

BMJ Open

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<http://bmjopen.bmj.com>).

If you have any questions on BMJ Open's open peer review process please email info.bmjopen@bmj.com

BMJ Open

Using Participatory Action Research to re-imagine community mental health services in Colombia: A Pilot Study Protocol

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2022-069329
Article Type:	Protocol
Date Submitted by the Author:	18-Oct-2022
Complete List of Authors:	<p>Burgess, Rochelle; UCL Institute for Global Health Dedios Sanguinetti, María Cecilia; Universidad de Los Andes, School of Government Maldonado-Carrizosa, Darío; Universidad de los Andes, School of Government Fonseca, Laura; London School of Economics and Political Science, Department of Psychological and Behavioural Science Vera San Juan, Norha; UCL Institute for Global Health; University College London, Rapid Research Appraisal and Evaluation Lab (RREAL) Lucumí, Diego; Universidad de Los Andes, School of Government González-Gort, Mónica; Universidad de Los Andes, School of Government Melgar, Mónica Carreño; Universidad de los Andes, School of Government Gaviria, María Fanny; Corporación Manigua Tovar, Diego; Cooperativa multiactiva para el buen vivir y la paz del Caquetá Jovchelovitch, Sandra; London School of Economics and Political Science, Department of Psychological and Behavioural Science</p>
Keywords:	MENTAL HEALTH, Depression & mood disorders < PSYCHIATRY, PUBLIC HEALTH

SCHOLARONE™
Manuscripts

1
2
3 **Using Participatory Action Research to re-imagine community mental health services in**
4 **Colombia: Pilot Study Protocol**
5
6
7
8

9 Corresponding author:

10
11 Rochelle A. Burgess,
12 Institute for Global Health,
13 30 Guilford Street
14 Rm. 3.04,
15 London
16 WC1N 1EH
17 r.burgess@ucl.ac.uk.
18
19

20
21 List of authors

22
23 **Rochelle A. Burgess**, Institute for Global Health, University College London, London,
24 United Kingdom.

25 **María Cecilia Dedios Sanguinetti**, School of Government, Universidad de Los Andes,
26 Bogotá, Colombia.

27 **Darío Maldonado-Carrizosa**, School of Government, Universidad de Los Andes, Bogotá,
28 Colombia.

29 **Laura Fonseca**, Department of Psychological and Behavioural Science, London School of
30 Economics and Political Science, London, United Kingdom.

31 **Norha Vera San Juan**, Institute for Global Health, University College London, London,
32 United Kingdom.

33 **Diego Lucumí**, School of Government, Universidad de Los Andes. Bogotá, Colombia.

34 **Mónica González-Gort**, School of Government, Universidad de Los Andes. Bogotá,
35 Colombia.

36 **Mónica Carreño Melgar**, School of Government, Universidad de Los Andes, Bogotá,
37 Colombia.

38 **María Fanny Gaviria**, Corporación Manigua (CORPOMANIGUA), Florencia, Colombia.

39 **Diego Ferney Tovar**, Cooperativa multiactiva para el buen vivir y la paz del Caquetá
40 (COOMBUVIPAC), La Montañita, Colombia.

41 **Sandra Jovchelovitch**, Department of Psychological and Behavioural Science, London
42 School of Economics and Political Science, London, United Kingdom.
43
44
45
46

47 **Word count: 4,189**
48
49
50
51
52
53
54
55
56
57
58
59
60

Key words

Colombia; mental health; health systems strengthening; community participation; community involvement

Authors and Institutions

Rochelle A. Burgess, r.burgess@ucl.ac.uk, University College London.

María Cecilia Dedios Sanguinetti, m.dedios@uniandes.edu.co, Universidad de Los Andes.

Darío Maldonado-Carrizosa, dmaldonadoc@uniandes.edu.co, Universidad de Los Andes.

Laura Fonseca, l.m.fonseca-duran@lse.ac.uk, London School of Economics and Political Science.

Norha Vera San Juan, n.verasanjuan@ucl.ac.uk, University College London.

Diego Lucumí, di.lucumi@uniandes.edu.co, Universidad de Los Andes.

Mónica González-Gort, m.gonzalez22@uniandes.edu.co, Universidad de Los Andes.

Mónica Carreño Melgar, m.carrenom@uniandes.edu.co, Universidad de Los Andes.

María Fanny Gaviria, f.gaviria@corpomanigua.org, Corporación Manigua (CORPOMANIGUA).

Diego Ferney Tovar, pacercr@gmail.com, Cooperativa multiactiva para el buen vivir y la paz del Caquetá (COOMBUVIPAC).

Sandra Jovchelovitch, s.jovchelovitch@lse.ac.uk, London School of Economics and Political Science.

ORCID Ids

Rochelle A Burgess: 0000-0001-9749-7065

María Cecilia Dedios-Sanguinetti: 0000-0002-6141-304X

Darío Maldonado-Carrizosa: 0000-0003-3544-208X

Laura Fonseca: 0000-0003-0638-3447

Norha Vera San Juan: 0000-0002-8677-7341

Diego Lucumí: 0000-0003-1834-7937

Mónica González-Gort: 0000-0002-5488-832X

Mónica Carreño Melgar: 0000-0003-2579-8568

María Fanny Gaviria: N/A (Non-academic partner)

Diego Ferney Tovar: N/A (Non-academic partner)

Sandra Jovchelovitch: 0000-0002-0073-2792

ABSTRACT

Introduction

Mental-health care systems are challenged by how they hear and respond to what marginalised communities experience as drivers of mental distress. In Colombia, this challenge intersects with wider challenges facing post-conflict reconstruction. Our pilot study will explore the feasibility and acceptability of a participatory approach to developing community-led participatory interventions for community mental health systems strengthening and mental health improvement, in two sites in Caquetá, Colombia.

Methods and analysis

The project is divided into three distinct phases aligned with community participatory action research (PAR) cycles diagnostic, intervention, and evaluation. This allows us to use a participatory approach to design a community-led, bottom-up community intervention for mental health systems strengthening and the promotion of mental health and wellbeing.

The diagnostic phase explores local understandings of mental health, mental distress, and access to mental health services from community members and health providers. The intervention stage will be guided by a participatory Theory of Change process. Community priorities led to the development of a Participatory, Learning and action (PLA) informed group intervention, with a community linkage forum. The pilot of the PLA intervention will be evaluated using MRC process evaluation guidelines.

Ethics and dissemination

This project has received ethical approval from two sources. Universidad de Los Andes [2021-1393] and the University College London [16127/005]. Dissemination of findings will include academic publications, community forums, policy briefs, and visual media (cartoons, pod casts and short films).

Article summary - Strengths and limitations of this study

- This pilot study aims to provide evidence for a new methodology that meaningfully involves citizens developing and strengthening health systems in complex settings.
- The study pilots for the first time in Colombia the use of participatory and learning action groups (PLA) for improving mental health and strengthening community mental health systems.
- Our approach will yield novel understandings and processes that enable better collaboration between community knowledge systems, community members, and the services that are designed to support them.
- The main challenge facing this pilot is the integration of participation across multiple sectors. Our desire to include potential service users and service providers in PAR processes will face difficulties in the pandemic environment and in a context where mental health services are limited.
- PAR processes can be directly impacted by wider geopolitical realities – such as the UK government funding cuts, which disrupted community processes and relationship building in the early stages of our work.

INTRODUCTION

Globally, the burden of mental health conditions is shaped by gaps in services. In Low-Middle Income Countries (LMICs), 75% of the population lacks access to any form of care.

[1] The COVID-19 pandemic exacerbated these challenges as intersecting social realities deepen distress, increase the incidence of mental health disorders, and overburden health systems.[2] In the case of Colombia, political violence, poverty, and displacement further aggravate this burden. Previous research shows that victims of armed conflict are more likely to suffer from mental health disorders,[3] with poverty explaining 86% of mental health inequalities in the country.[4]

Six years after the Peace Accords between the Colombian Government and the FARC guerrilla, there are still barriers in the implementation of the Psychosocial Care and Comprehensive Health Services for Victims programme (PAPSIVI) and the Psychosocial Wellbeing Component in the reintegration route for ex-combatants (Resolution n. 4309). In the case of ex-combatants, a dual status of victims and perpetrators requires balancing psychosocial well-being, personal protection, and political acceptability of mental health services. This population, like the victims of the conflict, reside in rural areas where services are scarce or non-existent.[3,5]

Mental-health care systems are challenged by how they hear and respond to what marginalised communities experience as drivers of mental distress.[6–8] This is acknowledged by global,[9] and national priorities, which call for providing accessible and quality services to overlooked communities. In Colombia, this includes territories and rural populations (campesinos) that are the focus of Territorially Focused Development Programmes (PDETs in Spanish), a national programme of development prioritising those who have been heavily affected by disproportionate armed conflict, poverty, illicit economies, and institutional fragility.[10,11]

1
2
3 Scaling-up services is important but only a partial response; sustainable solutions to
4 improve mental health require dialogue between health systems and communities.[12]
5
6 Community-owned and anchored interventions are critical to re-establishing trust between
7
8 local populations and systems, particularly after periods of extended upheaval. In this context,
9
10 integrating community-level experiences of mental health and mental distress with institutional
11
12 responses by state-level actors is a necessary step towards effective community mental health
13
14 services. This requires a multi-level interdisciplinary perspective that links individual and
15
16 community well-being to wider institutional, socio-economic, and political contexts.
17
18 Community Participatory Action Research (CPAR) approaches allow us to explore the ability
19
20 to identify strengths and solutions produced by communities for communities, connecting them
21
22 to wider systems, while acknowledging them as agents with the capacity to create effective,
23
24 context sensitive solutions.[13]
25
26
27
28
29
30

31 As Colombia begins to refocus its efforts towards achieving these global and national
32
33 policy aims, three critical areas require attention: 1) Wider social and political contextual
34
35 factors that drive experiences of poor mental health,[14] 2) Increasing understanding of local
36
37 embodied knowledge and lived experiences of communities and their relevance for building
38
39 knowledge about mental health,[15] and 3) The role and resources offered by community
40
41 participation in the co-design of interventions and services that are effective.[8]
42
43
44
45

46 In response to these demands, we will implement a participatory process to design,
47
48 implement, and evaluate a participatory intervention to strengthen community mental health
49
50 care systems in two PDET communities in Caquetá-Colombia. We are guided by the following
51
52 research question: *what are the pathways, mechanisms, and resources needed to catalyse*
53
54 *collaborative action between communities and institutions for promoting and improving*
55
56 *mental health services for PDET communities?* To this end, we aim:
57
58
59
60

1
2
3 (1) To co-design and co-implement a participatory group intervention to create trust
4 and opportunities for collaborative action between community and health system actors to
5 improve the performance of community mental health services.
6
7
8

9
10
11 (2) To co-evaluate the group intervention in terms of process, outcomes (including
12 individual and community mental health), and simulations of the cost-benefit and cost-
13 effectiveness of the intervention at individual, community, and health services levels.
14
15
16

17
18
19 (3) To produce a manual based on the development, implementation, and evaluation of
20 the intervention to guide communities and institutions in the application of these methods for
21 developing and scaling up community mental health services in Colombia. We expect these
22 tools to be made widely applicable in other low-resource or conflict-affected settings.
23
24
25
26

27
28
29 The project is divided into distinct phases aligned with community participatory action
30 research (PAR) cycles reflecting diagnostic, intervention and evaluation. This protocol
31 presents the STARS-C objectives, procedures, and methodological considerations for
32 implementing a participatory mental health research project in conflict areas amidst the Covid-
33 19 pandemic.
34
35
36
37
38

39 40 **METHODS AND ANALYSIS**

41
42 The project will be implemented in inter-related phases aligned with participatory
43 action research (PAR). It will run from February 2021 to May 2023 in Caquetá, Colombia.
44 Implementation of the group intervention will run from July 2022 – March 2023. The project
45 has been co-designed through existing partnerships involving academics and two community-
46 based organisations: (1) the Manigua Corporation [*Corpomanigua*], an organization of women
47 with experience in the design and implementation of projects with marginalized communities,
48 located in Florencia, representing an urban community and (2) the Multi-active Cooperative
49 for Wellbeing and Peace of Caquetá (*Cooperativa Multiactiva para el Buen Vivir y la Paz del*
50
51
52
53
54
55
56
57
58
59
60

1
2
3 *Caquetá*- (COOMBUVIPAC), which represents a rural community of ex-combatants from the
4 former guerrilla FARC-EP, located in the small village (*vereda*) Héctor Ramírez Poblado
5 Center (CP-HR - former Territorial Space for Training and Reincorporation Héctor Ramírez)
6
7 in the municipality of La Montañita.
8
9
10

11
12 Co-design and co-implementation will be further achieved through the appointment of
13 community researchers (two from each site), who live and work in the communities being
14 studied, and are not previously employed by our NGO partners. They will be involved in all
15 stages of the implementation of the project as detailed below and were appointed prior to the
16 drafting of this protocol. To ensure more equal partnerships in this work community
17 researchers were trained in collecting qualitative information, quantitative questionnaires and
18 in psychological first aid to support potential psychological and emotional distress among
19 participants. Regular supervision is provided in real-time planned meetings. WhatsApp groups
20 are utilised for constant communication.
21
22
23
24
25
26
27
28
29
30
31
32

33 **Setting**

34
35 Caquetá is one of the 32 departments of Colombia, and the only region of the country
36 in which all municipalities are included in the Territorially Focused Development Plans (PDET
37 in Spanish). The project will be conducted in 2 of these PDET municipalities: Florencia and
38 La Montañita. Each of the municipalities also represents diversity within a more general
39 context of deprivation and adversity.
40
41
42
43
44
45

46
47 Florencia is Caquetá's capital city and constitutes its largest population with 173,011
48 inhabitants, [16]. Updated mental health statistics are not available at the municipality level;
49 however, a report by MSF (2010) in Caquetá suggests that of the 60% of the nearly 5000
50 patients affected by armed conflict and internal displacement, 18% were diagnosed with
51 adaptative disorders, 18% with relationship problems and problems associated with abuse or
52 neglect, 11% by major depression with one episode, 9% with grief and 8% with mood
53
54
55
56
57
58
59
60

1
2
3 disorders [17]. Arguably, the prevalence of these mental health disorders relates to structural
4 drivers such as high unemployment levels. According to the latest report done by the National
5 Administrative Department of Statistics in 2020, the unemployment rate in Florencia was 25%,
6 with women having a higher unemployment rate (29.2%) than men (21.5%),[16] both much
7 more, than the current unemployment national rate of 11% [18]. As an urban area, Florencia
8 has access to some specialized mental health facilities and staff, including psychologists,
9 psychiatrists and nurses.
10
11
12
13
14
15
16
17
18

19 La Montañita is a rural area located to the south-west of Florencia and one of the areas
20 most affected by the armed conflict, with 8,756 victims out of a total of 14,692
21 inhabitants[16,19]. No mental health statistics are available for the municipality but reports
22 from local organisations point to mental distress associated with poverty and conflict as well
23 unmet care needs. The project will be carried out in a small village (*vereda*) self-named *Centro*
24 *Poblado Héctor Ramirez*, which is one of the former territorial spaces for training and
25 reincorporation for former FARC-EP combatants (AETCR in Spanish) in La Montanita.
26
27
28
29
30
31
32
33
34

35 **Design**

36
37 The STARS-C programme outlines a three-phase process to guide stakeholders in the
38 development and strengthening of community led mental health systems. It is informed by
39 coproduction principles, to enable a platform for involving community members in a process
40 of thinking through what changes are needed to improve access to, and the quality of mental
41 health services[20]. Coproduction principles demand the inclusion of everyday actors, or
42 potential service users, within processes of design and development. We will achieve this
43 through involving everyday community members using Community Participatory Action
44 Research (CPAR) [21] model, to thinking through what changes are needed to improve access
45 to and quality of mental health services[20]. As such the project combines participatory
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

qualitative inquiry across its three phases of diagnosis, intervention, and evaluation (see table 1) with quantitative assessments of mental health outcomes in a process described below.

Our study builds on a pilot feasibility study of this approach in Cundinamarca-Colombia with a group of forty forcibly displaced persons.[6]

Table 1.
Phases and data collection strategies

Phase	Data Collection	Participants	
		La Montañita	Florencia
Diagnostic	Focus Group 1: Local understandings of mental health and mental distress- Tree of Life	n=42	n=57
	Focus Group 2: Evaluation of standardised measures of mental health	n=34	n=49
	Interviews Health Providers	n= 13	n=17
	Whatsapp focus groups Health Providers	n=11	n=10
	Motivated Ethnography (1 month)	Local Hospital-Community health post	City Hospital
Intervention Design	Theory of Change Workshop	n=25	n=25
Intervention implementation	PLA Groups-Stage 1: Reflection		
	PLA Groups-Stage 2: From Reflection to action	4 groups	8 groups
	PLA Groups-Stage 3: Implementation of initiatives		
	PLA Groups-Stage 4: Evaluation		
Evaluation	Cost-benefit analysis	TBD	TBD
	Photovoice	TBD	TBD
	Baseline questionnaire		
	Endline questionnaire	TBD	TBD
	Endline qualitative Interviews	TBD	TBD

Phase 1: Diagnostics (Month 3- 14)

The aim of this phase is to map out and understand community knowledge, the systems, and services available at local level and everyday practices related to mental health. This is intended to identify the knowledge, practices, and resources available in the community and

1
2
3 the experiences and beliefs held by community actors about mental health, mental illness and
4 practices of care. Data collection initiated in April 2021 and was completed April 2022 for
5 stage one and two. Stage three remains ongoing. Specific aims, and procedures linked to this
6 stage are as follows:
7
8
9
10
11

12 (1) *Assess local mental health systems capacities and capabilities in collaboration with*
13 *service actors.* This stage involves three modes of data collection and engagement. First
14 a review of existing mental health national interventions and their implementation and
15 a Systematic Applied Policy Review of mental health national plans and policies
16 currently in force. Second, involves motivated ethnographies [22] of local mental health
17 services and community needs, with semi-structured interviews with service providers
18 in each site. Third, includes focus groups with service providers, which are conducted
19 online during the pandemic period. WhatsApp discussion groups are used as a platform
20 to engage time-strapped institutional (psychologists, social workers) and community
21 practitioners (including traditional healers) in both sites.[23] The implementation of
22 these steps is currently on-going, having started in February 2021.
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

38 (2) *Explore community understandings of mental health, mental distress, and wellbeing*
39 *strategies in one urban and one rural PDET territory.* This involves a qualitative
40 investigation of local understandings drawing on focus groups discussions, word
41 association tasks, a Tree of Life exercise which focuses on experiences and community
42 resources linked to achieving good mental health and wellbeing. It will also draw from
43 the motivated ethnography in each site. 12 focus groups discussions divided by gender
44 and age are envisaged.
45
46
47
48
49
50
51
52
53

54 (3) *Work with local communities to evaluate appropriateness of standard mental health*
55 *measures, using participatory methodologies.* Three standardised Mental health
56 measures PHQ-9; WHO-5, and Warwick-Edinburgh wellbeing scale were selected as
57
58
59
60

1
2
3 potential screening tools to evaluate the impact of community designed activities.
4
5 Initial team discussions with non-academic partners established the potential local
6
7 appropriateness of the measures before they were discussed with community members.
8
9
10 All measures have been standardised for use with Colombian or Spanish speaking
11
12 participants [24–26]. Focus groups will provide an opportunity to complete group
13
14 cognitive interviews to explore meaning and perceptions of measures [27]. This critical
15
16 stage is informed by previous pilot work conducted in Colombia by members of our
17
18 team [6,28]
19
20

21
22 (4) *Assess the cost of the standard mental health services basket offer of local health*
23
24 *systems.* The scarcity of data in these areas will make this stage challenging, but we are
25
26 envisaging the potential collection of data from three sources: motivated ethnography,
27
28 document analysis and service provider interviews (n – 30). This will allow us to
29
30 understand comparative costing for community led supports where possible.
31
32
33
34

35
36 *Phase 2: Intervention: PLA cycles to improve mental health community services (Months 15-*
37
38 *27)*
39

40 The aim of this phase is to design and implement a community led group intervention
41
42 to a) identify social drivers of mental health and priority conditions, b) create shared spaces for
43
44 dialogue and understanding of mental health, mental distress, and wellbeing, identifying
45
46 facilitators and barriers to collaborative processes of communication and action; and 3)
47
48 establish priorities for action that improve community's access to mental health services in
49
50 PDET territories.
51
52

53
54 *Intervention design:* The intervention design is grounded in a participatory theory of
55
56 change process. Its first component is a participatory Theory of Change (TOC) workshop to
57
58 involve large numbers of community members in the intervention co-design process.
59
60

Participants from each community with interest in the project and their children were invited to a daylong workshop in Florencia.

Drawing on preliminary analysis from the diagnostic phase, participatory activities are designed to facilitate real-time contributions to three main dimensions of the theory of change process: *identification of challenges, assumptions, and preconditions, short and long-term outcomes and impacts, and backward chaining*. Manual development was led by RAB and refined by the academic team members. The TOC workshop manual is available in supplementary materials, in English and Spanish. A summary of this process is provided in table 2.

Table 2.
Theory Of Change workshop structure

TOC session	Stage	Connection to TOC process	Activity to be conducted	Time allowance for activity	Number of facilitators required	Resources required
Session 1	Challenges that hinder good mental health and mental health services	Identify challenges, assumptions, and context	Building problem trees	2 hours	2-4	Tape recorder Flip chart Paper Coloured marker pens Flash cards with themes from FGDs (5 full sets)
Session 2	Ideal world that enables good mental health and mental health services	Identify long-term outputs, other outputs and pathways to change.	Storytelling of an ideal world	1.5 hours	2-4	Tape recorder Flip chart Paper Coloured marker pens Photocopy of exercise
Session 3	Identify interventions which could be used to improve mental health and mental health services	Identify intervention and additional contexts.	Mapping and intervention building	1 hour	2-4	Tape recorder Cardboards Paper Coloured marker pens Flashcards

The TOC workshop was run in December 2021 facilitated by senior project members community researchers. A total of 44 people attended, equally split between each study site.

1
2
3 14 of these participants also attended the FGDs in phase 1. The sessions were audio recorded
4
5 and data was transcribed and analysed in Spanish. The academic members of the project team
6
7 used this data alongside preliminary analyses of focus group data and the focused ethnography,
8
9 to develop a working model of the theory of change. This was presented to the wider project
10
11 team and community researchers, for evaluation and validation.
12
13

14
15 Based on the findings of the TOC process, we identified that a participatory, learning
16
17 and action (PLA) approach to the intervention would be an ideal structure. PLA cycles have
18
19 been used widely in other resource-limited settings but to the best of our knowledge, our study
20
21 is the first to implement PLA cycles at scale for community mental health improvement in
22
23 Colombia. For example, their use has contributed to improved health outcomes for diabetes in
24
25 Bangladesh,[29] and maternal and child health in India,[30] and are currently being evaluated
26
27 for improvement in under-5 pneumonia in Nigeria.[31] Crucially, our adaptation seeks to
28
29 enhance links across groups that are historically opposed and limited by unequal access to
30
31 power: community service providers, ex-combatants, internally displaced people, and host
32
33 community members. The value of these types of linking interventions for health systems
34
35 improvement are well documented elsewhere [32].
36
37
38
39

40
41 Based on community priorities identified in the TOC process, the proposed outcomes
42
43 for the PLA intervention are as follows. We organise these into primary outcomes which we
44
45 feel may be achieved in the short term, as well as longer term outcomes that could occur with
46
47 longer running of PLA groups. :
48

49
50 *Primary outcomes:* (1) increased access to mental health acknowledge and information by
51
52 community members; (2) improved feelings of belongingness and community cohesion and
53
54 (3) improved perceptions of communication and relationships between practitioners and
55
56 communities.
57
58
59
60

1
2
3 *Long term outcomes:* 1) improved recognition of the importance of good mental health to wider
4 health and wellbeing, 2) reduction of stigma around mental illness and mental health, 3) young
5 people's increased participation and communication in family life and community activities,
6
7
8
9
10 4) improved mental wellbeing, 5) improved experience of services (Respect, listening,
11 communication).
12
13

14 *Intervention structure:* The PLA intervention itself is comprised of 4 stages, running
15 across 13 sessions (Figure 1).
16
17

18
19 ***Stage one – knowledge building***, is designed to provide community members with
20 opportunities to develop new knowledge and understanding about mental health linked to the
21 priority issues identified in the ToC workshop.
22
23
24

25
26 ***Stage two – from reflection to action***, where participants will engage in a series of
27 prioritisation and planning activities to identify a single challenge or focus and a plan for local
28 action to address the issue. This stage will end with a community forum which creates a formal
29 link between key actors in the local mental health infrastructure. Key actors were identified in
30 the ToC and the ethnography and will be invited to engage in the community forums.
31
32
33
34
35
36

37
38 ***Stage three – implementation*** will focus on groups' implementation of their projects,
39 and group led monitoring of the implementation process and the delivery of the planned
40 activities. We will suggest the use of photography and video to help increase the accessibility
41 of this process to community members.
42
43
44
45
46

47
48 ***Stage four – evaluation*** will include a formalised participatory evaluation of each PLA
49 group's intervention, exploring any potential impact and efficacy in attaining the desired
50 outcomes. Group members will be invited to participate in a photovoice project to achieve this.
51 Phase four will also involve the election of community mental health champions. These
52 individuals will become the focal points about mental health issues in their communities,
53 combining with existing local infrastructure (such as health committees) in the long term. They
54
55
56
57
58
59
60

1
2
3 will complete additional training provided by the project (i.e WHO quality rights training,
4 Community MH gap training), as well as training on facilitating future cycles of the group for
5 those projects who which to continue. (See figure 1 below).
6
7
8
9

10 *[Insert Figure 1. PLA Groups Intervention]*
11
12
13

14 PLA group implementation

15
16 *Group facilitator Training:* Community researchers are also facilitators for PLA
17 groups. They completed full day of training, delivered in 5 short modules. The first of which
18 included basic information about the project and the use of the manual. The next 4 modules
19 corresponded to each PLA phase outlining the objectives of each session and activities. To
20 compensate for the short time period, the training programme was organised around role play
21 activities, where facilitators completed all activities to be used within the intervention. Training
22 also included a refresher on the processes for referrals (the same as used in phase one), and
23 introduction to new data monitoring processes.
24
25
26
27
28
29
30
31
32
33
34

35 *PLA groups development:* Sessions will be delivered in a by-weekly schedule, aiming
36 to approximate two 3-hour sessions per month, running for six months to complete one cycle.
37 Delivery of sessions will be supported by regular supervision by a member of the research
38 team, as well as bi-weekly meetings with all community researchers, where implementation
39 issues will be discussed. Due to time constraints created by the pandemic and funding
40 instability created by geopolitical contexts in the UK, the pilot study will be restricted to a
41 single cycle.
42
43
44
45
46
47
48
49
50

51 Group intervention structure will be determined by relevance to local context. In La
52 Montañita, given the close ties between community members, it is likely that men and women
53 will work together in groups in some cases. In Florencia, groups will likely be divided by sex
54 and in both contexts will be divided by age, with young people meeting separately.
55
56
57
58
59
60

1
2
3 *Phase 3: Evaluation (Months 20-27)*
4

5 At programme level, we will explore the acceptability, appropriateness, and feasibility
6 of a PAR approach to establish platforms for community-led mental health systems
7 strengthening. To evaluate this, we will hold monthly team meetings to discuss process and
8 implementation challenges. We will also convene two workshops to discuss the strengths and
9 weaknesses of the overall PAR approach and PLA intervention with team members and invited
10 service delivery and community member representatives.
11
12
13
14
15
16
17
18

19 At the intervention level, we will explore standard process and outcome evaluation
20 parameters as summarised in Table 3, in line with MRC Complex intervention guidelines. For
21 our intervention, we will evaluate potential impact at the individual and community level,
22 combining traditional academic evaluations of outcomes using standardised measures, exit
23 qualitative interviews with 30 participants (15 per site), and community led evaluation methods
24 – using photovoice methods.
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Table 3.*Outcome evaluation parameters for PLA group intervention.*

Item	Definition	Indicators	Target group	Frequency of collection	Person responsible	Source of data	Tool required	Data type
Acceptability	Satisfaction with the content and delivery of components	Experiences of sessions	PLA Participants	Once	Research Team	Endline interview	Topic guide	Qualitative
Appropriateness	Usefulness, relevance, suitability of component	Describing the intervention as useful	PLA Participants	Once	Research Team	Endline interview Endline questionnaire	Topic guide and survey	Qualitative and quantitative
Feasibility	Suitability of component for routine implementation	Delivery of sessions	Community researchers	Once	Research Team	Endline interview with community researchers Field diaries	Topic guide and field diaries	Mixed
Fidelity of delivery	Delivery of the component as intended	Number of sessions conducted	PLA Participants	Once	Community Researchers	Attendance registers	Attendance registers	Quantitative
		Content of sessions	Community researchers	Monthly	Community Researchers	Field diaries	Field diaries	Mixed
		Participatory-ness of the sessions		Monthly	Community Researchers	Field diaries	Field diaries	Qualitative
		Number of attendees	PLA Participants	Weekly	Community Researchers	Attendance registers	Attendance registers	Quantitative
Fidelity of receipt	Intervention reach	Profile of participants	PLA Participants	Once	Community Researchers	Questionnaire	Questionnaire (demographic session)	Quantitative
		Community led intervention strategies	PLA Participants	Once	Research Team	Field diaries and endline interviews	Topic guide and field diaries	Mixed
	receipt of component	Photovoice activities	PLA Participants	Once	Community Researchers	Photovoice	FG discussions and images	Qualitative

At the individual level, we will measure impact using standardised measures tested and validated by the community in Phase 1. These measures are summarised in Table 4. Where standardised tools were not available, we developed specific items to explore dimensions of knowledge, behaviour and practices linked to mental health knowledge. This was informed by KAP studies in other areas[33] and a similar tool used by other large scale mental health studies.[34] To better understand community and systems-level impacts, we will also run simulations to assess the cost-benefit or the cost-effectiveness of the actions that are (a) implemented and (b) planned in Phase 2. When it makes sense to monetize and data is available, results will be monetized using current knowledge of different uses of time by young individuals (education, work, political engagement, working for their communities) in resource-constrained countries for the cost-benefit analysis. When not possible, cost-effectiveness analysis will be developed. Costs will be estimated using the baseline quantification of cost of health services in WP1, if possible. Together, these strategies evaluate the pathways, mechanisms, and resources required for promoting and improving mental health services and inform future questions to be considered in future trials and scaling up of our intervention.

Table 4.
PLA intervention - Endline evaluation measures

Long term Outcomes	Indicator	Measure
Improved experiences of mental health	Improved well being	WHO-5 (5 items)
reduced symptoms of mental ill health	Reduced symptoms of depression	PHQ-2 (2 items)
Short term outcomes	Indicator	Measure
Improved perceptions of quality of relationships between practitioners and communities	Increased willingness to seek treatment	Perceptions on different Service providers (5 items)
Improved feelings of belongingness and community cohesion	Increased sense of attachment to place/home	Sense of belonging and attachment to place [35] (14 items)

	Increased feelings of emotional and community support	World Bank Social Capital measure (17 items)
	Increased feelings of inclusion and acknowledgement in the community	
	Improved perception of individual and collective agency	Possible selves questionnaire [36] (6 items)
	Positive sense of self/identity	
		Depression symptom knowledge (5 items)
		Stress symptom knowledge (5 items)
Increased mental health literacy Knowledge Attitudes and Practices (KAP) questions	Increased mental health literacy	Substance misuse symptom knowledge (5 items)
	Greater acceptance of others seeking treatment	3 items
	Helping others to seek treatment	2 items
	More positive perceptions of mental illness	1 item
Reduction of mental health stigma	More willingness to discuss/explore mental health needs in communities and families	RIBS reported behaviours subscale (4 items)

Sampling

Across the project two sampling strategies were used. For the diagnostic phase, purposive sampling ensured selection on the basis of participants' characteristics[37] in our case, in-depth knowledge of the context and local mental health services, from both potential service users' and providers' perspectives. Within this framework, we adopted a maximum variation approach, selecting across a broad spectrum of characteristics which included age, gender, and mental health status. This will support an in-depth understanding of the range of different groups who populate PDET communities ensuring saturation of contexts, through triangulation of data and experiences.[38]

1
2
3 Inclusion and exclusion criteria will be uniform across the programme. Inclusion
4
5 criteria for community members will include a) place of residency (Florencia/La Montañita),
6
7 reported by the participant as their home; b) age (16-25 years old and 26+ years); c) willingness
8
9 to voluntarily participate (inform consent signed) and d) self-reported emotional distress
10
11 experiences. Service provider sampling will include (a), working in a health provider setting
12
13 or in a decision-making scenario related to the health field will be used in addition to the criteria
14
15 used for community members as an inclusion criterion. Those with untreated mental health
16
17 affections, people unable to give consent, people under 15 years old, and people unrelated to
18
19 health providing systems and institution in the case of health representatives will not be eligible
20
21 for participation in our study.
22
23
24
25

26 For the intervention, purposive sampling will be used to include community members
27
28 who participated in the diagnostic phase as well as availability sampling to include a wide
29
30 range of other community members. We did not conduct a formal sample size calculation due
31
32 to the lack of data on the expected intervention effect size linked to our outcomes. However,
33
34 simple power analyses linked to the use of scales such as the PHQ-9 indicate that a sample size
35
36 of approximately 30 is required to show significance changes in pre-post testing.
37
38 Notwithstanding, our recruitment aims were guided by previous experience of the research
39
40 team applying this method in similar populations in Colombia [6] where the attrition rate was
41
42 found to be around 42% among a similarly highly mobile and critical population. This is similar
43
44 to other projects working with vulnerable and transient populations in PDET territories in
45
46 Colombia (Idrobo et al, personal communication).
47
48
49
50

51 **Data analysis**

52 Qualitative data across all phases will be analysed using thematic network,[39]
53
54 Reflexive,[40] or Framework analysis.[41] Thematic network analysis will be used to
55
56 understand community perceptions of wellbeing and emotional distress, and local mental
57
58
59
60

1
2
3 health services. Other thematic analysis methods mentioned will be used for analysing data
4
5 derived from the motivated ethnography, qualitative data from our evaluation, and in the policy
6
7 review to identify primary topics regarding access and mental health services in Colombia,
8
9 particularly in PDET municipalities. Collaborative data analysis strategies will be applied
10
11 across all our project analysis, involving participants and community researchers
12
13 in data analysis, verifying outputs and guaranteeing data validity.
14
15

16
17 Descriptive analysis and simple regression modelling will be performed
18
19 on quantitative data from our evaluation questionnaire to evidence changes regarding mental
20
21 health and wellbeing, and community level outcomes (social capital and social belonging)
22
23 before and after our intervention. These changes will be captured comparing baseline and
24
25 endline results following the completion of the intervention.
26
27
28
29

30 31 **Data availability**

32
33 Manuals in their finalised forms will be made available in English and Spanish on a
34
35 project website. A fully anonymised pilot quantitative dataset will be uploaded through and
36
37 open access data repository (ReShare) at the time of publication of our impact and results.
38
39 Qualitative data will not be made publicly available given the small size of our study
40
41 communities, the intimacy of people's experiences and narratives and the wider lack of trust
42
43 among citizens about research processes.
44
45
46

47 48 **Patient and Public Involvement**

49
50 Because of the nature of PAR research and our overall co-production approach, this
51
52 project is committed to public involvement. Community partner organisations were involved
53
54 in the framing and development of the project from the outset (including funding application
55
56 stages) and are involved in major planning and decision-making. Intervention design processes
57
58 involve everyday citizens, or 'potential service users' during all phases. The theory of change
59
60

1
2
3 approach planned for this study is rooted in participant and public involvement, diverging from
4
5 other approaches that involve a handful of patient representatives, or make use of previously
6
7 collected data from wider communities. Instead, the stage will include people with previous
8
9 experience of mental health services, family members, friends, and potential service users
10
11 within the theory of change process.
12
13
14
15
16

17 **ETHICS AND DISSEMINATION**

19 Ethical approval has been obtained from two academic institutions. One in Colombia [2021-
20
21 1393] and the UK [16127/005]. We will disseminate our work across academic, policy and
22
23 community platforms. We will produce peer-reviewed publications and policy reports,
24
25 alongside public communication activities such as workshops, short-films, infographics, and
26
27 photography exhibitions to highlight community projects. A detailed communication strategy
28
29 will be finalised based on collaborative agreement across our entire team and policy
30
31 stakeholders.
32
33
34
35
36
37

38 **AUTHORS CONTRIBUTIONS**

39
40 Given the participatory nature of this project, authors contributed to many credit roles. They
41
42 are outlined below:
43

44 Funding acquisition - RAB, MCD, SJ, DMC

45
46 Conceptualisation – All authors contributed equally to conceptualisation

47
48 Methodology – All authors contributed equally to methodology.

49
50 Data curation, investigation – LFD, NVSJ, MCM, MGG

51
52 Project administration: MGG, MCD, RAB, SJ, LF, NVSJ
53
54
55
56
57
58
59
60

1
2
3 Formal Analysis – MCD, MGG, SJ, LFD (phase one leads) RAB, LFD, MCD (phase two
4 leads) RAB, DMC, DL (phase three leads). All other authors are supporting contributors
5
6 across all phases
7

8
9
10 Supervision – RAB, SJ, MCD, DM
11

12 Writing original draft – RAB, MCD (equal leads of this manuscript)
13

14 Writing – review and editing – All authors
15

16 17 **Funding Statement**

18
19 This work is funded by an UKRI/ESRC Newton Award, grant number ES/V013211 and a
20
21 MINCIENCIAS award, grant number 856-2020.
22

23 24 **Competing interests' statement**

25
26 Authors declare that they have no competing interests
27
28
29
30
31
32

33 **REFERENCES**

- 34
35
36
37
38 1 Semrau M, Alem A, Ayuso-Mateos JL, *et al.* Strengthening mental health systems in
39 low- and middle-income countries: recommendations from the Emerald programme.
40 *BJPsych Open* 2019;**5**:e73. doi:10.1192/bjo.2018.90
41
42
43
44 2 Burgess R. COVID-19 mental-health responses neglect social realities. *Nature*
45
46 Published Online First: 4 May 2020. doi:10.1038/d41586-020-01313-9
47
48
49 3 Tamayo-Agudelo W, Bell V. Armed conflict and mental health in Colombia. *BJPsych*
50
51 *Int* 2019;**16**:40–2. doi:10.1192/bji.2018.4
52
53
54 4 Cuartas Ricaurte J, Karim LL, Martínez Botero MA, *et al.* The invisible wounds of
55
56 five decades of armed conflict: inequalities in mental health and their determinants in
57
58 Colombia. *Int J Public Health* 2019;**64**:703–11. doi:10.1007/s00038-019-01248-7
59
60

- 1
2
3 5 Cepeda-Pérez A, Giraldo-Vargas AM, Gómez-Lizarazu DE, *et al.* Evaluación
4 Programa de Atención Psicosocial y Salud Integral a Víctimas – PAPSIVI: Informe
5 Final. Bogotá, D.C: 2020.
6
7
8
9
10 [https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/PS/informe-](https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/PS/informe-final-evaluacion-resultados-papsivi-ps.pdf)
11 [final-evaluacion-resultados-papsivi-ps.pdf](https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/PS/informe-final-evaluacion-resultados-papsivi-ps.pdf)
12
13
14 6 Burgess RA, Fonseca L. Re-thinking recovery in post-conflict settings: Supporting the
15 mental well-being of communities in Colombia. *Glob Public Health* 2020;**15**:200–19.
16
17 doi:10.1080/17441692.2019.1663547
18
19
20
21 7 Montenegro CR, Cornish F. Historicising involvement: the visibility of user groups in
22 the modernisation of the Chilean Mental Health System. *Crit Public Health*
23
24 2019;**29**:61–73. doi:10.1080/09581596.2017.1400659
25
26
27
28 8 Burgess RA, Jain S, Petersen I, *et al.* Social interventions: a new era for global mental
29 health? *The Lancet Psychiatry* 2020;**7**:118–9. doi:10.1016/S2215-0366(19)30397-9
30
31
32
33 9 WHO. *Research for universal health coverage*. WHO 2013.
34
35 <https://www.who.int/publications/i/item/9789240690837>
36
37
38 10 Kroc Institute for International Peace Studies. Tres años después de la firma del
39 Acuerdo Final en Colombia: Hacia la transformación territorial. Diciembre 2018 a
40 Noviembre 2019. 2020. [http://peaceaccords.nd.edu/wp-](http://peaceaccords.nd.edu/wp-content/uploads/2020/06/200630-Informe-4-resumen-final.pdf)
41 [content/uploads/2020/06/200630-Informe-4-resumen-final.pdf](http://peaceaccords.nd.edu/wp-content/uploads/2020/06/200630-Informe-4-resumen-final.pdf)
42
43
44
45
46
47 11 Agencia de Renovación del Territorio. ABCÉ de los PDET: Programas de Desarrollo
48 con Enfoque Territorial. 2021.
49
50 <https://portal.renovacionterritorio.gov.co/descargar.php?idFile=29067>
51
52
53
54 12 Campbell C, Burgess R. The role of communities in advancing the goals of the
55 Movement for Global Mental Health. *Transcult Psychiatry* 2012;**49**:379–95.
56
57 doi:10.1177/1363461512454643
58
59
60

- 1
2
3 13 Nelson G, Prilleltensky I. *Community psychology : in pursuit of liberation and well-*
4 *being*. Basingstoke: : Palgrave Macmillan 2010.
5
6
7
8 14 Lund C, Brooke-Sumner C, Baingana F, *et al*. Social determinants of mental disorders
9 and the Sustainable Development Goals: a systematic review of reviews. *The Lancet*
10 *Psychiatry* 2018;**5**:357–69. doi:10.1016/S2215-0366(18)30060-9
11
12
13
14
15 15 Rose-Clarke K, Gurung D, Brooke-Sumner C, *et al*. Rethinking research on the social
16 determinants of global mental health. *The Lancet Psychiatry* 2020;**7**:659–62.
17 doi:10.1016/S2215-0366(20)30134-6
18
19
20
21
22 16 Departamento Administrativo Nacional de Estadística (DANE). La información del
23 DANE en la toma de decisiones regionales: Florencia - Caquetá. 2020.
24 [https://www.dane.gov.co/files/investigaciones/planes-departamentos-ciudades/201211-](https://www.dane.gov.co/files/investigaciones/planes-departamentos-ciudades/201211-InfoDane-Florencia-Caqueta.pdf)
25 [InfoDane-Florencia-Caqueta.pdf](https://www.dane.gov.co/files/investigaciones/planes-departamentos-ciudades/201211-InfoDane-Florencia-Caqueta.pdf)
26
27
28
29
30
31 17 Médicos sin Fronteras. Tres veces víctimas: Víctimas de la violencia, el silencio y el
32 abandono Conflicto armado y salud mental en el departamento de Caquetá, Colombia.
33 Florencia: 2010.
34 <https://www.acnur.org/fileadmin/Documentos/Publicaciones/2010/7372.pdf>
35
36
37
38
39
40 18 Departamento Administrativo Nacional de Estadística (DANE). Principales
41 indicadores del mercado laboral - Julio de 2022. Bogotá, D.C: 2022.
42 [https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/bol_empleo_jul_22.p](https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/bol_empleo_jul_22.pdf)
43 [df](https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/bol_empleo_jul_22.pdf)
44
45
46
47
48
49 19 Departamento Administrativo Nacional de Estadística (DANE). Fortalecimiento a la
50 Atención Integral a Víctimas del Conflicto Armado en el Municipio de La Montañita.
51 Florencia: 2020.
52 [https://lamontanitacaqueta.micolombiadigital.gov.co/sites/lamontanitacaqueta/content/](https://lamontanitacaqueta.micolombiadigital.gov.co/sites/lamontanitacaqueta/content/files/000342/17089_2020184100008-victimas.pdf)
53 [files/000342/17089_2020184100008-victimas.pdf](https://lamontanitacaqueta.micolombiadigital.gov.co/sites/lamontanitacaqueta/content/files/000342/17089_2020184100008-victimas.pdf)
54
55
56
57
58
59
60

- 1
2
3 20 Burgess RA, Choudary N. Time is on our side: operationalising ‘phase zero’ in
4 coproduction of mental health services for marginalised and underserved populations
5 in London. *Int J Public Adm* 2021;**44**:753–66. doi:10.1080/01900692.2021.1913748
6
7
8
9
10 21 Baum F, MacDougall C, Smith D. Participatory action research. *J Epidemiol*
11
12 *Community Heal* 2006;**60**:854–7. doi:10.1136/jech.2004.028662
13
14
15 22 Burgess RA. Policy, power, stigma and silence: Exploring the complexities of a
16 primary mental health care model in a rural South African setting. *Transcult*
17 *Psychiatry* 2016;**53**:719–42. doi:10.1177/1363461516679056
18
19
20
21 23 Dedios Sanguineti MC, Martínez Gómez M, Guarín Á. Using WhatsApp to collect
22 data on displaced Venezuelans, internally displaced populations, and host communities
23 in Colombia during COVID-19 lockdowns. World Bank Blogs Dev. Peace.
24 2022.[https://blogs.worldbank.org/dev4peace/using-whatsapp-collect-data-displaced-](https://blogs.worldbank.org/dev4peace/using-whatsapp-collect-data-displaced-venezuelans-internally-displaced-populations-and)
25 [venezuelans-internally-displaced-populations-and](https://blogs.worldbank.org/dev4peace/using-whatsapp-collect-data-displaced-venezuelans-internally-displaced-populations-and) (accessed 11 Oct 2022).
26
27
28
29
30
31
32
33 24 Cassiani-Miranda CA, Cuadros-Cruz AK, Torres-Pinzón H, *et al.* Validity of the
34 Patient Health Questionnaire-9 (PHQ-9) for depression screening in adult primary care
35 users in Bucaramanga, Colombia. *Rev Colomb Psiquiatr (English ed)* 2021;**50**:11–21.
36 doi:10.1016/j.rcpeng.2019.09.002
37
38
39
40
41
42 25 Campo-Arias A, Miranda-Tapia GA, Cogollo Z, *et al.* Reproducibilidad del Índice de
43 Bienestar General (WHO-5 WBI) en estudiantes adolescentes. *Salud Uninorte*
44 2015;**31**:18–24. <https://www.redalyc.org/articulo.oa?id=81739659003>
45
46
47
48
49 26 Serrani Azcurra D. Traducción, adaptación al español y validación de la escala de
50 bienestar mental de WARWICK-EDINBURGH en una muestra de adultos mayores
51 argentinos. *Acta Colomb Psicol* 2015;**18**:79–93. doi:10.14718/ACP.2015.18.1.8
52
53
54
55
56 27 Ouimet JA, Bunnage JC, Carini RM, *et al.* Using Focus Groups, Expert Advice, and
57 Cognitive Interviews to Establish the Validity of a College Student Survey. *Res High*
58
59
60

- 1
2
3 *Educ* 2004;**45**:233–50. <http://www.jstor.org/stable/40197291>
- 4
5 28 Zamora-Moncayo E, Burgess RA, Fonseca L, *et al*. Gender, mental health and
6
7 resilience in armed conflict: listening to life stories of internally displaced women in
8
9 Colombia. *BMJ Glob Heal* 2021;**6**:e005770. doi:10.1136/bmjgh-2021-005770
- 10
11
12 29 Morrison J, Akter K, Jennings HM, *et al*. Participatory learning and action to address
13
14 type 2 diabetes in rural Bangladesh: a qualitative process evaluation. *BMC Endocr*
15
16 *Disord* 2019;**19**:118. doi:10.1186/s12902-019-0447-3
- 17
18
19 30 Seward N, Neuman M, Colbourn T, *et al*. Effects of women’s groups practising
20
21 participatory learning and action on preventive and care-seeking behaviours to reduce
22
23 neonatal mortality: A meta-analysis of cluster-randomised trials. *PLOS Med*
24
25 2017;**14**:e1002467. doi:10.1371/journal.pmed.1002467
- 26
27
28 31 King C, Burgess RA, Bakare AA, *et al*. Integrated Sustainable childhood Pneumonia
29
30 and Infectious disease Reduction in Nigeria (INSPIRING) through whole system
31
32 strengthening in Jigawa, Nigeria: study protocol for a cluster randomised controlled
33
34 trial. *Trials* 2022;**23**:95. doi:10.1186/s13063-021-05859-5
- 35
36
37 32 Durrance-Bagale A, Marzouk M, Tung LS, *et al*. Community engagement in health
38
39 systems interventions and research in conflict-affected countries: a scoping review of
40
41 approaches. *Glob Health Action* 2022;**15**. doi:10.1080/16549716.2022.2074131
- 42
43
44 33 Abrahams Z, Jacobs Y, Mohlamonyane M, *et al*. Implementation outcomes of a health
45
46 systems strengthening intervention for perinatal women with common mental
47
48 disorders and experiences of domestic violence in South Africa: Pilot feasibility and
49
50 acceptability study. *BMC Health Serv Res* 2022;**22**:641. doi:10.1186/s12913-022-
51
52 08050-x
- 53
54
55 34 Newson JJ, Thiagarajan TC. Assessment of Population Well-Being With the Mental
56
57 Health Quotient (MHQ): Development and Usability Study. *JMIR Ment Heal*
58
59
60

- 1
2
3 2020;7:e17935. doi:10.2196/17935
4
5
6 35 Jovchelovitch S, Priego-Hernández J. *Underground Sociabilities: identity, culture and*
7
8 *resistance in the favelas of Rio*. Brasilia, Paris: UNESCO 2013.
9
10
11 36 Oyserman D, Johnson E, James L. Seeing the Destination but Not the Path: Effects of
12
13 Socioeconomic Disadvantage on School-focused Possible Self Content and Linked
14
15 Behavioral Strategies. *Self Identity* 2011;10:474–92.
16
17 doi:10.1080/15298868.2010.487651
18
19 37 Etikan I, Musa S, Akassim RS. Comparison of Convenience Sampling and Purposive
20
21 Sampling. *Am J Theor Appl Stat* 2016;5:1. doi:10.11648/j.ajtas.20160501.11
22
23
24 38 Guest G, Bunce A, Johnson L. How Many Interviews Are Enough? *Field methods*
25
26 2006;18:59–82. doi:10.1177/1525822X05279903
27
28
29 39 Attride-stirling J. Thematic networks: an analytic tool for qualitative research. In:
30
31 *Qualitative Research*. London; Thousand Oaks; New Delhi: : SAGE Publications
32
33 2001. 385–405.
34
35
36 40 Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc*
37
38 *Heal* 2019;11:589–97. doi:10.1080/2159676X.2019.1628806
39
40
41 41 Gale NK, Heath G, Cameron E, *et al*. Using the framework method for the analysis of
42
43 qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*
44
45 2013;13:117. doi:10.1186/1471-2288-13-117
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

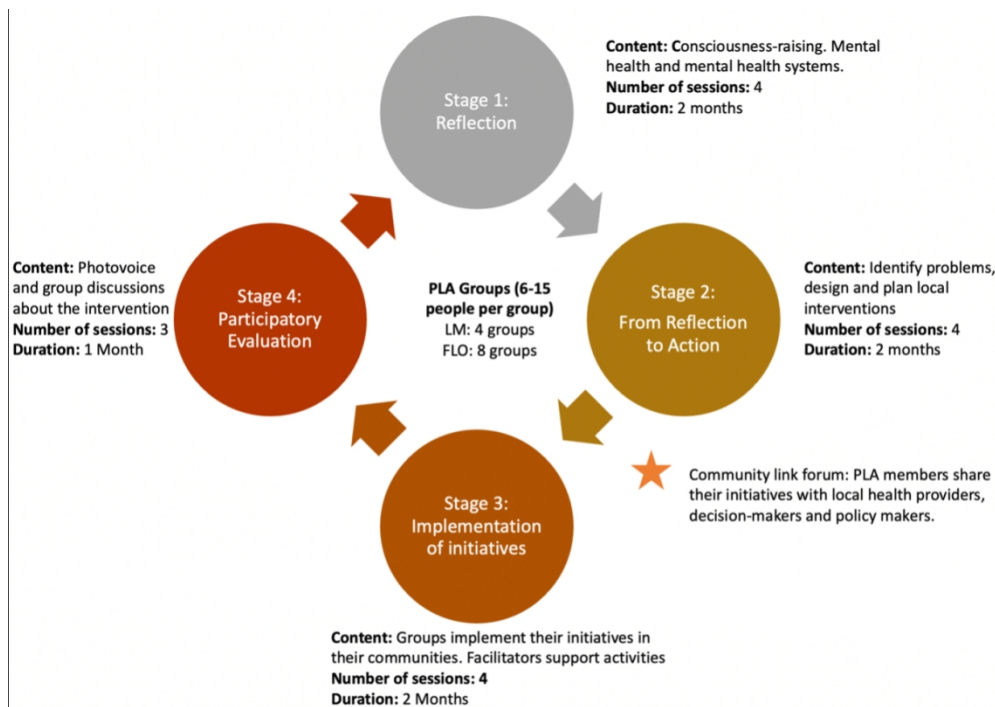


Figure 1 PLA intervention structure

159x112mm (220 x 220 DPI)

1
2
3
4
5
6 **Starting From the Bottom: Building a Theory of Change (ToC) for community**
7 **interventions to improve mental health services in PDET communities in**
8 **Colombia**
9

10
11
12
13 **STARS-C project**
14
15

16
17
18
19
20
21
22
23
24
25
26
27
28
29 **Manual**
30 **English Version**
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For peer review only

Theory of Change Workshop Manual

Methodology:

Conduct a public community forum and a Theory of Change workshop to collectively develop expectations, priorities and desired outcomes of mental health and mental health services for communities. This will also create an opportunity to set a broader goal for what people would like to see as the main outcomes of participation in through in this project.

Sampling:

50 participants

Procedure:

The below table provides a summary of what will be done in each session, and what the aim of each session is.

TOC session	Stage	Activity to be conducted	Time allowance for activity	# of facilitators required	Resources required
Session 1	Challenges that hinder good mental health and mental health services	Building problem trees	2 hours	2-4	1. Tape recorder 2. Flip chart 3. Paper 4. Coloured markerpens 5. Flash cards with themes from FGDs (5 full sets)
Session 2	Ideal world that enables good mental health and mental health services	Storytelling of an ideal world	3 hours	2-4	1. Tape recorder 2. Flip chart 3. Paper 4. Coloured markerpens 5. Photocopy of exercise
Session 3	Identify interventions which could be used to improve mental health and mental health services	Mapping and intervention building	1 hour	2-4	1. Tape recorder 2. Cardboards 3. Paper 4. Coloured markerpens 5. Flashcards

Things to remember:

1. Each session should be audio recorded to be transcribed/translated later.
2. You must make sure you take photos of all the outputs from each activity (e.g. problem tree etc).

Introduction

We provided information about the project and the team, for participants to feel welcome and know who to ask if any questions should arise.

With the help of attendees, we developed a set of rules for respectful groups discussions and maintaining confidentiality.

Each participant was given a name tag, assigned a group number, and was sat on a table with the rest of their group. Facilitators prompted them to introduce themselves while activities started, as they would be working together throughout the day.

Session 1

Where we begin: Mapping and connecting factors that shape poor mental health

The aim of this session is to identify challenges that hinder good mental health and mental health services. We will do this, through using flash cards, which summarise the findings from our earlier focus group discussions, to build problem trees. When summarising the focus group discussions' data, be sure to avoid interpretations. The summary should be as much as possible a descriptive summary of raw data.

Step 1. *Brief introduction to the topic:* Remind participants of the activities during the FGDs and discuss the themes that emerged. You may want to facilitate a brief discussion to help warm up the room. For example, each facilitator is given a stack of randomized flash cards to distribute across the room. Then ask participants to place them into 'categories' on the walls.

Step 2. Divide participants into smaller groups. The groups should reflect the way that we will organize the PLA groups. Each group should have no more than 10 people.

Step 3: Assign the following topics to each group for them to create a problem tree.

- 1) Group of adults A (Florencia) – Mental health
- 2) Group of adults B (Florencia) – Mental health services
- 3) Group of young people (Florencia) – Mental Health
- 4) Group of adults A(La Montañita) – Mental health services
- 5) Group of adults B(La Montañita) – Mental health
- 6) Group of young people (La Montañita) – Mental health services

Step 4. Introduce the main activity – the problem tree (below) and provide instructions as follows:

Script: Today, we want to think deeply about the challenges that hinder good mental health and mental health services. We can articulate problems very clearly,

1
2
3 but this task will help us to build connections between challenges at various levels
4 in our lives. We can think of this more clearly, if we think about something
5 physical in our environment, like a tree. A tree has different parts that all connect
6 to make the whole. The roots, which are hidden, not always visible, but make it
7 possible for the tree to exist. They grow first and have the largest effect. The main
8 part of the tree – which is the trunk. It connects the roots to the outside world – it
9 is the part that we see first, that is most visible. Finally, the leaves – the top of the
10 tree, they grow up and out into the future.
11
12

13 The activity we will do first, is to build a problem tree, which helps us to make
14 sense of these major themes that emerged from our focus group discussions. In
15 your groups, you need to think about yourselves – as women, men, young people,
16 and what specific problems matter the most to you, in your lives, and connect them
17 from the ‘roots’ to the broader outcomes.
18
19

20 Each problem tree is split into three sections: the root (foundations/root causes)
21 the core problem (what we can see) and the outcomes/consequences.
22
23

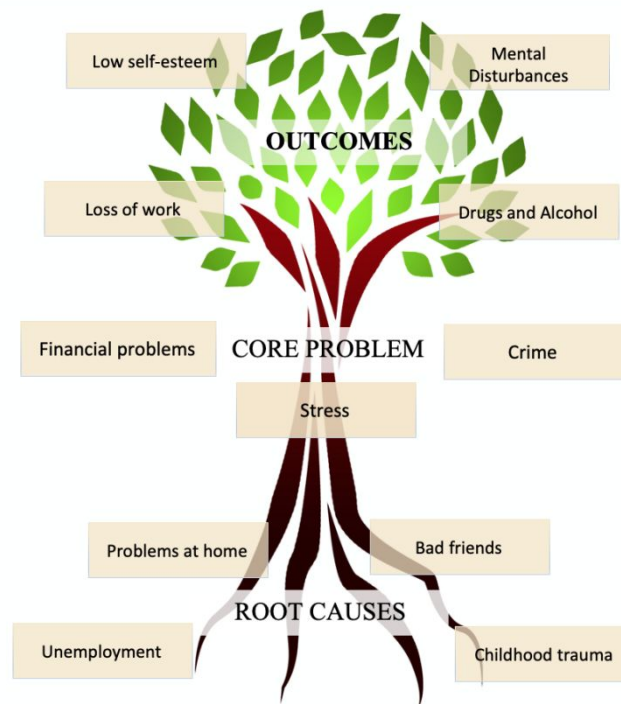
24 The roots are where you may map the root/hidden causes of challenges, such as
25 unemployment, weak relationships; conflict; violence. The trunk signifies what
26 the main problem is. For some people, this could be a mental health condition
27 (depression), but it could be many other things as well (no education; isolation;
28 hunger; family separation). Finally, at the branches, this signifies the outcomes,
29 or the consequences of these difficulties. This could include things like: loss of
30 work; low self-esteem; mental health challenges; exclusion, etc.
31
32

33 ***NB to facilitator: it may help, to build an example tree, while you are discussing***
34 ***these points above. You should have example flash cards to put in each part of***
35 ***the tree and ask participants where to put each.***
36
37

38 Using the cards you have as a starting point, begin to build your problem trees.
39 Some groups will make a tree for the experience of poor mental health, and the
40 others will make a tree for what hinders mental health services. You will also be
41 given blank cards, if there are things that were not captured in prior focus groups,
42 but that you think are important to consider.
43
44

45 If it helps, you can imagine a person that you know, or that you have heard of,
46 who is living through these issues right now. How would you build a tree to
47 describe their life and experiences? How would you build a tree to describe their
48 quest to seek treatment/support with the things they find difficult?
49
50

51 ***Instructions:*** Hand out cards to each group, showing the themes that emerged
52 during the FGDs. Show participants the example problem tree below and give
53 them 1 hour to discuss and create problem trees within their groups. In each group,
54 provide a recorder device to capture the discussions being held by the participants.
55
56
57
58
59
60



Step 5. After 1 hour, ask a representative from each group to share their problem tree with the rest of the participants (which should take approximately another hour).

Step 6. While the participants share their trees, one facilitator should be taking notes to support later analysis. Another should be taking more general notes to facilitate discussion. Note the similarities and differences between trees, and the challenges and outcomes of healthcare vs health services. These should be shared with the wider group, and participants should be asked for their thoughts on what is being shared.

Session 2

Storytelling of an ideal world – imagining outcomes and outputs

The aim of this session is to identify potential solutions to improve mental health services, and mental health outcomes. This is a long-term plan but should give participants a chance to think about what actions are required to achieve this long-term vision.

Step 1. Facilitators present the following phrase.

“The way we think about the future often focuses on the immediate future. However, when thinking is inspired by a vision, there is more room to achieve things which are thought of as ‘unthinkable’. A vision for a better future gives us hope and increases motivation to take action to pursue that vision”

Step 2. Participants should work in the same groups from activity 1.

Script: “Imagine your community 20 years from now. The national television agency (Día a Día/Séptimo Día) has prepared a programme on the outstanding achievements your community has made to increase the rates of access to mental health services and improving mental health in the community. The television/radio programme was prepared based on interviews with community members, local authorities, traditional leaders, and health institutions working in the district. Imagine what the programme would report about your community’s achievements in mental health. They have completed a special feature, on two people who have experienced this change. One person is someone whose mental health has been improved, and another is a practitioner who has worked with the patient and the community to build that change.

NB for facilitators: These questions should be handed out to each group on a piece of paper

General questions to consider for all parties

- What are major changes your community has made in the last 20 years to ensure good mental health in your community?
- What are the major changes your community has made in the last 20 years to increase the rates of access to mental health services?
- As a mental health provider, ¿what have you done to improve the mental health of your community?
 - Example: If you are a psychologist, how did you help your community?
- How have community leaders have supported efforts to address poor mental health?

Questions for your main characters:

- What actions did you do to start making life changes in terms of your mental health? Who was involved?
- What action plan did they follow in the first year to make the change happen?
- How did they convince other people who are important in their lives that this was the right decision?
- How did they keep going in the long run?

Scrip continued: “in your groups, you will need to write a story about this future world. It may help you to think about the questions in on the attached sheet of paper. You will present your story to the group in a role play (no more than 10 minutes long) of a television interview. There should be four speaking roles:

- 1) The journalist (who could be asking some of the questions we have provided)
- 2) a main character who has benefitted from the new world and services (could be the same person you thought about to help you do activity 1)
- 3) a health care provider
- 4) A key person who you feel is important to the story. (i.e could be a family member, a community leader, a politician, a friend, etc)

You will have 1 hour to work on this.

1
2
3 Step 3. After 1 hour, ask the groups to present their plays within each site. Then ask them to
4 vote for the better story as this will be presented to the broader group including participants
5 from the other site. After deciding which play to present, ask participants to add or improve
6 their stories if they think they should.
7

8
9 Step 4. Finally, let participants present the play from each site to one another. The facilitators
10 should be taking notes and asking people to think about similarities or make comments
11 towards what is being presented after each play. Audio and video record each presentation
12 and the plenary discussion for future analysis.
13
14

15 16 17 **Session 3** 18 **Mapping and intervention building** 19

20 The aim of this final session is to identify interventions which could be used to improve better
21 mental health and mental health services in communities. It may be worth stating at this stage,
22 that these discussions will shape how we run the second stage of our project – which are the
23 activities we facilitate to improve mental health and improve relationships between mental
24 health services and communities over the course of the next year.
25

26
27 Step 1. Divide participants into same groups as for previous activity
28

29 Step 2. Explain that they will need to think back to the problem trees from Activity 1 and what
30 was discussed in Activity 2.
31

32 Step 3. Tell participants that they have 1 hour to consider these challenges and imagine possible
33 solutions. Make cardboards with the following questions.
34

- 35 1. What are the interventions you need to improve mental health and mental health services
36 in your community?
- 37 2. What resources do you need to implement those interventions/actions?
- 38 3. What are the expected outcomes of implementing those interventions?
39

40 Step 4: Ask participants to write down the answer to those questions in flashcards and then to
41 paste them under each cardboard.
42
43

44 **NB to facilitator: Register the answer provided. If there is enough time, share results with**
45 **the broader group trying to highlight similarities and differences.**
46

47 **Closing statements** 48

49 Participants were thanked for their time and contributions. Facilitators went around the room
50 asking about people's experiences and any feedback for future activities.
51 Facilitators shared next-steps for the project to have a sense of continuity and stay in touch with
52 the community.
53
54
55
56
57
58
59
60

BMJ Open

Using Participatory Action Research to re-imagine community mental health services in Colombia: A Mixed-Methods Study Protocol

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2022-069329.R1
Article Type:	Protocol
Date Submitted by the Author:	22-Nov-2022
Complete List of Authors:	Burgess, Rochelle; UCL Institute for Global Health Dedios Sanguinetti, María Cecilia; Universidad de Los Andes, School of Government Maldonado-Carrizosa, Darío; Universidad de los Andes, School of Government Fonseca, Laura; London School of Economics and Political Science, Department of Psychological and Behavioural Science Vera San Juan, Norha; UCL Institute for Global Health; University College London, Rapid Research Appraisal and Evaluation Lab (RREAL) Lucumí, Diego; Universidad de Los Andes, School of Government González-Gort, Mónica; Universidad de Los Andes, School of Government Melgar, Mónica Carreño; Universidad de los Andes, School of Government Gaviria, María Fanny; Corporación Manigua Tovar, Diego; Cooperativa multiactiva para el buen vivir y la paz del Caquetá Jovchelovitch, Sandra; London School of Economics and Political Science, Department of Psychological and Behavioural Science
Primary Subject Heading:	Global health
Secondary Subject Heading:	Health services research, Mental health, Public health, Patient-centred medicine
Keywords:	MENTAL HEALTH, Depression & mood disorders < PSYCHIATRY, PUBLIC HEALTH

SCHOLARONE™
Manuscripts

1
2
3 **Using Participatory Action Research to re-imagine community mental health services in**
4 **Colombia: A Mixed-Methods Study Protocol**
5
6
7
8

9 Corresponding author:

10
11 Rochelle A. Burgess,
12 Institute for Global Health,
13 30 Guilford Street
14 Rm. 3.04,
15 London
16 WC1N 1EH
17 r.burgess@ucl.ac.uk.
18
19

20
21 List of authors

22
23 **Rochelle A. Burgess**, Institute for Global Health, University College London, London,
24 United Kingdom.

25 **María Cecilia Dedios Sanguinetti**, School of Government, Universidad de Los Andes,
26 Bogotá, Colombia.

27 **Darío Maldonado-Carrizosa**, School of Government, Universidad de Los Andes, Bogotá,
28 Colombia.

29 **Laura Fonseca**, Department of Psychological and Behavioural Science, London School of
30 Economics and Political Science, London, United Kingdom.

31 **Norha Vera San Juan**, Institute for Global Health, University College London, London,
32 United Kingdom.

33 **Diego Lucumí**, School of Government, Universidad de Los Andes. Bogotá, Colombia.

34 **Mónica González-Gort**, School of Government, Universidad de Los Andes. Bogotá,
35 Colombia.

36 **Mónica Carreño Melgar**, School of Government, Universidad de Los Andes, Bogotá,
37 Colombia.

38 **María Fanny Gaviria**, Corporación Manigua (CORPOMANIGUA), Florencia, Colombia.

39 **Diego Ferney Tovar**, Cooperativa multiactiva para el buen vivir y la paz del Caquetá
40 (COOMBUVIPAC), La Montañita, Colombia.

41 **Sandra Jovchelovitch**, Department of Psychological and Behavioural Science, London
42 School of Economics and Political Science, London, United Kingdom.
43
44
45
46

47 **Word count: 4,189**
48
49
50
51
52
53
54
55
56
57
58
59
60

Key words

Colombia; mental health; health systems strengthening; community participation; community involvement

Authors and Institutions

Rochelle A. Burgess, r.burgess@ucl.ac.uk, University College London.

María Cecilia Dedios Sanguinetti, m.dedios@uniandes.edu.co, Universidad de Los Andes.

Darío Maldonado-Carrizosa, dmaldonadoc@uniandes.edu.co, Universidad de Los Andes.

Laura Fonseca, l.m.fonseca-duran@lse.ac.uk, London School of Economics and Political Science.

Norha Vera San Juan, n.verasanjuan@ucl.ac.uk, University College London.

Diego Lucumí, di.lucumi@uniandes.edu.co, Universidad de Los Andes.

Mónica González-Gort, m.gonzalez22@uniandes.edu.co, Universidad de Los Andes.

Mónica Carreño Melgar, m.carrenom@uniandes.edu.co, Universidad de Los Andes.

María Fanny Gaviria, f.gaviria@corpomanigua.org, Corporación Manigua (CORPOMANIGUA).

Diego Ferney Tovar, pacercr@gmail.com, Cooperativa multiactiva para el buen vivir y la paz del Caquetá (COOMBUVIPAC).

Sandra Jovchelovitch, s.jovchelovitch@lse.ac.uk, London School of Economics and Political Science.

ORCID Ids

Rochelle A Burgess: 0000-0001-9749-7065

María Cecilia Dedios-Sanguinetti: 0000-0002-6141-304X

Darío Maldonado-Carrizosa: 0000-0003-3544-208X

Laura Fonseca: 0000-0003-0638-3447

Norha Vera San Juan: 0000-0002-8677-7341

Diego Lucumí: 0000-0003-1834-7937

Mónica González-Gort: 0000-0002-5488-832X

Mónica Carreño Melgar: 0000-0003-2579-8568

María Fanny Gaviria: N/A (Non-academic partner)

Diego Ferney Tovar: N/A (Non-academic partner)

Sandra Jovchelovitch: 0000-0002-0073-2792

ABSTRACT

Introduction

Mental-health care systems are challenged by how they hear and respond to what marginalised communities experience as drivers of mental distress. In Colombia, this challenge intersects with wider challenges facing post-conflict reconstruction. Our pilot study will explore the feasibility and acceptability of a participatory approach to developing community-led participatory interventions for community mental health systems strengthening and mental health improvement, in two sites in Caquetá, Colombia.

Methods and analysis

The project is divided into three distinct phases aligned with community participatory action research (PAR) cycles: diagnostic, intervention, and evaluation. This allows us to use a participatory approach to design a community-led, bottom-up intervention for mental health systems strengthening and the promotion of mental health and wellbeing.

The diagnostic phase explores local understandings of mental health, mental distress, and access to mental health services from community members and health providers. The intervention stage will be guided by a participatory Theory of Change process. Community priorities will inform the development of a Participatory, Learning and action (PLA) informed group intervention, with a community linkage forum. The pilot of the PLA intervention will be evaluated using MRC process evaluation guidelines.

Ethics and dissemination

This project has received ethical approval from two sources. Universidad de Los Andes [2021-1393] and the University College London [16127/005]. Dissemination of findings will include academic publications, community forums, policy briefs, and visual media (cartoons, pod casts and short films).

Article summary - Strengths and limitations of this study

- This pilot study aims to provide evidence for a new methodology that meaningfully involves citizens developing and strengthening mental health systems in complex settings.
- The study pilots for the first time in Colombia participatory action research to design participatory learning and action groups (PLA) for improving mental health and strengthening community mental health systems.
- PLA groups will enable better collaboration between community knowledge systems, community members, and the services that are designed to support them, through ‘community link’ activities.
- The main challenge facing this pilot is the integration of participation across multiple sectors.
- PAR processes can be directly impacted by wider geopolitical realities – such as the UK government funding cuts, which disrupted community processes and relationship building.

INTRODUCTION

Globally, the burden of mental health conditions is shaped by gaps in services. In Low-Middle Income Countries (LMICs), 75% of the population lacks access to any form of care. [1] The COVID-19 pandemic exacerbated these challenges as intersecting social realities deepen distress, increase the incidence of mental health disorders, and overburden health systems.[2] In the case of Colombia, political violence, poverty, and displacement further aggravate this burden. Previous research shows that victims of armed conflict are more likely to suffer from mental health disorders,[3] with poverty explaining 86% of mental health inequalities in the country.[4]

Six years after the Peace Accords between the Colombian Government and the FARC guerrilla, there are still barriers in the implementation of the Psychosocial Care and Comprehensive Health Services for Victims programme (PAPSIVI) and the Psychosocial Wellbeing Component in the reintegration route for ex-combatants (Resolution n. 4309). In the case of ex-combatants, a dual status of victims and perpetrators requires balancing psychosocial well-being, personal protection, and political acceptability of mental health services. This population, like the victims of the conflict, reside in rural areas where services are scarce or non-existent.[3,5]

Mental-health care systems are challenged by how they hear and respond to what marginalised communities experience as drivers of mental distress.[6–8] This is acknowledged by global,[9] and national priorities, which call for providing accessible and quality services to overlooked communities. In Colombia, this includes territories and rural populations (campesinos) that are the focus of Territorially Focused Development Programmes (PDETs in Spanish), a national programme of development prioritising those who have been heavily affected by disproportionate armed conflict, poverty, illicit economies, and institutional fragility.[10,11]

1
2
3 Scaling-up services is important but only a partial response; sustainable solutions to
4 improve mental health require dialogue between health systems and communities.[12]
5
6 Community-owned and anchored interventions are critical to re-establishing trust between
7
8 local populations and systems, particularly after periods of extended upheaval. In this context,
9
10 integrating community-level experiences of mental health and mental distress with institutional
11
12 responses by state-level actors is a necessary step towards effective community mental health
13
14 services. This requires a multi-level interdisciplinary perspective that links individual and
15
16 community well-being to wider institutional, socio-economic, and political contexts.
17
18 Community Participatory Action Research (CPAR) approaches allow us to explore the ability
19
20 to identify strengths and solutions produced by communities for communities, connecting them
21
22 to wider systems, while acknowledging them as agents with the capacity to create effective,
23
24 context sensitive solutions.[13]
25
26
27
28
29
30

31
32 As Colombia begins to refocus its efforts towards achieving these global and national
33
34 policy aims, three critical areas require attention: 1) Wider social and political contextual
35
36 factors that drive experiences of poor mental health,[14] 2) Increasing understanding of local
37
38 embodied knowledge and lived experiences of communities and their relevance for building
39
40 knowledge about mental health,[15] and 3) The role and resources offered by community
41
42 participation in the co-design of interventions and services that are effective.[8]
43
44
45

46
47 In response to these demands, we will implement a participatory process to design,
48
49 implement, and evaluate a participatory intervention to strengthen community mental health
50
51 care systems in two PDET communities in Caquetá-Colombia. We are guided by the following
52
53 research question: *what are the pathways, mechanisms, and resources needed to catalyse*
54
55 *collaborative action between communities and institutions for promoting and improving*
56
57 *mental health services for PDET communities?* To this end, we aim:
58
59
60

1
2
3 (1) To co-design and co-implement a participatory group intervention to create trust
4 and opportunities for collaborative action between community and health system actors to
5 improve the performance of community mental health services.
6
7
8

9
10
11 (2) To co-evaluate the group intervention in terms of process, outcomes (including
12 individual and community mental health), and simulations of the cost-benefit and cost-
13 effectiveness of the intervention at individual, community, and health services levels.
14
15
16

17
18
19 (3) To produce a manual based on the development, implementation, and evaluation of
20 the intervention to guide communities and institutions in the application of these methods for
21 developing and scaling up community mental health services in Colombia. We expect these
22 tools to be made widely applicable in other low-resource or conflict-affected settings.
23
24
25
26
27

28
29 The project is divided into distinct phases aligned with community participatory action
30 research (PAR) cycles reflecting diagnostic, intervention and evaluation. This protocol
31 presents the STARS-C objectives, procedures, and methodological considerations for
32 implementing a participatory mental health research project in conflict areas amidst the Covid-
33 19 pandemic.
34
35
36
37
38
39

40 **METHODS AND ANALYSIS**

41
42 The project will be implemented in inter-related phases aligned with participatory
43 action research (PAR). It will run from February 2021 to May 2023 in Caquetá, Colombia.
44 Implementation of the group intervention will run from July 2022 – March 2023. The project
45 has been co-designed through existing partnerships involving academics and two community-
46 based organisations: (1) the Manigua Corporation [*Corpomanigua*], an organization of women
47 with experience in the design and implementation of projects with marginalized communities,
48 located in Florencia, representing an urban community and (2) the Multi-active Cooperative
49 for Wellbeing and Peace of Caquetá (*Cooperativa Multiactiva para el Buen Vivir y la Paz del*
50
51
52
53
54
55
56
57
58
59
60

1
2
3 *Caquetá*- (COOMBUVIPAC), which represents a rural community of ex-combatants from the
4 former guerrilla FARC-EP, located in the small village (*vereda*) Héctor Ramírez Poblado
5 Center (CP-HR - former Territorial Space for Training and Reincorporation Héctor Ramírez)
6
7 in the municipality of La Montañita.
8
9
10

11
12 Co-design and co-implementation will be further achieved through the appointment of
13 community researchers (two from each site), who live and work in the communities being
14 studied, and are not previously employed by our NGO partners. They will be involved in all
15 stages of the implementation of the project as detailed below and were appointed prior to the
16 drafting of this protocol. To ensure more equal partnerships in this work community
17 researchers were trained in collecting qualitative information, quantitative questionnaires and
18 in psychological first aid to support potential psychological and emotional distress among
19 participants. Regular supervision is provided in real-time planned meetings. WhatsApp groups
20 are utilised for constant communication.
21
22
23
24
25
26
27
28
29
30
31
32

33 **Setting**

34
35 Caquetá is one of Colombia's 32 departments, and the only region of the country in
36 which all municipalities are included in the Territorially Focused Development Plans (PDET
37 in Spanish). The project will be conducted in 2 of these PDET municipalities: Florencia and
38 La Montañita. Each of the municipalities also represents diversity within a more general
39 context of deprivation and adversity.
40
41
42
43
44
45

46
47 Florencia is Caquetá's capital city and constitutes its largest population with 173,011
48 inhabitants, [16]. Updated mental health statistics are not available at the municipality level;
49 however, a report by MSF (2010) in Caquetá suggests that of the 60% of the nearly 5000
50 patients affected by armed conflict and internal displacement, 18% were diagnosed with
51 adaptative disorders, 18% with relationship problems and problems associated with abuse or
52 neglect, 11% by major depression with one episode, 9% with grief and 8% with mood
53
54
55
56
57
58
59
60

1
2
3 disorders [17]. Arguably, the prevalence of these mental health disorders relates to structural
4 drivers such as high unemployment levels. According to the latest report done by the National
5 Administrative Department of Statistics in 2020, the unemployment rate in Florencia was 25%,
6 with women having a higher unemployment rate (29.2%) than men (21.5%),[16] both much
7 more, than the current unemployment national rate of 11% [18]. As an urban area, Florencia
8 has access to some specialized mental health facilities and staff, including psychologists,
9 psychiatrists and nurses.
10
11
12
13
14
15
16
17
18

19 La Montañita is a rural area located to the south-west of Florencia and one of the areas
20 most affected by the armed conflict, with 8,756 victims out of a total of 14,692
21 inhabitants[16,19]. No mental health statistics are available for the municipality but reports
22 from local organisations point to mental distress associated with poverty and conflict as well
23 unmet care needs. The project will be carried out in a small village (*vereda*) self-named *Centro*
24 *Poblado Héctor Ramirez*, which is one of the former territorial spaces for training and
25 reincorporation for former FARC-EP combatants (AETCR in Spanish) in La Montanita.
26
27
28
29
30
31
32
33
34

35 **Design**

36
37 The STARS-C programme outlines a three-phase process to guide stakeholders in the
38 development and strengthening of community led mental health systems. It is informed by
39 coproduction principles, to enable a platform for involving community members in a process
40 of thinking through what changes are needed to improve access to, and the quality of mental
41 health services[20]. Coproduction principles demand the inclusion of everyday actors, or
42 potential service users, within processes of design and development. We will achieve this
43 through involving everyday community members using a Community Participatory Action
44 Research (CPAR) [21] model, to think through what changes are needed to improve access to
45 and quality of mental health services[20]. As such the project combines participatory
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

qualitative inquiry across its three phases of diagnosis, intervention, and evaluation (see table 1) with quantitative assessments of mental health outcomes in a process described below.

Our study builds on a pilot feasibility study of this approach in Cundinamarca-Colombia with a group of forty forcibly displaced persons.[6]

Table 1.
Phases and data collection strategies

Phase	Data Collection	Participants	
		La Montañita	Florencia
Diagnostic	Focus Group 1: Local understandings of mental health and mental distress- Tree of Life	n=42	n=57
	Focus Group 2: Evaluation of standardised measures of mental health	n=34	n=49
	Interviews Health Providers	n= 13	n=17
	Whatsapp focus groups Health Providers	n=11	n=10
	Motivated Ethnography (1 month)	Local Hospital-Community health post	City Hospital
Intervention Design	Theory of Change Workshop	N =25	n=25
Intervention implementation	PLA Groups-Stage 1: Reflection		
	PLA Groups-Stage 2: From Reflection to action	4 groups	8 groups
	PLA Groups-Stage 3: Implementation of initiatives		
	PLA Groups-Stage 4: Evaluation		
Evaluation	Cost-benefit analysis	TBD	TBD
	Photovoice		
	Baseline questionnaire		
	Endline questionnaire		
	Endline qualitative Interviews		

Phase 1: Diagnostics (Month 3- 14)

The aim of this phase is to map out and understand community knowledge, the systems, and services available at local level and everyday practices related to mental health. This is intended to identify the knowledge, practices, and resources available in the community and

1
2
3 the experiences and beliefs held by community actors about mental health, mental illness and
4 practices of care. Data collection initiated in April 2021 and was completed April 2022 for
5 stage one and two. Stage three remains ongoing. Specific aims, and procedures linked to this
6
7
8 stage are as follows:
9
10

11
12 (1) *Assess local mental health systems capacities and capabilities in collaboration with*
13 *service actors.* This stage involves three modes of data collection and engagement. First
14 a review of existing mental health national interventions and their implementation and
15 a Systematic Applied Policy Review of mental health national plans and policies
16 currently in force. Second, involves motivated ethnographies [22] of local mental health
17 services and community needs, with semi-structured interviews with service providers
18 in each site. Third, includes focus groups with service providers, which are conducted
19 online during the pandemic period. WhatsApp discussion groups are used as a platform
20 to engage time-strapped institutional (psychologists, social workers) and community
21 practitioners (including traditional healers) in both sites.[23] The implementation of
22 these steps is currently on-going, having started in February 2021.
23
24
25
26
27
28
29
30
31
32
33
34
35
36

37
38 (2) *Explore community understandings of mental health, mental distress, and wellbeing*
39 *strategies in one urban and one rural PDET territory.* This involves a qualitative
40 investigation of local understandings drawing on focus groups discussions, word
41 association tasks, a Tree of Life exercise which focuses on experiences and community
42 resources linked to achieving good mental health and wellbeing. It will also draw from
43 the motivated ethnography in each site. 12 focus groups discussions divided by gender
44 and age are envisaged.
45
46
47
48
49
50
51
52
53

54 (3) *Work with local communities to evaluate appropriateness of standard mental health*
55 *measures, using participatory methodologies.* Three standardised Mental health
56 measures PHQ-9; WHO-5, and Warwick-Edinburgh wellbeing scale were selected as
57
58
59
60

1
2
3 potential screening tools to evaluate the impact of community designed activities.
4
5 Initial team discussions with non-academic partners established the potential local
6
7 appropriateness of the measures before they were discussed with community members.
8
9
10 All measures have been standardised for use with Colombian or Spanish speaking
11
12 participants [24–26]. Focus groups will provide an opportunity to complete group
13
14 cognitive interviews to explore meaning and perceptions of measures [27]. This critical
15
16 stage is informed by previous pilot work conducted in Colombia by members of our
17
18 team [6,28]
19
20

21 (4) *Assess the cost of the standard mental health services basket offer of local health*
22
23 *systems.* The scarcity of data in these areas will make this stage challenging, but we are
24
25 envisaging the potential collection of data from three sources: motivated ethnography,
26
27 document analysis and service provider interviews (n – 30). This will allow us to
28
29 understand comparative costing for community led supports where possible.
30
31
32
33
34

35 *Phase 2: Intervention: PLA cycles to improve mental health community services (Months 15-*
36
37 *27)*
38
39

40 The aim of this phase is to design and implement a community led group intervention
41
42 to a) identify social drivers of mental health and priority conditions, b) create shared spaces for
43
44 dialogue and understanding of mental health, mental distress, and wellbeing, identifying
45
46 facilitators and barriers to collaborative processes of communication and action; and 3)
47
48 establish priorities for action that improve community's access to mental health services in
49
50 PDET territories.
51
52

53 *Intervention design:* The intervention design is grounded in a participatory theory of
54
55 change process. Its first component is a participatory Theory of Change (TOC) workshop to
56
57 involve large numbers of community members in the intervention co-design process.
58
59
60

Participants from each community with interest in the project and their children were invited to a daylong workshop in Florencia.

Drawing on preliminary analysis from the diagnostic phase, participatory activities are designed to facilitate real-time contributions to three main dimensions of the theory of change process: *identification of challenges, assumptions, and preconditions, short and long-term outcomes and impacts, and backward chaining*. Manual development was led by RAB and refined by the academic team members. The TOC workshop manual is available in supplementary materials, in English and Spanish. A summary of this process is provided in table 2.

Table 2.
Theory Of Change workshop structure

TOC session	Stage	Connection to TOC process	Activity to be conducted	Time allowance for activity	Number of facilitators required	Resources required
Session 1	Challenges that hinder good mental health and mental health services	Identify challenges, assumptions, and context	Building problem trees	2 hours	2-4	Tape recorder Flip chart Paper Coloured marker pens Flash cards with themes from FGDs (5 full sets)
Session 2	Ideal world that enables good mental health and mental health services	Identify long-term outputs, other outputs and pathways to change.	Storytelling of an ideal world	1.5 hours	2-4	Tape recorder Flip chart Paper Coloured marker pens Photocopy of exercise
Session 3	Identify interventions which could be used to improve mental health and mental health services	Identify intervention and additional contexts.	Mapping and intervention building	1 hour	2-4	Tape recorder Cardboards Paper Coloured marker pens Flashcards

The TOC workshop was run in December 2021 facilitated by senior project members community researchers. A total of 44 people attended, equally split between each study site.

1
2
3 14 of these participants also attended the FGDs in phase 1. The sessions were audio recorded
4
5 and data was transcribed and analysed in Spanish. The academic members of the project team
6
7 used this data alongside preliminary analyses of focus group data and the focused ethnography,
8
9 to develop a working model of the theory of change. This was presented to the wider project
10
11 team and community researchers, for evaluation and validation.
12
13

14
15 Based on the findings of the TOC process (see supplementary data for final TOC), we
16
17 identified that a participatory, learning and action (PLA) approach to the intervention would
18
19 be an ideal structure. PLA cycles have been used widely in other resource-limited settings but
20
21 to the best of our knowledge, our study is the first to implement PLA cycles at scale for
22
23 community mental health improvement in Colombia. For example, their use has contributed to
24
25 improved health outcomes for diabetes in Bangladesh,[29] and maternal and child health in
26
27 India,[30] and are currently being evaluated for improvement in under-5 pneumonia in
28
29 Nigeria.[31] Crucially, our adaptation seeks to enhance links across groups that are historically
30
31 opposed and limited by unequal access to power: community service providers, ex-combatants,
32
33 internally displaced people, and host community members. The value of these types of linking
34
35 interventions for health systems improvement are well documented elsewhere [32].
36
37
38
39

40
41 Based on community priorities identified in the TOC process, the proposed outcomes
42
43 for the PLA intervention are as follows. We organise these into primary outcomes which we
44
45 feel may be achieved in the short term, as well as longer term outcomes that could occur with
46
47 longer running of PLA groups:

48
49 *Primary outcomes:* (1) increased access to mental health acknowledge and information by
50
51 community members; (2) improved feelings of belongingness and community cohesion and
52
53 (3) improved perceptions of communication and relationships between practitioners and
54
55 communities.
56
57
58
59
60

1
2
3 *Long term outcomes:* 1) improved recognition of the importance of good mental health to wider
4 health and wellbeing, 2) reduction of stigma around mental illness and mental health, 3) young
5 people's increased participation and communication in family life and community activities,
6
7
8
9
10 4) improved mental wellbeing, 5) improved experience of services (Respect, listening,
11 communication).
12
13

14 *Intervention structure:* The PLA intervention itself is comprised of 4 stages, running
15 across 13 sessions (Figure 1).
16
17

18 *Stage one – knowledge building,* is designed to provide community members with
19 opportunities to develop new knowledge and understanding about mental health linked to the
20 priority issues identified in the ToC workshop.
21
22
23
24

25 *Stage two – from reflection to action,* where participants will engage in a series of
26 prioritisation and planning activities to identify a single challenge or focus and a plan for local
27 action to address the issue. This stage will end with a community forum which creates a formal
28 link between key actors in the local mental health infrastructure. Key actors were identified in
29 the ToC and the ethnography and will be invited to engage in the community forums.
30
31
32
33
34
35
36

37 *Stage three – implementation* will focus on groups' implementation of their projects,
38 and group led monitoring of the implementation process and the delivery of the planned
39 activities. We will suggest the use of photography and video to help increase the accessibility
40 of this process to community members.
41
42
43
44
45
46

47 *Stage four – evaluation* will include a formalised participatory evaluation of each PLA
48 group's intervention, exploring any potential impact and efficacy in attaining the desired
49 outcomes. Group members will be invited to participate in a photovoice project to achieve this.
50
51
52
53
54
55
56
57
58
59
60
Phase four will also involve the election of community mental health champions. These
individuals will become the focal points about mental health issues in their communities,
combining with existing local infrastructure (such as health committees) in the long term. They

1
2
3 will complete additional training provided by the project (i.e WHO quality rights training,
4 Community MH gap training), as well as training on facilitating future cycles of the group for
5 those projects who which to continue. (See figure 1 below).
6
7
8
9

10 *[Insert Figure 1. PLA Groups Intervention]*
11
12
13

14 PLA group implementation

15
16 *Group facilitator Training:* Community researchers are also facilitators for PLA
17 groups. They completed full day of training, delivered in 5 short modules. The first of which
18 included basic information about the project and the use of the manual. The next 4 modules
19 correspond to each PLA phase outlining the objectives of each session and activities. To
20 compensate for the short time period, the training programme was organised around role play
21 activities, where facilitators completed all activities to be used within the intervention. Training
22 also included a refresher on the processes for referrals (the same as used in phase one), and
23 introduction to new data monitoring processes.
24
25
26
27
28
29
30
31
32
33
34

35 *PLA groups development:* Sessions will be delivered in a by-weekly schedule, aiming
36 to approximate two 3-hour sessions per month, running for six months to complete one cycle.
37 Delivery of sessions will be supported by regular supervision by a member of the research
38 team, as well as bi-weekly meetings with all community researchers, where implementation
39 issues will be discussed. Due to time constraints created by the pandemic and funding
40 instability created by geopolitical contexts in the UK, the pilot study will be restricted to a
41 single cycle.
42
43
44
45
46
47
48
49

50
51 Group intervention structure will be determined by relevance to local context. In La
52 Montañita, given the close ties between community members, it is likely that men and women
53 will work together in groups in some cases. In Florencia, groups will likely be divided by sex
54 and in both contexts will be divided by age, with young people meeting separately.
55
56
57
58
59
60

1
2
3 *Phase 3: Evaluation (Months 20-27)*
4

5 At programme level, we will explore the acceptability, appropriateness, and feasibility
6 of a PAR approach to establish platforms for community-led mental health systems
7 strengthening. To evaluate this, we will hold monthly team meetings to discuss process and
8 implementation challenges. We will also convene two workshops to discuss the strengths and
9 weaknesses of the overall PAR approach and PLA intervention with team members and invited
10 service delivery and community member representatives.
11
12
13
14
15
16
17
18

19 At the intervention level, we will explore standard process and outcome evaluation
20 parameters as summarised in Table 3, in line with MRC Complex intervention guidelines. For
21 our intervention, we will evaluate potential impact at the individual and community level,
22 combining traditional academic evaluations of outcomes using standardised measures, exit
23 qualitative interviews with 30 participants (15 per site), and community led evaluation methods
24 – using photovoice methods.
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Table 3.*Outcome evaluation parameters for PLA group intervention.*

Item	Definition	Indicators	Target group	Frequency of collection	Person responsible	Source of data	Tool required	Data type
Acceptability	Satisfaction with the content and delivery of components	Experiences of sessions	PLA Participants	Once	Research Team	Midline/Endline interview	Topic guide	Qualitative
Appropriateness	Usefulness, relevance, suitability of component	Describing the intervention as useful	PLA Participants	Once	Research Team	Endline interview Endline questionnaire	Topic guide and survey	Qualitative and quantitative
Feasibility	Suitability of component for routine implementation	Delivery of sessions	Community researchers	Once	Research Team	Endline interview with community researchers Field diaries	Topic guide and field diaries	Mixed
Fidelity of delivery	Delivery of the component as intended	Number of sessions conducted	PLA Participants	Once	Community Researchers	Attendance registers	Attendance registers	Quantitative
		Content of sessions	Community researchers	Monthly	Community Researchers	Field diaries	Field diaries	Mixed
		Participatory-ness of the sessions		Monthly	Community Researchers	Field diaries	Field diaries	Qualitative
		Number of attendees	PLA Participants	Weekly	Community Researchers	Attendance registers	Attendance registers	Quantitative
Fidelity of receipt	Intervention reach	Profile of participants	PLA Participants	Once	Community Researchers	Questionnaire	Questionnaire (demographic session)	Quantitative
		Community led intervention strategies	PLA Participants	Once	Research Team	Field diaries and endline interviews	Topic guide and field diaries	Mixed
	receipt of component	Photovoice activities	PLA Participants	Once	Community Researchers	Photovoice	FG discussions and images	Qualitative

At the individual level, we will measure impact using standardised measures tested and validated by the community in Phase 1. These measures are summarised in Table 4. Where standardised tools were not available, we developed specific items to explore dimensions of knowledge, behaviour and practices linked to mental health. This was informed by KAP studies in other areas[33] and a similar tool used by other large scale mental health studies.[34] To better understand community and systems-level impacts, we will also run simulations to assess the cost-benefit or the cost-effectiveness of the actions that are (a) implemented and (b) planned in Phase 2. When it makes sense to monetize and data is available, results will be monetized using current knowledge of different uses of time by young individuals (education, work, political engagement, working for their communities) in resource-constrained countries for the cost-benefit analysis. When not possible, cost-effectiveness analysis will be developed. Costs will be estimated using the baseline quantification of cost of health services in WP1, if possible. Together, these strategies evaluate the pathways, mechanisms, and resources required for promoting and improving mental health services and inform future questions to be considered in future trials and scaling up of our intervention.

Table 4.
PLA intervention - outcome evaluation measures

Long term Outcomes		
Outcomes	Indicator	Measure
Improved experiences of mental health	Improved well being	WHO-5 (5 items)
reduced symptoms of mental ill health	Reduced symptoms of depression	PHQ-2 (2 items)
Short term outcomes		
Outcomes	Indicator	Measure
Improved perceptions of quality of relationships between practitioners and communities	Increased willingness to seek treatment	Perceptions on different Service providers (5 items)
Improved feelings of belongingness and community cohesion	Increased sense of attachment to place/home	Sense of belonging and attachment to place [35] (14 items)

	Increased feelings of emotional and community support	World Bank Social Capital measure (17 items)
	Increased feelings of inclusion and acknowledgement in the community	
	Improved perception of individual and collective agency	Possible selves questionnaire [36] (6 items)
	Positive sense of self/identity	
		Depression symptom knowledge (5 items)
		Stress symptom knowledge (5 items)
Increased mental health literacy Knowledge Attitudes and Practices (KAP) questions	Increased mental health literacy	Substance misuse symptom knowledge (5 items)
	Greater acceptance of others seeking treatment	3 items
	Helping others to seek treatment	2 items
	More positive perceptions of mental illness	1 item
Reduction of mental health stigma	More willingness to discuss/explore mental health needs in communities and families	RIBS reported behaviours subscale (4 items)

Sampling

Across the project two sampling strategies were used. For the diagnostic phase, purposive sampling ensured selection on the basis of participants' characteristics[37] in our case, in-depth knowledge of the context and local mental health services, from both potential service users' and providers' perspectives. Within this framework, we adopted a maximum variation approach, selecting across a broad spectrum of characteristics which included age, gender, and mental health status. This will support an in-depth understanding of the range of different groups who populate PDET communities ensuring saturation of contexts, through triangulation of data and experiences.[38]

1
2
3 Inclusion and exclusion criteria will be uniform across the programme. Inclusion
4
5 criteria for community members will include a) place of residency (Florencia/La Montañita),
6
7 reported by the participant as their home; b) age (16-25 years old and 26+ years); c) willingness
8
9 to voluntarily participate (inform consent signed) and d) self-reported emotional distress
10
11 experiences. Service provider sampling will include (a), working in a health provider setting
12
13 or in a decision-making scenario related to the health field will be used in addition to the criteria
14
15 used for community members as an inclusion criterion. Those with untreated mental health
16
17 affections, people unable to give consent, people under 16 years old, and people unrelated to
18
19 health providing systems and institution in the case of health representatives will not be eligible
20
21 for participation in our study.
22
23
24
25

26 For the intervention, purposive sampling will be used to include community members
27
28 who participated in the diagnostic phase as well as availability sampling to include a wide
29
30 range of other community members. We did not conduct a formal sample size calculation due
31
32 to the lack of data on the expected intervention effect size linked to our outcomes. However,
33
34 simple power analyses linked to the use of scales such as the PHQ-9 indicate that a sample size
35
36 of approximately 30 is required to show significance changes in pre-post testing.
37
38 Notwithstanding, our recruitment aims were guided by previous experience of the research
39
40 team applying this method in similar populations in Colombia [6] where the attrition rate was
41
42 found to be around 42% among a similarly highly mobile and critical population. This is similar
43
44 to other projects working with vulnerable and transient populations in PDET territories in
45
46 Colombia (Idrobo et al, personal communication).
47
48
49
50

51 **Data analysis**

52 Qualitative data across all phases will be analysed using thematic network,[39]
53
54 Reflexive,[40] or Framework analysis.[41] Thematic network analysis will be used to
55
56 understand community perceptions of wellbeing and emotional distress, and local mental
57
58
59
60

1
2
3 health services. Other thematic analysis methods mentioned will be used for analysing data
4
5 derived from the motivated ethnography, qualitative data from our evaluation, and in the policy
6
7 review to identify primary topics regarding access and mental health services in Colombia,
8
9 particularly in PDET municipalities. Collaborative data analysis strategies will be applied
10
11 across all our project analysis, involving participants and community researchers
12
13 in data analysis, verifying outputs and guaranteeing data validity.
14
15

16
17 Descriptive analysis and simple regression modelling will be performed
18
19 on quantitative data from our evaluation questionnaire to evidence changes regarding mental
20
21 health and wellbeing, and community level outcomes (social capital and social belonging)
22
23 before and after our intervention. These changes will be captured comparing baseline and
24
25 endline results following the completion of the intervention.
26
27
28
29

30 **Data availability**

31
32
33 Manuals in their finalised forms will be made available in English and Spanish on a
34
35 project website. A fully anonymised pilot quantitative dataset will be uploaded through and
36
37 open access data repository (ReShare) at the time of publication of our impact and results.
38
39 Qualitative data will not be made publicly available given the small size of our study
40
41 communities, the intimacy of people's experiences and narratives, and the wider lack of trust
42
43 among citizens about research processes.
44
45

46 **Patient and Public Involvement**

47
48
49 Because of the nature of PAR research and our overall co-production approach, this
50
51 project is committed to public involvement. Community partner organisations were involved
52
53 in the framing and development of the project from the outset (including funding application
54
55 stages) and are involved in major planning and decision-making. Intervention design processes
56
57 involve everyday citizens, or 'potential service users' during all phases. The theory of change
58
59
60

1
2
3 approach planned for this study is rooted in participant and public involvement, diverging from
4
5 other approaches that involve a handful of patient representatives, or make use of previously
6
7 collected data from wider communities. Instead, the stage will include people with previous
8
9 experience of mental health services, family members, friends, and potential service users
10
11 within the theory of change process.
12
13
14
15
16

17 **ETHICS AND DISSEMINATION**

19 Ethical approval has been obtained from two academic institutions. One in Colombia [2021-
20
21 1393] and the UK [16127/005]. We will disseminate our work across academic, policy and
22
23 community platforms. We will produce peer-reviewed publications and policy reports,
24
25 alongside public communication activities such as workshops, short-films, infographics, and
26
27 photography exhibitions to highlight community projects. A detailed communication strategy
28
29 will be finalised based on collaborative agreement across our entire team and policy
30
31 stakeholders.
32
33
34
35
36
37

38 **AUTHORS CONTRIBUTIONS**

39
40 Given the participatory nature of this project, authors contributed to many credit roles. They
41
42 are outlined as follows. Writing original draft: RAB and MCDS are equal first authors on this
43
44 manuscript. All other authors contributed to reviewing and editing of this manuscript. All
45
46 authors contributed to the conceptualisation and methodology of the project. Funding
47
48 acquisition was led by RAB, MCDS, SJ, DMC, MFG and DFT. Project administration is led
49
50 by MGG, MCDS, RAB, SJ, LF, NVSJ. Data curation, investigation is led by LF, NVSJ,
51
52 MCM, MGG. Formal Analysis: MCDS, MGG, SJ, LF, are phase one analysis leads. RAB,
53
54 LF, MCDS are phase two leads. RAB, DMC, DL are phase three leads. All other authors
55
56
57
58
59
60

1
2
3 supporting analysis contributors across all phases. Supervision across this project is
4
5 completed by RAB, SJ, MCDS, DMC.
6
7

8 **Funding Statement**

9
10 This work is funded by an UKRI/ESRC Newton Award, grant number ES/V013211 and a
11
12 MINCIENCIAS award, grant number 856-2020.
13
14

15 **Competing interests' statement**

16
17 Authors declare that they have no competing interests
18
19
20
21
22
23

24 **REFERENCES**

- 25
26
27
28
29 1 Semrau M, Alem A, Ayuso-Mateos JL, *et al.* Strengthening mental health systems in
30
31 low- and middle-income countries: recommendations from the Emerald programme.
32
33 *BJPsych Open* 2019;**5**:e73. doi:10.1192/bjo.2018.90
34
35
36 2 Burgess R. COVID-19 mental-health responses neglect social realities. *Nature*
37
38 Published Online First: 4 May 2020. doi:10.1038/d41586-020-01313-9
39
40 3 Tamayo-Agudelo W, Bell V. Armed conflict and mental health in Colombia. *BJPsych*
41
42 *Int* 2019;**16**:40–2. doi:10.1192/bji.2018.4
43
44 4 Cuartas Ricaurte J, Karim LL, Martínez Botero MA, *et al.* The invisible wounds of
45
46 five decades of armed conflict: inequalities in mental health and their determinants in
47
48 Colombia. *Int J Public Health* 2019;**64**:703–11. doi:10.1007/s00038-019-01248-7
49
50
51 5 Cepeda-Pérez A, Giraldo-Vargas AM, Gómez-Lizarazu DE, *et al.* Evaluación
52
53 Programa de Atención Psicosocial y Salud Integral a Víctimas – PAPSIVI: Informe
54
55 Final. Bogotá, D.C: 2020.
56
57
58 <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/PS/informe->
59
60

- 1
2
3 final-evaluacion-resultados-papsivi-ps.pdf
4
5
6 6 Burgess RA, Fonseca L. Re-thinking recovery in post-conflict settings: Supporting the
7
8 mental well-being of communities in Colombia. *Glob Public Health* 2020;**15**:200–19.
9
10 doi:10.1080/17441692.2019.1663547
11
12 7 Montenegro CR, Cornish F. Historicising involvement: the visibility of user groups in
13
14 the modernisation of the Chilean Mental Health System. *Crit Public Health*
15
16 2019;**29**:61–73. doi:10.1080/09581596.2017.1400659
17
18
19 8 Burgess RA, Jain S, Petersen I, *et al.* Social interventions: a new era for global mental
20
21 health? *The Lancet Psychiatry* 2020;**7**:118–9. doi:10.1016/S2215-0366(19)30397-9
22
23
24 9 WHO. *Research for universal health coverage*. WHO 2013.
25
26 <https://www.who.int/publications/i/item/9789240690837>
27
28
29 10 Kroc Institute for International Peace Studies. Tres años después de la firma del
30
31 Acuerdo Final en Colombia: Hacia la transformación territorial. Diciembre 2018 a
32
33 Noviembre 2019. 2020. [http://peaceaccords.nd.edu/wp-](http://peaceaccords.nd.edu/wp-content/uploads/2020/06/200630-Informe-4-resumen-final.pdf)
34
35 [content/uploads/2020/06/200630-Informe-4-resumen-final.pdf](http://peaceaccords.nd.edu/wp-content/uploads/2020/06/200630-Informe-4-resumen-final.pdf)
36
37
38 11 Agencia de Renovación del Territorio. ABCÉ de los PDET: Programas de Desarrollo
39
40 con Enfoque Territorial. 2021.
41
42 <https://portal.renovacionterritorio.gov.co/descargar.php?idFile=29067>
43
44
45 12 Campbell C, Burgess R. The role of communities in advancing the goals of the
46
47 Movement for Global Mental Health. *Transcult Psychiatry* 2012;**49**:379–95.
48
49 doi:10.1177/1363461512454643
50
51
52 13 Nelson G, Prilleltensky I. *Community psychology : in pursuit of liberation and well-*
53
54 *being*. Basingstoke: : Palgrave Macmillan 2010.
55
56
57 14 Lund C, Brooke-Sumner C, Baingana F, *et al.* Social determinants of mental disorders
58
59 and the Sustainable Development Goals: a systematic review of reviews. *The Lancet*
60

- 1
2
3 *Psychiatry* 2018;**5**:357–69. doi:10.1016/S2215-0366(18)30060-9
4
5
6 15 Rose-Clarke K, Gurung D, Brooke-Sumner C, *et al*. Rethinking research on the social
7
8 determinants of global mental health. *The Lancet Psychiatry* 2020;**7**:659–62.
9
10 doi:10.1016/S2215-0366(20)30134-6
11
12 16 Departamento Administrativo Nacional de Estadística (DANE). La información del
13
14 DANE en la toma de decisiones regionales: Florencia - Caquetá. 2020.
15
16 [https://www.dane.gov.co/files/investigaciones/planes-departamentos-ciudades/201211-](https://www.dane.gov.co/files/investigaciones/planes-departamentos-ciudades/201211-InfoDane-Florencia-Caqueta.pdf)
17
18 [InfoDane-Florencia-Caqueta.pdf](https://www.dane.gov.co/files/investigaciones/planes-departamentos-ciudades/201211-InfoDane-Florencia-Caqueta.pdf)
19
20
21 17 Médicos sin Fronteras. Tres veces víctimas: Víctimas de la violencia, el silencio y el
22
23 abandono Conflicto armado y salud mental en el departamento de Caquetá, Colombia.
24
25 Florencia: 2010.
26
27 <https://www.acnur.org/fileadmin/Documentos/Publicaciones/2010/7372.pdf>
28
29
30 18 Departamento Administrativo Nacional de Estadística (DANE). Principales
31
32 indicadores del mercado laboral - Julio de 2022. Bogotá, D.C: 2022.
33
34 [https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/bol_empleo_jul_22.p](https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/bol_empleo_jul_22.pdf)
35
36 [df](https://www.dane.gov.co/files/investigaciones/boletines/ech/ech/bol_empleo_jul_22.pdf)
37
38
39 19 Departamento Administrativo Nacional de Estadística (DANE). Fortalecimiento a la
40
41 Atención Integral a Víctimas del Conflicto Armado en el Municipio de La Montañita.
42
43 Florencia: 2020.
44
45 [https://lamontanitacaqueta.micolombiadigital.gov.co/sites/lamontanitacaqueta/content/](https://lamontanitacaqueta.micolombiadigital.gov.co/sites/lamontanitacaqueta/content/files/000342/17089_2020184100008-victimas.pdf)
46
47 [files/000342/17089_2020184100008-victimas.pdf](https://lamontanitacaqueta.micolombiadigital.gov.co/sites/lamontanitacaqueta/content/files/000342/17089_2020184100008-victimas.pdf)
48
49
50
51 20 Burgess RA, Choudary N. Time is on our side: operationalising ‘phase zero’ in
52
53 coproduction of mental health services for marginalised and underserved populations
54
55 in London. *Int J Public Adm* 2021;**44**:753–66. doi:10.1080/01900692.2021.1913748
56
57
58 21 Baum F, MacDougall C, Smith D. Participatory action research. *J Epidemiol*
59
60

- 1
2
3 *Community Heal* 2006;**60**:854–7. doi:10.1136/jech.2004.028662
4
5
6 22 Burgess RA. Policy, power, stigma and silence: Exploring the complexities of a
7 primary mental health care model in a rural South African setting. *Transcult*
8 *Psychiatry* 2016;**53**:719–42. doi:10.1177/1363461516679056
9
10
11
12 23 Dedios Sanguineti MC, Martínez Gómez M, Guarín Á. Using WhatsApp to collect
13 data on displaced Venezuelans, internally displaced populations, and host communities
14 in Colombia during COVID-19 lockdowns. World Bank Blogs Dev. Peace.
15 2022. [https://blogs.worldbank.org/dev4peace/using-whatsapp-collect-data-displaced-](https://blogs.worldbank.org/dev4peace/using-whatsapp-collect-data-displaced-venezuelans-internally-displaced-populations-and)
16 [venezuelans-internally-displaced-populations-and](https://blogs.worldbank.org/dev4peace/using-whatsapp-collect-data-displaced-venezuelans-internally-displaced-populations-and) (accessed 11 Oct 2022).
17
18
19
20
21
22
23
24 24 Cassiani-Miranda CA, Cuadros-Cruz AK, Torres-Pinzón H, *et al.* Validity of the
25 Patient Health Questionnaire-9 (PHQ-9) for depression screening in adult primary care
26 users in Bucaramanga, Colombia. *Rev Colomb Psiquiatr (English ed)* 2021;**50**:11–21.
27 doi:10.1016/j.rcpeng.2019.09.002
28
29
30
31
32
33 25 Campo-Arias A, Miranda-Tapia GA, Cogollo Z, *et al.* Reproducibilidad del Índice de
34 Bienestar General (WHO-5 WBI) en estudiantes adolescentes. *Salud Uninorte*
35 2015;**31**:18–24. <https://www.redalyc.org/articulo.oa?id=81739659003>
36
37
38
39
40 26 Serrani Azcurra D. Traducción, adaptación al español y validación de la escala de
41 bienestar mental de WARWICK-EDINBURGH en una muestra de adultos mayores
42 argentinos. *Acta Colomb Psicol* 2015;**18**:79–93. doi:10.14718/ACP.2015.18.1.8
43
44
45
46
47 27 Ouimet JA, Bunnage JC, Carini RM, *et al.* Using Focus Groups, Expert Advice, and
48 Cognitive Interviews to Establish the Validity of a College Student Survey. *Res High*
49 *Educ* 2004;**45**:233–50. <http://www.jstor.org/stable/40197291>
50
51
52
53
54 28 Zamora-Moncayo E, Burgess RA, Fonseca L, *et al.* Gender, mental health and
55 resilience in armed conflict: listening to life stories of internally displaced women in
56 Colombia. *BMJ Glob Heal* 2021;**6**:e005770. doi:10.1136/bmjgh-2021-005770
57
58
59
60

- 1
2
3 29 Morrison J, Akter K, Jennings HM, *et al*. Participatory learning and action to address
4 type 2 diabetes in rural Bangladesh: a qualitative process evaluation. *BMC Endocr*
5
6 *Disord* 2019;**19**:118. doi:10.1186/s12902-019-0447-3
7
8
9
10 30 Seward N, Neuman M, Colbourn T, *et al*. Effects of women's groups practising
11 participatory learning and action on preventive and care-seeking behaviours to reduce
12 neonatal mortality: A meta-analysis of cluster-randomised trials. *PLOS Med*
13
14 2017;**14**:e1002467. doi:10.1371/journal.pmed.1002467
15
16
17
18 31 King C, Burgess RA, Bakare AA, *et al*. Integrated Sustainable childhood Pneumonia
19 and Infectious disease Reduction in Nigeria (INSPIRING) through whole system
20 strengthening in Jigawa, Nigeria: study protocol for a cluster randomised controlled
21 trial. *Trials* 2022;**23**:95. doi:10.1186/s13063-021-05859-5
22
23
24
25
26
27 32 Durrance-Bagale A, Marzouk M, Tung LS, *et al*. Community engagement in health
28 systems interventions and research in conflict-affected countries: a scoping review of
29 approaches. *Glob Health Action* 2022;**15**. doi:10.1080/16549716.2022.2074131
30
31
32
33 33 Abrahams Z, Jacobs Y, Mohlamonyane M, *et al*. Implementation outcomes of a health
34 systems strengthening intervention for perinatal women with common mental
35 disorders and experiences of domestic violence in South Africa: Pilot feasibility and
36 acceptability study. *BMC Health Serv Res* 2022;**22**:641. doi:10.1186/s12913-022-
37 08050-x
38
39
40
41 34 Newson JJ, Thiagarajan TC. Assessment of Population Well-Being With the Mental
42 Health Quotient (MHQ): Development and Usability Study. *JMIR Ment Heal*
43
44 2020;**7**:e17935. doi:10.2196/17935
45
46
47
48 35 Jovchelovitch S, Priego-Hernández J. *Underground Sociabilities: identity, culture and*
49 *resistance in the favelas of Rio*. Brasilia, Paris: UNESCO 2013.
50
51
52
53
54
55
56
57 36 Oyserman D, Johnson E, James L. Seeing the Destination but Not the Path: Effects of
58
59
60

- 1
2
3 Socioeconomic Disadvantage on School-focused Possible Self Content and Linked
4 Behavioral Strategies. *Self Identity* 2011;**10**:474–92.
5
6 doi:10.1080/15298868.2010.487651
7
8
9
10 37 Etikan I, Musa S, Akassim RS. Comparison of Convenience Sampling and Purposive
11 Sampling. *Am J Theor Appl Stat* 2016;**5**:1. doi:10.11648/j.ajtas.20160501.11
12
13
14 38 Guest G, Bunce A, Johnson L. How Many Interviews Are Enough? *Field methods*
15 2006;**18**:59–82. doi:10.1177/1525822X05279903
16
17
18
19 39 Attride-stirling J. Thematic networks: an analytic tool for qualitative research. In:
20 *Qualitative Research*. London; Thousand Oaks; New Delhi: : SAGE Publications
21 2001. 385–405.
22
23
24
25
26 40 Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc*
27 *Heal* 2019;**11**:589–97. doi:10.1080/2159676X.2019.1628806
28
29
30
31 41 Gale NK, Heath G, Cameron E, *et al*. Using the framework method for the analysis of
32 qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*
33 2013;**13**:117. doi:10.1186/1471-2288-13-117
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

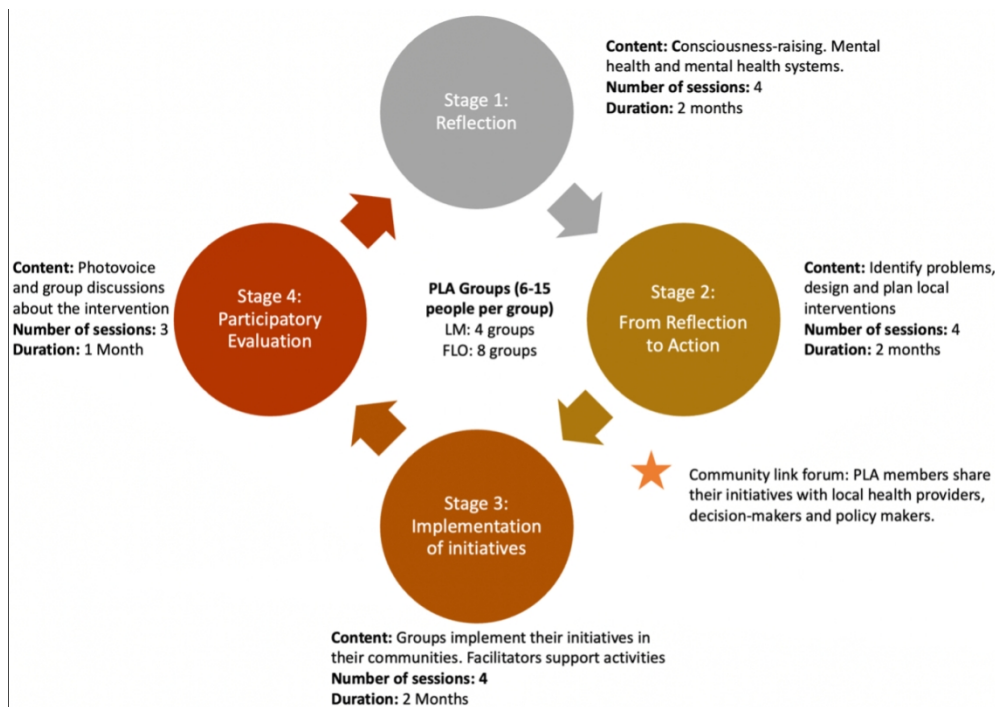


Figure 1 PLA intervention structure

159x112mm (220 x 220 DPI)

1
2
3
4
5
6 **Starting From the Bottom: Building a Theory of Change (ToC) for community**
7 **interventions to improve mental health services in PDET communities in**
8 **Colombia**
9

10
11
12
13 **STARS-C project**
14
15

16
17
18
19
20
21
22
23
24
25
26
27
28
29 **Manual**
30 **English Version**
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For peer review only

Theory of Change Workshop Manual

Methodology:

Conduct a public community forum and a Theory of Change workshop to collectively develop expectations, priorities and desired outcomes of mental health and mental health services for communities. This will also create an opportunity to set a broader goal for what people would like to see as the main outcomes of participation in through in this project.

Sampling:

50 participants

Procedure:

The below table provides a summary of what will be done in each session, and what the aim of each session is.

TOC session	Stage	Activity to be conducted	Time allowance for activity	# of facilitators required	Resources required
Session 1	Challenges that hinder good mental health and mental health services	Building problem trees	2 hours	2-4	1. Tape recorder 2. Flip chart 3. Paper 4. Coloured markerpens 5. Flash cards with themes from FGDs (5 full sets)
Session 2	Ideal world that enables good mental health and mental health services	Storytelling of an ideal world	3 hours	2-4	1. Tape recorder 2. Flip chart 3. Paper 4. Coloured markerpens 5. Photocopy of exercise
Session 3	Identify interventions which could be used to improve mental health and mental health services	Mapping and intervention building	1 hour	2-4	1. Tape recorder 2. Cardboards 3. Paper 4. Coloured markerpens 5. Flashcards

Things to remember:

1. Each session should be audio recorded to be transcribed/translated later.
2. You must make sure you take photos of all the outputs from each activity (e.g. problem tree etc).

Introduction

We provided information about the project and the team, for participants to feel welcome and know who to ask if any questions should arise.

With the help of attendees, we developed a set of rules for respectful groups discussions and maintaining confidentiality.

Each participant was given a name tag, assigned a group number, and was sat on a table with the rest of their group. Facilitators prompted them to introduce themselves while activities started, as they would be working together throughout the day.

Session 1

Where we begin: Mapping and connecting factors that shape poor mental health

The aim of this session is to identify challenges that hinder good mental health and mental health services. We will do this, through using flash cards, which summarise the findings from our earlier focus group discussions, to build problem trees. When summarising the focus group discussions' data, be sure to avoid interpretations. The summary should be as much as possible a descriptive summary of raw data.

Step 1. Brief introduction to the topic: Remind participants of the activities during the FGDs and discuss the themes that emerged. You may want to facilitate a brief discussion to help warm up the room. For example, each facilitator is given a stack of randomized flash cards to distribute across the room. Then ask participants to place them into 'categories' on the walls.

Step 2. Divide participants into smaller groups. The groups should reflect the way that we will organize the PLA groups. Each group should have no more than 10 people.

Step 3: Assign the following topics to each group for them to create a problem tree.

- 1) Group of adults A (Florencia) – Mental health
- 2) Group of adults B (Florencia) – Mental health services
- 3) Group of young people (Florencia) – Mental Health
- 4) Group of adults A(La Montañita) – Mental health services
- 5) Group of adults B(La Montañita) – Mental health
- 6) Group of young people (La Montañita) – Mental health services

Step 4. Introduce the main activity – the problem tree (below) and provide instructions as follows:

Script: Today, we want to think deeply about the challenges that hinder good mental health and mental health services. We can articulate problems very clearly,

1
2
3 but this task will help us to build connections between challenges at various levels
4 in our lives. We can think of this more clearly, if we think about something
5 physical in our environment, like a tree. A tree has different parts that all connect
6 to make the whole. The roots, which are hidden, not always visible, but make it
7 possible for the tree to exist. They grow first and have the largest effect. The main
8 part of the tree – which is the trunk. It connects the roots to the outside world – it
9 is the part that we see first, that is most visible. Finally, the leaves – the top of the
10 tree, they grow up and out into the future.
11
12

13 The activity we will do first, is to build a problem tree, which helps us to make
14 sense of these major themes that emerged from our focus group discussions. In
15 your groups, you need to think about yourselves – as women, men, young people,
16 and what specific problems matter the most to you, in your lives, and connect them
17 from the ‘roots’ to the broader outcomes.
18
19

20 Each problem tree is split into three sections: the root (foundations/root causes)
21 the core problem (what we can see) and the outcomes/consequences.
22
23

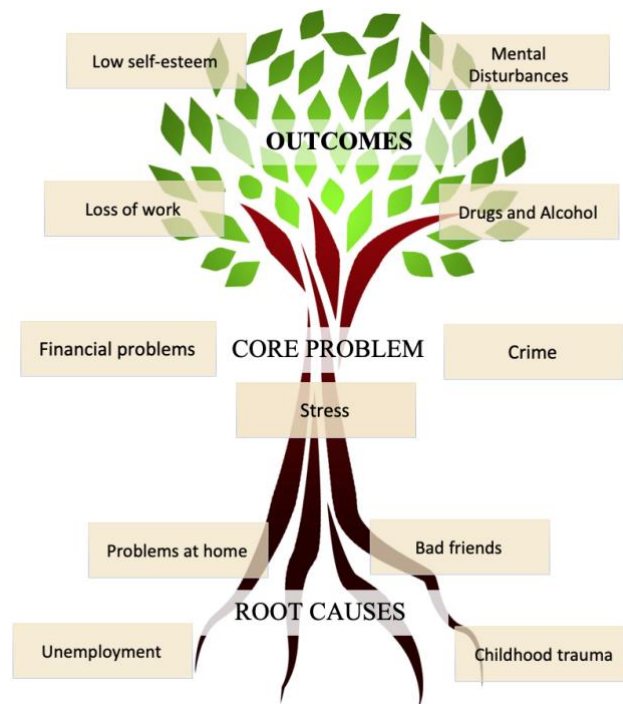
24 The roots are where you may map the root/hidden causes of challenges, such as
25 unemployment, weak relationships; conflict; violence. The trunk signifies what
26 the main problem is. For some people, this could be a mental health condition
27 (depression), but it could be many other things as well (no education; isolation;
28 hunger; family separation). Finally, at the branches, this signifies the outcomes,
29 or the consequences of these difficulties. This could include things like: loss of
30 work; low self-esteem; mental health challenges; exclusion, etc.
31
32

33 ***NB to facilitator: it may help, to build an example tree, while you are discussing***
34 ***these points above. You should have example flash cards to put in each part of***
35 ***the tree and ask participants where to put each.***
36
37

38 Using the cards you have as a starting point, begin to build your problem trees.
39 Some groups will make a tree for the experience of poor mental health, and the
40 others will make a tree for what hinders mental health services. You will also be
41 given blank cards, if there are things that were not captured in prior focus groups,
42 but that you think are important to consider.
43
44

45 If it helps, you can imagine a person that you know, or that you have heard of,
46 who is living through these issues right now. How would you build a tree to
47 describe their life and experiences? How would you build a tree to describe their
48 quest to seek treatment/support with the things they find difficult?
49
50

51 ***Instructions:*** Hand out cards to each group, showing the themes that emerged
52 during the FGDs. Show participants the example problem tree below and give
53 them 1 hour to discuss and create problem trees within their groups. In each group,
54 provide a recorder device to capture the discussions being held by the participants.
55
56
57
58
59
60



Step 5. After 1 hour, ask a representative from each group to share their problem tree with the rest of the participants (which should take approximately another hour).

Step 6. While the participants share their trees, one facilitator should be taking notes to support later analysis. Another should be taking more general notes to facilitate discussion. Note the similarities and differences between trees, and the challenges and outcomes of healthcare vs health services. These should be shared with the wider group, and participants should be asked for their thoughts on what is being shared.

Session 2

Storytelling of an ideal world – imagining outcomes and outputs

The aim of this session is to identify potential solutions to improve mental health services, and mental health outcomes. This is a long-term plan but should give participants a chance to think about what actions are required to achieve this long-term vision.

Step 1. Facilitators present the following phrase.

“The way we think about the future often focuses on the immediate future. However, when thinking is inspired by a vision, there is more room to achieve things which are thought of as ‘unthinkable’. A vision for a better future gives us hope and increases motivation to take action to pursue that vision”

Step 2. Participants should work in the same groups from activity 1.

Script: “Imagine your community 20 years from now. The national television agency (Día a Día/Séptimo Día) has prepared a programme on the outstanding achievements your community has made to increase the rates of access to mental health services and improving mental health in the community. The television/radio programme was prepared based on interviews with community members, local authorities, traditional leaders, and health institutions working in the district. Imagine what the programme would report about your community’s achievements in mental health. They have completed a special feature, on two people who have experienced this change. One person is someone whose mental health has been improved, and another is a practitioner who has worked with the patient and the community to build that change.

NB for facilitators: These questions should be handed out to each group on a piece of paper

General questions to consider for all parties

- What are major changes your community has made in the last 20 years to ensure good mental health in your community?
- What are the major changes your community has made in the last 20 years to increase the rates of access to mental health services?
- As a mental health provider, ¿what have you done to improve the mental health of your community?
 - Example: If you are a psychologist, how did you help your community?
- How have community leaders have supported efforts to address poor mental health?

Questions for your main characters:

- What actions did you do to start making life changes in terms of your mental health? Who was involved?
- What action plan did they follow in the first year to make the change happen?
- How did they convince other people who are important in their lives that this was the right decision?
- How did they keep going in the long run?

Scrip continued: “in your groups, you will need to write a story about this future world. It may help you to think about the questions in on the attached sheet of paper. You will present your story to the group in a role play (no more than 10 minutes long) of a television interview. There should be four speaking roles:

- 1) The journalist (who could be asking some of the questions we have provided)
- 2) a main character who has benefitted from the new world and services (could be the same person you thought about to help you do activity 1)
- 3) a health care provider
- 4) A key person who you feel is important to the story. (i.e could be a family member, a community leader, a politician, a friend, etc)

You will have 1 hour to work on this.

1
2
3
4 Step 3. After 1 hour, ask the groups to present their plays within each site. Then ask them to
5 vote for the better story as this will be presented to the broader group including participants
6 from the other site. After deciding which play to present, ask participants to add or improve
7 their stories if they think they should.
8
9

10 Step 4. Finally, let participants present the play from each site to one another. The facilitators
11 should be taking notes and asking people to think about similarities or make comments
12 towards what is being presented after each play. Audio and video record each presentation
13 and the plenary discussion for future analysis.
14
15
16
17

18 Session 3

19 Mapping and intervention building

20
21 The aim of this final session is to identify interventions which could be used to improve better
22 mental health and mental health services in communities. It may be worth stating at this stage,
23 that these discussions will shape how we run the second stage of our project – which are the
24 activities we facilitate to improve mental health and improve relationships between mental
25 health services and communities over the course of the next year.
26
27

28 Step 1. Divide participants into same groups as for previous activity
29

30 Step 2. Explain that they will need to think back to the problem trees from Activity 1 and what
31 was discussed in Activity 2.
32

33 Step 3. Tell participants that they have 1 hour to consider these challenges and imagine possible
34 solutions. Make cardboards with the following questions.
35

- 36 1. What are the interventions you need to improve mental health and mental health services
37 in your community?
- 38 2. What resources do you need to implement those interventions/actions?
- 39 3. What are the expected outcomes of implementing those interventions?
40
41

42 Step 4: Ask participants to write down the answer to those questions in flashcards and then to
43 paste them under each cardboard.
44

45 **NB to facilitator: Register the answer provided. If there is enough time, share results with**
46 **the broader group trying to highlight similarities and differences.**
47
48

49 Closing statements

50
51 Participants were thanked for their time and contributions. Facilitators went around the room
52 asking about people's experiences and any feedback for future activities.
53 Facilitators shared next-steps for the project to have a sense of continuity and stay in touch with
54 the community.
55
56
57
58
59
60

Context

Activities

Outputs

Outcomes

Long term results

Impact

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41

Gendered differences in understanding of mental health
- Men: food
- Women; emotions, care

Dominance of biomedical approach to mental health

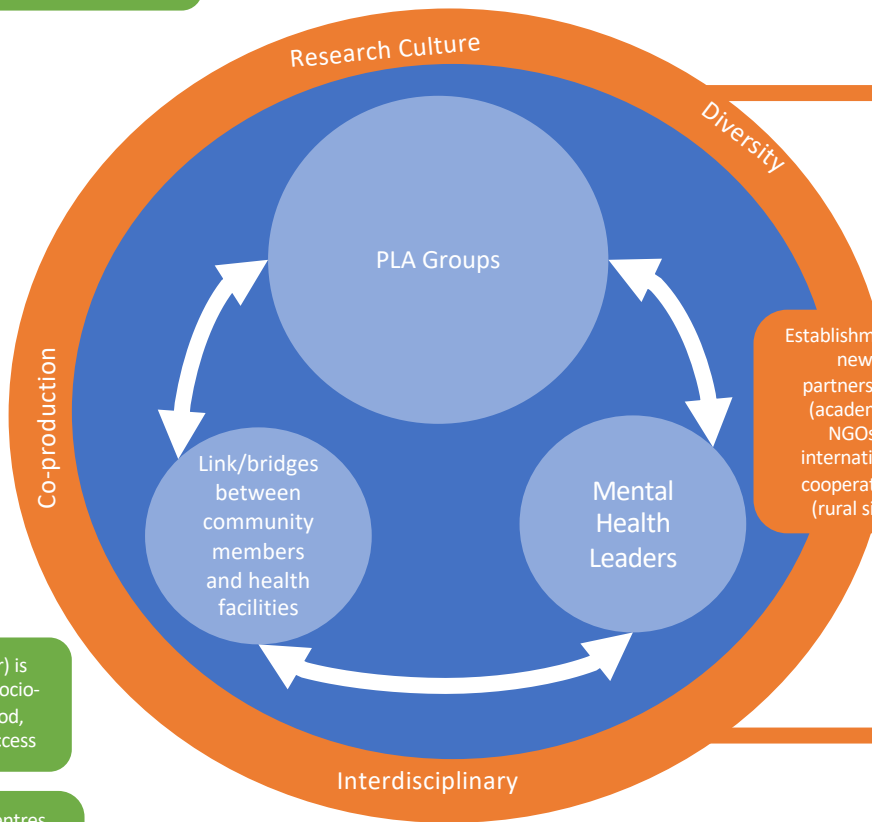
Previous negative experiences when accessing health services

Young people and gendered differences in understanding mental health

Gaps in mental health services

Mental health (bienestar) is determined by access to socio-structural resources - food, housing, employment - access to basic needs

Community logic of care centres importance of political determinants of mental health (rights, citizenship, participation, social justice)



Establishment of new partnerships (academia, NGOs, international cooperation) (rural site)

Increased access to MH knowledge and information

Improved feelings of belongingness and community cohesion

Improved perceptions of communication and relationships between practitioners and communities.

Reduction of stigma around mental illness and mental health

Young people's increased participation (& communication) in family life and community activities

Improved recognition of the importance of good mental health to wider health and wellbeing.

Improved experience of services (respect, listening, communication)

Potential indicators

P 01: Greater acceptance of others seeking treatment
 P 01: More positive perceptions of mental illness
 P 01: Helping others to seek treatment
 P 01 y P 03: Increased willingness to seek treatment
 P 02: Increased feelings of community support
 P 02: Positive sense of self/identity
 P 02: Increased feelings of inclusion and acknowledgement in the community

P 02: Increased sense of attachment to place/home
 P 02: percentage of people from the communities who attend community activities organised by the project
 P 02: Improved perception of individual and collective agency
 P 03: People feel recognised, listened to and acknowledged by health providers and systems
 P 03: Increased feelings of citizenship and that rights to quality care are being met

For peer review only - <http://bmjopen.bmj.com/site/about/guidelines.xhtml>

Assumptions

1. Health care providers are willing to attend community led forums, and provide guidance and contribute to community actions to improve mental health, including those informed by social determinants of health, human rights and traditional medicines
2. Local governments are willing to let community members have more ownership over the use of local spaces and environments (urban site)
3. Rural dwellers have reliable access to mental health practitioners and support
4. Young people have the resources and freedom to participate in mental health enhancing activities