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Mutual Aid Groups for Loneliness, Psychosocial Disability, and Continuity of Care

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Abstract

The objective of the present study was to evaluate the effectiveness of mutual help groups in continuity of care, loneliness and psychosocial disability in a Colombian context. For this, a quasi-experimental design is used, with pre- and post-intervention assessments due to non-randomized participant allocation. The study involved 131 individuals with mental disorders. The Psychosocial Disability Scale, The Alberta Scale of Continuity of Services in Mental Health, the UCLA Scale and the Zarit Caregiver Burden Scale were employed. The intervention was based on the core components of mutual aid groups. Significant differences ($p < 0.001$) were observed for the study variables, particularly in Loneliness, Continuity of Care, and various domains of psychosocial disability. A large effect size was found for these variables after the intervention. Most variables exhibited a moderate to large effect. This study demonstrates the effectiveness of mutual groups facilitated by mental health personnel at the primary care level.

Keywords Mutual aid groups · Loneliness · Continuity of patient care · Psychosocial functioning · Quasi-experimental studies

Introduction

The Community as the Core of Recovery in Global Policy

In the 2018 Regional Report on Health Systems in America and the Caribbean, psychosocial disability is identified as the primary cause of disability, accounting for 7.8% of the total, specifically attributed to depression [Pan American Health Organization (PAHO), 2018]. A psychosocial disability is understood as a process that arises when an individual, due to a mental health condition or history, is hindered from participating in the same manner as others, typically due to environmental factors (PAHO, 2018). The above-mentioned encourages legal recognition for individuals with psychosocial disabilities, recognizing social barriers and access to healthcare services as pivotal factors distinguishing between limitation and disability in an individual (Collis et al., 2011; Patel et al., 2018).

Latin American countries have encountered challenges in public health management related to mental health. These challenges encompass limited research resources, fragmented functioning of mental health systems, the absence of a national health system, inadequate policies directly impacting the organization and provision of services, or mismanagement of policies (Collis et al., 2011; Díaz-Castro et al., 2017; PAHO, 2022). These challenges may vary and encompass health co-morbidities, housing instability, relationship breakdowns, disconnection from support networks, or difficulties in continuously navigating through multiple service systems (McIntyre et al., 2022).

It has been observed that in low and middle-income countries, between 75 and 90% of individuals with mental disorders do not receive the necessary treatment, despite the existence of effective treatments (PAHO, 2018). Likewise, it has

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been documented that countries allocating fewer resources for mental health tend to have higher spending on psychiatric hospitalizations. Conversely, countries with greater investment in community-based services exhibit fewer psychiatric hospitalizations (Jamison et al., 2018).

Similarly, higher spending on psychiatric hospitalizations has been described in countries that allocate fewer resources for mental health, showing that countries have fewer psychiatric hospitalizations the greater the investment in community-based services (Jamison et al., 2018; PAHO, 2022). Efforts directed towards treating mental disorders should initiate in emergency or hospitalization departments, extend into the immediate post-discharge period, and persist over an extended duration, with a particular focus on community settings (Chung et al., 2017; PAHO, 2022).

Loneliness as a Public Issue

Loneliness can have a significant impact on the health and well-being of individuals, particularly in older adults (Wang et al., 2017). Loneliness is defined as the subjective perception of social isolation, and it can be caused by a variety of factors such as the loss of friends and family, retirement, illness, and disability. This can have a negative impact on both mental and physical health (Lloyd-Evans et al., 2014; Wang et al., 2017).

While social isolation refers to the lack of objective social connections, loneliness is the subjective experience of feeling alone, even when surrounded by others. Loneliness can be divided into emotional loneliness, which pertains to a lack of attachment to significant individuals, and social loneliness, which involves a deficiency in a social network or community (Caple et al., 2023).

As effects of loneliness, it has been described that those who feel lonely may also have a weaker immune system and a higher risk of disability and premature mortality (Lloyd-Evans et al., 2014). In terms of general health, loneliness has been linked to an increased risk of chronic diseases, such as cardiovascular disease, diabetes, and cancer (Xia & Li, 2018). Perceptions of social isolation are correlated with a higher risk of mortality and are clearly risk factors for cardiovascular disease (Xia & Li, 2018). Similarly, there is increasing evidence that social isolation is a risk factor for dementia, as it could result in cognitive inactivity, which is related to faster cognitive decline (Livingston et al., 2020). This indicates that loneliness may be equivalent to a public health problem (Xia & Li, 2018).

In terms of mental health, loneliness has been associated with a higher risk of depression, anxiety, stress, and sleep disorders (Wang et al., 2017). Individuals who experience loneliness may also exhibit lower self-esteem and reduced life satisfaction (Lyoms et al., 2021). Furthermore, there may be an increase in the progression of cognitive decline and depressive symptoms (Lee et al., 2022). In individuals with mental illness, over 50% of this group experiences loneliness, which is associated with challenges in forming friendships, a lack of social opportunities, and stigma (Wickramaratne et al., 2022). Often, treatment interventions for these individuals do not adequately address this issue (White et al., 2020).

It has been described that social support serves as a protective factor for both depressive symptoms and depressive disorders, a consistency observed across various environments and populations (Wickramaratne et al., 2022). Similarly, psychosocial group interventions and rehabilitation have proven effective in addressing loneliness and social isolation in older adults (Lloyd-Evans et al., 2014) as well as in individuals with mental disorders (White et al., 2020).

Just as an association is noted between isolation and psychosocial disability, both isolation and loneliness also correlate with the utilization of healthcare services. A model has been proposed to elucidate isolation, considering the quantity, structure, quality of social interactions, subjective perception, and the social and community resources that facilitate these connections (Wang et al., 2017).

Continuity of Care for Mental Health

Best practices for the prevention and management of mental disorders recommend providing individuals with targeted treatment to mitigate associated risks, ensuring that services facilitate continuity in mental health care. To achieve these goals, clinical teams need evidence-based interventions in a continuous, longitudinal, and coordinated manner (Doupnik et al., 2020). This highlights how continuity of care stands as a central component in international public health systems that prioritize community-based approaches. Especially in the field of mental health, continuity of care has emerged as a standard for interventions, given its pivotal role in ensuring quality and effectiveness (Diez-Canseco et al., 2020; Vandyk et al., 2016).

There are significant barriers to accessing services, stemming from economic, geographical, and cultural challenges. These are associated with considerations related to the populace's perception of the system's ability to address their needs, as well as various factors within the healthcare system, particularly the coordination among its stakeholders (Agudelo-Hernández & Rojas-Andrade, 2021). Individuals with a psychosocial disability seeking assistance from emergency services may face numerous concurrent challenges that have culminated in an acute crisis. These challenges may encompass health co-morbidities, housing instability, relationship breakdowns, disconnection from support networks, or difficulties in continuously navigating through multiple service systems (McIntyre et al., 2022).

Continuity of care is regarded as a process that entails organized and seamless care, ensuring a smooth transition of individuals across various components of the service delivery system (Vandyk et al., 2016). This variable is considered as a process that involves orderly care, an uninterrupted movement of people between the various elements of the service delivery system (Bachrach, 1981). This aspect is pivotal for achieving positive outcomes for individuals with severe and persistent mental illness (Haggerty et al., 2003), as evidenced by robust correlations between this factor and a sustained quality of life in multivariate models (Mitton et al., 2005). Similarly, in addition to strengthening primary care, community-based interventions such as mutual aid groups have proven effective in reducing healthcare system fragmentation and bolstering continuity of care (Morales Piña & Gutiérrez Chávez, 2019).

Group Interventions for Psychosocial Disability, Loneliness, and Continuity of Care

Since 1990, particularly with the Declaration of Caracas, the focus of mental health care has shifted away from psychiatric clinics characterized by asylum-like settings. Instead, the aim has been to establish psychiatric wards within general hospitals, emphasizing a more integrated and community-oriented approach to mental health care. In addition to the integration of mental health into primary healthcare, the emphasis is placed on considering both the individual and the community as the nuclear elements of the recovery process (PAHO, 1990).

The latter concept is encapsulated in the expression "nothing about us without us." This principle signifies that individuals experiencing mental health issues affirm their empowerment and advocate for their active participation in shaping care services and research within the field. Consequently, low-cost interventions, such as peer support groups, have been recognized as potentially beneficial, as they align with the philosophy of inclusive participation and can make a substantial contribution to the well-being of those involved (Nickels et al., 2016).

These interventions are founded on the fundamental premise that individuals who have faced significant mental health challenges can provide valuable and unique support to those currently grappling with similar issues (Lyons et al., 2021). In certain cases, it has been suggested as a strategy to alleviate the financial burden related to psychosocial disability (Agudelo-Hernández et al., 2023a; Kelly et al., 2019).

The recovery approach places the aspirations of individuals with mental health disorders at the core of care objectives. Alongside the noticeable reduction in the manifestation of the disorder, the recovery approach aims for the restoration of cognitive abilities and enhancements in community and occupational performance (Agudelo-Hernández et al., 2023a). The recovery approach underscores an individual's efforts to lead a life that aligns with their personal values and aspirations, staying faithful to the roles they aspire to fulfill in diverse contexts (Patel et al., 2018).

Embracing a core component approach to evidence-based practice enhances decision-making processes when implementing health strategies or plans. In the case of Mutual Aid Groups, it has been established that these components may encompass active agency, coping strategies, recognition and management of emotions, problem-solving skills, supportive interaction, trust, self-identity construction, and fortification of social networks (Agudelo-Hernández et al., 2023a).

In the case of Colombia, it has been determined that the implementation of support groups, mutual aid groups and other community actions is lower compared to other mental health services (Agudelo-Hernández & Rojas-Andrade, 2023a). Among the barriers indicated, there is a lack of support at the administrative level, in addition to a lack of clear methodologies to implement these. Despite the above, some community experiences have provided benefits, improvement in quality of life, learning in mental health, improvement in social functioning, life skills, and hope has increased (Agudelo-Hernández & Rojas-Andrade, 2023b).

The Present Study

Evidence-based practices take an average of 17 years to be routinely incorporated into healthcare practice (Morris et al., 2011), and only half of Evidence-Based Interventions (EBIs) achieve widespread clinical utilization (Bauer et al., 2015). In the case of Latin-American context, community-based and comprehensive mental health care strategies do not offer a distinct perspective (Agudelo-Hernández & Rojas-Andrade, 2023a). The National Institute of Mental Health (NIMH) acknowledged the necessity for research aimed at enhancing the implementation of effective and efficient programs (Fajardo Flores & Alger, 2019). This requires identifying aspects such as the nuclear components of interventions. Nuclear components are fundamental elements within empirically validated treatments that serve as key reference points for comprehending, implementing, and evaluating an intervention (Garland et al., 2008).

The establishment of networks between primary care sectors and other sectors outside of the health sector is also important for addressing loneliness and social isolation in older adults. Primary care professionals can collaborate with community organizations, volunteer groups, and other service providers to establish networks of social support and enhance access to and continuity of the necessary resources and services (Lyons et al., 2021; Tyler et al., 2019).

Internationally, it has been observed that the connection between mental disorders and continuity of care has received limited attention from research teams (Adair et al., 2005).

Despite the recognition of the importance of continuity of mental health care and the need to systematize program evaluations (Leiva-Peña et al., 2021), there is not enough evidence regarding its relationship with psychosocial disability in Low- and Middle-income Countries.

It has also been noted that the majority of existing evidence regarding the impact of community interventions is found in Europe and North America, where a positive and significant effect on personal recovery has been observed, with modest effects on other variables (Lloyd-Evans et al., 2014; Lyons et al., 2021; White et al., 2020). Limited studies have also been emphasized in Low- and Middle-Income Countries, where such interventions may be more necessary, and where variables such as empowerment, hope, and perception of social support may yield different outcomes (Lloyd-Evans et al., 2014; Lyons et al., 2021; White et al., 2020).

Likewise, to address loneliness as a public health problem, various primary care interventions have been developed that focus on the early identification of loneliness and social isolation, in addition to the creation of continuous care networks between care sectors. Primary, health and non-health, and the implementation of psychosocial and rehabilitation group interventions (Galvez-Hernandez et al., 2022). Another strategy that is crucial is fostering active aging, community capacity, and feelings of empowerment (White et al., 2020). Individualized peer support in mental health services shows a positive effect on self-reported empowerment and recovery, as well as working alliance and social network support (White et al., 2020).

To overcome these challenges, it is imperative to clearly specify the components encompassed by peer support interventions. Additionally, the use of specific outcomes related to disability, loneliness, and the functioning of healthcare systems, along with their respective measurement tools, is crucial (White et al., 2020). Building upon the aforementioned considerations, the present study seeks to ascertain the effectiveness of mutual aid groups in fostering continuity of care, alleviating loneliness, and addressing psychosocial disability within a Latin American context. The following hypothesis is posited: Individuals with mental disorders who engage in Peer Mutual Aid Groups will experience a decrease in psychosocial disability and *loneliness*, along with an increase in continuity of care. Additionally, it is anticipated that a methodology centered around the core components of these group interventions will be proposed for implementation in similar settings.

Methods

A quasi-experimental, prospective design was utilized, incorporating pre- and post-intervention assessments. This study was conducted within the framework of a community-based rehabilitation strategy in the department of Caldas, Colombia, spanning the latter half of 2022 and the first half of 2023.

Participants and Procedure

In this study, 131 individuals with mental disorders and their primary caregivers voluntarily completed the instruments. All of them were engaged in a community-based mental health rehabilitation process through municipal hospitals. This strategy involves individuals diagnosed with psychopathology, particularly affective disorders and thought disorders. All strategies were implemented in semi-urban and rural environments, given that the Community Based Rehabilitation program on which the study was developed had these contexts. The strategy was executed in seven municipalities, with each municipality contributing one group, averaging 19 participants per group.

All participants willingly consented to take part in the study. All participants had at least one caregiver who participated in completing the instruments (Zarit Scale) and in the group sessions. The administration of the instruments was conducted by personnel from local hospitals, particularly psychologists and social workers. In the event of detecting any disturbance, care pathways were activated, and individuals were attended to by the primary care team. The sampling was not conducted randomly as the groups were already established.

Intervention

The intervention involved the establishment of a Mutual Aid Group as part of the community-based rehabilitation strategy. For the mutual aid groups, an eight-session program was designed to strengthen the core components identified in the literature (Agudelo-Hernández & Rojas-Andrade, 2023b). Among these components are problem-solving, hope, agency capacity, support networks, coping strategies, stress management, psychoeducation, and empowerment. Each component will be covered in a weekly session lasting 90–120 min, held in community settings. The group maintained an average participation rate of 80% of its members in each session. On average, each participant attended 7.2 sessions. Each session was facilitated by a member of the mental health team.

In addition to the core components of the groups, techniques for group cohesion based on Hombrados (2010) and strategies to address difficulties with the therapeutic alliance in the group, such as the Rupture Resolution Rating System (3RS) (Garceau et al., 2021), were taken into account. The content and theoretical support for each session is described in Table 1.

Although differences have been raised between support groups and mutual aid groups, which is given by the leadership of a facilitator of the health system in the case of support groups, for the purposes of this study, support groups and mutual aid groups in the same category. In this case, both types of groups were based on the core components of community actions for mental health (Agudelo-Hernández & Rojas-Andrade, 2023b).

Instruments

The instruments were applied 1 week before starting the intervention and 1 week after finishing it. Questions about medical history, both psychiatric and non-psychiatric, were included. Sociodemographic questions were also included. In addition to these questions, the following validated instruments for similar populations were used:

Psychosocial Disability Scale

To determine psychosocial disability, the Psychosocial Disability Scale was used, validated for the study population and recommended by the Colombian Ministry of Health (Agudelo-Hernández et al., 2023b). This instrument has 33 questions with dichotomous answers of "Yes" or "No". The domains are Adherence to Treatment (which identifies elements related to treatment, its continuity and understanding by the person), Personal and Emotional Disability (which evaluates the individual's capacity for self-care, engagement in meaningful activities, and ability to respond emotionally) and Family Functioning Disability (which recognizes the family structure, considering kinship, age, profession, and level of education). In the domain of Social Disability, the assessment includes significant interactions with other individuals, as well as the presence and quality of relationships

Table 1 Principal components of mutual aid groups

Component	Component definition	Theoretical basis of interventions
Active agency	The increase of abilities or moving these skills to functions, which has been obtained through the participation in the group	Bernabéu-Álvarez et al. (2020), Petrini et al. (2020), Sample et al. (2018)
Coping strategies	The mutual aid group provides individuals with techniques that are learned or strengthened, enabling them to better cope with challenging personal situations	Landstad et al., (2020), Longden et al. (2018), Sample et al. (2018)
Emotion recognition and management	This code pertains to the identification of personal difficulties through group dynamics. It includes all citations that explicitly or implicitly refer to the processes conducted within the group, facilitating the recognition of individual challenges related to mental health	Ngai et al. (2021), Manning et al. (2020)
Problem solving	Group contribution that occurs by identifying individual coping strategies in group dynamics that had not been considered before and that are important for recovery	Bernabéu-Álvarez et al. (2020), Gona et al. (2020), Wijekoon et al. (2020), Carlén and Kylberg (2021)
Supportive interaction	It refers to relationships given in the group perceived as horizontal and generating trust between members. Active exploration of the same people of group actions for mental health with the intention of relating to other people	Trojan et al. (2014), Ngai et al. (2021)
Identity construction	This code includes all citations that make explicit or implicit mention of a process of identifying characteristics of one's own personality. Also, in the behavior or in the thoughts of the other people in the group. Identification of parental roles, such as father, mother, brother, etc., are included	Ngai et al. (2021), Wijekoon et al. (2020)
Trust	Perception of the dynamics of the group with the freedom to express an opinion or speak what is thought. Reception of particularities of each person without criticism or pointing out those that the person perceives as negative in himself	Landstad et al. (2020), Ngai et al. (2021)
Social networks	It refers to relationships given in the group perceived as horizontal and generating trust between members. Recognition of the group as a tool that provides the person with constant availability for their difficulties, beyond specific meetings	Patil and Kokate (2017), Kelly et al. (2019), Southall et al. (2019)

Adapted from Agudelo-Hernández and Rojas-Andrade (2023b) within support networks. Lastly, within the domain of Occupational Disability, inquiries are made regarding job satisfaction, relationships with colleagues and superiors, as well as overall work and occupational performance. At the end, a summation of each of these items is conducted, enabling a classification of psychosocial risk into categories of low, moderate, high, and very high.

Alberta Continuity of Services Scale-Mental Health

The Alberta Continuity of Services Scale-Mental Health (ACSS-MH) (Mitton et al., 2005) was employed. The scale was translated into Spanish and validated in the Colombian population, demonstrating high reliability ($\alpha = .93$) while maintaining the original factorial structure (Agudelo-Hernández et al., 2023c).

This instrument is divided into two parts. The first part (Part A) is designed for users and consists of 43 Likert-type items. It investigates the utilization of mental health services and the subjective experience related to the care process. This is assessed through three subscales: System fragmentation, grassroots relationships, and receptive treatment. The second part (Part B) comprises 17 multiple-choice items with a single answer. It involves the reporting of service provision based on the records of the care process. This section is completed by healthcare personnel after analyzing the care processes. While a specific cut-off point has not been set, Part A of the Scale is quantified, with a maximum score of 172. A higher score indicates better continuity of care services.

UCLA- Loneliness Scale

For this study, the ten-item version validated in the Carreño-Moreno et al. (2022) study was utilized. This version of the scale is a self-administered test with ten questions that utilize a Likert-type measurement scale, where: 1 corresponds to the category “I often feel this way”; 2 “I feel this way frequently”; 3 “I rarely feel this way”; and 4 “I have never felt this way”. The minimum score is 10, and the maximum is 40 points. Scores below 20 may indicate a severe degree of loneliness, while scores between 20 and 30 may suggest a moderate level of loneliness (Carreño-Moreno et al., 2022).

Self Reporting Questionnaire (SRQ)

For the detection of affective symptoms, the Self Reporting Questionnaire (SRQ) designed by the World Health Organization (Beusenberg et al., 1994) was employed. It consists of two parts. The first part comprises 20 questions pertaining to symptoms of depression, anxiety, or both. A positive result is indicated by a score equal to or greater than 11 points. The second part consists of five questions for the detection of symptoms related to psychosis and seizures. In this section, each question scores as an individual risk factor. In validation studies conducted in Latin America, including Colombia, a sensitivity ranging from 62.9 to 90% and a specificity from 44 to 95.2% have been determined. Additionally, an internal consistency of .81 (Cronbach’s alpha) has been observed (Beusenberg et al., 1994).

Zarit Burden Scale

This assesses the burden experienced by a caregiver, measuring areas such as financial, social, physical, and psychological well-being, among others. It has been noted that when measuring caregiver burden, it not only addresses neglect of one’s own health and caregiver frustration, but also provides insight into family dynamics, particularly those related to the caregiver’s adaptation (Breinbauer et al., 2009). The scores range as follows: 22–46: No burden, 47–55: Mild burden, and 56–110: Severe burden (Breinbauer et al., 2009). For this study, the validated version in Colombia was utilized (Rodríguez et al., 2016).

Data Analysis

The analysis was conducted using SPSS version 26 software. The assumption of normality for each of the quantitative variables was verified using the Kolmogorov–Smirnov test. Similarly, correlations were evaluated between the variables using a correlation matrix with respective coefficients and p-values. Non-parametric tests were used to contrast the results. To assess the intragroup intervention effects, the Wilcoxon test for two related samples was employed. Effect size (Rosenthal’s r) was calculated using the following thresholds: small effect (from $.1 <$ to $.3$); moderate effect (from $.3 <$ to $.5$) and large effect (from $\geq$ to $.5$), applying the following equation: $r = z/\sqrt{(n1 + n2)}$. Additionally, to compare the results between groups, the non-parametric Mann–Whitney U test for unrelated samples was utilized, with a significance level set at $p < .05$ for significant differences between groups.

Results

For individuals with psychiatric diagnoses, the mean age was 37.63 years, with 59.5% being women, and the remaining percentage identified as men. 93.9% stated that they did not belong to any specific ethnic group, while the remaining percentage identified themselves as belonging to the Embera people. Regarding socioeconomic stratum, 61.9% fell within strata zero and one (the lowest), while the remaining percentage fell within strata two and three (middle income). As for occupations, the most frequent category was related to artistic skills, followed by none and housewife.

Regarding non-psychiatric pathologies, those associated with cardiovascular risk (diabetes mellitus and hypertension) stand out, in addition to sensory disability. In psychiatric pathologies, the highest proportion is represented by affective disorders. Other sociodemographic variables are shown in Table 2.

Table 3 displays the initial indicators of the study variables as reported with the corresponding scales used.

Regarding comparative data, the intragroup intervention effects can be observed in Table 4, which displays the scores on the Alberta Continuity of Services Scale, the Psychosocial Disability Scale, the SRQ for recent symptoms, the Zarit Burden Scale for caregiver burden, and the UCLA Loneliness Scale, both before starting the mutual aid group (Assessment 1) and after its completion (Assessment 2).

It is observed that there are significant differences between both time points for the study variables, especially in Loneliness, Continuity of Attention and several domains of Psychosocial Disability, such as Occupational Disability and Emotional Disability, with a large effect size, and Adherence with a moderate effect size. Similarly, differences are noted in acute symptoms and Caregiver Burden. Regarding the effect size, in most variables, a moderate to large effect is observed.

Table 2 Sociodemographic data

Variable	%
Gender	
Male	60.3
Female	39.7
Education	
Incomplete primary	17.8
Incomplete secondary	33.8
Complete secondary	27.8
Professional degree	20.6
Main comorbidity	
None	44.3
Physical disability	7.6
Hypothyroidism	2.3
Hypertension	9.9
Chronic kidney disease	1.5
Diabetes mellitus	12.2
Sensory impairment	9.9
Cancer	2.3
Unexplained abdominal pain/unexplained headache	10
Occupation	
Housewife	20.6
None	26
Employee	7.6
Farmer	9.7
Artisan/artistic skills	32.3
Retired	3.8
Main psychiatric diagnosis	
Depression	30
Bipolar disorder	21.9
Schizoaffective disorder	2.9
Anxiety	9.9
Schizophrenia	1.5
Epilepsy	12.2
Autism	9.9
Substance use disorder	11.7

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Discussion

In effective interventions aimed at improving mental disorders, addressing psychosocial disability emerges as a key element. This approach includes multiple components, such as meeting financial needs, increasing information, peer support, group meetings, building therapeutic relationships and, especially, transition processes from hospital to community services (Tyler et al., 2019). This study was based on these concepts to determine the effectiveness of the groups in psychosocial disability, loneliness, caregiver burden, and continuity of care, aspects related to the recovery of mental disorders (Patel et al., 2018). The proposed hypothesis was confirmed upon finding that the mutual aid group, structured according to the core components of these interventions, improved loneliness, occupational disability, affective and behavioral symptoms, caregiver burden, and continuity of care in health services.

As these results indicate, other studies have demonstrated the effectiveness of group interventions in improving psychotic symptoms, cognitive impairment, and mortality in adults (White et al., 2020). These effects persist for up to 6 months, positively influencing self-perceived personal recovery and psychological well-being. This has an impact on self-efficacy, quality of life, and social participation (Lloyd-Evans et al., 2014; Lyons et al., 2021). Additionally, other studies have indicated an impact of these groups on caregiver burden, which has indirectly influenced social functioning (Lee et al., 2022).

In a systematic review and meta-analysis of 18 randomized controlled trials assessing the effectiveness of peer support interventions for individuals with severe mental illnesses, it is indicated that peer support interventions can enhance quality of life, reduce symptoms of mental illnesses, decrease hospitalizations, and lead to improvements in caregiver burden (Lloyd-Evans et al., 2014). This reaffirms the findings of the current study. However, it is also noted that the methods are heterogeneous (Lyons

Table 3 Information related to continuity of care, psychosocial disability, and loneliness

Variable	Minimum	Maximum	Mean	SD
Psychosocial disability				
Adherence	4	8	5.36	1.264
Family disability	4	8	5.52	0.95
Occupational disability	9	17	11.64	1.925
Emotional disability	9	18	13.19	2
Social disability	7	14	9.88	2.102
Total disability	35	54	45.59	4.647
Continuity of care				
Provider relationship	0	20	15.45	4.351
Access to services	4	28	15.19	5.609
Responsive treatment	3	16	7.57	2.781
Treatment continuity	0	12	4.23	2.602
Follow-up	0	16	9.58	3.955
Total part A	16	80	52.03	11.852
UCLA Loneliness Scale	18	40	27.93	6.216
SRQ	0	20	8.24	5.666
Zarit Scale	0	74	23.34	16.95

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et al., 2021) and often do not report mechanisms of change or intervention components (White et al., 2020), which hinders a better understanding of the functioning of these interventions.

On the other hand, it has also been noted that the available evidence on the effectiveness of mutual aid groups is better demonstrated in the improvement of psychosocial variables, with small effects in other domains of disability, such as empowerment and clinical recovery (Lloyd-Evans et al., 2014; Lyons et al., 2021; White et al., 2020). The present study indicates that the implementation of these groups could improve occupational variables and acute symptoms at an affective and behavioral level, in addition to variables related to the functioning of the health system, with large effect sizes.

Other studies have established a connection between service continuity, improved quality of life, symptom reduction, and decreased healthcare costs due to fewer hospitalizations. Ultimately, this leads to enhanced overall functioning for individuals (Tammes & Salisbury, 2017). An environment where information sharing and service delivery are effective in meeting the needs of individuals requiring care is conducive to shared attention, decision-making, and ultimately, shared power (O'Shea et al., 2019). This dynamic can significantly impact indicators of psychosocial disability (Doupnik et al., 2020).

On the other hand, this study points out the improvement in care overload. This coincides with other studies that indicate that community interventions improve the quality of life in caregivers, either through improvement in the autonomy of people with mental disorders or directly through the reduction of symptoms in caregivers (Hajek et al., 2021). This is why there is a need to implement policies and programs to support informal caregivers and reduce their workload. These policies and programs may include measures to improve access to health care services and emotional support services (Hajek et al., 2021), as noted in the present research.

The strengths of the study include the implementation of an evidence-based methodology through the application of core components, which renders this method replicable in similar contexts. Additionally, techniques to maintain adherence are included, which has been shown to be a limitation in multiple studies examining the effectiveness of peer support (White et al., 2020). It can also be noted that measurements beyond symptoms are included, such as loneliness, psychosocial disability, caregiver burden, and continuity of care. This provides a more comprehensive view of the recovery process. The aforementioned could have broader implications in conceptualizing the groups as part of the healthcare system and as integral components of other sectors related to well-being, such as the educational, recreational, and social sectors.

Similarly, this approach addresses another challenge of these strategies, which involves the integration of these

Table 4 Intragroup effects of the intervention

Variable	Assessment 1		Assessment 2		*Z*	*p**	*r*
	M	SD	M	SD			
Loneliness (UCLA)	27.93	6.216	29.88	4.99	−8.63	< 0.001	0.76
Continuity of care	52.03	11.852	57.94	7.54	−9.09	< 0.001	0.79
Adherence	5.36	1.264	5.05	1.04	−5.12	< 0.001	0.45
Occupational disability	11.64	1.925	11.12	1.92	−8.06	< 0.001	0.71
Emotional disability	13.19	2.01	11.98	1.87	−6.35	< 0.001	0.56
SRQ (acute symptoms)	8.24	5.666	6.12	4.39	−8.33	< 0.001	0.73
Zarit (caregiver burden)	23.34	16.95	18	13.77	8.90	< 0.001	0.78

M mean, *SD* deviation, *Z* Wilcoxon test for related samples, *r* effect size

*Statistical Significance: $p < .05$

interventions with the healthcare system (Lloyd-Evans et al., 2014; Lyons et al., 2021). It is noted that primary care professionals can collaborate with community organizations, volunteer groups, and other service providers to create social support networks and improve access to resources for recovery.

As other implications of this study in the developed context, it is noted that a specific methodology is provided, based on nuclear components of community actions and aimed at specific goals focused on the real needs of people, such as loneliness or access to services of health, beyond isolated symptoms. This could considerably impact the low implementation of community services for mental health in Colombia and in similar contexts.

The risk of a type I error is noted as a possible limitation. However, given the design of the study, it could be argued that the analysis of these results shows the real implementation of a public health program in a middle-income context, which it could also be a guide for similar health systems. Future studies could include other variables such as economic recovery, stigma reduction, strengthening of citizenship, reduction of psychiatric hospitalizations, and suicidal behavior. These variables have been pointed out by another research (Ngai et al., 2021). It is also necessary to analyze the use of this methodology in other contexts, the response to intercultural adaptations, and cost analysis (Lloyd-Evans et al., 2014; Lyons et al., 2021; Wickramaratne et al., 2022). In addition, collecting a sufficient number of data points between interruptions is crucial to ensure that the effects of each intervention can be determined individually (Miller et al., 2020). While it might be complex due to the difficulty of allowing randomization in mutual aid groups (Agudelo-Hernández et al., 2023a), randomized studies could be conducted.

Conclusions

While the need for implementing group and community interventions for mental health recovery is acknowledged, the evidence for effective interventions in low- and middle-income countries is limited. The present study demonstrates the effectiveness of mutual groups led by primary mental health care personnel, particularly in improving care continuity, caregiver burden, acute symptoms, treatment adherence, and occupational disability in people with mental disorders.

This reaffirms that psychosocial disability, understood as both the symptoms resulting from a mental disorder and the barriers imposed by the environment, necessitates interventions that integrate aspects of clinical treatment and social recovery. Hence, the key components of the mutual aid groups include active agency, coping strategies, recognition and management of emotions, problem-solving strategies, supportive interaction, trust, self-identity construction, and strengthening of social networks. These components translate psychosocial interventions into an increase in capabilities and the transformation of these capabilities into functions.

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Data Availability The authors declare that the data presented in this manuscript are available.

Declarations

Conflict of interest The authors have no conflicts of interest relevant to this article to disclose.

Ethical Approval This study complied with the recommendations for biomedical research of the Declaration of Helsinki by the World Medical Association and was approved by the Ethics Committee of the University of Manizales, act CB02_2022. The names of the participants in the study were kept strictly confidential. Everyone agreed to participate in the study.

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