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Mental health promotion by local governments: a consensus study on community mental health workers

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Abstract

Introduction Mental illness is a leading cause of disability worldwide and requires responses that extend strictly clinical care. Community health workers are increasingly recognized for their potential, yet no clear guidelines exist regarding their roles and training in mental health. This study aimed to establish expert consensus on a framework for implementing a Community Mental Health Worker Program within local governments, focusing on training requirements, strategic priorities, service delivery approaches and potential forms of funding.

Methods A three-round Delphi study was conducted with thirty experts. Participants rated fifty-seven items, ranked two sets of options, and answered three open-ended questions. Consensus was defined as 70% agreement (rated as "strongly agree" or "agree") or disagreement (rated as "strongly disagree" or "disagree") on a five-point Likert scale.

Results Fifty-one items reached consensus. The ranking questions achieved moderate to strong agreement by round three. The open-ended responses generated 226 segments, grouped into twenty categories. Experts agreed that community mental health workers play a vital role in community-based mental health promotion, working collaboratively and intersectionally with various stakeholders. However, appropriate training is lacking and is considered crucial for ensuring their public recognition. Providing adequate funding is considered the primary incentive for implementing such programs.

Conclusions This study made it possible to gather consensus on the critical role of community mental health workers and the urgent need for structured training programs at the local level. It also identified key elements and strategic strategic approaches essential for implementing a successful Community Mental Health Worker Program.

Keywords Mental health, Health promotion, Local government, Delphi technique, Community health workers, Education/Training program

1 Background

1.1 Mental health promotion

Mental illness is considered one of the main causes of disability worldwide [1]. In Portugal, as in other high-income countries, despite investment in mental health services, there remains a high prevalence of psychiatric disorders, a significanttreatment gap, inappropriate use of services, and long delays in seeking help in a timely manner [2].

This concerning situation is linked to several systemic and structural factors in the organization of mental health services, as well as to the inherent complexity of psychiatric disorders, particularly the stigma associated with them, which compromises access to healthcare, leads tosocial discrimination and may even contribute to premature death [3]. The complexity of the mental health-illness spectrum and its intersection with sociocultural issues requires a range of services responses that go beyond strictly clinical aspects. It calls for an approach that acknowledges the interplay of biological, psychological, and social factors in shaping mental health across the life course and prioritizes a population-based approach rather than an individual one [4, 5].

The WHO Service Organization Pyramid for an Optimal Mix of Services for Mental Health provides a framework for organizing mental health services (Fig. 1). It is based on the principle that no single service setting can meet all population mental health needs, and it advocates for integrated mental health systems based on primary mental health care [6].

The model emphasizes the dimension of self-care at the base of the pyramid and at every step above it. Self-care refers to self-management without direct professional input, though ideally with some support from formal services [6].

The second step of the pyramid, "Informal Community Care", encompassesresources that exist within the community but are not part of formal health services. These include family, user organizations, civil society organizations, local governments, traditional healers, professionals from the educational sector, police officers, and nonspecialized

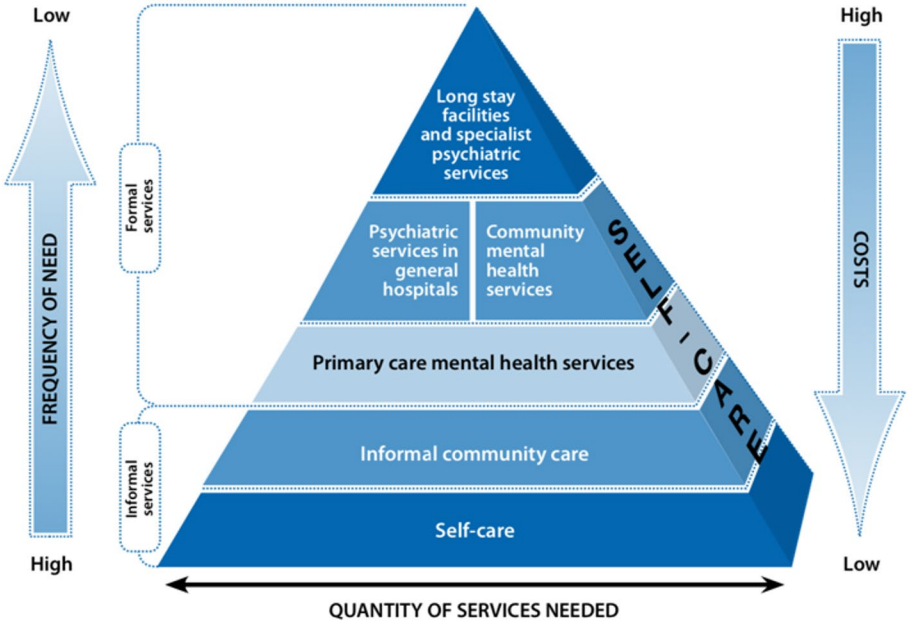

Fig. 1 *WHO Service Organization Pyramid for an Optimal Mix of Services for Mental Health* (CC BY-NC-SA 3.0 IGO)

health workers or lay health workers [6, 7]. When care needs are not adequately met at these two levels, it becomes necessary to mobilize the formal health sector.

Entry into the formal healthsector should occur through primary health care, where early stages of mental illness can be idetected, mild and moderate mental illness can be managed, and severe mental illness can be referred to specialist care. Specialized outpatient care includes community mental health centers, rehabilitation services, supervised residential services, and home care. When mental health needs cannot be met in the community, psychiatric services should be available in general hospitals, specialized inpatient care and long-stay facilities[6].

Informal services represent the least specific and least costlysteps of care, yet they address the most frequent needs and should therefore be widely available in the community. Mental health promotion should be integrated into all steps of the pyramid but should be particularly anchored in informal services. According to the World Health Organization (WHO) [8], "mental health promotion involves actions to strengthen the policy environment and use of strategic communication for network building, stakeholder engagement, enhanced mental health literacy, and behaviour change". Mental health promotion addresses the social determinants of mental health, and is understood as both a social and health-oriented activity concerned with inequity and social justice. Consequently, mental health promotion efforts must be developed within communities, intervening where people live, work, learn, and thrive. Promoting mental health in the community brings services closer to people, facilitates access to the remaining steps of the pyramid and increases public support and participation [9].

1.2 Local governments as mental health promoters

Mental health promotion should be widely disseminated across various community contexts, with local governments playing a key role. Local governments promote mental health by shaping everyday living conditions, fostering social connections, supporting healthy lifestyles and making low barrier, non stigmatizing resources available. They are, therefore, considered key settings for health promotion, with growing investment in this area, reflected in initiatives such as the European Network of Healthy Cities [10], and, in Portugal, the Portuguese Network of Healthy Municipalities [11].

Local governments can play a powerful and multifaceted role in providing reliable information, challenging established prejudices and promoting access to mental health care. They can act as the frontline of public health and well-being through a range of local and health services, with theability to implement policies and programstailored to the population's needs. Beyond core areas of intervention, such as education, social services or urban planning they can desing comprehensive programs to reduce mental health inequalities, with a significant impact on mental health outcomes. Adopting a "Mental Health in All Policies" approach recognizes and emphasizes the impact of public policy on mental health determinants. Policies related to housing, transport, education, urban planning, culture and the environment should be developed and implemented in ways that actively promote and protect mental health. [12].

The organization, autonomy and services that local governments are responsible for differ from country to country. In Portugal, there are 308 municipalities, the second-level administrative subdivision. Each municipality is composed of one or more parishes and may include various towns or cities, which constitute an entirely separate

organization system. Municipalities operate through a Municipal Chamber, the executive body, and the Municipal Assembly, the deliberative body. Since 2019, they have had consultive, planning, management, investment, inspection and licensing responsibilities in the health sector [13, 14]. They are also expected to develop strategic partnerships with the National Health Service for disease prevention programs, particularly those promoting healthy lifestyles and active aging [14].

Portuguese municipalities can be considered the equivalent to district or city councils in Great Britain or *départements* in France. The term local government is a general and comprehensive concept that refers to an official organization that is responsible for governing a specific area of a country. This concept will be used for practical reasons.

Although there is consensus on the importance of local governments in promoting community mental health, there is still a lack of specific training programs and frameworks to guide their role [15].

1.3 Community health workers

Where the health system is fragile or the providers are scarce, an approach based on task shifting, that is, the redistribution of tasks among health workforce teams, can help make more efficient use of human resources [16]. Simpler tasks can be transfered from highly educated health workers to those with fewer qualifications, and certain tasks can even be delegated to members of the community [6].

There is increasing recognition of the importance of community health workers (CHWs), which are frontline health workers without formal health training, who are trusted members of, or who have a close understanding of, the community they serve [17]. Other terms used to designate individuals from the community providing frontline services includes *promotores*, lay health workers, lay providers, indigenous paraprofessionals, peer support specialists, natural helpers and lay counsellors [18].

CHW models of care delivery have most frequently been used to address physical health disparities. For example, CHWs have been effective in increasing childhood immunization rates and improving outcomes for individuals with chronic health conditions such as diabetes, obesity, and asthma. They can act as liaisons between agencies and communities, facilitating access to services, enhancing service quality and, improving cultural responsiveness of those services. CHWs also play a role in promotinghealth equity in underserved communities [18].

Depending on the setting, available resources and local needs, CHWs can fulfill different roles in delivering evidence-based mental health interventions. CHWs may 1) conduct outreach, acting as a "bridge" between the community and the health system; 2) contribute to case management and treatment compliance; 3) provide basic care to patients with less intensive needs; or 4) be responsible for the delivery of health services as the single treatment provider [18]. There are, in fact, several models of CHW in mental health, and the most suitable model may vary depending on the sociocultural context and the specific services needed.

Evidence suggests that CHW models of mental health service delivery can effectively address global and local disparities in care for underserved, excluded or vulnerable populations: as trusted members of their communities, CHWs are uniquely positioned to bridge cultural gaps, reduce stigma and provide accessible, affordable and culturally appropriate mental health support—particularly in contexts where professional services

are limited or inaccessible. Notably, two-thirds of randomized controlled trials have demonstrated positive mental health outcomes for traditionally underserved communities over a comparison condition [18].

In 2018, the WHO issued comprehensive guidelines to support the training and integration of community health agents, based on a systematic review of 122 published reviews (systematic reviews, meta-analyses and nonsystematic reviews). These guidelinesprovide practical recommendations for participant selection, training characteristics, supervision strategies and integration within community and health systems [19]. In 2019, the WHO published the mhGAP Community Toolkit, offering strategies to expand mental health services beyond clinical care, with a focus community-based health promotion and disease prevention [20].

There is growing evidence of the need to provide training to CHWs, particularly in mental health, to ensure their interventions are effective, appropriate and safe [21, 22]. Studies suggest that those receiving psychiatric training report higher positive emotions and self-efficacy [23]. A systematic review of CHW training protocols found that training typically ranged from two to three days and included didactic sessions, role-playing and proficiency testing. Most protocols incorporate ongoing group or individual supervision delivered locally or remotely and over one-third included fidelity monitoring plans [18]. Beyond training, other implementation factors are critical. Organisational support and psychological assistance can help mitigate the cumulative effect of occupational stress [23, 24] and improving wages for workers is likely to reduce turnover [25]. Overall, the use of CHWs appears cost-effective [19].

Despite widespread recognition of the importance of CMHW in global health literature, most of the existing research focuses on their roles within non-governmental organizations or national-level programs, with limited attention to local government structures. Current studies often address training, service delivery and funding separately, with few proposing a unified, contextually adaptable model [18].

An implementation framework that outlines essential components, processes, and contextual considerations [26]. tailored specifically to local governments for developing sustainable and effective CMHW programs, is lacking. A formal consensus-based implementation framework would provide practical guidance for translating evidence-based interventions into real-world settings.

The present study seeks to establish expert consensus on a framework for implementing a Community Mental Health Worker Program within local governments, integrating training requirements, strategic priorities, service delivery approaches and potential forms of funding. In doing so, it bridges policy and practice, offering local authorities with actionable, evidence-informed strategies to strengthen community mental health services.

2 Methods

2.1 Study design

A modified Delphi method was used to gather expert consensus on the implementation of a Community Mental Health Worker Program. The Delphi method was chosen because it is a well-recognizable method for achieving consensus among experts across a wide range of purposes in mental health research, including improving professional

training, strengthening mental health systems, developing intervention content or enhancing public action [27].

2.2 Study process

This study used a single-panel Delphi and a mixed-methods design:

(1) Development of the questionnaire based on prior international orientations and guidelines on Community Health Worker Programmes, particularly those working in the field of mental health.
(2) Review of the questionnaire by one mental health practitioner and one public mental health expert.
(3) Selection and invitation of the panel members.
(4) Single-panel Delphi study, composed of three iterative rounds of mixed data collection.
(5) Analysis of results.
(6) Development of an implementation report sheet summarizing key points for a Community Mental Health Worker Program.

2.3 Questionnaire

A self-prepared questionnaire was developed to gather data directly aligned with the research objectives and tailored to address the specific context of the investigation. The items were constructed based on a review of relevant literature, particularly the *WHO Guidelines on Health Policy and System Support to Optimize Community Health Worker Programmes* [19] and the *mhGAP Community Toolkit* [20]. The draft questionnaire was then reviewed by one mental health practitioner and one public mental health expert, who suggested minor improvements.

The questionnaire included: a brief contextualization of mental health promotion and CMHW concepts, an explanation of the study purpose and twelve questions: three open-ended questions, two ranking questions and fifty-seven items to be rated. Different questions types were used to capture both the breadth and depth of expert perspectives. Likert scale items, rated on a five-point scale (strongly disagree, disagree, neither agree nor disagree, agree, strongly agree) allowed participants to evaluate the perceived importance, relevance, and feasibility of a range of potential actions, enabling quantitative analysis and comparison across respondents. Each statements was accompanied by brief explanations or examples.

Ranking questions provided a mechanism for prioritizing key actions, ensuring the most critical and feasible interventions emerged through consensus. The inclusion of open-ended questions offered complementary perspectives that supported interpretation of other responses. They enabled the collection of nuanced qualitative insights, clarification of reasoning, and the identification of unanticipated factors. All questions included free-text boxes for optional comments. This mixed-question approach is consistent with established Delphi methodology, integrating structured quantitative assessments with qualitative feedback to achieve a more robust and contextually informed consensus.

The questionnaire was organized into three main dimensions:

1. Local government as a mental health promoter—three open-ended questions and nineteen Likert scale items to capture experts' views on the role of local governments in mental health promotion.
2. Community mental health workers—twelve Likert scale items and one ranking question adressing characteristics, skills and recognition of CMHW.
3. Training program—twenty-six Likert scale items and one ranking question on target groups, content, participant evaluation and implementation of CMHW training programs (Fig. 2 and Additional file 1).

2.4 Delphi expert panel members/panel recruitment

An expert is generally considered someone with recognizable merit in their field of work. In this study, we recruited participants who, by virtue of their credentials, education or practical experience, were considere to have specialized knowledge relevant to the investigation. To ensure diversity of perpectives and maximize idea generation, we included various levels of experience and expertise from three key sectors to the subject of matter: health, local government and community.

From the health sector, we recruited mental health, primary care and public health professionals. From local government, we included mayors/chief executives from different municipalities, members of regional councils and representatives from national council organizations. Finally, from the community sector, we selected senior representatives of recognizable community-based nonprofit organizations holding public utility status—a designation granted to legal entities that pursue objectives of general interest and cooperate with public administration. All selected organizations maintained close ties with the communities they served, had deep knowledge of local needs, and engaged regularly with local authorities. When senior representatives were not able to participate, they were invited to nominate a suitable substitute. All selected experts were contacted by email, receiving detailed information about the study and the foreseeable calendarization for the Delphi process. Upon preliminary acceptance, they received the first questionnaire, preceded by a consent form.

2.5 The delphi process

The Delphi process followed the ACCORD guidelines [28].

All questionnaires were administered online and completed anonymously through the software platform Welphi® [29]. Informed consent was obtained at the start of the questionnaire.

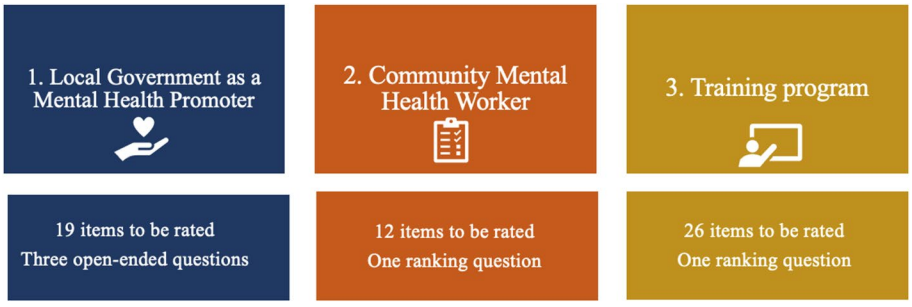

Fig. 2 Questionnaire structure. The questionnaire was organized into three main dimensions of research: 1. Local Government as a Mental Health Promoter; 2. Community Mental Health Workers; and 3. Training Program.

The process took place between July and December 2022. Each round lasted approximately six weeks to complete. Initially, participants were given four weeks to respond, followed by a reminder and, if necessary, an extension of up to two additional weeks.

After the first round, qualitative data from the three open-ended questions were extracted for analysis.

For ranking questions, in each round, participants received controlled feedback—including the mean rank, percentiles and comments/justifications from the previous round—and were able to revise their responses.

Consensus was defined as at least 70% agreement among participants. Therefore, in each round, statements reaching 70% or more agreement (i.e., rated as agree or strongly agree) or disagreement (rated as disagree or strongly disagree) were removed from subsequent rounds. For rounds 2 and 3, participants received a revised questionnaire containing only items that had not yet reached consensus, along with aggregated percentages and anonymized comments from the previous round. At this time, the participants were allowed to change their response. If consensus was not reached after three consecutive rounds, the Delphi process concluded [30].

2.6 Analysis

Statements to be rated for agreement were considered to have reached consensus when 70% or more of the panel either agreed or disagreed [30]. Statistical analysis was conducted through the software platform Welphi®.

For the ranking questions, Kendall's W coefficient of concordance (W) was calculated for each round as an indicator of agreement [31]. Values from .1 to .3 indicate weak agreement, values from .4 to .6 moderate agreement, values from .7 to .9 strong agreement, and values of approximately 1 indicate very strong agreement [32]. All items were retained for subsequent rounds, regardless of W values, to allow iterative refinement of judgments and to assess stability, rather than enforce early exclusion. Statistical analysis for the ranking questions was conducted using IBM SPSS Statistics version 28 for advanced statistical analysis® software.

Qualitative free-text responses were analyzed using a content analysis approach, conducted through MAXQDA® [33]. An inductive coding process was employed, whereby the data were read repeatedly to identify and label explicit concepts through conceptual analysis. Codes were developed directly from the data rather than from a pre-existing framework, ensuring that the analysis captured participants' perspectives authentically. Similar codes were then grouped into higher-order categories that reflected shared meanings or themes. The resulting coding matrix was reviewed and validated by an independent investigator to ensure reliability and consistency in categorization decisions. Discrepancies were discussed and resolved through consensus.

An implementation report sheet was created summarizing the study's results. It includes statements that reached consensus, ranking questions outcomes, and key themes from the open-ended questions.

3 Results

3.1 Participants characteristics

We invited thirty-eight experts, of whom thirty accepted the invitation and participated in Round 1.

The retention rate was 67% in Round 2 and 80% in Round 3. Table 1 presents the characterization of the panel in Round 1.

3.2 Overall agreement across rounds

The three rounds of the Delphi process are shown in Fig. 3.

Regarding the statements to be rated, the panel rated fifty-seven items, all of which were included in Round 1. Fifty-one items (89.5%) were accepted by consensus: forty-eight (84.2%) in the first round and three (5.3%) in the second round. Six items (10,5%) did not achieve consensus after three rounds, were considered uncertain items and were not included in the final list. No items were rejected by consensus.

3.3 Local governments as mental health promoters

This dimension of research was evaluated using nineteen items rated on Likert-type scales and three open-ended questions. Regarding the rated items, three items - pertaining to challenges and obstacles hampering the implementation of mental health promotion by local governments - did not reach consensus after the third round. The remaining sixteen items reached agreement (rated as "agree" or "strongly agree") in the first round, three of which achieved 100% agreement. Content analysis of the open-ended questions produced 226 segments (phrases or sentences) in twenty identified categories, which were organized into three overarching categories: local government role in mental health promotion; health promotion initiatives; and incentives (Additional file 2).

Participants acknowledge the fundamental importance of local governments in mental health promotion:

Table 1 Panel characterization in the first round

		N	(%)
Gender			
	Female	22	73
	Male	8	27
Sector			
	Clinical sector	3	10
	Social sector	11	37
	Academic sector	6	20
	Local government	10	33
Professional Role			
Local Government sector	Municipality	7	23
	Regional Councils	2	7
	National Council Organization	1	3
Community sector	Healthcare and social services	5	17
	Health advocacy	3	10
	Migrant support	2	7
Health sector	Psychiatry	1	3
	Psychology	2	7
	Public Health	1	3
	Nursing	2	7
	Primary care	1	3
	Social Service	1	3
	Researchers	2	7

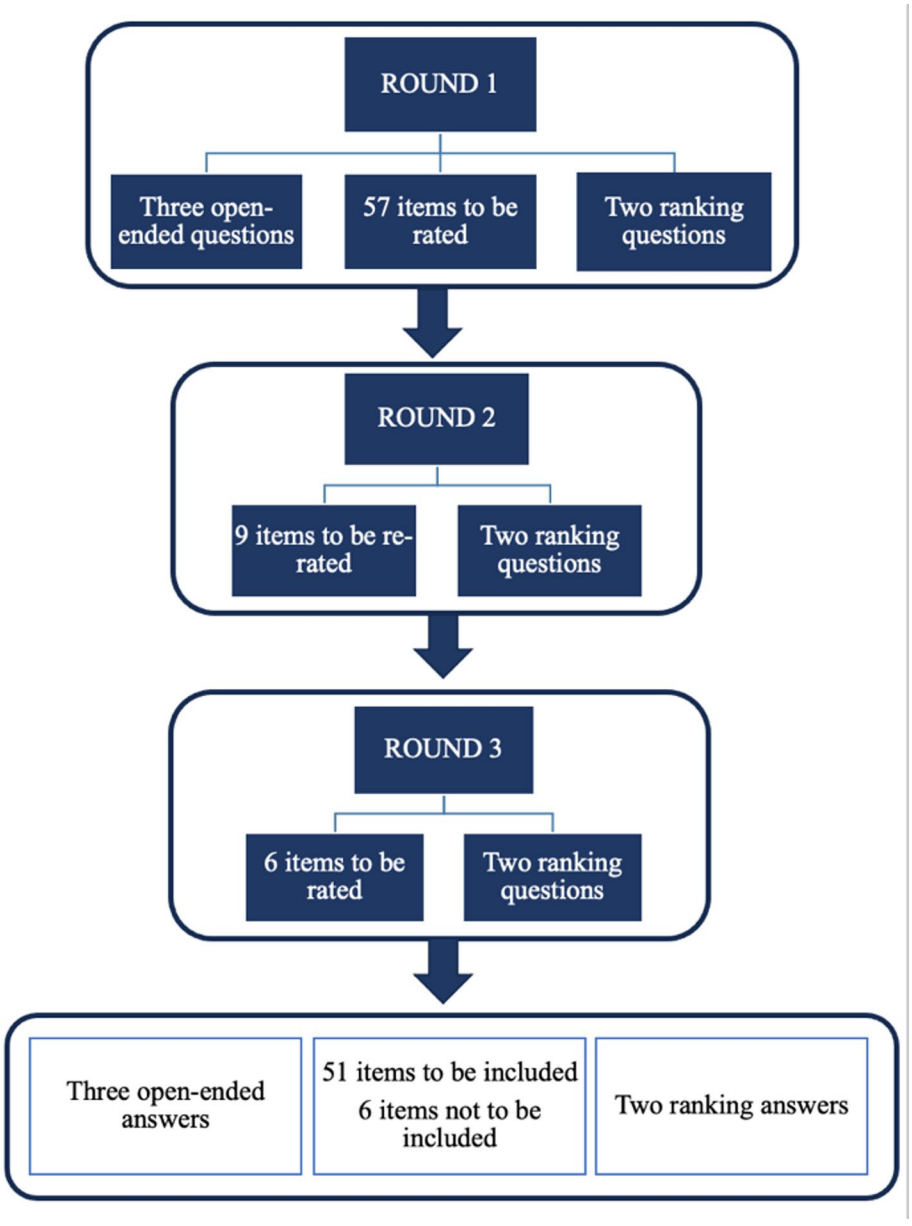

Fig. 3 Overall agreement across rounds

> *"Local authorities can play a fundamental role in promoting mental health and community well-being as a right for all citizens" (Expert LLHC5);*
> *"Municipalities, as local government entities responsible for safeguarding the interests of the population they serve (...) undoubtedly have a responsibility in promoting mental health" (Expert 95479).*

Experts expressed that mental health promotion should be translated into activities such as physical activity and nutritional programs, general healthy lifestyle programs, promotion of mental health literacy and cooperation and support third-sector organizations and community projects. In particular, local governments should invest in projects and actions that raise awareness of mental health and illness ("*Promoting mental health literacy and well-being, as well as raising public awareness on these topics(...)*"—Expert

LLHC5), promote social cohesion and fight discrimination ("*Combating poverty as a key area of action on the social determinants of mental health*"—Expert X1FOZ).

In addition, specific programs that address people's needs and tailored to different stages of life should be developed in alignment with national plans and international guidelines:

> *"Municipalities, as local structures, are better positioned to identify the specific needs of their communities and implement action plans that are coherent with the realities of those communities. The principle of "think globally, act locally" is highly relevant in this context" (Expert R3DN).*

A high level of endorsement was obtained for the engagement of different sector in mental health promotion, both within local governments and in the community. Community sports associations, nonprofit organizations and public clinical services reached 100% agreement (Table 2).

With respect to the challenges that compromise mental health promotion by local governments, consensus was reached for all but three: reduced availability of partners, reduced availability of the community, and lack of time (Table 2).

Finally, the panel highlighted the importance of encouraging local governments to take action in mental health promotion by ensuring adequate funding ("*Promote the allocation of funds* (...)"—Expert 0AF0), establishing national programs aligned with local

Table 2 Results from the rating questions, regarding the "Local governments as mental health promoters" dimension

	Description of items	Round	% Agreement (strongly agree or agree)
Engagement with different sectors *(With which sectors should local governments engage to promote the mental health of their communities?)*			
1	City Council's Department of Social Services	1	97
2	City Council's Department of Education	1	97
3	City Council's Department of Sports	1	96
4	City Council's Human Resources Department	1	90
5	Schools	1	97
6	Day centers and nursing homes	1	93
7	Judicial sector	1	76
8	Sports associations and clubs	1	100
9	Nonprofit organizations	1	100
10	Public clinical services	1	100
11	Private clinical services	1	80
Challenges and obstacles *(What factors can hamper mental health promotion by local governments?)*			
1	Lack of adequate training on mental health	1	93
2	Lack of support and sensitivity from managers within the municipality	1	90
3	Reduced availability of community partners	*	35
4	Reduced availability of the target population for the initiatives developed	*	40
5	Lack of time	*	50
6	Lack of a proper framework	1	84
7	Mental health-related stigma	1	80
8	Other professional priorities	1	87

* No agreement after three rounds.

needs ("*Integrate clear guidelines into National Health Plans*" (...)—Expert 8N305), prioritizing professional training ("*Enhance the training/education of professionals in this field*"—Expert 8N305), raising awareness among leaders and professionals ("*It is essential that policymakers are aware of this issue and to provided with as much information as possible to demonstrate the cost–benefit relationship of these actions.*"—Expert FHQ76) and enhancing communication with the third sector ("*Better coordination of resources among all local agents*"—Expert M7689; "*Encouraging collaboration between sectors* (...)"—Expert 2OVS).

3.4 Community mental health workers

This dimension was evaluated using twelve items rated on Likert-type scales and one ranking question. All items reached consensus, with four achieving 100% agreement. Eleven items reached consensus in the first round, and one item reached consensus after the second round (Additional file 2).

Regarding strategies to engage local government workers in mental health promotion, the first round yielded high consensus for providing supervision or monitoring of fieldwork, access to proper training, and recognitioon in performance evaluations. Granting specific privileges to the workers, such as a flexible schedule, also reached consensus, but in the second round (Table 3).

All the Community Mental Health Workers' skills listed in the questionnaire reached consensus in the first round. Four achieved 100% agreement: theoretical training, interpersonal skills, empathy and active listening, and networking and integrative care. Additional skills identified as important for CMHW include basic psychotherapeutic

Table 3 Results from the rating questions, regarding the "Community Mental Health Workers" dimension

	Description of items	Round	% Agreement (strongly agree or agree)
Engagement of Community Workers *(How can local governments workers be encouraged to engage with mental health?)h issues?)*			
1	Access to proper training	1	87
2	Performance evaluation	1	74
3	Incentives, such as flexible schedule	2	75
4	Supervision and monitoring	1	93
Skills of the Community Mental Health Workers *(What skills should be developed among local governments workers to enable them to take the role of community mental health agents?)*			
1	Theoretical training	1	100
2	Interpersonal skills	1	100
3	Empathy and active listening	1	100
4	Basic physiotherapeutic support strategies	1	80
5	Networking and integrated care	1	100
6	Program planning	1	97
7	Self-care	1	97
8	Understanding the limits of their role	1	97

* No agreement after three rounds.

strategies and program planning skills. Furthermore, CMHWs should recognize the importance of self-care and understand the responsibilities and boundaries of their role (Table 3).

According to the panel, the main factor ensuring public recognition of community mental health workers is certified training (ranked first). This was followed, in decreasing order of importance, by the existence of a national network of community mental health workers, ongoing structured guidance and supervision, remuneration and a defined career path. Kendall's W coefficient of concordance in the third round was 0.734 (Table 4).

3.5 Training program

This dimension was evaluated using twenty-six items rated on Likert-type scales and one ranking question. All but three reached consensus. Twenty-one items reached consensus in the first round, and two more reached consensus after the second round. Eight items reached 100% agreement (Additional file 2).

Regarding participant selection for the training program, intrinsic motivation to work in mental health promotion achieved 100% agreement in the first round. Consensus was also reached for minimum education, community relevance, municipal relevance, and participant profile. However, gender did not reach consensus even after the third round (Table 5).

For the theoretical content for training for community mental health workers, the panel agreed on an extensive list of topics, except for basic psychopharmacology principles. Mental health promotion, determinants of mental health, mental illness prevention, child and adolescent mental health, mental health and aging, workplace mental health, and warning signs of mental illness all reached 100% agreement in the first round (Table 5).

According to the experts, participants should be evaluated based on achieved goals, the implementation of a municipal mental health plan, or the establishment of a municipal health council, all of which reached consensus in the first round. Using a written assessment did not achieve consensus as a valid evaluation method, even after the third round (Table 5).

According to the experts, the Department of Health, a ministerial government department, should fund the training program. Kendall´s W coefficient of concordance in the third round was 0.628 (Table 6).

Table 4 Results from the ranking question, regarding the "Community Mental Health Workers" dimension (How can community mental health workers be recognized by the community?)

Item	Final rank
Certified training	1
Creation of a national network	2
Guidance and supervision	3
Fair remuneration	4
Establishment of a specific career path	5
Final Kendall's W	0.734

Table 5 Results from the rating questions, regarding the "Training Program" dimension

	Description of items	Round	% Agreement (strongly agree or agree)
Selection of the participants of a training program *(What criteria should be used for selecting potential community mental health workers in local governments?)*			
1	Minimum educational qualifications	1	73
2	Gender	*	20
3	Relevance in the community	1	84
4	Relevance in the municipality	2	70
5	Profile	1	97
6	Intrinsic motivation	1	100
Training contents *(Regarding theoretical content, what topics should be addressed in the training of community mental health workers?)*			
1	Mental Health promotion	1	100
2	Determinants of Mental Health	1	100
3	Mental illness prevention	1	100
4	Child and adolescent Mental Health	1	100
5	Mental health and aging	1	100
6	Workplace Mental Health	1	100
7	Warning signs of Mental illness	1	100
8	Clinical aspects of different mental illnesses	1	77
9	How to navigate the health system	1	93
10	Available treatments	2	75
11	Basic principles of psychopharmacology	*	40
12	Psychosocial rehabilitation	1	80
13	Portuguese Mental Health Law	1	83
14	Mental Health of migrant population	1	93
15	Mental Health of homeless population	1	93
16	Mental Health of LGBTQIA+ communities	1	93
Evaluation of the participants of a training program *(How should the training of community mental health workers be evaluated?)*			
1	Written assessment	*	35
2	Completion of activities and achievements of goals	1	97
3	Implementation of a Municipal Mental Health Plan	1	86
4	Establishment of a Municipal Health Council	1	70

* No agreement after three rounds.

Table 6 Results from the ranking question, regarding the "Training Program" dimension (Who should bear the training costs?)

Item	Final rank
Department of Health	1
Local governments	2
Regional Healthcare Administration	3
Civil society	4
Final Kendall's W	0.628

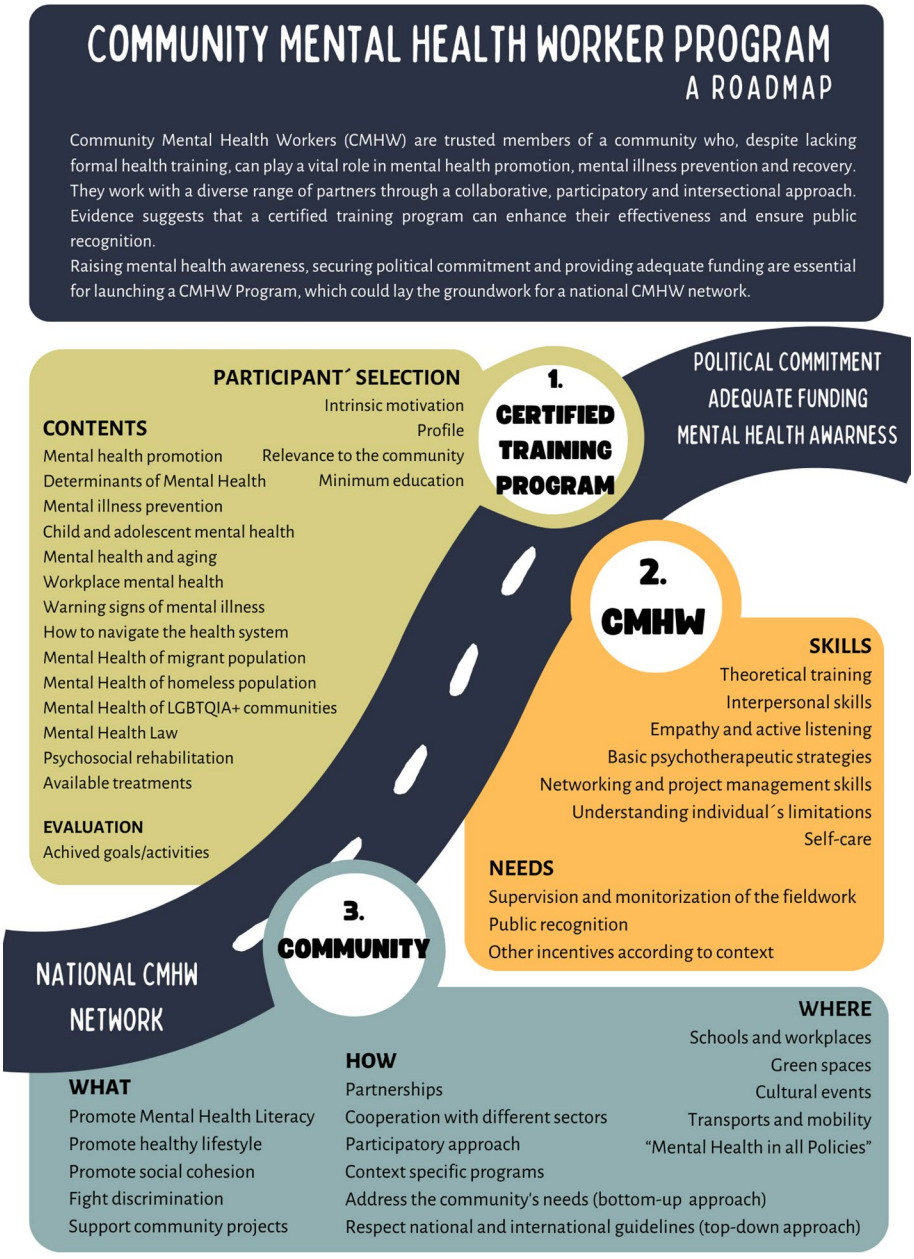

Fig. 4 Implementation report sheet

3.6 Implementation report sheet

An implementation report sheet was created to summarize the study's results, including statements that reached consensus, the outcomes of the ranking questions, and key themes from the open-ended questions (Figure 4).

4 Discussion

CMHWs can play a crucial role in reducing both global and local disparities in care, particularly for vulnerable populations [18]. When properly trained, CMHWs can significantly contribute to community-based mental health promotion and well-being, as they have a deep understanding of population needs and available resources. This study aimed to gather experts consensus on a framework for implementing a Community

Mental Health Worker Program, focusing on training focusing on training requirements, strategic priorities, service delivery approaches and potential forms of funding. Globally, the findings of this Delphi study align with international recommendations and existing evidence [19, 20].

The vast majority of statements (89.5%) were accepted by agreement, with 26.3% achieving 100% agreement. None were rejected, although six statements (10.5%) failed to reach consensus after the third round. The two ranking questions achieved moderate and strong agreement by the end of the three rounds. The three open-ended questions generated 226 segments, which were organized into 20 categories. Overall, a high level of consensus was reached regarding the items across the three dimensions, enabling agreement on the key aspects of the role of local government, as well as the role and training of community mental health agents. The qualitative data enriched the understanding of the experts' perspectives.

The discussion of the results is structured around the three key dimensions of the questionnaire: local governments as mental health promoters, community mental health workers, and training programs.

4.1 Local governments as mental health promoters

Local governments engaged in health promotion should combine a top-down approach with a bottom-up approach as a shared paradigm of government strategies and public health politicy [9].

Local governments are well aware of community needs and should invest in projects and actions tailored to the different stages of life and local contexts, implementing a participatory approach whenever possible. Specific programs or local/regional plans should be developed in accordance with national plans and legislation, as well as international guidelines. This principle—considered fundamental to mental health promotion in major guidelines and recommendations [9]—was unanimously supported by the panel, emphasized by the participants in every related question.

All sectors within the city council and in the wider community represent important potential partners for local governments. The need for a collaborative and participative approach, that includes community members and organizations in decision-making and project planning, wasclear. Mental health permeates all aspect of community life, making intersectional and multidisciplinary interventions to be the most effective approach. Adressing the social, cultural, economic and educational factors that influence mental health implies mobilizing multiple sectors and ensuring “Mental Health in all Policies” [12].

Local governments can implement a wide range of activities, such as raising awareness, providing training to professionals, supporting community projects, cooperating with third-sector organizations and creating local networks. Proposed strategies include physical activity programs, support networks, nutritional education and mental health literacy initiatives.

The main challenge for local governments in promoting mental health appear to be the lack of proper training and the absence of a conceptual framework to address mental health and stigma. Stigma is ubiquitous and may manifest as a lack of interest or support from managers and colleagues within municipalities itself and/or in the prioritization of other areas over mental health. Encouraging local authorities to act requiresraising

awareness among leaders and professionals, as well as policymakers about the importance of this issue. Furthermore, it is crucial to make proper funds available. The financing of public mental health, particularly within the local governments context, is complex and falls beyond the scope of this research; however, integrating mental health into National Health Plans, with concrete local repercussions, is likely beneficial.

4.2 Community mental health workers

CMHWs should have theoretical knowledge of basic mental health topics and project management skills, along with stronginterpersonal skills, empathy and active listening. These social skills, which can be taught and developed, are for the success of CMHWs' work [34].

Basic knowledge of psychotherapeutic strategies was identified as a necessary skill by the panel. Evidence suggests that such skills are particularlyimportant where health services are fragile or disorganized, as in low-income countries [6, 35, 36]. In contexts where mental health professionals are insufficient to meet population needs, less-qualified professionals or even members of the community can provide basic levels of care to patients with lower-intensity needs [6]. While this may not be the case in Portugal, basic psychotherapeutic strategies can still foster meaningful relationships with the community.

The CMHWs should recognize the importance of self-care and understand the responsibilities and boundaries of their role. Self-care skills, along with the ability to manage difficult emotions arising from work-related stress should be valued and supported. Although not raised by the panel, literature recomens having a backup plan with support from the managers, offering professional help when needed[23, 24].

The panel concluded that access to certified training and supervision or monitoring of fieldwork can enhance the engagement of local government workers in mental health promotion. These factors are also essential for ensuring CMHWs' public recognition, which facilitates their acceptance in the community and supports the implementation of initiatives and activities [19].

4.3 Training program

Evidence supports the benefits of providing appropriate training to community health workers in various fields [19, 21]. The panel agreed that a certified training program for CMHWs would be a key factor in encouraging local government workers engagement in mental health promotion and ensuring public recognition of their role. A major challenge for local governments remains the lack of adequate training on mental health or a clear framework for action.

According to the panel, selction criteria for CMHWs training programs should include a minimum education level, relevance in the community, relevance in the municipality, profile and intrinsic motivation, with the latter achieving 100% agreement in the first round. Gender, as a selection criterion, did not reach consensus, even after the third round.

These criteria—including gender—are recommended by the WHO [19]. Gender is a particularly relevant selection factor in contexts where women are excluded from public space for religious or cultural reasons. The WHO emphasizes adopting selection criteria that improve gender equity. In Portugal, and other high-income countries, gender

may not be an important requisite, as indicated by the panel. However, certain intervention areas that could benefit from some gender/cultural competence, such as maternal health, migrant health and LGBTQIA+ health [19]. the decision to usegender as a selection criterion should be based of local sociocultural contexts and the specific role expected of the CMHW.

With respect to the theoretical content of a CMHW training program, many topics were deemed relevant: mental health promotion, determinants of mental health, mental illness prevention, child and adolescent mental health, mental health and aging, workplace mental health and warning signs of mental illness.

The basic principles of psychopharmacology are likely too specific for routine inclusion in training programs for CMHWs, particularly when such content may exceed the scope of their expected responsibilities. While a general awareness of medication types and their purposes may be beneficial, psychopharmacological knowledge could divert time and resources away from competencies more directly aligned with the CMHW'S desirable role. Therefore, the inclusion of psychopharmacology content should be carefully considered and tailored to the specific functions and responsibilities assigned to CMHWs within a given context.

According to the panel, the evaluation of the participants should focus on the achievement of practical intervention goals in the community. The WHO recommends implementing a competency-based formal certification for CHWs who successfully complete training [19]. Qualitative evaluation measures, such as gathering feedback from community members or conducting interviews with trained agents, should also be considered. This may be an important factor in the progressive formal acceptance of these health workers within the community, as noted above.

The panel considered that the training program should be funded by the Department of Health, a ministerial department of the government. This reinforces the importance of a national, integrated approach to mental health promotion, with local-level impact and specific funding allocations.

This study achieved consensus on the importance of CMHWs within local governments and the critical need to provide them with proper training. It also identified fundamental characteristics of a CMHW program and key strategies for its successful implementation. However, the constructivist nature of the Delphi method represents both a strength and a limitation of this study. While the iterative exchange of expert opinions fosters the co-construction of a shared understanding, it also means that the findings are shaped by the specific composition of the panel and the way the items were framed and refined. Consensus achieved in this context reflects a socially constructed agreement rather than an absolute or universally generalizable truth.

A further limitation was the high level of consensus achieved across many items, which may reflect the inclusion of overly general topics or statements with broad acceptance among participants. While consensus is a desired outcome in Delphi research, excessively high agreement can limit the ability to identify areas of genuine divergence. This raises the possibility that the items did not sufficiently challenge participants to consider nuanced or context-specific perspectives. Future research should consider disaggregating overly broad items to encourage a wider range of expert perspectives and to identify more nuanced priorities.

Additionally, the study was conducted in Portugal, within the specific institutional, cultural, and policy context of Portuguese municipalities. While certain findings and considerations may be transferable, particularly to other high-income countries with similar governance structures and public health systems, the unique administrative frameworks, resource distributions, and sociopolitical dynamics of Portugal should be taken into account. Consequently, caution is warranted when extrapolating these results to different national or regional contexts, as variations in local governance, health policy priorities, and community engagement mechanisms may influence their applicability.

5 Conclusion

Community mental health workers can play a crucial role in various aspects of mental health promotion, mental illness prevention and recovery. Local governments have in-depth knowledge of their communities´ characteristics, needs and available resources. When CMHWs operate within local governments, they can drive meaningful progress in mental health promotion by collaborating with a diverse range of partners through a participatory and intersectional approach.

The primary incentive for strengthening CMHW programs is adequate funding, while the main challenge is the lack of proper training. Certified training programs can enhance the public recognition of these workers and should be tailored to the community's sociocultural context. This role-based approach ensures that training remains relevant, practical, and proportionate to the level of decision-making authority expected from these workers. In addition to theoretical knowledge, CMHWs should also receive training in interpersonal and project management skills.

This study highlights the importance of well-structured training programs for CMHWs, particularly at the local level. It has helped systematize the key elements needed to implement such programs within local authorities. Although this study was conducted within the specific context of Portuguese municipalities, some considerations may be generalizable, particularly to high-income countries. Nevertheless, further research is needed to assess the effectiveness of these initiatives and their tangible impact on community mental health.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1007/s44192-025-00288-1.

Supplementary Material 1

Supplementary Material 2

Acknowledgements
Not applicable.

Authors' contributions
BL contributed to the study conception, design, data analysis and interpretation and writing of the manuscript. AG contributed to the data analysis and interpretation. AG and TM were involved in the critical revision of the manuscript. All the authors contributed to manuscript revision, read and approved the submitted version.

Funding
The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as potential conflicts of interest.

Data availability
The datasets used and analyzed during the current study are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from the Ethics Committee of the *Administração Regional de Saúde de Lisboa e Vale do Tejo* (Proc. 047/CES/INV/2020). This study was conducted in full compliance with all relevant institutional, national, and international guidelines and regulations. All participants signed an informed consent form that explained in detail the purposes for which the collected data would be used. All data was collected electronically through online questionnaires. The results were anonymous.

Consent for publication

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Received: 17 June 2025 / Accepted: 4 September 2025
Published online: 30 September 2025

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