Mental health services implementation in Colombia–A systematic review

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Abstract

Colombia's mental health services have a complex history shaped by 60 years of armed conflict, a predominantly clinical approach to mental health, and social factors such as inequities and stigma. The 1990 Caracas declaration proposed a shift towards decentralised community mental health services and interventions based on the recovery approach and emphasis on social determinants of mental health in the Americas. Colombia has adopted these approaches in its legal and practical framework in recent years, but implementation has been uneven. This systematic review aims to contribute to mental health services understanding in Colombia by examining the barriers and facilitators to the implementation of mental health services in Colombia. A search was conducted to explore available peer-reviewed studies on Colombian mental health services across five databases (Medline, PubMed, Scopus, Scielo and BVS) on quantitative and qualitative research papers published in the last ten years and without language restrictions. The Consolidated Framework for Implementation Research (CFIR) was used to structure the analysis and identify barriers and facilitators during the implementation of mental health services. We adapted the CFIR to attend to gender, race and age informed by the Socio-Political Economy of Global Mental Health framework, given the importance of these factors to the Colombian health landscape. Finally, narrative synthesis was used to summarise the data. 1 530 records were identified, and 12 articles met all inclusion criteria and were included in the analysis. 8 papers described substance use disorders services, 11 involved multidisciplinary healthcare professionals, and 7 were implemented at a local scale. The primary barriers to implementation were the lack of coordination, high workloads, and low funding. Facilitators included the use of protocols, and the involvement of communities, stakeholders, users, and external champions. Findings suggest the continued importance of community and recovery approaches and efforts to improve coordination between multi-sector actors involved in the mental health spaces (e.g., public, and private organisations, users and their families).

Introduction

In the last 30 years, mental health systems and services have received more attention and urgency to prioritise by governments. Global health crisis such as the COVID-19 pandemic has increased pressure on people's mental health and has risen general mental health awareness. According to the WHO, the global prevalence of anxiety and depression increased by 25% in the first year of the COVID-19 pandemic. Recently, a study explored the correlation between the COVID-19 pandemic and mental health in some low-and-middle-income countries (LMICs), including Colombia. This work concluded that depression symptoms significantly increased during the first months of the pandemic, which could have been influenced by insufficient policy interventions and mental health support services.

Nevertheless, how governments and mental health systems should respond is still a general debate. For instance, Colombia has advanced in building a relative robust health policy space to address these challenges. However, translating visions and concepts into real-world changes tends to be a convoluted pathway full of barriers and enablers, which should be avoided and supported respectively to achieve the goals and objectives articulated in policy documents [1].

Global and regional situation

In 2007, *The Lancet* launched the first global mental health series outlining the treatment gaps in low-and-middle-income countries (LMICs) and the necessity of better cost-effective mental health interventions [2]. Furthermore, the ratification of the Sustainable Development Goals in 2015 included the promotion of mental health with a strong emphasis on substance abuse, including the use of alcohol [3].

The WHO Mental Health Action Plan 2013–2020 led many states along pathways to strengthen leadership and governance for mental health, increase the provision of mental and social care services and support better information systems for evidence and research [4]. In Latin America, such efforts are predated by the *Caracas Declaration of Mental Health, and Human Rights* from 1990, which highlighted the necessity of adapting primary care lenses and community-based services in mental health. It also promoted more team planning and the reduction of the role of institutionalisation in mental health services, expanding voices in mental health spaces [5].

Critiques against the global mental health agenda remain. Many report of the limited consultation with social scientists, people with psychosocial disabilities, victims of negative mental health services, and others [6]. Moreover, analysts also argue that the proposed mental health models are limited by "Western" neo-colonial lenses, disregarding traditional and cultural understandings of mental health interpretations [7]. This situation fosters the replication of services solely built on the biomedical model.

One of the consequences is that non-pharmaceutical interventions such as psychotherapy or community-based programmes are actively overlooked. Also called "psychiatrisation," the biomedical perspective favours pharmaceutical companies, governmental supporters behind them, and even some psychiatry and mental health practitioners. This scenario has facilitated a profitable world market for these companies and their stakeholders [8]. The prioritisation of pharmacological treatment has also produced a normalisation of adverse effects of psychiatric medications, which are incredibly relevant and should be reported to regulatory agencies and manufacturers for quality and research purposes [9, 10].

Furthermore, in Latin America, the outlook on mental health financing is complex. While HICs' funding on mental health is around 5% of the total health budget, LMICs' is between 2 and 9 times less. Overall, the percentage of the budget used on mental health services is not

proportional to the negative impact that none or limited mental health provision generates in society, as stated by multiple experts in the last 20 years [11, 12].

In the Americas in 2018, the treatment gap for mental disorders was up to 71.2% for any mental disorder and 65.7% for severe to moderate disorders. The difference between North and South America is evident, considering that the treatment gap for substance abuse is 83.7% and 69.1%, respectively. Some individual factors behind this reality are the lack of belief in treatment, financial barriers, and stigma, among others [13].

Setting

Colombia has suffered decades of violence which has had a major impact on Colombians' mental health [14]. More than 60 years of internal conflict (1960) have fractured social structures and intensified the transmission of communicable and non-communicable diseases [14]. War tactics like massacres, anti-personnel landmines, and gender-based and sexual violence drove internal displacement and the escalation of substance abuse [15]. These circumstances can also trigger a plethora of mental health difficulties among victims (including legal and illegal armed forces, civilians, and foreigners) [14].

According to the National Health Institute of Colombia, the consequences of armed conflict on mental health include high rates of post-traumatic stress disorder (PTSD), depression, anxiety, and suicidal behaviour [14]. Additionally, the conflict directly affected human healthcare resources due to direct attacks on the workforce, causing a cessation in the training of new healthcare professionals (HCPs) in some regions such as Arauca, Guaviare, Caquetá and Putumayo, which were the regions with the highest indicators of violent conflict intensity [14]. Healthcare services became increasingly urban-based due to the intensified violence that led to the reduction of healthcare centres in conflict-affected rural areas, and many people stopped accessing care due to mobility limitations and financial hardship [14].

In 1993, the National Law 100 determined that healthcare services must be administered and partially operated by healthcare insurers (Empresas Promotoras de Salud [EPS] in Spanish), and the population was divided into two income-based schemes; subsidised and contributory [16]. Insurers hire providers (private practitioners, hospitals, clinics, laboratories) to deliver health services stated in the national health benefits packages (Plan de Beneficios en Salud (PBS) in Spanish) [17].

This law established a legal right to healthcare based on opportunity, quality, and comprehensive coverage. Healthcare coverage increased from 23% to 97% [18], with a benefits package affordable for most of the population [19]. However, the law weakened mental health services, revoking programmes like Day Hospitals, restricting access to psychotherapy after one month, and only covering early-stage treatment [19]. Consequently, the number of legal actions (also known as "*Tutelas*" in Colombia) against healthcare insurers skyrocketed. These oversights required a range of reforms, new policies, and amends.

One of these reforms was the first version of the National Mental Health Policy in 1998, strengthened with the Mental Health Law in 2013 [20, 21]. These legal and strategic frameworks aimed to improve access, quality, and coverage. However, their local implementation has been limited and insufficient [12]. According to Holguín and Sanmartín-Rueda (2018) [22] current mental health services in Colombia are centred on financial profitability for insurers, and due to weak inspection and regulation, numerous deficiencies in the flow of financial assets, and corruption lawsuits, the legal right to healthcare has been undermined.

In parallel at the social level, stigma, which compromises service quality worldwide, has been categorised as one of the most notable factors that prevent accessing mental health services in Colombia [23]. According to Campo-Arias, Oviedo and Herazo (2014) [24, 25] the

most common sources of stigma are the surrounding community, family, employees and colleagues, and media. People believe that the only causes of mental disorders are substance abuse, brain disease, and spiritual reasons such as evil spirits or "God's punishments". This lack of additional understanding may be due to a deficiency of available information regarding mental health disorders' nature and multiple causes.

On the whole, there is a global and regional space with ideas on mental health approaches, and Colombia is aiming to develop laws and policies influenced by these ideas and supported by massive surveys and monitoring actions such as the National Mental Health Survey in 2015 or the 2021 mental health statistical reports by the National Statistical System (Departamento Administrativo Nacional de Estadística or DANE in Spanish). Thus, both the National Mental Health Law and Policy have represented an opportunity for Colombia to develop integrated mental health models and frameworks based on national evidence, and community approaches and consider the social determinants of mental health (SDMH). However, multiple studies, independent reports and civil complaints spell out the decay of mental health services and how they are failing to satisfy mental health care needs [26–32], demonstrating that this supportive policy environment does not automatically translate into effective and accessible services in practice.

Aim

Despite the robust mental health policy environment in Colombia, there is a gap on why implementation failures remain. The purpose of this paper is to identify the barriers contributing to these gaps in delivering effective and accessible services aligning with policy ambitions. It also aims to contribute to existing knowledge by identifying the facilitators for implementing mental health services in Colombia.

The following research questions guided this review:

1. What are the reported mental health services in Colombia?

2. What are the main challenges with the implementation of mental health services?

3. What are the facilitators of the implementation of mental health services?

Methods

Design and approach

This systematic review included chronological identification, screening, selection and synthesis [33, 34], and followed a systematic approach to ensuring that all the available information was incorporated [34]. This systematic review was conducted following the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines. No formal protocol was developed or published for this review.

Implementation science framework

The relevance of evidence for decision-making in policy is well known, especially in healthcare. Healthcare settings are usually complex environments, with limited resources and multiple actors, behaviours, and structures that complicate taking decisions [35]. While the production of evidence rises every day, it is a well-known fact that without methodical adoption processes for both clinical and non-clinical interventions, significant changes in health outcomes cannot be expected [36]. Therefore, it is crucial to determine whether evidence can be implemented and what impedes its acceptance.

Table 1. Overview of the CFIR.

Domain	Definition	Selected constructs
Intervention characteristics	The influence of essential and adaptable interacting components in the success of implementation.	Intervention source Evidence strength & quality Relative advantage Design quality & packing Cost
Outer setting	It is the external framework where the entire process resides. It includes economic, political, and social contexts.	Patient needs & resources External policies & incentives
Inner setting	It includes structural features of politics and culture, through which the implementation process will be shaped.	Structural characteristics Implementation climate Tension for Change Available resources Access to knowledge & information
Individual characteristics	Features of people who are actively involved in the implementation.	Not used in this review
Process	Group of sub-processes progressing simultaneously at multiple levels within the organisation.	Planning Engaging Executing Reflecting & Evaluating

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To organise the results for analysis we used the CFIR. It comprises 39 different constructs divided into five domains: intervention characteristics, outer setting, inner setting, individual characteristics, and process [37]. The CFIR was chosen because it provides a high-quality and integrative tool to assess implementation processes in multiple disciplines. In English et al., (2011) [39] this tool proved to be valuable to guide implementation assessments in an under-funded setting in Kenya, comparable to the Colombian settings. Likewise, for this work, we only used the appropriate constructs from four domains, which are defined in Table 1.

The domain of characteristics of individuals was not used since very little data from included studies was about individuals' beliefs, features, or capabilities. Furthermore, as the CFIR is focused on institutions and organisational problematics during implementation, factors such as religious beliefs, gender, ethnicity, or race are not actively considered within the framework despite their significant influence on mental health services. To cover these missing factors, we adapted the CFIR adding a new domain of socio-political economy in mental health based on the Socio-Political Economy of Global mental health framework proposed by Burgess et al., (2022) [40].

Specifically, we included three of their nine factors: I. Gender and sexuality, II. Racism, caste, xenophobia, and III. Age and disability. These factors were selected because they allowed us to explore their influence on determining mental health, their representation in the literature, and the existence of relevant information. We did not include other proposed factors such as religion, spirituality, or neighbourhood dynamics due to a foreseeable lack of information, while political dynamics were not incorporated since this kind of information was covered by the CFIR (domain of outer setting, construct of external policies and incentives).

Search strategy

The literature search was performed between June and July 2021 using five databases: Medline (OVID), PubMed, Scopus, Scielo and BVS (Biblioteca Virtual de Salud in Spanish). These databases were selected because of the amount of peer-reviewed available information, and in the case of Scielo and BVS, due to their inclusion of Latin American literature.

The search terms were established based on MeSH (Medical Subject Headings) terms and the Spanish counterpart DeCS (Descriptores en Ciencias de la Salud in Spanish) for mental

Table 2. Inclusion and exclusion criteria.

Main aspect	Inclusion criteria
Type of documents	Published quantitative and qualitative peer-reviewed papers or manuscripts where mental health services were mentioned and/or described.
Publication period	January 1, 2011, to July 01, 2021
Language of publication	No restriction
Include policy, programmes/ interventions/strategies	That applied or implemented any of the following: • Mental health services such as: ○ Psychiatric hospitalisation, psychotherapy, outpatient and inpatient mental health treatment, recovery, and complementary/alternative treatments, medication programmes.
Country of focus	Colombia
Main aspects	**Exclusion criteria**
Type of documents	• Manuscripts, files, or reports that are not openly available. • Editorial or comments. • Newspaper articles. • Scoping/systematic reviews.
Type of services, actions, or interventions	• Mental health services that are not currently working or are due to be discontinued. • Mental health services that were part of development programmes but were stopped. • Studies or publications that are only focused on characterising and/or analyse mental health disorders (prevalence/incidence rates).

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health. Search terms included relevant words to refer to mental health and Colombia. It was necessary to use broad search terms because key literature results did not appear during preliminary searches. Detailed searching terms and combination strategies are described in **S1 Appendix. Search strategy.**

Location terms included the names of the five principal cities with more than one million inhabitants in Colombia. These cities were incorporated in the searches done in Scopus, Medline (OVID) and PubMed because it was noticed during earlier search checks that multiple possible eligible studies did not mention the country but specifically a city. It was also noted that using this strategy with the Boolean term "OR" did not risk losing data because studies mentioned at least the country or a city. This strategy was unnecessary in either Scielo or BVS since adding city names significantly lost results.

The search was limited between 2011 and 2021 to capture the most current state of mental health systems in Colombia while still capturing significant modifications of mental health policies (e.g., The Decennial Public Health Plan in 2012, National Mental Health Law in 2013), and the first years after the sign of the peace agreement in 2016 [38]. Articles were screened by one author (GA-AG) at the title and abstract level using *Rayyan* software [39] based on the specific inclusion and exclusion criteria presented in Table 2. Full-text screening was conducted by two reviewers (GA-AG and NV-SJ), with 100% of included and 10% of excluded documents checked by an author (NV-SJ). Disagreements were solved via discussion between two authors (GA-AG and NVSJ).

Data extraction

All the information was charted in an *Excel* data extraction form developed following the research objectives and based on the CFIR and the Socio-Political Economy of Global Mental Health framework.

Data included basic information (authors, year) and identification (e.g., mental health problem addressed, level of healthcare service, human resources, and population, among

others). This review classified interventions into psychiatric hospitalisation, psychotherapy, outpatient and inpatient mental health treatment, complementary/alternative treatments, and medication programmes.

Moreover, the classification of mental health services in the Colombian healthcare system is divided into three levels. First (I) level (low) for basic ambulatory care principally in small municipalities, second (II) (medium) for specialised HCPs with medium-range medical technology and third (III) (high) with the highest level of technology and subspecialised personnel [40]. Likewise, the coverage was considered local (small municipalities), regional (a whole department/state) and national.

Initial data extraction was performed on a first version with two studies to verify the practicability of the extraction form. After some adjustments, the extraction was completed with all the selected studies. The CFIR was adapted based on the nature of these interventions and the reported information. Therefore, all the domains except for one (individual characteristics) were included. Lastly, information was incorporated using a narrative synthesis method, which facilitated the categorisation of synthesised data and their organisation in text categories [41].

Results

Study selection

The search yielded a total of 1 530 results. A duplicate detection process was performed in two phases. Firstly, the detection was supported by Mendeley's software tool to check duplicates. Based on a reported accuracy of over 95%, 250 duplicates were removed. Finally, 135 possible duplicates were manually examined, finding that eight results were not duplicated; therefore, an additional 127 duplicates were removed.

1 153 results were imported on Rayyan for the title and abstract screening, of which 32 studies were selected for a full-text review, applying the full inclusion and exclusion criteria. 15 studies were excluded due to the lack of description of mental health services [12, 24, 42–54], two because of their focus on characterising mental health disorders [55, 56], two were only recommendations and were not implemented [57, 58], and 1 due to the type of publication [15]. In the end, 12 studies were selected for data extraction. The screening and selection process is presented using the PRISMA flow diagram (Fig 1) [59].

General features of included papers

The studies were published in the last six years. Of the 12 selected studies, five were focused on substance use disorders, specifically heroin and alcohol consumption [60–64]; three addressed mental health disorders such as anxiety, depression, PTSD, schizophrenia, and bipolar affective disorder [65–67]; and the others were centred on suicide [68], behavioural health disorders [17, 69], and inclusion and rehabilitation [70].

Geographically, there was high variability since only four studies were solely conducted in the principal cities of Bogota or Cali [62, 65, 68, 70], while the rest were in multiple smaller cities and municipalities in the country, mainly in rural areas. Notably, three studies were multicentric, combining both urban and rural settings [17, 64, 71]. Similarly, the most reported level of coverage was local, which are services focused on specific districts or neighbourhoods, different to regional and national levels that cover wider populations (7).

Ten studies reported the complexity level of the healthcare institutions [17, 61, 62, 64–67, 69–71], of which seven provided healthcare at the first and second levels [17, 62, 65, 66, 69–71]. Likewise, it was significant that all the studies involved multidisciplinary HCPs. Mainly, general practitioners, psychiatrists, psychologists, nurses, and social workers participated. Nevertheless, five studies included infrequent providers such as physical education instructors,
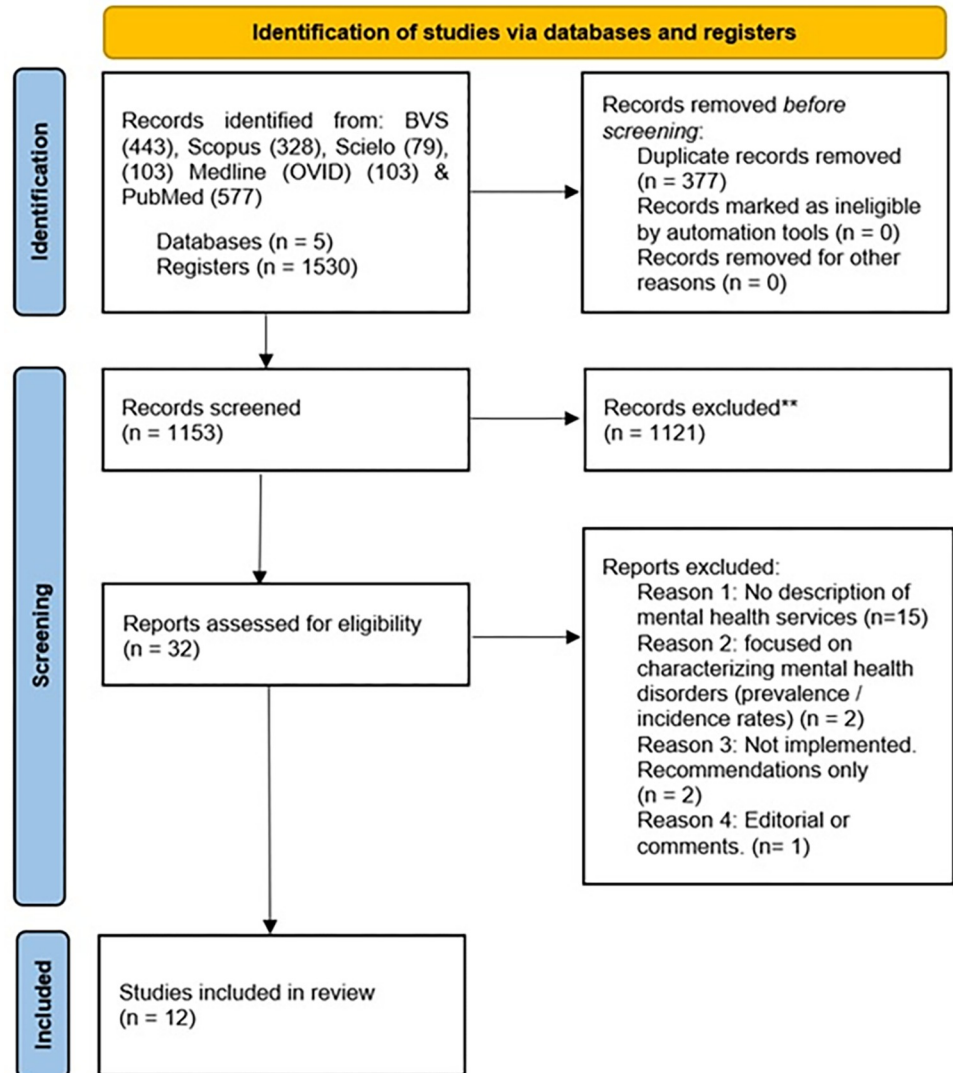
Fig 1. PRISMA–Study selection process.

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nutritionists, occupational therapists, schoolteachers, and even internally displaced women who were trained as part of a programme. Five studies were classified as complementary/alternative treatments [66, 68–71], four as psychotherapy [17, 62, 65, 67], and three as medication programmes along with outpatient or inpatient treatment [61, 63, 64].

Finally, about the target population, half of the studies were directed to the general population (adults or children) [17, 62, 67, 69–71], while the rest pursued only men [64], internally displaced women (IDW) [65], communities [61], university staff [68], users of psychoactive substances [63], or a woman (case report) [66]. A description of the included studies can be found in Table 3. Main characteristics of the included studies.

Quality of evidence

The studies' quality was assessed using the Mixed Methods Appraisal Tool (MMAT). This tool was selected because it is feasible to evaluate mixed studies reviews [72].

Table 3. Main characteristics of the included studies.

Study ID	Setting	Study design	Participants	Comparison	Outcomes assessed	Results	Limitations
Barrios Acosta 2017 [68] Location: Colombia	Universities	Qualitative description	66 university workers	Not applicable	Institutional responses and actions towards suicidal behaviour of university students.	Participating universities have a heteronomous understanding of the phenomenon of suicide, as well as different attention mechanisms, which were mainly directed to administrative support and the prevention of suicidal behaviour contagion.	This study was limited by the number and type of participants since it did not include students, which could have highlighted a new perspective on the problem. Also, the study lacked further proposals on how findings can inform policies and be replicated in other settings.
Borda 2021 [63] Location: Armenia	A harm reduction centre and two public methadone maintenance treatment (MMT) programme	Cross-sectional analytic study	148 subjects with opioid use disorder	Participants not involved in the MMT	Using the General Health Questionnaire-28 (GHQ-28), it was compared drug use, social functioning, human immunodeficiency virus risk behaviours, criminal activity, and the physical/mental health of subjects involved in MMT and those not receiving treatment.	Despite technical and logistical difficulties, subjects participating in MMT reported less illegal substance use (specifically heroin and *basuco*), less human immunodeficiency virus risk behaviours, better social functioning, less criminal activity, and fewer physical and mental health problems than those not receiving treatment. In addition, subjects involved in MMT reported daily use of heroin and lower than recommended dosages of methadone.	Although the study was an important experience on reduction of unhealthy behaviours associated with OUD, its applicability might be reduced considering that bigger and more populated territories might experience diverse social factors that are not present in smaller cities such as Armenia. Also, authors did not report specific details about the recommended dosages or the reasons behind the lower dosages. More information in this regard could have been useful for a comprehensive analysis. All the information presented was based on self-reporting by participants and additional methods to confirm the information were not used.
Castro 2020 [17] Location: Bogotá, Duitama, Santa Rosa de Viterbo, Armero-Guayabal, and Chaparral.	Primary care health facilities treatment (MMT) programmes	Survey	Adults and children	Not applicable	BHIMC scores by dimensions (programme structure, programme milieu, screening and assessment, clinical treatment, continuity of care, programme staffing, staff training).	The adapted BHIMC index is a practical tool used to measure the level of behavioural healthcare integration in Colombian primary care settings. This tool may help institutions to develop a plan to achieve or improve their integrated care capacity. Results show that the level of integration of behavioural health care into the five Colombian primary care sites was low, with some variation between rural and urban settings.	The study did not provide a more detailed discussion section that delved into the practical implications of the findings. It was not clear how to address the identified barriers to integration, or what policy changes or interventions could improve the situation.

Table 3. (Continued)

Study ID	Setting	Study design	Participants	Comparison	Outcomes assessed	Results	Limitations
Ceballos 2016 [65] Location: Bogota	Mental health facility	Case study	Internally displaced women (IDW)	Not applicable	Assessment using the Patient Health Questionnaire (PHQ-9); the Generalized Anxiety Disorder Questionnaire (GAD-7); and posttraumatic stress disorder using the PTSD Checklist-Civilian Version (PCL-C).	In this case study, Inter-Personal Counselling proved to be an effective treatment for a forcibly displaced woman over a short period. Specifically, through restoring the patient's sense of agency and attachment to others and teaching her coping skills to empower her to make critical decisions.	This case study focused on a specific population of IDW in Colombia's capital city, who in contrast with IDW in other regions might have experienced the Colombian armed conflict differently, changing the needs of care due to, for example, cultural aspects. The case highlighted a strong attachment between the participant and the therapist. While forming a therapeutic alliance is generally positive, the dependency on the therapist, which might be counterproductive, might also limit access in settings serving deprived populations.
Gomez Restrepo 2018 [61] Location: Colombia	Therapeutic communities	Survey and quantitative description	Communities	Not applicable	Quantity and quality of the existing Therapeutic Communities (TC) in 5 different countries. The TCs' quality was evaluated according to the scoring system established by De Leon.	The majority of the TCs meet the quality criteria established by De Leon, mostly providing services for substance abuse disorders, followed by alcohol abuse and other kinds of abuse. There was a high non-response rate (41%). Only in Colombia and Argentina communities that met 8 criteria or less were found.	A substantial non-response rate raised concerns about potential bias in the findings. The exclusion of certain communities and the possibility of misrepresentation in the study's conclusions further underscored the need for caution when generalising the results to a broader population. Additionally, the assessment of study quality utilising the Leon criteria posed challenges in terms of comparability with prior research since it marked the first instance of such an assessment in the context of TCs.
Gonzalez 2019 [64] Location: Antioquia, Bogotá, Cauca, Norte de Santander, Quindío, Risaralda y Valle del Cauca.	Methadone-assisted treatment programmes	Survey	Men–young adults	Not applicable	The demographic and clinical characteristics of the patients attending the programmes. The description of the services offered, their methadone treatment protocols, the various barriers to treatment and the causes of treatment abandonment.	Colombian MAT programmes analysed generally have unequal development and implementation of national and international protocols. Among the twelve programmes assessed, some were in the early phases of this implementation, while others were much more developed. The lack of coordination with primary care was considered the most significantly problematic barrier o accessing treatment.	The study's findings indicated that administrative and insurance-related factors were identified as the primary drivers behind patient attrition in methadone-assisted treatment programmes. However, the study lacked a comprehensive exploration of potential alternative strategies or solutions, both from a policy and practical standpoint. A more in-depth examination of feasible alternatives at these levels would have provided valuable insights to inform policies and decision, which might increase effectiveness of such programmes.

(*Continued*)

Table 3. (Continued)

Study ID	Setting	Study design	Participants	Comparison	Outcomes assessed	Results	Limitations
Hernandez Holguin 2017 [69] Location: Antioquia	Mental health facility	Interviews	Children and their parents/ care takers	Not applicable	Design and implementation of a childhood mental health programme based on the contextual-perspective from the ecological model and health education approach to preventing violence.	The study did not present the impact evaluation. The programme created aims to build parenting strategies with parents and carers, through an educational process about children's development characteristics and mental health. The programme had three intersectional modules: child development, child rearing and mental health.	Although parental experiences contributed to the programme's design, there was no particular acknowledgment of the diverse cultural differences associated with socioeconomic characteristics that exist in Colombia. For instance, there was mention of participation of parents from multiple socioeconomic backgrounds but there was no report of these details.
Martinez Perez 2020 [67] Location: Antioquia	Mental health facility	Cross-sectional descriptive study	Psychiatric services users	Not applicable	Patients' and health professionals' satisfaction.	A sample of 38 patients (34%) was used to evaluate their experience, of which 94.7% said their problem had been solved and 100% were highly satisfied. Although this study found great satisfaction among the healthcare personnel involved in the programme, it was noted that the first level of care has been received more widely by psychologists than by physicians, who showed great resistance to change.	The exclusive reliance on data obtained from a satisfaction survey raised concerns about potential biases in the study results, as it primarily reflected patients' perceptions of the quality of telemental health services. While the study briefly mentioned a service assessment involving HCPs, it lacked comprehensive data or analysis related to this aspect, leaving a notable gap in understanding. Given the multidisciplinary nature of healthcare teams, the exclusion of nursing staff could limit representativeness of the HCPs sample.
Mejía Trujillo 2015 [71] Location: Bogotá, Cundinamarca, Quindío.	Mental health community service	Quantitative analysis	General population	Not applicable	This paper described the process of implementation of CQC in Colombia, its differences with CTC, the creation of Colombian cut points and the main difficulties.	The psychometric analysis of the instrument and the cut points were essential to ensure an accurate diagnosis. This process contributes to the generation of measurement technologies in the area of prevention. The prevalence of use of drugs such as alcohol, tobacco, marihuana, and inhalants was much higher than the national averages in populations in which the implementation of CQC has been requested.	The surveys collected did not constitute a representative sample. The absence of reliable data from areas outside major cities further underscored the potential limitations in the study's scope and applicability.

(Continued)

Table 3. (Continued)

Study ID	Setting	Study design	Participants	Comparison	Outcomes assessed	Results	Limitations
Satizabal Reyes 2019 [70] Location: Cali	University–Mental health service	Case study	Adults	Not applicable	This paper described the implementation of a community mental health programme.	The main barriers faced were the lack of articulation within different attention modalities and the gap between what is stated in the law versus its implementation. This may be related to two difficulties; the long wait for the law implementation, and the lack of health professionals' training to understand the paradigm shift from the hospital model to a community approach.	The study did not provide insight into the specific strategies and methodologies employed in developing and executing the programme, which limited a comprehensive understanding of its effectiveness and replicability.
Shannon 2021 [62] Location: Bogota	Primary care site	Interviews	General population	Not applicable	CFIR's five domains: intervention, outer setting, inner setting, individual characteristics, and process	Despite the stigma around depression and AUD, the model improved provider capacity to diagnose and manage patients, helped patients feel supported and provided useful prevalence data for administrators. Challenges included limited provider time and questions about sustainability. The implementation facilitated the identification, diagnosis, and care of patients with depression and AUD. There is an ongoing need to decrease stigma, create stronger networks of mental health professionals, and transition intervention ownership to the healthcare centre.	This study relied primarily on data from a single site—an urban, relatively well-resourced clinic with strong ties to a university and prior research involvement. This singular focus might limit the generalisability of the findings to the broader landscape of primary care clinics in Colombia. A more comprehensive understanding could have been achieved by including multiple sites with diverse barriers and facilitators to programme implementation.
Taborda Zapata 2016 [66] Location: Envigado	Mental health facility	Case study	Women	Not applicable	Not reported	The patient managed to identify when there was an exacerbation of symptoms, sought specialised care and prompt service was provided. Since then, the patient did not require hospital management and had acceptable general functionality	While the authors did acknowledge the typical involvement of policing in certain schizophrenia approaches, the paper lacked a thorough exploration of how law enforcement could be integrated into future community mental health models of care, beyond advocating for police training.

The assessment was performed using a scale of zero to five, considering the number of positive or negative points on two screening and five appraisal questions. Appraisal questions varied between qualitative and quantitative studies, yet they assessed approach appropriateness, sample representation, risk of nonresponse, data collection methods, among other questions.

After assessing the included articles, the average score was 3.6, with the lowest and highest quality scores of 2.5 and 5.0, respectively. Half of the selection were quantitative descriptive studies, while the other half were qualitative. Eight of 12 studies scored above 4.0, and none below 2.5. Notably, the lowest scores revealed issues with sampling strategy and coherence between data, methods, and discussion. Further information is provided in **S2 Appendix**. **MMAT scores.**

Findings

We report on our findings using the broad structure of the CFIR (constructs and domains) complemented with the selected factors of the Socio-Political Economy of Global Mental Health framework. A summary of the domains, constructs, and examples is presented in Table 4.

Intervention's characteristics. *Intervention source.* Mental health interventions were developed and implemented via partnerships between universities, healthcare providers, and government bodies. Studies also involved international research institutions from North America (Canada and The United States) [17, 59, 61, 65].

Studies were supported by primary systematic reviews, national public surveys like the National Mental Health Survey in 2015 [61, 66] and previous international studies with notable performance results in similar settings [59, 62, 64].

All the reviewed alternative interventions showed significant advantages in comparison to standard treatment options. One intervention reduced access barriers like geographical isolation [66], treatment continuity, and HCP and patient satisfaction. Another positive point was the approval from settings administrators and will to support implementation, evaluation and continuity [62, 66, 70]. Nevertheless, the reported disadvantages were low articulation with pre-existing service models and no existence of infrastructure and skilled staff [61, 63, 69].

Half of the selection did not report any toolkit, online or onsite materials for the intervention. The most common resources included prearranged support material from the international sponsor organisation [59, 61] and audio-visual materials and software for monitoring and evaluation [66, 73].

It was remarkable that only two studies referred to financing sources in the interventions being evaluated. The study from Satizabal-Reyes and Ortiz-Quiroga (2019) [70, 74] clarified that no public funding was involved in the programme and its continuity merely relies on the urgent and accurate implementation of the National Mental Health Policy. By contrast, in the study by González et al., [64] 43% of the patients paid for their treatment and were treated by private providers, while the remaining patients were covered by the healthcare system and attended public facilities.

Outer setting. Primarily, the interventions were developed considering patients' thoughts and points of view. Also, patients' families were both formally and informally consulted. This helped managers understand the population's needs and patients to consider themselves as a person and not be labelled as a disease or condition. This was verified using evaluation components, informal chats and semi-structured interviews [69].

It was notable how the interventions were considered and tailored to the Colombian mental health system. All of them mentioned the 2013 National Mental Health Policy and similar regulations and are aimed to support their application. Moreover, healthcare facilities had to comply with the national regulation to maintain the services enabled or receive high standards certification, thus sustaining public and private funding [17, 61, 66, 69].

Table 4. Outline of reported CFIR information.

Domain	Construct	Reported information
Intervention's characteristics	Intervention source	• Research groups at national and international universities [17, 62, 65–70]. • National and international non-governmental organisations [71]. • Global mental health organisations [65]. • Healthcare provider [67, 70]. • National government institutions [64, 69].
	Evidence strength and quality	• Previous experiences in settings with similar socioeconomic characteristics [17, 63, 65, 66, 71]. • Exploratory literature searches [69]. • Patient experience and national mental health indicators [62, 65–67].
	Relative advantage	• Improved quality of mental health care including better-personalised care [17, 64, 65, 70]. • Constant offer, and not suddenly stopped as other treatments [65]. • Inclusion of both the psychosocial and cultural contributions of families [69]. • Higher coverage of patients with mental illness in rural areas, with a moderate cost associated [67, 71]. • Patients' satisfaction with the educational content to understand their conditions, and the perceived support [62]. • Better connection between community, and mental health centres [66].
	Design quality & packing	• Access to materials and resources such as: ○ educational materials [17, 71]. ○ support from established trained supervisors [65]. ○ manuals, videos, and software for monitoring and evaluation [67, 69]. ○ changes of the setting, including the installation of a kiosk in the waiting room with access to decision-support tablets for each practitioner to use for screening purposes [62].
	Cost	• Private providers obtained most of their resources from private patients. Patients from lower incomes were covered by public funds [64]. • The intervention had no financial support from any public funds, which impacted continuity [70].
Outer setting	Patient needs & resources	• Community, families, and patient's perspective was part of the process of design and execution of the interventions [17, 61, 62, 67, 69, 70]. • The patients' thoughts and needs were assessed as part of the intervention [61, 62, 65, 67].
	External policies & incentives	• Healthcare organisations are required to deliver services for mental health conditions and are regulated nationally and therefore must comply with quality indicators [17, 61]. • Laws and policies such as the mental health law, the National Policy for the Reduction of the Consumption of Psychoactive Substances, and Telemedicine regulation [62, 64, 67, 70]. • Funded commissions by the Ministry of Health [63].
Inner setting	Structural Characteristics	• The country started the implementation of legislation and policies to address mental health risks associated with heroin consumption [64]. • Active student participation and improved collaboration between universities and governmental institutions were important for the intervention's formulation [68]. • Mental health care could be facilitated by a political commitment to mental health, and the adoption of the community model as a care strategy [66, 71].
	Implementation climate and tension for change	• Despite challenges, administrators, doctors, and patients expressed broad support for the intervention [62, 64]. Participants and staff agreed that the use of technology was useful and easy to use, and they intended to continue using it [67]. • Some practitioners needed to redefine their roles to achieve sustainable integration [17]. • The community welcomed the intervention, allowing the confluence and participation of professionals and practitioners from various disciplines in a community service designed by a community [70].
	Available resources	• Limited resources in general [61–63, 65, 66, 68, 70]. • Insurers' challenging performance was linked to scarce resources since there were barriers to access to the intervention that could have been easily mitigated with better health administration [64].
	Access to knowledge & information	• Training facilitation to practitioners, administrative staff, and patients [17, 62, 65, 71]. • There were significant differences between the provision of training in urban and rural settings [17]. • Training sessions via online platforms facilitated provision for people located outside the main cities [65].

(*Continued*)

Table 4. (Continued)

Domain	Construct	Reported information
Process	Planning	• Anticipated tasks for implementation: ○ Preliminary discussions and agreements with community leaders, local authorities, national government bodies, patients, and families [69]. ○ Written planning strategies as part of guidelines [71]. ○ Partnerships between institutions such as research centres, insurers, providers, and public and regulatory bodies [62, 66, 70].
	Engaging	• Attraction of key collaborators: ○ Local, regional, and national authorities, especially from the health and education sector [63, 69]. ○ Local police and security offices [66]. ○ Administrative staff and students [68].
	Executing	• Public and private organisations exhibited significant differences [17]. • Better health management could have mitigated barriers to access and retention issues [64]. • Some HCPs involved in the interventions expressed great satisfaction, while others showed resistance to change, possibly due to institutional problems in each setting [62, 67].
	Reflecting & evaluating	• Assessment strategies included: ○ Changes in pre and post-intervention indicators [63, 64, 67, 69]. ○ Qualitative feedback and anecdotal stories of accomplishment [65]. ○ Appraisal instruments (BHIMC index, PHQ-9, GAD-7) [17, 65].
Socio-political economy in mental health	Gender and Sexuality	• A scarce allusion to gender-related terms, only mentioned for descriptive statistical purposes [63, 64, 67, 68].• IDW and their children were unequally impacted by the hardship of relocating. The intervention aimed at women because it could impact the functioning of the entire household [65].• Certain activities included topics such as family relationships from a gender perspective [69]. • According to the interviews, women were more likely to institute and seek help for depression, while the *machismo* culture prevented men from acknowledging the symptoms or accepting the diagnosis [62].
	Racism, Caste & Xenophobia	• Although the intervention screening was viewed as beneficial for reducing stigma, future experiences could improve by developing culturally appropriate and adapted educational materials, which could address barriers such as racism or xenophobia [62].
	Age & Disability	• Promoting social inclusion and social skills among individuals with mental disabilities could rebuild citizenship affected by stigma and discrimination [70]. • Traditional approaches to mental health conditions often relied on hospitalization, which could prolong institutionalization and further exacerbate disability [66].

Inner setting. There was a unanimous position favouring better coordination with government bodies, healthcare providers and research institutions. Additionally, HCPs' training opportunities and workload imbalance were aspects in need of improvement. For instance, the lack of skilled HCPs and the excessive workload for professionals were constantly mentioned. For example, nurses were reported to work more than four times the shift time per week compared to psychiatrists [61, 62].

HCPs welcomed technology-based strategies, but there was some resistance and a need to redefine roles when adapting to new healthcare delivery models (e.g., primary healthcare versus traditional clinical treatment) [17, 61, 66]. In addition, community-based interventions and programmes led by universities or research institutions were more likely to have a favourable implementation climate [66, 69].

The studies on opioid use disorders indicated a social opposition to any initiative associated with psychoactive substances. The Colombian armed conflict association with narcotraffic caused a social belief of Colombia being a producer country and not a consumer one. Therefore, it is necessary to increase the collaboration between insurers, providers, researchers, policymakers, police bodies and law entities such as The Ministry of Justice. Hence, Colombia will address the emerging consumption phenomenon and its consequences [62, 63].

Not all the studies reported the accessibility of resources for implementation and replication. The access to resources varied considering the type of institution and the established

agreements with healthcare administrator companies. The better the cooperation was, the sooner the resources were secured, and the more straightforward implementation was [17, 59, 61, 63].

The reported programmes required diverse types of training. The training varied depending on whether the setting was urban or rural. While urban centres had more training and development chances, rural ones struggled with adequate training resources due to deficient internet infrastructure. Alternatively, the strategy from Ceballos et al., (2016) trained non-HCPs people who were also affected by the problem to be addressed. This intervention was closely supervised and approved by remote and onsite experienced trainers. The interventions sponsored by international institutions demonstrated more precise and constant training and followed up [17, 59, 61, 64].

Process. Generally, the interventions had approved protocols, guidelines and plans that described phases, strategies, and activities. This eased implementation, prevented avoidable barriers and emphasised the importance of the programmes. Only a few studies stated that outside actors backed them. Supporters included police forces, students, and official health officers [62, 66, 68, 69].

Despite the existence of plans and protocols, some implementation difficulties were mentioned. The difference in nature and financing source between public and private institutions was a problem when executing the interventions. Public institutions were more likely to be involved than private ones because the public felt more responsible for the health status of their community [17]. Nevertheless, public centres presented more access barriers and less retention of patients.

Consulted HCPs reported that time was a frequent problem during execution because the time consumed during piloting, implementation and evaluation was not considered in their workload. Both situations could be certainly addressed with better management practices [61, 63]. Nonetheless, half of the selection stated that implementation was conducted as planned with minor anticipated obstacles, such as technical and logistical difficulties.

Although implementation challenges were reported, most of the selected studies reported positive results that were confirmed after assessment procedures. Two interventions developed their evaluation forms [66], whereas others utilised established tools commonly used worldwide [17, 59, 63, 64]. Information collected on these instruments was individual, assessed performance, and compared indicators against pre-existing programmes before and after completion.

On the other hand, two studies did not report assessments because of the nature of the studies, which mainly focused on show characteristics, advantages and development rather than their evaluations [68, 69]. Only one study reported that an impact evaluation would be performed in the future considering the long-term design of the intervention, which was focused on preventing violence in children and young people using a positive promotion approach [69]. Hernández Holguín et al., [69] followed this approach based on the public health ecological model to implement strategies in different spheres such as family, school, and neighbourhood, where children and parents were supported in topics such as nutrition, routines, and crying.

Methodologically, quantitative studies supported their results through descriptive statistics, characterising patients, and explaining programmes' characteristics and treatment models, among other variables [17, 59, 61–63, 66]. Alternatively, qualitative studies reported participants' viewpoints, inviting them to provide their perspectives about the programmes' performance and feedback [61, 75, 76].

Socio-political economy in mental health. Overall, interventions mentioned words such as "female or male" only for descriptive statistical purposes. There was no mention of gender,

LGBT (Lesbian, Gay, Bisexual, and Transgender), hetero or homosexual, or other related terms.

One study highlighted that women and their children affected by conflict were often forced to displace to suburban locations where they faced socioeconomic hardship and stigma. Considering this situation, the intervention was focused on women, because improvement in their mental health could impact the mental and physical health and functioning of the household [65].

Another study reflected on reviewing the gender perspective in terms of parenthood, contemplating differences in caregiving according to child sex. This perspective aimed to shape more suitable strategies for preventing violence and promoting positive development for children and young people considering gender roles [69].

Associated terms such as race, racial, ethnicity, or xenophobia were not mentioned in the selected literature. Only one study acknowledged culture and nationality as an influence on the intervention's performance. Shannon et al., [62] stressed how interventions and educational material need to be culturally appropriate and deem social influences that tend to lead to exclusion or practices based on preferences. All this increases responsiveness and involvement, impacting positively mental health outcomes.

Finally, one study mentioned older adults in their analysis, exploring the main reason suicide in this group was related to structural social and economic conditions within specific historical periods. This study suggested that enhancing the social and institutional response to these conditions might impact positively mental health factors that go beyond the psychologist and psychiatrist's scope [68]. Three studies mentioned how mental health illness was a factor in disability, and deteriorating quality of life in both the individual and their family and community [61, 62, 70]. Substance abuse was a major issue in increasing mortality and contributing to the rising of years lived with a disability (YDL) and Disability Adjusted Life Years (DALYs) [77].

Discussion

This review identified the mental health services in Colombia assessed in studies and published in peer-reviewed journals. It provided background information about the history of mental health services and the healthcare system, and it explained how this has shaped modern models of service provision. Finally, it has assessed implementation processes using a modified CFIR with the Socio-Political Economy of Global Mental Health framework by Burgess et al., [78] to make it more sensitive to wider social and political factors known to shape the Colombian context.

Identified mental health services

The first objective of this review sought to determine the mental health services established in Colombia as reported in peer-reviewed literature. Reported interventions offered a broad overview of how mental health has been considered and changed in the last years.

The compiled information showed that the studies focused on certain common and severe mental health conditions such as substance abuse, anxiety, and schizophrenia. Only one study was focused on inclusion and rehabilitation strategies. The types of interventions were psychotherapy, medication programmes and complementary treatments. The target population was diverse, with a high majority focusing on general adults and children and specific groups such as users of psychoactive substances and armed conflict victims. Furthermore, studies were broadly completed in some small municipalities and towns where sometimes even essential healthcare services like general practitioners or laboratory services are unavailable.

Finally, with an average score of 3.6 over 5.0 in the MMAT, findings need to be interpreted cautiously. For instance, Borda et al., (2021) acknowledged a major problem with the sample strategy, which restricted the generalisability of these findings. Also, in Satizabal et al., (2019) although it was described the mental health intervention, there was no reported method to characterise, analyse or evaluate it.

Community mental health

Prior studies have noted the importance of rethinking mental health services and treatments within a more coordinated mental health system. This system ought to act concertedly with reasonable opportunities for all the population, but with different approaches to special populations such as armed-conflict victims, women, and LGBTQ+ groups, among others [17, 65, 68, 70].

A tendency for more community mental health involvement was observed in the results. As other authors and health agencies have suggested, a community-centred mental health approach promotes equity and increases access to community resources and patient satisfaction [79, 80]. Studies from this review align with worldwide evidence and positive experiences of holistic approaches and social recovery rather than biomedical models and clinical recovery [81, 82]. These studies also recommend disseminating this approach and strengthening existing community mental health services [60, 61, 70, 83].

Ultimately, it is recommended to continuously assess implementation as a whole process and complement it with impact evaluation. As previously emphasised by other authors, impact evaluation is vital for global mental health. Measuring factors such as access, coverage, costs, and quality facilitate influencing policymakers to prioritise mental health interventions and strengthen the relevance of mental health interventions [84].

Challenging psychiatry hegemony

Seven studies were conducted in healthcare settings of the first and second levels of complexity, possibly not requiring an inpatient regimen and including multiple HCPs. Surprisingly, all the interventions included multidisciplinary teams during implementation, contrasting with the traditional psychiatry hegemony.

Historically, in Colombia, mental health services were primarily focused on clinical understandings of mental health, thus contributing to the medicalisation of human life (60), which promotes the excessive medical control of non-medical affairs and the overlooking of social factors instigating disease.

Not instituting mental health services in psychiatric discourses was a relevant tendency identified in this review. The use of multidisciplinary professionals gives different perspectives on mental health and expected mental health outcomes and prevents the repetition of harmful medical treatment overuse such as incarceration, electroconvulsive therapy, and lobotomy [85]. This finding is consistent with previous works about the need to reject hegemonic processes in global mental health, preventing the re-colonisation of mental health [8, 86], and replacing the mental health practice with strategies that do not follow pathologisation and pharmaceuticalisation processes. Previous works in Brazil have associated these processes with a public health crisis, such as the uncontrolled use of psychotropics in vulnerable settings where social and economic factors are relevant but not deemed [87].

In addition, and following this trend, services were active in considering the need of users, families, and other stakeholders. These diverse perspectives mainly were welcomed by managers because they offered more quality and order. Organisations and providers were open to hearing patients' concerns and building together treatment options. This attitude is consistent

with multiple recommendations for mental health services to follow the recovery approach, empowering patients to participate in their treatments actively [88], understanding that services might differ for specific groups [89] and considering the SDMH comprehensively [82].

Implementation of mental health services

Services were characterised by being evidence-based, guided by the 2015 National Mental Health Survey and previous clinical studies. This approach strengthened the potential advantage and success of comparing it with standard services.

Studies rarely reported costs associated with implementation. This could be explained due to the financing nature of the reported services (most of them funded by non-public or governmental sources), so the budget may not be open-source information. Nevertheless, this information may be found in other sources like budget reports that were out of the scope of this review.

Another important finding was the level of international cooperation as a support mechanism. For many years, overseas institutions have advocated mental health initiatives in Colombia during all their phases [60, 62, 65]. While some institutions backed services with mentoring and training, others provided grants and research scholarships. Governmental support is relatively limited to allow data access and use of infrastructure instead of economic funding [67, 70].

Some internal characteristics within organisations facilitated implementation. HCPs, staff, and users embraced the use of technology for service delivery. This facilitated the implementation of telemedicine services, also called telemental health [90], which prevented geographical barriers to access without jeopardising the quality and relationship between users and HCPs. Different Colombian experiences have shown the advantage of promoting these services to address mental health disorders.

Sánchez Díaz et al., [58] highlighted the practicality of telemental health, in particular phone calls to follow-up patients where mental health professionals are not available, while Torrey et al., [91] underlined that the use of telematic tools for screening increased the number of early diagnoses of depression in primary care services where it might be easier to address.

Although telemental health is a strong tendency with multiple advantages for providers, users, and HCP, it should not be used as a replacement strategy for face-to-face services but as a complementary strategy. If necessary, patient needs ought to be reviewed and addressed accordingly with specialised services. Virtual interactions should be used in individual situations where it might be beneficial in comparison (e.g., group interventions, patients with physical disabilities or geographical difficulties in accessing services) [92].

It is notable that even when telematic services are thought to enhance mental health services coverage, they might have their own access' barriers when patients lack technological access and expertise [92]. They could also be unsuccessfully implemented due to clinicians' and managers' lack of trust in efficacy, integration into mental health systems and missed in-person experience [93]. Nevertheless, multiple experiences in both HICs and LMICs have underlined how telemental health services might be time and cost-saving and offer flexibility to both patients and clinicians (e.g., no travel hours, fewer missed appointments), which could increase access and coverage, leading to address inequalities in mental health services [94–97].

Resistance to adoption was less when recognised institutions like universities guided the use of technology. Community-based interventions functioned better when students are involved, particularly students from different disciplines because students facilitated adoption [70]. This also accords with other experiences of mental health services implementation in Latin America, where students are highly recognised also by staff and other HCPs [98].

Though they are not external actors because they are involved during the entire process within the organisation, it can be said that they champion the process and bridge providers with users positively.

In contrast, implementation was usually disrupted because of the lack of coordination between healthcare actors. Though some authors believe that better management could address this problem, it might require redirecting government bodies' role in planning, delivery, and regulation.

One example of this was the study by Barrios-Acosta et al., [68] about the institutional response of universities to suicide in students, which was utterly unconnected to government services. Nevertheless, the reported services constantly contemplate national roadmaps and guidelines as crucial references, and they follow them strictly.

In this case, institutions designed their strategies to address suicide, considering national and local regulations but lacking cooperation and communication with external actors. This caused, as in other mental health services, overlapped efforts and reduced efficacy. It is, therefore, usual that services aim to suit the health policy instead of proposing different structural approaches from their planning. This finding was also reported by Aceituno et al., [99] concerning poor coordination and time constraints as factors that impacted the implementation of early psychosis services in Chile.

As in other types of health care, there is still a disparity in workload. There was a considerable difference in shift times between nurses and psychiatrists. Gomez Restrepo et al., [61] associated this difference with not specified costs since hiring psychiatrists for extended periods represents elevated expenses. Unfortunately, this imbalance may create an avoidable hostile labour environment. Likewise, training and execution times were sometimes not considered in the staff workload, creating a reluctance to participate. Although there was no specific information about the relationship between staff salaries and inadequate performance in selected studies, multiple global studies in the last 30 years have highlighted this as a critical issue in implementation [100, 101].

Services generally had good planning strategies, such as preliminary agreed plans on which responsibilities and deadlines were clear. Planning facilitated implementation by preventing easily avoidable problems.

Precise design and assembling promote accessibility for users, facilitating adaptation and future implementation [63]. However, regarding how the interventions were designed and presented, many did not report toolkits or material used to support implementation. Therefore, it is suggested to highlight the usage of this material since it is also a key step in promoting the dissemination and introducing innovative interventions in new settings [102].

During implementation, the difference between public and private institutions was more evident. It may be related to sources' availability or nature, but private institutions tended only to have slight difficulties. This trend contradicts previous studies in low- and high-income economies (Nepal and Australia), where settings were also influenced by private organisations but shifted to mixed partnerships and independent public-funded services in the last years [103, 104].

Australian experience suggested prioritising the allocation of public funding to public mental health services rather than private ones because this support can result in better-positioned and strengthened mental health systems [103]. In contrast, the Nepal case proposed improving public and private partnerships, including a comprehensive model where diverse partners are involved. Both Nepal and Colombian cases were generally in low-resource settings and were consistent with the limited inclusion of other partners different to the usual overseas institutions and public settings.

Unlike Colombia, the Nepal study recommended the participation of non-governmental organisations, healthcare service users, multicultural professionals and academic medical centres [104]. These examples are feasible options and are in line with previous global guidelines to develop infrastructure for mental health financing, where elements such as involvement of stakeholders, better information systems and evaluation analysis [4].

Finally, regarding evaluation processes, these were performed using designed evaluation forms and validated instruments. This strategy allowed institutions to identify weaknesses, improvement opportunities and future approaches to secure implementation achievement. Unlike other Latin American settings, where the evaluation was utterly requested to participants and non-participants [61], most of the studies in Colombia did not request feedback from all actors (patients, administrative staff, or providers) but just from patients. This situation can lead to incomplete quality improvement plans and inadequate reflection of organisational priorities [105].

Socio-Political interactions in mental health

The objective of incorporating these factors was to capture the researchers' perspectives on how they affect people's mental health. Additionally, it aimed to enable us to delve into the realities frequently encountered in vulnerable communities, which cannot be adequately captured by the original CFIR framework.

Nevertheless, selected studies were ambiguous in considering the influence of gender, race, and age, in undermining people's mental health.

Regarding gender and sexuality, the studies limited the use of related terms for statistical purposes. Only 3 studies reported reflections regarding the influence of gender on mental health [62, 65, 69]. For example, Shannon et al., [62] identified that patients and providers were conscious of the gender differences in depression and treatment seeking. In fact, women were more often willing to know more about symptoms and seek out support for depression, while men were more reluctant in accepting symptoms, diagnosis, and treatment due to the "*machismo*" culture [62].

Previous experiences in Latin America have unveiled the relevance of gender perspectives in mental health models and the particular influence of the "machismo" and the less-known "marianismo" on it. Marianismo is the influence of catholic beliefs in Latin women, mainly related to the importance of the Virgin Mary paradigm, normalising women in their submissive feminine role based on their greater moral and spiritual strength [106].

In lived experiences and peer-reviewed studies [107–109], both gender role expectations have been associated with detrimental emotional health outcomes (depression and anxiety symptoms, or violent and hostile behaviours) that are also linked to socio-demographic factors, mentioned before (e.g., race, age, nationality). In addition, the effects of these expectations are particularly worse in LGBTQ+ people due to homophobia, racism and fetishisation [108].

Second, though discrimination and stigma based on race and ethnicity are two key risk factors for mental illness [78], none of the studies referred to this, only one work underlined the importance of adapting material and educational strategies based on factors such as ethnicity and cultural viewpoints. Multiple works have enunciated race and ethnicity as social determinants that preferentially disadvantage certain groups in numerous social matters, such as healthcare, marginalising them and affecting their well-being [110–112].

Finally, although age is an influence that might lead to discrimination or stereotyping selected [78], studies did not consider it a relevant factor for their interventions. Only Barrios-Acosta et al., [68] highlighted how suicide in older adults is frequently associated with structural conditions, but this is not deepened in the study, which is focused on young university students.

In line with Flores et al., [113] and Giebel et al., [30] there is scarce literature on older people and mental health in Colombia and only a few studies have explored this field. For instance, Flores et al., [113] used quantitative data which associated higher levels of depression in older adults with earlier armed-conflict situations such as sexual abuse and displacement. However, as in our selected studies, these work and previous ones have failed in incorporating qualitative experiences of life events on peoples' mental health, which might broaden and analysis and debate regarding mental health services and policies.

Regarding disabilities, only Taborda-Zapata et al., [66] commented on how the answer of the traditional mental health model has been towards hospitalisation, prolonging hospitalisations that have led to direct access to institutionalisation, thus prolonging disability.

In general, the selected studies did not grapple with the relevance of the selected constructs in mental health. The inclusion of gender, race or age/disability perspectives in mental health discussions in Colombia is still unsettled. As previous studies have endorsed [114], it is suggested for future mental health research to string together socioeconomic factors that shape mental health and well-being and not limit the discussion towards institutional performance based exclusively on indicators. It is necessary to explore expanded viewpoints in people from LMICs, who face certain social and political circumstances. This comprehensive understanding might lead us to recognise the wider impact of these factors on the country's goals of achieving healthy relationships and well-being.

The evident but missing association with armed conflict

Lastly, although Colombia has been one of the most affected countries by long-term armed conflicts for the last decades, the included studies were vague on linking conflict and mental health. 11 studies did not mention this major factor, while 1 merely mentioned it only in the background section [65].

Earlier works have stressed the influence of conflict-related violence on people's mental health. Chaskel et al., [26] described how armed insurgency and internal displacement lead to increased substance misuse, disability, and suicide. Also, Cuartas Ricaurte et al., [115] analysed the relationship between exposure to the armed-conflict and violence with mental health disorders in Colombia concluding that exposure to violent crimes multiplied substantially by socioeconomic difficulties and the overall risk of mental health disorders. This relationship is in line with previous studies in Colombia that also linked violence with socioeconomic deprivation in terms of unemployment and poverty, and together with lack of assistance from the government lead to mental health disorders [116].

Strengths and limitations

The results from this review may be used for the public debate about the nature of mental health systems and services in Colombia and how they are accomplishing or failing to people's mental health. To our knowledge, it is the only compilation of this information, including positive changes and the efforts to include the SDMH in policies, systems, and services in Colombia.

To guarantee the consistency and transparency of this systematic review, we followed the PRISMA guidelines for reporting and applied the MMAT to assess the quality of the included studies. However, one limitation was that data review and extraction had no second reviewer to discuss conflicts and reduce bias.

The main limitation of this study was the paucity of detailed publications depicting the implementation of mental health services. Despite applying a comprehensive search strategy covering all the databases deemed relevant, only twelve papers were found to describe a mental

health service or intervention implementation. An added related factor is that these services are possibly explained in grey literature from governmental or non-governmental sources. Therefore, not having included government documents and policies or grey literature reduced the generalisability of assumptions about the availability of these services in the country.

Finally, the use of the CFIR as a framework to analyse and discuss these studies was limited since not all the constructs could be used due to a lack of available data and the reduced applicability of domains or constructs. Nevertheless, this work was strengthened by the inclusion of a new domain of socio-political economy in mental health, which allowed us to interpret the information through diverse lenses, and not underestimate relevant factors for mental health such as gender, racism, or disability.

Conclusion

This review has reflected on mental health services in Colombia and their implementation barriers and facilitators. Even though data revealed that mental health services involved strong multidisciplinary teams and extensively adopted the idea of considering users, communities and stakeholders viewpoints, there is a notable gap between mental health planning and the implementation of services. There is also an evident disregard for social and economic factors such as gender, race, age, and the influence of the long-run conflict in Colombia. Selected studies were distant from these concepts and historical events, and their impact on mental health, mostly only mentioning them to segregate reported results or provide background.

Remarkably, Colombia has started a long-term public health plan to comprehensively address mental health through laws, policies, and strategies. The aim of this plan is to promote mental health in protective environments, prioritising integral treatments and enhancing intersectoral order and integration [117]. However, a critical reported barrier has been the lack of coordination between insurers (EPS), providers, and policymakers with negative consequences on implementation and access to quality care. To redress these challenges, it is necessary to restructure governments responsibility within the mental health system, avoid overregulation, and give people and communities more voice and control over their lives and health, as evidence has recommended [79].

Findings suggested the potential of implementing modern models in mental health services in Colombia, involving strategies based on communities, users' perspectives, and emancipation from the biomedical model. Nevertheless, further efforts are needed to adapt these elements to achieve culturally responsive mental health services with expanded access and increased quality. Moreover, it is necessary to continue exploring complex processes such as mental health services, studying their implementation factors, and involving cost information to achieve substantial evidence. Finally, as underlined throughout, it is advisable to persist in adopting community-based mental health services, and the recovery approach and contemplate gender, race and age as influences that affect mental health. In doing so, these may build healthier, more organised, and empowered individuals and communities.

Supporting information

S1 Checklist. PRISMA abstract checklist.
(DOCX)

S2 Checklist. PRISMA checklist.
(DOCX)

S1 Appendix. Search strategy.
(DOCX)

S2 Appendix. MMAT scores.
(DOCX)

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References

1. Bullock HL, Lavis JN. Understanding the supports needed for policy implementation: a comparative analysis of the placement of intermediaries across three mental health systems. Health Res Policy Syst. 2019; 17: 82. https://doi.org/10.1186/s12961-019-0479-1 PMID: 31438977

2. Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, et al. The Lancet Commission on global mental health and sustainable development. The Lancet. 2018; 392: 1553–1598. https://doi.org/10.1016/S0140-6736(18)31612-X PMID: 30314863

3. United Nations Development Programme (UNDP). Sustainable Development Goals. In: Sustainable Development Goals [Internet]. 2015 [cited 23 Dec 2021]. Available: https://www.undp.org/sustainable-development-goals

4. World Health Organization. Mental health action plan 2013–2020. Mental health action plan 2013–2020. Geneva; 2013 Jan. Available: https://www.who.int/publications/i/item/9789241506021

5. Pan-American Health Organization (PAHO), World Health Organization (WHO). The Caracas Declaration. In: Conference on the Restructuring of Psychiatric Care in Latin America within the Local Health Systems [Internet]. 15 Nov 1990 [cited 23 Dec 2021]. Available: https://www.globalhealthrights.org/instrument/caracas-declaration/

6. Cosgrove L, Mills C, Amsterdam J, Heath I, Mehta A, Kalathil J, et al. Global mental health. The Lancet. 2019; 394: 117–118. https://doi.org/10.1016/S0140-6736(19)30945-6 PMID: 31229231

7. Cooper S. Global mental health and its critics: moving beyond the impasse. Crit Public Health. 2016; 26: 355–358. https://doi.org/10.1080/09581596.2016.1161730

8. Mills C. Decolonizing global mental health: The psychiatrization of the majority world. 1st ed. Decolonizing Global Mental Health: The Psychiatrization of the Majority World. London: Routledge; 2014. https://doi.org/10.4324/9780203796757

9. Revet A, Montastruc F, Roussin A, Raynaud JP, Lapeyre-Mestre M, Nguyen TTH. Antidepressants and movement disorders: A postmarketing study in the world pharmacovigilance database. BMC Psychiatry. 2020; 20: 1–13. https://doi.org/10.1186/S12888-020-02711-Z/TABLES/4

10. Rajkumar R, Melvin G. Pharmacovigilance for psychiatrists: An introduction. Indian J Psychiatry. 2014; 56: 176. https://doi.org/10.4103/0019-5545.130502 PMID: 24891707

11. Alarcón RD. Mental health and mental health care in Latin America. World Psychiatry. 2003; 2: 54. PMID: 16946892

12. Rojas-Bernal LÁ, Castaño-Pérez GA, Restrepo-Bernal DP. Salud mental en Colombia. Un análisis crítico. Ces Medicina. 2018; 32: 129–140. https://doi.org/10.21615/cesmedicina.32.2.6

13. Kohn R, Ali AA, Puac-Polanco V, Figueroa C, López-Soto V, Morgan K, et al. Mental health in the Americas: an overview of the treatment gap TT—La salud mental en las Américas: una visión general de la brecha de tratamiento TT—Saúde mental nas Américas: uma visão geral da lacuna de tratamento. Revista Panamericana de Salud Pública. 2018; 42. https://doi.org/10.26633/rpsp.2018.165 PMID: 31093193

14. Instituto Nacional de Salud, Observatorio Nacional de Salud. Consecuencias del Conflicto Armado en Salud en Colombia. Bogotá; 2017.

15. Chaskel R, Shultz JM, Gaviria SL, Taborda E, Vanegas R, García NM, et al. Mental health law in Colombia. BJPsych Int. 2015; 12: 92–94. https://doi.org/10.1192/s2056474000000659 PMID: 29093872

16. República de Colombia. Ley 100 de 1993, por la cual se crea el sistema de seguridad social integral. Bogota: El Congreso de la Republica de Colombia; Dec 23, 1993.

17. Castro SM, Cubillos L, Uribe-Restrepo JM, Suárez-Obando F, Meier A, Naslund JA, et al. Assessing the Integration of Behavioral Health Services in Primary Care in Colombia. Adm Policy Ment Health. 2020; 47: 435–442. https://doi.org/10.1007/s10488-019-01002-4 PMID: 31832852

18. Yepes Lujan JF. Colombia: A Healthcare System in Crisis. Medical Solutions. 2012;Essay Seri.

19. Romero-González M, González G, Rosenheck RA. Mental health service delivery following health system reform in Colombia. Journal of Mental Health Policy and Economics. 2003; 6: 189–194. PMID: 14713726

20. Congreso de la República de Colombia. Ley 1616 de 2013 por medio de la cual se expide la ley de Salud Mental y se dictan otras disposiciones. Congreso de la República de Colombia; 2013. http://www.secretariasenado.gov.co/senado/basedoc/ley_1616_2013.html

21. Ministerio de Salud y Proteccion Social de Colombia. Resolución 0004886 de 2018 por la cual se adopta la Política Nacional de Salud Mental. 2018.

22. Hernández Holguín DM, Sanmartín Rueda CF. La paradoja de la salud mental en Colombia: entre los derechos humanos, la primacía de lo administrativo y el estigma. Gerencia y Políticas de Salud. 2018; 17. https://doi.org/10.11144/Javeriana.rgps17-35.psmc

23. Fink-Samnick E. The Social Determinants of Mental Health: Definitions, Distinctions, and Dimensions for Professional Case Management: Part 1. Prof Case Manag. 2021; 26: 121–137. https://doi.org/10.1097/NCM.0000000000000497 PMID: 33784719

24. Campo-Arias A, Oviedo HC, Herazo E. [Stigma: Barrier to Access to Mental Health Services]. Rev Colomb Psiquiatr. 2014; 43: 162–167. https://doi.org/10.1016/j.rcp.2014.07.001 PMID: 26575130

25. Campo-Arias A, Herazo E. Stigma and mental health in victims of Colombia's internal armed conflict in situation of forced displacement. Rev Colomb Psiquiatr. 2014; 43: 712–717. https://doi.org/10.1016/j.rcp.2014.09.004 PMID: 26574078

26. Chaskel R, Gaviria SL, Espinel Z, Taborda E, Vanegas R, Shultz JM. Mental health in Colombia. BJPsych Int. 2015; 12: 95. https://doi.org/10.1192/s2056474000000660 PMID: 29093873

27. The Borgen Project. The Silent Truth About Mental Health in Colombia. In: The Borgen Project [Internet]. Mar 2021 [cited 23 Sep 2022]. Available: https://borgenproject.org/silent-truth-about-mental-health-in-colombia/

28. Palacio A. CA. Situación de salud mental en Colombia. Int J Psychol Res (Medellin). 2018; 11: 6–7. https://doi.org/10.21500/20112084.3712 PMID: 32612773

29. Gonzalez-Diaz JM, Córdoba R, Zamora DC. Mental health in Colombia: Amid a global virus, tear gases and rifle shots. The Lancet Regional Health—Americas. 2021; 3: 100050. https://doi.org/10.1016/j.lana.2021.100050 PMID: 36777407

30. Giebel C, Zuluaga MI, Saldarriaga G, White R, Reilly S, Montoya E, et al. Understanding post-conflict mental health needs and co-producing a community-based mental health intervention for older adults in Colombia: a research protocol. BMC Health Serv Res. 2022; 22: 1–7. https://doi.org/10.1186/S12913-022-07645-8/FIGURES/1

31. PAHO/WHO. Shining a spotlight on mental health in rural communities in Colombia. In: Bulletins [Internet]. 2018 [cited 23 Sep 2022]. Available: https://www3.paho.org/hq/index.php?option=com_content&view=article&id=14395:shining-a-spotlight-on-mental-health-in-rural-communities-in-colombia&Itemid=1001&lang=en#gsc.tab=0

32. Magazine BORGEN. The Future of Mental Health in Colombia. In: Global Health [Internet]. 18 Nov 2020 [cited 23 Sep 2022]. Available: https://www.borgenmagazine.com/mental-health-in-colombia/

33. Efron SE, Ravid R. Writing the literature review: a practical guide. New York: Guilford Publications; 2018.

34. Aveyard H. Doing a literature review in health and social care: a practical guide. Open University Press; 2018.

35. Bauer MS, Damschroder L, Hagedorn H, Smith J, Kilbourne AM. An introduction to implementation science for the non-specialist. BMC Psychol. 2015; 3. https://doi.org/10.1186/s40359-015-0089-9 PMID: 26376626

36. Eccles MP, Mittman BS. Welcome to Implementation Science. Implementation Science 2006 1:1. 2006; 1: 1–3. https://doi.org/10.1186/1748-5908-1-1

37. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. Implementation Science. 2009; 4: 1–15. https://doi.org/10.1186/1748-5908-4-50 PMID: 19664226

38. CI Felter, Renwick D. Colombia's Civil Conflict | Council on Foreign Relations. In: council on foreign relations [Internet]. 2017 [cited 5 Apr 2021]. Available: https://www.cfr.org/backgrounder/colombias-civil-conflict

39. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan—a web and mobile app for systematic reviews. Systematic Reviews 2016 5:1. 2016; 5: 1–10. https://doi.org/10.1186/s13643-016-0384-4 PMID: 27919275

40. Prada-Ríos SI, Pérez-Castaño AM, Rivera-Triviño AF. Clasificación de instituciones prestadores de servicios de salud según el sistema de cuentas de la salud de la Organización para la Cooperación y el Desarrollo Económico: El caso de Colombia. Revista Gerencia y Politicas de Salud. 2017; 16: 51–65. https://doi.org/10.11144/JAVERIANA.RGPS16-32.CIPS

41. Popay J, Roberts H, Sowden A, Petticrew M, Arai L, Rodgers M, et al. Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC Methods Programme. 2006. https://doi.org/10.13140/2.1.1018.4643

42. Bohórquez Peñaranda A, Gómez Restrepo C, Oviedo Lugo GF, de la Hoz Bradford AM, Castro Díaz SM, García Valencia J, et al. Modalidades de atención para el paciente adulto con diagnóstico de esquizofrenia en fase aguda y de mantenimiento. Rev Colomb Psiquiatr. 2014; 44: 101–109. https://doi.org/10.1016/j.rcp.2015.05.012 PMID: 26576466

43. Zaraza-Morales DR, Hernández-Holguín DM. Towards a community mental health care for people with schizophrenia in Colombia. Cien Saude Colet. 2016; 21: 2607–18. https://doi.org/10.1590/1413-81232015218.14732015 PMID: 27557033

44. Jaramillo Estrada JC, Espinosa Duque D, Ocampo Lopera D, Arango García A, Arévalo Gutiérrez M, García González L, et al. Caracterización de la atención psicoterapéutica en la IPS CES Sabaneta, Colombia, 2014–2015. CES Psicología. 2018; 11: 97–110. https://doi.org/10.21615/cesp.11.2.9

45. Gonzalez LM, Penaloza RE, Matallana MAMA, Gil FF, Gomez-Restrepo C, Landaeta APV, et al. [Determining Factors in the Access to Mental Health Services by the Adult Colombian Population]. Factores que determinan el acceso a servicios de salud mental de la poblacion adulta en Colombia. 2016; 45 Suppl 1: 89–95. https://dx.doi.org/10.1016/j.rcp.2016.10.004

46. Medina M, Velásquez AV, Ribero OJ, Trujillo N. [Direct medical costs of suicide attempts by patients in Columbia's Antioquia Mental HospitalCustos médicos diretos por tentativa de suicídio em pacientes do hospital de saúde mental de Antioquia, Colômbia]. Rev Panam Salud Publica. 2018; 42: e129. https://doi.org/10.26633/RPSP.2018.129 PMID: 31093157

47. Villamizar VVA, Monsalve GIS, Lobo JHA, Manrique LC, Rodríguez GRL, de Biava YM, et al. Trends in psychological intervention and psychotherapy in Norte de Santander-Colombia. Archivos Venezolanos de Farmacologia y Terapeutica. 2018; 38: 546–551. Available: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067846114&partnerID=40&md5=a9ad660d934f31111d21dbca833aef1b

48. Borges G, Aguilar-Gaxiola S, Andrade L, Benjet C, Cia A, Kessler RC, et al. Twelve-month mental health service use in six countries of the Americas: A regional report from the World Mental Health

Surveys. Epidemiol Psychiatr Sci. 2019; 29: e53. https://doi.org/10.1017/S2045796019000477 PMID: 31452485

49. Marulanda FÁT, Arroyave CDL. Comprensión de la ciencia al servicio y cuidados de la salud y alteración mental. Cien Saude Colet. 2019; 24: 275–284. https://doi.org/10.1590/1413-81232018241.27922016 PMID: 30698260

50. Toro-Hernández ML, Mondragón-Barrera A, Múnera-Orozco S, Villa-Torres L, Camelo-Castillo W. Experiences with rehabilitation and impact on community participation among adults with physical disability in Colombia: perspectives from stakeholders using a community based research approach. Int J Equity Health. 2019; 18: 18. https://doi.org/10.1186/s12939-019-0923-4 PMID: 31155006

51. Zamora-Rondón DC, Suárez-Acevedo D, Bernal-Acevedo O, Zamora-Rondon DC, Suarez-Acevedo D, Bernal-Acevedo O. [Analysis of needs and use of mental healthcare services in Colombia]. Analisis de las necesidades y uso de servicios de atencion en salud mental en Colombia. 2019; 21: 175–180. https://doi.org/10.15446/rsap.V21n2.71638 PMID: 33027326

52. Cubillos L, Muñoz J, Caballero J, Mendoza M, Pulido A, Carpio K, et al. Addressing Severe Mental Illness Rehabilitation in Colombia, Costa Rica, and Peru. Psychiatr Serv. 2020; 71: 378–384. https://doi.org/10.1176/appi.ps.201900306 PMID: 31896339

53. Monroy-Sánchez DC. Naturaleza del acceso a los servicios de salud mental de la población adulta víctima del conflicto armado en Colombia. Revista Salud Bosque. 2020; 10: 1–15. https://doi.org/10.18270/rsb.v10i1.3053

54. Salamanca-Sanabria A, Richards D, Timulak L, Connell S, Mojica Perilla M, Parra-Villa Y, et al. A Culturally Adapted Cognitive Behavioral Internet-Delivered Intervention for Depressive Symptoms: Randomized Controlled Trial. JMIR Ment Health. 2020; 7: e13392. https://doi.org/10.2196/13392 PMID: 32003749

55. Zapata MA, Giraldo LF. [Methadone substitution treatment for heroin addiction: a program assessment in Colombia]. Adicciones. 2012; 24: 69–75. Available: http://www.ncbi.nlm.nih.gov/pubmed/22508019

56. Vargas Díaz NS, Hincapié Molina ML, Secretaría Distrital de Salud de Bogotá DC. Atenciones relacionadas con el consumo de sustancias psicoactivas en la población vinculada, desplazada y atenciones no POS-S, 2006–2012 TT—Attentions Related with the Consumption of Psychoactive Substances in the Population Linked, Displaced and Atten. Investig segur soc salud. 2014; 16: 5–17. Available: http://app.saludcapital.gov.co/revistadigital/

57. Navarro—Jiménez E, Laborde—Cárdenas C, Gómez—Méndez P, Fontalvo Morales R. Implementation of Clinical Practice Guideline (CPG) for early detection, diagnosis and comprehensive care of the depressive episode and recurrent depressive disorder in adults at Hospital Universitario Cari ESE Neurociencias de Barranquilla (Colombia). Salud Uninorte. 2016; 32: 429–435. https://doi.org/10.14482/sun.32.2.9743

58. Sánchez Díaz N, Duarte Osorio A, Gómez Restrepo C, Bohórquez Peñaranda AP. Implementacion de la guía de práctica clínica para el manejo de adultos con esquizofrenia en Colombia. Rev Colomb Psiquiatr. 2016; 45: 60–66. https://doi.org/10.1016/j.rcp.2014.12.001 PMID: 27132754

59. Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. BMJ. 2021; n160. https://doi.org/10.1136/bmj.n160 PMID: 33781993

60. Mejía-Trujillo J, Pérez-Gómez A, Reyes-Rodríguez MF. Implementation and adaptation in Colombia of the Communities That Care. Adicciones. 2015; 27: 253–264. Available: https://doi.org/10.20882/adicciones.750 PMID: 26706808

61. Gómez Restrepo C, Maldonado P, Rodríguez N, Ruiz-Gaviria R, Escalante MÁ, Gómez RÁ, et al. Therapeutic Communities In Latin America: An International Descriptive Study In Different Countries Across Latin America. Revista Colombiana de psiquiatria (English ed). 2018; 47: 140–147. https://doi.org/10.1016/j.rcp.2017.01.011 PMID: 30017036

62. Shannon CL, Bartels SM, Cepeda M, Castro S, Cubillos L, Suárez-Obando F, et al. Perspectives on the Implementation of Screening and Treatment for Depression and Alcohol Use Disorder in Primary Care in Colombia. Community Ment Health J. 2021. https://doi.org/10.1007/s10597-021-00781-1 PMID: 33665738

63. Borda JP, Gutiérrez LG, López L, Orrego DA. Evaluation of Methadone Maintenance Treatment in Armenia, Colombia: A Cross-sectional Study Responding to a National Priority. Addict Disord Their Treat. 2021; 20: 91–97. https://doi.org/10.1097/ADT.0000000000000219

64. González G, Giraldo LF, DiGirolamo G, Rey CF, Correa LE, Cano AM, et al. Enfrentando el problema emergente de consumo de heroína en Colombia: los nuevos programas de tratamiento asistido con metadona. Rev Colomb Psiquiatr. 2019; 48: 96–104. https://doi.org/10.1016/j.rcp.2017.07.004 PMID: 30981333

65. Ceballos AMG, Andrade AC, Markowitz T, Verdeli H. "You Pulled Me out of a Dark Well": A Case Study of a Colombian Displaced Woman Empowered Through Interpersonal Counseling (IPC). J Clin Psychol. 2016; 72: 839–46. https://doi.org/10.1002/jclp.22365 PMID: 27467690

66. Taborda Zapata EM, Montoya González LE, Gómez Sierra NM, Arteaga Morales LM, Correa Rico OA. Intervención de la esquizofrenia desde el modelo comunitario. Rev Colomb Psiquiatr. 2016; 45: 46–50. https://doi.org/10.1016/j.rcp.2015.09.001 PMID: 26896404

67. Martínez Pérez DC, Agudelo García ÁM, Andrade Carrillo R, García Cano JF, Porras Cataño SM. Telepsiquiatría: una experiencia exitosa en Antioquia, Colombia. Rev Colomb Psiquiatr. 2020; 49: 239–245. https://doi.org/10.1016/j.rcp.2019.06.005 PMID: 33328016

68. Barrios-Acosta M, Ballesteros-Cabrera MDP, Zamora-Vásquez S, Franco Agudelo S, Gutierrez Bonilla ML, Tatis Amaya J, et al. Universidad y conducta suicida: respuestas y propuestas institucionales, Bogotá 2004–2014. Revista de Salud Pública. 2017; 19: 153–160. https://doi.org/10.15446/rsap.v19n2.57001 PMID: 30183953

69. Hernández Holguín DM, Páez Zapata E, Múnera Restrepo LM, Duque Ramírez LF. Diseño de un programa basado en la promoción del desarrollo positivo en la infancia para la prevención temprana de la violencia en Colombia. Glob Health Promot. 2017; 24: 83–91. https://doi.org/10.1177/1757975915591683 PMID: 26187923

70. Satizabal-Reyes M, Ortiz-Quiroga D. Mentalmente Sanos: Una experiencia con enfoque comunitario. Revista de Salud Pública. 2019; 21: 122–127. https://doi.org/10.15446/rsap.V21n1.63309 PMID: 33206919

71. Mejía-Trujillo J, Pérez-Gómez A, Reyes-Rodríguez MF. Implementación y adaptación en Colombia del sistema preventivo Communities That Care. Adicciones. 2015; 27: 253. https://doi.org/10.20882/adicciones.750 PMID: 26706808

72. Hong QN, Fàbregues S, Bartlett G, Boardman F, Cargo M, Dagenais P, et al. The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. Education for Information. 2018; 34: 285–291. https://doi.org/10.3233/EFI-180221

73. Hernández DM, Duque LF, Restrepo A. [Design of a program for the positive development of school-children and characteristics of participants (Medellin, Colombia)]. TT—Diseño y características de los participantes de un programa para el desarrollo positivo de escolares (Medellín, Colombia). Gac Sanit. 2014; 28: 330–333.

74. Satizabal-Reyes M, Ortiz-Quiroga D. [Mentalmente Sanos: an experience with a community approach]. Rev Salud Publica (Bogota). 2019; 21: 122–127. https://doi.org/10.15446/rsap.V21n1.63309 PMID: 33206919

75. Frampton GK, Shepherd J, Pickett K, Griffiths G, Wyatt JC. Digital tools for the recruitment and retention of participants in randomised controlled trials: a systematic map. Trials. 2020; 21: 478. https://doi.org/10.1186/s13063-020-04358-3 PMID: 32498690

76. Taborda Zapata E, Montoya Gonzalez LE, Gómez Sierra NM, Arteaga Morales LM, Correa Rico OA. [Integrated management of patients with schizophrenia: beyond psychotropic drugs]. Rev Colomb Psiquiatr. 2016; 45: 118–123. https://doi.org/10.1016/j.rcp.2015.07.002 PMID: 27132761

77. Gómez-Restrepo C, Cruz-Ramírez V, Medina-Rico M, Rincón CJ. Mental health in displaced children by armed conflict—National Mental Health Survey Colombia 2015. Actas Esp Psiquiatr. 2018; 46: 51–57. PMID: 29616713

78. Burgess R, Chobhthaigh SN, Lee S, Pathare S, Iemmi V, Lund C. Scoping Review Protocol: Establishing a Socio-Political Economy of Global Mental Health. OSF; 2022. https://doi.org/10.17605/OSF.IO/CGJQH

79. Public Health England. Health and wellbeing: a guide to community-centred approaches. London; 2015 Feb. Available: https://www.gov.uk/government/publications/health-and-wellbeing-a-guide-to-community-centred-approaches

80. Stamboglis N, Jacobs R. Factors Associated with Patient Satisfaction of Community Mental Health Services: A Multilevel Approach. Community Ment Health J. 2020; 56: 50–64. https://doi.org/10.1007/s10597-019-00449-x PMID: 31522349

81. Jorge-Monteiro MF, Ornelas JH. "What's Wrong with the Seed?" A Comparative Examination of an Empowering Community-Centered Approach to Recovery in Community Mental Health. Community Ment Health J. 2016; 52: 821–833. https://doi.org/10.1007/s10597-016-0004-8 PMID: 27072950

82. World Health Organization. Guidance on community mental health services: Promoting person-centred and rights-based approaches. Geneva; 2021 Jun.

83. Taborda Zapata E, Montoya Gonzalez LE, Gómez Sierra NM, Arteaga Morales LM, Correa Rico OA. Manejo integral del paciente con esquizofrenia: más allá de los psicofármacos. Rev Colomb Psiquiatr. 2016; 45: 118–123. https://doi.org/10.1016/j.rcp.2015.07.002 PMID: 27132761

84. de Silva MJ. Impact evaluations of mental health programmes: the missing piece in global mental health. J Epidemiol Community Health (1978). 2015; 69: 405–407. https://doi.org/10.1136/jech-2014-203866 PMID: 25492897

85. Castrillón-Valderrutén M del C. Entre asilos y hospitales psiquiátricos. Una reflexión historiográfica sobre el programa institucional de atención a la locura en Colombia TT—Between nursing homes and psychiatric hospitals. A historiographical reflection on the institutional program o. Sociedad y Economía. 2020; 143–162. https://doi.org/10.25100/sye.v0i40.8327

86. Cohen BMZ. Psychiatric hegemony: a Marxist theory of mental illness / Bruce M.Z. Cohen. 2016.

87. Ordoñez-Vargas L, Cortés-García CM. Medicalización psiquiátrica en tres prisiones femeninas brasileras: un abordaje etnográfico sobre los itinerarios de criminalización, patologización y farmacologización. Salud Colect. 2020; 16: e2507. https://doi.org/10.18294/sc.2020.2507 PMID: 33147392

88. Vera San Juan N, Mena H C, Rezende Andrade MC. Panoramica del concepto de recuperacion (recovery) y evidencia en America Latina. Revista Latinoamericana de Psiquiatria. 2021; 20. Available: www.webapal.org

89. Centre for Mental Health—Department of Health, Mind, NHS Confederation Mental Health Network, Rethink Mental Illness, Turning Point. No health without mental health: implementation framework. Department of Health; 2012 Jul. Available: https://dera.ioe.ac.uk/15016/?view=primo

90. American Psychological Association. What are Telehealth and Telepsychology? 2014 [cited 10 Jan 2022]. Available: https://www.apa.org/pi/disability/resources/publications/telepsychology

91. Torrey WC, Cepeda M, Castro S, Bartels SM, Cubillos L, Obando FS, et al. Implementing technology-supported care for depression and alcohol use disorder in primary care in Colombia: Preliminary findings. Psychiatric Services. 2020; 71: 678–683. https://doi.org/10.1176/appi.ps.201900457 PMID: 32151216

92. Appleton R, Williams J, Juan NVS, Needle JJ, Schlief M, Jordan H, et al. Implementation, adoption and perceptions of telemental health during the COVID-19 pandemic: a systematic review. medRxiv. 2021; 2021.07.05.21260018. https://doi.org/10.1101/2021.07.05.21260018

93. Cowan KE, McKean AJ, Gentry MT, Hilty DM. Barriers to Use of Telepsychiatry: Clinicians as Gatekeepers. Mayo Clin Proc. 2019; 94: 2510–2523. https://doi.org/10.1016/j.mayocp.2019.04.018 PMID: 31806104

94. Acharibasam JW, Wynn R. Telemental Health in Low- and Middle-Income Countries: A Systematic Review. Int J Telemed Appl. 2018; 2018: 1–10. https://doi.org/10.1155/2018/9602821 PMID: 30519259

95. LeRouge CM, Gupta M, Corpart G, Arrieta A. Health System Approaches Are Needed To Expand Telemedicine Use Across Nine Latin American Nations. Health Aff. 2019; 38: 212–221. https://doi.org/10.1377/hlthaff.2018.05274 PMID: 30715970

96. Myers CR. Using Telehealth to Remediate Rural Mental Health and Healthcare Disparities. Issues Ment Health Nurs. 2019; 40: 233–239. https://doi.org/10.1080/01612840.2018.1499157 PMID: 30508400

97. Siegel A, Zuo Y, Moghaddamcharkari N, McIntyre RS, Rosenblat JD. Barriers, benefits and interventions for improving the delivery of telemental health services during the coronavirus disease 2019 pandemic: a systematic review. Curr Opin Psychiatry. 2021; 34: 434–443. https://doi.org/10.1097/YCO.0000000000000714 PMID: 33928918

98. Shannonhouse L, Zeligman M, Scherma H, Luke M, Schweiger W, McDonald CP, et al. Mental health facilitator service implementation in Mexico: a community mental health strategy. Journal of counselor leadership and advocacy. 2019; 6: 114–128. https://doi.org/10.1080/2326716X.2019.1637303

99. Aceituno D, Mena C, Vera N, Gonzalez-Valderrama A, Gadelha A, Diniz E, et al. Implementation of early psychosis services in Latin America: A scoping review. Early Interv Psychiatry. 2021; 15: 1104–1114. https://doi.org/10.1111/eip.13060 PMID: 33047889

100. Schinnar AP, Kamis-Gould E, Delucia N, Rothbard AB, Special Assistant is. Organizational determinants of efficiency and effectiveness in mental health partial care programs. Health Serv Res. 1990; 25: 387. Available: /pmc/articles/PMC1065634/?report=abstract

101. Aarons GA, Sawitzky AC. Organizational climate partially mediates the effect of culture on work attitudes and staff turnover in mental health services. Administration and Policy in Mental Health and Mental Health Services Research. 2006; 33: 289–301. https://doi.org/10.1007/s10488-006-0039-1 PMID: 16544205

102. Proctor EK, Landsverk J, Aarons G, Chambers D, Glisson C, Mittman B. Implementation Research in Mental Health Services: an Emerging Science with Conceptual, Methodological, and Training challenges. Administration and Policy in Mental Health and Mental Health Services Research. 2009; 36: 24–34. https://doi.org/10.1007/s10488-008-0197-4 PMID: 19104929

103. Hyde J. Lessons from Australia in the public funding of mental health services. Canadian Psychology. 2014. pp. 139–143. https://doi.org/10.1037/a0036237

104. Acharya B, Maru D, Schwarz R, Citrin D, Tenpa J, Hirachan S, et al. Partnerships in mental healthcare service delivery in low-resource settings: developing an innovative network in rural Nepal. Global Health. 2017; 13: 2. https://doi.org/10.1186/s12992-016-0226-0 PMID: 28086925

105. Brach C, Lenfestey N, Roussel A, Amoozegar J, Sorenson A. Will It Work Here? A Decisionmaker's Guide to Adopting Innovations. RTI International for the Agency for Healthcare Research and Quality (AHRQ). Rockville; 2008 Sep. Available: https://www.ahrq.gov/sites/default/files/wysiwyg/innovations/will-work/InnovationAdoptionGuide.pdf

106. Rondon MB. From Marianism to terrorism: the many faces of violence against women in Latin America. Arch Womens Ment Health. 2003; 6: 157–163. https://doi.org/10.1007/s00737-003-0169-3 PMID: 12920613

107. Nuñez A, González P, Talavera GA, Sanchez-Johnsen L, Roesch SC, Davis SM, et al. Machismo, marianismo, and negative cognitive-emotional factors: Findings from the Hispanic Community Health Study/Study of Latinos Sociocultural Ancillary Study. J Lat Psychol. 2016; 4: 202–217. https://doi.org/10.1037/lat0000050 PMID: 27840779

108. Ascencio E. The Effects of Machismo, Marianismo and Minority Stress on The Effects of Machismo, Marianismo and Minority Stress on Mental Health in the Latinx LGBTQ+ Community Mental Health in the Latinx LGBTQ+ Community. Scripps College. 2020. Available: https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=2682&context=scripps_theses

109. Llanes M. Beyond Machismo: Intersectional Latino Masculinities. In: Identity article collection [Internet]. SAGE Publications; 12 Apr 2021 [cited 29 Sep 2022] p. 0. https://doi.org/10.1177/1097184X17724846

110. Fernando S. Race and culture issues in mental health and some thoughts on ethnic identity. Couns Psychol Q. 2012; 25: 113–123. https://doi.org/10.1080/09515070.2012.674299

111. Tran AGTT. Race/ethnicity and Stigma in Relation to Unmet Mental Health Needs among Student-athletes. J College Stud Psychother. 2021; 1–18. https://doi.org/10.1080/87568225.2021.1881859

112. Bryant BE, Jordan A, Clark US. Race as a Social Construct in Psychiatry Research and Practice. JAMA Psychiatry. 2022; 79: 93. https://doi.org/10.1001/jamapsychiatry.2021.2877 PMID: 34878501

113. Flores RJ, Campo-Arias A, Stimpson JP, Chalela CM, Reyes-Ortiz CA. The Association Between Past Sexual Abuse and Depression in Older Adults From Colombia. J Geriatr Psychiatry Neurol. 2018; 31: 13–18. https://doi.org/10.1177/0891988717743588 PMID: 29172904

114. Zamora-Moncayo E, Burgess RA, Fonseca L, González-Gort M, Kakuma R. Gender, mental health and resilience in armed conflict: listening to life stories of internally displaced women in Colombia. BMJ Glob Health. 2021; 6: e005770. https://doi.org/10.1136/bmjgh-2021-005770 PMID: 34620613

115. Cuartas Ricaurte J, Karim LL, Martínez Botero MA, Hessel P. The invisible wounds of five decades of armed conflict: inequalities in mental health and their determinants in Colombia. Int J Public Health. 2019; 64: 703–711. https://doi.org/10.1007/s00038-019-01248-7 PMID: 31119303

116. Santaella-Tenorio J, Bonilla-Escobar FJ, Nieto-Gil L, Fandiño-Losada A, Gutiérrez-Martínez MI, Bass J, et al. Mental health and psychosocial problems and needs of violence survivors in the Colombian Pacific Coast: A qualitative study in Buenaventura and Quibdó. Prehosp Disaster Med. 2018; 33: 567–574. https://doi.org/10.1017/S1049023X18000523 PMID: 30047356

117. Consejo Nacional de Política Económica y Social. Estrategia para la promoción de la salud mental en Colombia. Departamento Nacional de Planeación. Bogotá; 2020 Apr. Available: https://colaboracion.dnp.gov.co/CDT/Conpes/Económicos/3992.pdf