qualitative interviews of this study. Importantly, "benevolent stigma" is not a benign or lesser form of stigma: by restricting decision-making and limiting opportunities for social and occupational participation, it constitutes, in itself, an obstacle to full social inclusion, regardless of its well-intentioned origin [29,30].

The identified patterns of Social Restriction and Authoritarianism are directly related to discourses of fear and perceptions of danger picked up in the interviews. These attitudes reproduce deeply entrenched stereotypes that link mental illness to violence and unpredictability, which are consistently contradicted by clinical and epidemiological evidence [6,7]. The persistence of these beliefs in settings with restricted access to mental health education underscores the significance of community-based interventions aimed at improving mental health literacy [19].

The results of this study are highly linked to the mental health treatment gap in Latin America, estimated at more than 77.9% [11]. Community stigma not only affects the social lives of people with mental illness, but also constitutes a structural barrier to accessing care. In the Colombian context, even with the regulatory advances represented by Law 1616 of 2013 and the National Mental Health Plan, the implementation of community-based care models is met with resistance related to the stigmatizing attitudes identified in this and other studies [12,20].

The convergent mixed-methods design employed in this study allowed for a more comprehensive understanding of the phenomenon than would have been possible with single-method approaches. The triangulation of quantitative and qualitative data revealed that the attitudinal patterns measured by the CAMI scale are linked to complex meanings and experiences that are not always captured by structured instruments.This methodological complementarity is consistent with recent mixed-methods research in the field of mental health stigma [18,21,32].

International and Latin American mixed-methods research on stigma corroborates this pattern. In the United Kingdom, Walsh and Foster [18] triangulated media discourse, focus group discussions, and individual interviews and found that quantitative measures of public attitudes failed to capture the dynamic, theme-based negotiation processes through which communities simultaneously resist and reproduce stigma, paralleling the present study's finding that ambivalent, paternalistic attitudes coexist with explicit social restriction. In Vietnam, Le Minh Thi et al. [32] applied a parallel convergent mixed-methods design combining a structured survey (n = 639) with in-depth interviews and focus groups among pregnant women, showing that quantitatively low stigma scores can mask qualitatively reported fears of judgment that deter health-seeking behavior, a divergence between self-reported attitudes and lived experience also evident in our integration of CAMI scores with participants' narratives. In the Latin American context, Donetto et al. [21], working within a mixed-methods study of youth mental health in post-conflict Colombia, identified through qualitative thematic analysis that stigma is experienced as a threat to valued capabilities and social identity rather than as an isolated attitudinal trait, reinforcing the present finding that stigmatizing attitudes in Cartagena are embedded in broader sociocultural and relational dynamics rather than reducible to a single explanatory dimension. Taken together, these studies converge in showing that mixed-methods triangulation consistently uncovers complexities in stigma that single-method designs obscure, while diverging in the specific populations, contexts, and intervention targets examined, underscoring the value of contextually grounded, multi-method approaches such as the one adopted here.

4.1. Study Limitations

The use of non-probability sampling through voluntary engagement limits the extent to which the findings can be generalized to the full set of communities assessed. Social desirability might have affected the responses to the CAMI scale, leading to an underestimation of explicit stigmatizing attitudes. The absence of systematic theoretical sampling in the qualitative part is also a methodological limitation. Future studies should use probabilistic samples and stronger qualitative strategies such as focus groups or community ethnography. Beyond methodological refinements in sampling, future research should prioritize longitudinal designs capable of tracking how stigmatizing attitudes and their underlying ambivalence evolve over time and in response to community-level events, given that cross-sectional designs, including the present one, cannot establish whether the coexistence of benevolent and restrictive attitudes observed here is stable or transitional. Likewise, intervention-based studies are needed to

translate these findings into actionable change: contact-based strategies, such as the arts-mediated pilot intervention evaluated among youth in India [33], and structured mental health literacy programs integrated with acceptance-based psychoeducation, such as the cluster-randomized trial recently tested among university students in China [34], offer promising models that could be adapted and tested in similarly stigmatized Latin American communities through rigorous trial designs.

4.2. Future Research

Future studies should examine changes in community attitudes toward mental illness over time through longitudinal designs. Such approaches would allow researchers to evaluate the stability of stigmatizing beliefs and the influence of social, educational, and policy changes on community perceptions, furthermore, intervention-based research is needed to assess the effectiveness of mental health literacy, anti-stigma campaigns and community engagement in vulnerable urban settings.

Evaluating these strategies through experimental or quasi-experimental designs could generate evidence to guide the development of sustainable community mental health policies and practices.

5. CONCLUSIONS

The vulnerable communities in Cartagena studied exhibit ambivalent attitudinal patterns toward mental illness, characterized by the coexistence of benevolent, paternalistic attitudes with perceptions of danger, social restriction, and authoritarian attitudes. These findings are consistent with patterns described in other Latin American contexts and reflect the influence of sociocultural factors and access to mental health information on community perceptions.

The identified community stigma constitutes a significant barrier to the implementation of community-based mental health care models and to timely access by affected individuals to available services. Contextualized community interventions are required, aimed at mental health literacy, stigma reduction, and the promotion of inclusive attitudes based on a rights-based approach.

The results of this study provide, to our knowledge, the first mixed-methods evidence on community attitudes toward mental health in a vulnerable urban context on the Colombian Caribbean coast, extending the cross-cultural application of the CAMI scale beyond the populations and methodological designs previously reported in Latin America, and contribute to the development of public policies and community mental health intervention programs in the city of Cartagena.

Conflict of Interest: The authors declare that they have no conflicts of interest.

Funding: This study did not receive external funding.

REFERENCES

Agudelo-Hernández F, Vélez-Botero H, Guapacha-Montoya M. Human rights engagement, stigma and attitudes towards mental health among Colombian social work and medical students. Adv Health Sci Educ Theory Pract. 2025;30(4):1085-1100. https://doi.org/10.1007/s10459-024-10377-5

Allstadt Torras RC, Scheel C, Dorrough AR. The stereotype content model and mental disorders: Distinct perceptions of warmth and competence. Front Psychol. 2023; 14:1069226. https://doi.org/10.3389/fpsyg.2023.1069226

American Psychiatric Association. Stigma, Prejudice and Discrimination Against People with Mental Illness. Washington, D.C.: APA; 2020. Available at: https://www.psychiatry.org/patients-families/stigma-and-discrimination

Campo-Arias A, Herazo E, Ceballos-Ospino GA. Association Between Familiarity with Mental Disorders and Stigma Discrimination Related to Mental Disorders Among Colombian Students. Psychiatry Clin Psychopharmacol. 2024;34(1):94-98. https://doi.org/10.5152/pcp.2024.23721

Córdoba-Castro E, Hernández-Holguín DM. Historical overview, approaches, and trends in community mental health in Latin America: a comprehensive literature review. Rev Cienc Salud. 2024;22(3):1–28. https://doi.org/10.12804/revistas.urosario.edu.co/revsalud/a.14251

Corrigan PW, Druss BG, Perlick DA. The impact of mental illness stigma on seeking and participating in mental health care. Psychol Sci Public Interest. 2014;15(2):37–70. https://doi.org/10.1177/1529100614531398

Corrigan PW, Watson AC. Understanding the impact of stigma on people with mental illness. World Psychiatry. 2002;1(1):16–20. PMID: 16946807.

Corrigan PW. How stigma interferes with mental health care. Am Psychol. 2004;59(7):614–625. https://doi.org/10.1037/0003-066X.59.7.614

Creswell JW, Plano Clark VL. Designing and Conducting Mixed Methods Research. 3rd ed. Thousand Oaks: SAGE Publications; 2018.

Cuddy AJC, Fiske ST, Glick P. The BIAS map: behaviors from intergroup affect and stereotypes. J Pers Soc Psychol. 2007;92(4):631-648. https://doi.org/10.1037/0022-3514.92.4.631

Donetto S, Ortiz Baddan Sochandamandou S, Garcia Duran MC, Hessel P, Zimmerman A, Araya Baltra R, Idrobo F. "It's a delicate topic": Stigma, capabilities and young people's mental health in post-conflict Colombia. Glob Public Health. 2024;19(1):2346947. https://doi.org/10.1080/17441692.2024.2346947

Gaiha SM, Gasparrini A, Koschorke M, Raman U, Petticrew M, Salisbury TT. Impact, feasibility, and acceptability of CREATORS: an arts-based pilot intervention to reduce mental-health-related stigma among youth in Hyderabad, India. SSM Ment Health. 2024;6:100339. https://doi.org/10.1016/j.ssmmh.2024.100339

Global Burden of Disease Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet Psychiatry. 2022;9(2):137–150. https://doi.org/10.1016/S2215-0366(21)00395-3

Görzig A, Ryan C. The different faces of mental illness stigma: systematic variation of stereotypes, prejudice and discrimination by type of illness. Scand J Psychol. 2022;63(5):545-554. https://doi.org/10.1111/sjop.12833

Grandón P, Bustos C, Fernández D, Cova F, Nazar G, Díaz-Pérez G, Monreal V, Méndez J. Stigma toward people with mental disorders in mental healthcare in Chile. Int J Soc Psychiatry. 2024;70(7):1289-1297. https://doi.org/10.1177/00207640241263251

Guimarães PN, Pedersen D. The role of moral explanations and structural inequalities in experiences of mental illness stigma in Northern Minas Gerais, Brazil. Transcult Psychiatry. 2022;59(2):188-201. https://doi.org/10.1177/13634615211055000

Hernández-Holguín DM, López BEA, Martínez-Hernáez Á. Collective mental health: a review of the concept in the academic literature of Brazil, Colombia, and Spain. Saúde Soc. 2023;32(3):e210693es. https://doi.org/10.1590/S0104-12902023210693es

Hernández-Holguín DM. Characterization of perceived stigma toward mental health in the implementation of an integrated primary care services model in Colombia. Rev Colomb Psiquiatr. 2021;50(2):139–147. https://doi.org/10.1016/j.rcp.2019.11.002

Jara-Ogeda R, Grandón Fernández P, Leyton Leguües D. The praxis of mental health care and the manifestation of stigma: an ethnographic study in mental health centers in the Biobío Region, Chile. Salud Colect. 2025;21:e5631. https://doi.org/10.18294/sc.2025.5631

Jörm AF. Mental health literacy: empowering the community to take action for better mental health. Am Psychol. 2012;67(3):231–243. https://doi.org/10.1037/a0025957

Le Minh Thi, Manzano A, Bui Thi Thu Ha, et al. Mental health stigma and health-seeking behaviors amongst pregnant women in Vietnam: a mixed-method realist study. Int J Equity Health. 2024;23(1):163. https://doi.org/10.1186/s12939-024-02250-z

Link BG, Phelan JC. Conceptualizing stigma. Annu Rev Sociol. 2001;27(1):363–385. https://doi.org/10.1146/annurev.soc.27.1.363

Mascayano F, Armijo JE, Yang LH. Addressing stigma relating to mental illness in low- and middle-income countries. Front Psychiatry. 2015;6:38. https://doi.org/10.3389/fpsyt.2015.00038

Ochoa S, Martínez F, Pons A, et al. Spanish validation of the Community Attitudes toward Mental Illness (CAMI) scale in adolescents. Rev Psiquiatr Salud Ment. 2016;9(3):120–128. https://doi.org/10.1016/j.rpsm.2014.11.003

Oliveira SE, Carvalho H, Esteves F. Toward an understanding of the stigmatization of people with mental disorders: social representations and implications. Front Psychol. 2016;7:1301. https://doi.org/10.3389/fpsyg.2016.01301

Pan American Health Organization. Mental Health. Washington, D.C.: PAHO; 2023. Available at: https://www.paho.org/es/temas/salud-mental

Sadler MS, Meagor EL, Kaye KE. Stereotypes of mental disorders differ in competence and warmth. Soc Sci Med. 2012;74(6):915-922. https://doi.org/10.1016/j.socscimed.2011.12.019

Sánchez-Iglesias I, Zamorano S, González-Sanguino C, Santos-Olmo AB, Muñoz M. Psychometric properties of

the 12-item Community Attitudes Toward Mental Illness scale (CAMI) in a representative sample of Spain: The CAMI-12-ES. Stigma Health. 2024. Advance online publication. https://doi.org/10.1037/sah0000557

Schomerus G, Angermeyer MC. Stigma and its impact on help-seeking for mental disorders: what do we know? Epidemiol Psichiatr Soc. 2008;17(1):31–37. https://doi.org/10.1017/S1121189X00002669

Taylor SM, Dear MJ. Scaling community attitudes toward the mentally ill. Schizophr Bull. 1981;7(2):225–240. https://doi.org/10.1093/schbul/7.2.225

Vaishnav M, Javed A, Gupta S, Kumar V, Vaishnav P, Kumar A, et al. Stigma towards mental illness in Asian nations and low-and-middle-income countries, and comparison with high-income countries: A literature review and practice implications. Indian J Psychiatry. 2023;65(10):995-1011. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_667_23

Walsh D, Foster J. Understanding the public stigma of mental illness: a mixed-methods, multi-level, exploratory triangulation study. BMC Psychol. 2024;12(1):403. https://doi.org/10.1186/s40359-024-01887-3

World Health Organization. World Mental Health Report: Transforming Mental Health for All. Geneva: WHO; 2022. Available at: https://www.who.int/publications/i/item/9789240049338

Zhang Q, Wang Y, Wang J, Wang X, Tian M. Reducing public stigma toward people with mental illness through the ACE intervention: a cluster-randomized waitlist-controlled trial. BMC Psychol. 2026;14(1):282. https://doi.org/10.1186/s40359-026-04107-2