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Enhancing the Brazilian health system's ability to support the mental health of young people – MENTALKIT-Brazil project

1st Theory of Change workshop report

Wagner Silva Ribeiro, Cláudio Torres de Miranda, Antônio José Grande, Dave McDaid, Adriana Paffer, Auxiliadora Damiane Costa, Carola Ziebold, Christine Faustino, Derek King, Joni Marcio de Farias, Jorge Arthur Coelho, Loiva dos Santos Leite, Maria José Cardoso Silva, Paulo de Tarso Jardim, Raiane Jordan, Rita Lins, Rosane Lowenthal, Sandra Leone, Sandra Lúcia Correia Lima Fortes, Silvia Moraes, Valter Silva, Verônica Alves, Sara Evans-Lacko

London School of Economics and Political Science

Universidade Federal de Alagoas

Universidade Estadual de Mato Grosso do Sul

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I PROJECT SUMMARY

Original title: Enhancing the capacity of the Brazilian health system to support the mental health of young people – MENTALKIT

Title in Brazilian Portuguese: Melhorando a Capacidade do Sistema de Saúde Brasileiro para Cuidar da Saúde Mental de Jovens

OVERARCHING AIM

The MENTALKIT project's overarching objective is to help enhance the capacity of the Brazilian health system to prevent mental disorders and to treat young people with mental health problems. To achieve this goal, MENTALKIT intends to develop strategies to help policymakers and practitioners use scientific evidence to formulate public health policy and to implement evidence-based interventions to prevent and treat mental disorders and to promote mental health among young people. The tools we are planning to develop will provide policymakers and practitioners with evidence and support to weigh the costs and benefits of different interventions and, therefore, to decide which ones are the most appropriate considering the context and available resources.

PROJECT STRUCTURE

MENTALKIT comprises three interlinked Work Packages which will produce and organise scientific evidence which is relevant to the formulation of public health policy in relation to young people with mental health problems. The evidence will, then, be synthesised into practical tools to help policymakers and practitioners implement evidence-based policies in Brazil.

WORK PACKAGE 1: DEMAND ESTIMATES AND ECONOMIC MODELLING

Work Package 1 (WP1) will use existing data collected from all regions of Brazil to estimate the number of children and adolescents with mental health problems in the country who need mental health care. Data from two studies carried out in the five regions of the country will be used:

The first database comes from a prospective cohort study of 5,511 children and adolescents recruited from public schools in São Paulo and Porto Alegre[1]. Participants were 6 to 14 years old at the baseline assessment, in 2010–2011. In 2014–2016, 80% of participants were reassessed. This follow-up assessment included a questionnaire developed by SEL to assess use of services due to mental health problems and to identify potential barriers to mental health care. An ongoing second follow-up, which started in 2017, is expected to be completed in 2019.

The second database comes from a multicentre cross-sectional study carried out in four small cities (around 30,000 inhabitants) in four of the five regions of the country[2]: Caeté, in the State of Minas Gerais, Southeast Region; Goianira, State of Goiás, Central-West Region; Itaitinga, in Ceará, Northeast Region; and Rio Preto da Eva, in the State of Amazonas, North Region. This cross-sectional study included 1,721 participants and was carried out in 2010–2011.

Based on the demand estimates, and using variables provided by both studies, we will perform economic models to estimate: (a) social and economic impact to the country resulting from mental health problems among children and adolescents; (b) the costs of offering effective care to children and adolescents with mental health problems; (c) potential return on investment (RoI) resulting from the implementation of effective care for children and adolescents with mental health problems. Evidence shows that improvements on mental health status tend to result in improved school performance, employment status and general health. Improved mental health is also related with reduction/prevention of negative outcomes, such as substance abuse, involvement with criminal activities and Disability-Adjusted Life Years (DALYs)[3].

WORK PACKAGE 2: IDENTIFICATION OF EFFECTIVE INTERVENTIONS WHICH ARE ADEQUATE TO THE BRAZILIAN CONTEXT

Work Package 2 (WP2) will perform a systematic review to identify effective interventions that are appropriate to different Brazilian contexts to prevent and treat mental health problems among children and adolescents, and to promote mental health. The Review will focus on interventions that have been proven effective and/or cost-effective in Brazil or similar countries and would, therefore, be applicable to the Brazilian public health system, taking into consideration the local context.

WORK PACKAGE 3: DEVELOPMENT OF A PRACTICAL TOOLKIT

Work Package 3 (WP3) will synthesise evidence from WP1 and WP2 to develop a practical mental health evidence toolkit, as well as training and dissemination materials, to support relevant stakeholders (policymakers and professionals from different public sectors) in the implementation of interventions that are adequate and effective to prevent and treat mental health problems among children and adolescents. The toolkit will comprise modules that are suitable to different sectors responsible for providing children and adolescents with care, such as health, education, justice and social care.

The toolkit will also include resources to estimate how much it would cost to implement interventions, and potential return on investment resulting from the implementation.

To guarantee that the toolkit is adequate to the Brazilian context, and that it will be used by relevant stakeholders, WP3 will organise one consultation workshop in the first year of the project, and at least five training and dissemination workshops in the five regions of the country in the third year.

II RESEARCH TEAM, FINANCING AND COLLABORATORS

RESEARCH TEAM

MENTALKIT project results from a partnership between researchers from Universidade Federal de Alagoas (UFAL) and Universidade Estadual do Mato Grosso do Sul (UEMS), in Brazil, and the Care Policy and Evaluation Centre (CPEC) at the London School of Economics and Political Science (LSE), in the United Kingdom.

The research team was formed to respond to the *MRC-CONFAP Call for Health Systems Research Networks*[4], launched by the UK Medical Research Council in partnership with the Brazilian National Council of State Foundations for Research Support [Conselho Nacional de Fundações Estaduais de Amparo à Pesquisa (CONFAP)]. The MRC-CONFAP call aimed to "support research that aims to improve health policy and systems for vulnerable communities in Brazil" by supporting "UK-Brazil partnerships working to [carry out] research to strengthen the Brazilian health system and improve health outcomes".[4]

The call established that "each project must include at least two participant Brazilian State Funding Agencies ('FAP') in Brazil and one UK partner", and that "the joint funders seek interdisciplinary proposals from UK-Brazil networks that aim to address health systems challenges in Brazil".[4] Our project is funded with resources from the MRC and two FAPs that joined the CONFAP consortium.

To develop the MENTALKIT project, we have assembled an inter-disciplinary team covering expertise in health systems, mental health, research methods, epidemiology, economy and public policy. With such a team, we have established a bilateral research consortium, which has one Principal Investigator (PI) in the UK (Dr Sara Evans-Lacko, from LSE) and one PI in Brazil (Professor Cláudio Torres de Miranda, from UFAL). Our consortium also includes one co-Investigator (Co-I) in Brazil (Professor Antônio José Grande, from UEMS) and two co-Is in the UK (Professor David McDaid and Dr Wagner Silva Ribeiro, also from LSE).

Our project also includes a stakeholder impact advisory group (SIAG)

STAKEHOLDER IMPACT ADVISORY GROUP AND WORKSHOPS

Our SIAG comprises representatives from different sectors which are responsible for providing care for children and adolescents. The SIAG offers expert advice to the project and will provide feedback on the overall project strategy and outputs, and ensure our data are relevant to policymakers in Brazil. SIAG members will also help identify which resources are needed and which are the barriers to the implementation of effective interventions in the Brazilian public system. This will ensure that the tools we are going to develop will help overcome potential barriers and strengthen the ability of existing resources to provide appropriate care.

SIAG members have been chosen through a snowball technique, starting with consultations with experts in Brazil with whom our research team has collaborated. Experts, then, appointed professionals who work in different sectors of care and different levels in the Brazilian public system. Appointed professionals were invited through email to join the SIAG.

III THEORY OF CHANGE (TOC) WORKSHOP

Our first consulting workshop was carried out in Maceió, Alagoas, in the Northeast Region, on 23 November 2019. It was based on the ToC framework.

Before the workshop, our research team held a two-day face-to-face project meeting at UFAL. This meeting aimed at integrating the research team, developing the project and planning the ToC workshop. During the project meeting, the research team defined the project's brand name – MENTALKIT-Brasil – which was later approved by the workshop participants.

We invited representatives from the five Brazilian regions and from different states, representing different sectors from the Brazilian public system to participate in the ToC workshop. As the workshop took place in Maceió, Alagoas, it included a significant number of representatives from the municipal and state authorities:

- **Local participants**
  - 14 professionals from Maceió Health Department:
  - Two professionals from the State of Alagoas Health Department
  - One professional from the State Health Department's Special Education Programme
  - Two professionals from Maceió Social Care Department
  - One guardianship counsellor
  - Three professionals from UFAL who develop research projects within the public health system
- **Six representatives from the other four Brazilian regions** (North, Central-West, Southeast and South)

The identification of local participants was coordinated by a professional from Maceió Health Department (AP) who has joined the research team as a PhD student. Professionals who have a leadership role in the state and municipality health, education and social care departments were invited to participate in the workshop and/or to appoint representatives. Guardianship counsellors were also invited. Meetings were held with Maceió's mayor and heads of health, education and social care departments to ensure invitees were allowed to participate in the workshop.

Participants from other regions were identified through academics and professionals from the public health sector with whom members of our team (SEL and WSR) have collaborated.

Representatives from the Ministry of Health and the National Campaign for Education [Campanha Nacional pelo Direito à Educação] were also invited but could not participate.

THEORY OF CHANGE (TOC)

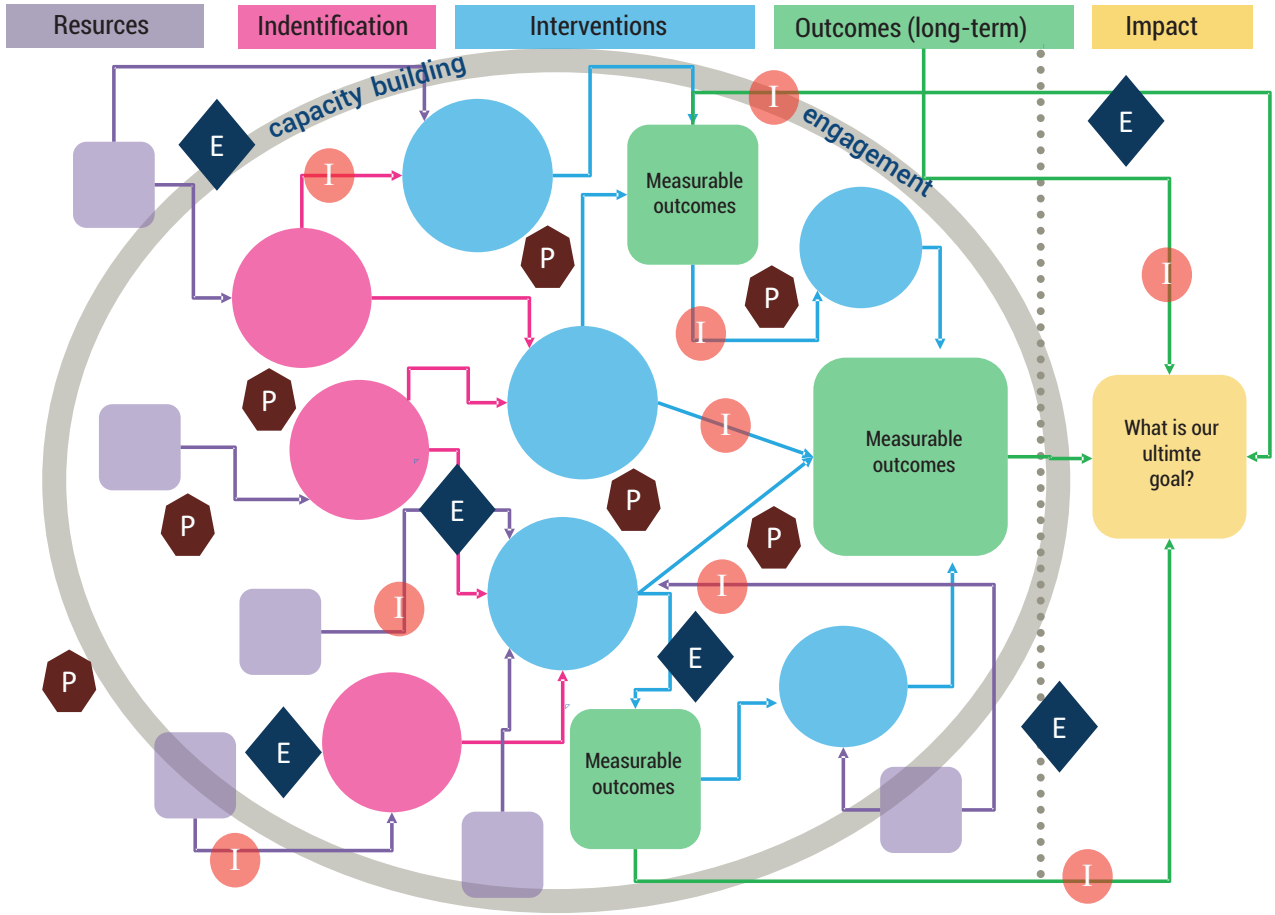
ToC[5] is a framework for organising and planning initiatives, which takes into consideration "a theory of how and why an initiative works".[5] When applied to specific objectives/projects, ToC helps identify which components and steps are essential to ensure expected results are achieved. Reflecting upon these components and steps, and on how they interrelate, helps map which resources are needed, which processes and methods are to be developed, and which barriers are to be

overcome to make sure the initiative is successful. The main advantages of ToC are:

- It can be empirically tested through the identification and development of indicators to evaluate each component of the initiative
- It considers the context in which initiatives will be implemented, by including representatives of local community, policymakers, professionals, service users etc. By including people who will actually implement the initiative, ToC ensures that the local context, resources, demands are taken into consideration when designing public policies.
- It is flexible and can be adapted as a result of permanent monitoring and evaluation based on indicators that are developed as part of the process, and which are consolidated through stakeholders' feedback.
- It is objective and transparent, and can be graphically represented as a ToC map (Figure 1)

Figure 1 is a graphic representation of the main components/steps that are needed for the expected impact to be achieved, and how they interact. When planning an initiative through ToC, one usually starts by defining impact (or the ultimate goal one expects to achieve). Once impact is defined, an operationalisation process begins by defining measurable short- mid- and long-term outcomes. Based on a clear definition of outcomes, it is possible, then, to develop and/or to identify interventions that can lead to the outcomes. Also, it is possible to identify/develop indicators to monitor and evaluate the interventions. By identifying/developing interventions, one should, then, establish which resources are needed so they can be implemented. At the same time, mapping available resources helps to choose interventions that are more suitable to the context, and/or to adapt them so they can be actually applicable.

FIGURE 1: THEORY OF CHANGE MAP



Adapted from: De Silva et al (2014)[5] and from Votruba et al (2020)[6]

To identify resources, needs and barriers, a situational analysis should be performance and updated periodically. Finally, scientific evidence and assumptions should be considered during the development and implementation of the project. Scientific evidence validates components of the implementation process and allow for the assessment of impact, effectiveness, limitations etc. Assumptions are preconceived ideas and beliefs which should be considered as potential starting points, or which should be modified throughout the implementation process.

TOC APPLIED TO MENTALKIT PROJECT

When applying the ToC framework to the MENTALKIT project, we defined the expected impact of our initiative: "to strengthen the capacity of the Brazilian health system to support the mental health of children and adolescents". Considering this impact, we started mapping which components/steps should be developed to achieve our expected goals. The following questions guided the discussion with stakeholders to carry out this mapping:

1. What are the main problems and knowledge gaps in the field of child and adolescent mental health in Brazil?
2. Consensus on the definition of impact: "how do we define a successful policy?"
3. Development of a map of outcomes: "which outcomes do we need to achieve so we can accomplish the expected impact?"
4. Development of interventions: "how do we achieve the expected outcomes/ impact?"

SUMMARY OF DISCUSSION WITH STAKEHOLDERS

Table 3 lists the main themes emerging from the group discussions during the workshop. Themes were grouped in three different dimensions, which, according to participants' perceptions, reflect broad sets of challenges to be tackled to improve the capacity of the Brazilian health system. Grouping the themes into these three different dimensions was done to facilitate the identification of challenges and barriers. The three dimensions are deeply interlinked with significant overlap between them. As one can see in Table 3, some themes are included in more than one dimension – e.g., "lack of qualification to work in SUS"* is included both in the "human resources" dimension, as it leads to shortage of professionals with appropriate skills to deal with patients' needs, and in the "knowledge/information/evidence" dimension, as it indicates which sort of knowledge/evidence should be made available so to improve the system's efficiency.

1. PROBLEMS/KNOWLEDGE GAPS

The group discussion among stakeholders noted that the Brazilian mental health care network has several structural problems. Stakeholders described a scenario of "dismantlement of public policies" in Brazil, characterized by significant reduction in public investment in essential areas such as health and education. As a result, stakeholders perceived a mismatch between needs for care and available resources, as both services and human resources are thought to be insufficient. This, in turn, results in a mental health care gap, meaning that a significant proportion of young people with mental health problems do not have access to the care they need.

Beyond reduction in investment, other potential obstacles to providing young people with the care they need are related to flaws in the way the mental health system is organised. According to stakeholders, "the intersectoral network is deficient" and "adequate integration between primary and secondary care is lacking", as well as "between relevant sectors". All agreed that it is not possible to

* SUS = "Sistema Único de Saúde", the Brazilian Universal Public Health System.

provide children and adolescents with adequate care without integration between different sectors and levels of care. Therefore, it is important to promote strategies to improve communication between relevant actors – e.g., health, education justice and social care sectors.

One deleterious consequence of poor intersectoral integration is, for example, the "judicialization of mental health", when the justice system obliges health care services to provide interventions that are not necessarily effective, which may cause disruptions in the services' and professionals' routines. This could be avoided with effective communication between health and justice sectors.

One potential cause – or, at least, a contributor to the public system inefficiency relates to the "lack of qualification to work in SUS". There was a consensus among participants that the

TABLE 3: LIST OF THEMES EMERGING FROM THE WORKSHOP

Dimension 1: System/network	Dimension 2: Human resources	Dimension 3: Knowledge / information / evidence
What are the main problems/knowledge gaps in child and adolescent mental health in Brazil?		
• Fragility of social control • Dismantlement of public policy • Lack of adequate integration between primary and secondary levels of care • High demand vs. low coverage (health, education) – paucity of services and HR • Deficiency in the intersectoral work • Judicialization of mental health • Lack of aims and objectives in mental health • Lack of investment • The care network is not familiar with aims and objectives in mental health • Difficulties organising psychological collaborative care	• High demand vs. low coverage (health, education) – paucity of services and HR • Lack of training to work in SUS • Lack of definition of professionals' roles • Lack of aims and objectives in mental health • Staff turnover, particularly managerial staff	• Lack of training to work in SUS • Lack of qualification of some mental health professionals • Lack of definition of professionals' roles • Lack of aims and objectives in mental health • Lack of, or little investment in technical training • Scientific evidence tends to be ignored [by] mental health [professionals]
Consensus on the definition of impact: "what does a successful policy mean to us"?		
• Responsible management (prioritisation) • Governance and Governance technical management • Prioritisation of intersectoral policies aimed to increase and guarantee access [to care] • To rethink the collaborative care model • To consider different territorial realities	• Human resources: qualitative and quantitative adequation	

Dimension 1: System/network	Dimension 2: Human resources	Dimension 3: Knowledge / information / evidence
Development of a "Map of outcomes": what do we need to achieve to make our objectives come true?		
• Understanding demand is needed/ epidemiological indicators – target population • Identification of intersectoral network • Mapping of child-adolescent protection network • Use of local data		• Understanding demand is needed/ epidemiological indicators – target population • Identification of intersectoral network • Mapping of child-adolescent protection network • Use of local data • Development of reliable indicators on patients' behaviour (related to subjectivity)
Development of strategies and interventions: how do we achieve the expected outcomes/impact?		
• Mapping... data on care network based on Municipality and State Plans and [public] databases (MoH)/CNES; Potential sources: planning and technical departments • Mapping of technologies of care in primary and secondary care • Systematisation/organisation of processes • Investment in soft technologies • Implementation of electronic health records (linked with the 'toolkit') • Integration between management data services • To improve mental health care funding • Creation of integrated platform (health, education, social care, etc.) • Planning of services which are articulated and territorial; [and] cost-effective • Definition of priority care • To differentiate collaborative care and supervision • To act on different prevention levels • To invest in social control (empowerment of users, family and professionals)	• To guarantee technical-political training to work in SUS • To use active learning methods in the training process • [To implement] post-training monitoring • Permanent and continuous education • Distance education / semi-presential with PBL support • To prepare [professionals] it is needed to talk about stigma • Intersectoral training (e.g., justice sector) • Assessment of professionals' productivity/effectiveness	• Surveillance/monitoring – strategic planning focused on epidemiological profile • To identify and integrate relevant data • Evidence-based practices • To invest in action/participatory research • [to bring] research back to services • Systematisation of local data • Integration between academic and local knowledge • Scientific evidence: useful, tested in the [local] context; practiced in the context • To create economic models to guarantee investment in resources that are needed • To estimate needs, costs and where investment should be made; how: estimate of costs; analysis of demands (priority); Who: personnel from financial departments; partnership with universities • Using data to strategically make plans based on evidence and contests

academic training of health professionals in Brazil do not provide them with the skills required by the public health system – e.g., "medical schools in Brazil are structured to train specialized doctors, instead of family doctors and/or general practitioners", whereas "psychology courses emphasise individual psychotherapy techniques that are more suited to private practice, rather than public services". Therefore, "professionals are not adequately prepared to work in the community-based psychosocial care network and/or in primary-care settings". As a result, "professionals do not develop a vocation to work on the public system", which, together with other structural problems, results in "huge turnover of professionals, particularly of managerial staff", breaking the continuity of processes.

As a recent improvement in medical training, residency programmes on family health medicine have been implemented in Brazil. It would be important to check if, and how much, family doctors trained in such programmes are prepared to deal with mental health problems in family health services.

According to stakeholders, "the public health system also lacks objectivity", as "there are no clear aims and objectives related to mental health" and "neither any definition of professionals' roles". This results in extreme heterogeneity regarding interventions delivered by different services, with no parameters or indicators to assess their quality, effectiveness etc.

2. SITUATIONAL ANALYSIS

It is worthwhile to mention that, whereas there was a consensus regarding the paucity of material and human resources, stakeholders agreed on that little is known about the actual extent of the existing psychosocial care network. Therefore, everyone agreed on that it is necessary to "identify the intersectoral network" and to "map the youth-protection network", preferably based on "local data".

Stakeholders emphasised that "it is important to map existing material and human resources in the territory and in the municipality- and state-level networks, and also interventions that are delivered". There was a consensus that a comprehensive mapping of the psychosocial care network would help existing resources to be applied more efficiently, which, in turn, would help reduce the mental health treatment gap.

There was also a consensus that it is important to "better understand the actual demands based on epidemiological indicators", so it would be possible to define "target populations" of interventions, and to understand the "local reality", including "psychosocial conditions, such as violence", and available supplementary resources, such as "education and social care". These data could help promote "responsible management" based on "prioritization", "governance and technical management". It would also help "to prioritise intersectoral policy aimed at increasing access to care" and also to "rethink collaborative care [*matriciamento*⋆]" to improve integration between specialized services and primary care, where most young people with mental health problems should be treated.

Another important fact highlighted by stakeholders is "the resistance of primary care professionals to treat people with mental health problems". According to stakeholders, "many professionals claim that they do not feel confident or prepared to deal with mental health problems" – local stakeholders reported that "this resistance and lack of confidence/training have made it difficult to implement collaborative care in Maceió". These stakeholders stated that "professionals in Maceió should have access to training programmes and support, so they would be able to work together with specialists to deliver adequate mental health care in the community".

⋆ It is important to note that, even though we are translating "matriciamento" as "collaborative care", the two concepts are not entirely equivalent. The main feature of matriciamento is that, rather than treating patients with mental health problems, mental health specialists support primary-care and other non-specialised professionals (through case discussions, training, supervision etc.) so patients can be treated in primary care settings.

3. IMPACT/INTERVENTIONS

Stakeholders suggested short- medium- and long-term initiatives to achieve the expected impact:

In the short-term, stakeholders suggested a "mapping of the psychosocial care network" and an "assessment of the population's epidemiological profile" using existing databases, such as "the Brazilian Institute of Geography and Statistics" and "the planning and management departments in regional health, education and social care departments". According to some policymakers participating in the workshop, relevant information can be obtained from public services through consultation with "planning departments", technical departments" and "information systems". There was a consensus that, in the short-term, it would also be possible to promote a "systematization and organization of the workflow".

In the medium-term, "it is necessary to establish a connection with scientific knowledge" so that "[clinical] practice could be based on scientific evidence". Evidence, in turn, should be "useful" and "tested in the [local] context". Stakeholders stated that scientific evidence should also be used to "create economic models to ensure investment where it is needed", to help "estimate needs and costs" and fundament decision on "where investment should be done". It is also important to count on scientific evidence to "plan services which are "articulated [within the care network] and territorial", and that are "cost-effective".

Another set of medium-term priorities identified by stakeholders relates to training of personnel. Everyone agreed that "permanent education programmes" should be implemented, and "professionals should be followed-up after [receiving] training". Permanent education programmes should "guarantee technical-political qualification to [work in] SUS" and should "use active learning strategies" and "distance education based on problem-based learning". Stakeholders highlight that "[in the training programmes] it is necessary to talk about stigma" and that "intersectoral capacitation (including, e.g., justice sector) should be implemented.

Some practical medium-term actions suggested by stakeholders include implementation of "electronic health records (linked to the 'toolkit)" and of "productivity monitoring processes" – according to comments of one of the report co-author (SF) after the workshop, the Ministry of Health started implementing electronic health records (e-SUS) in all primary care units in Brazil[7,8]. It would be important for our team to study the e-SUS and to consider whether it could be somehow linked to resources we will develop as a result of the MENTALKIT project.

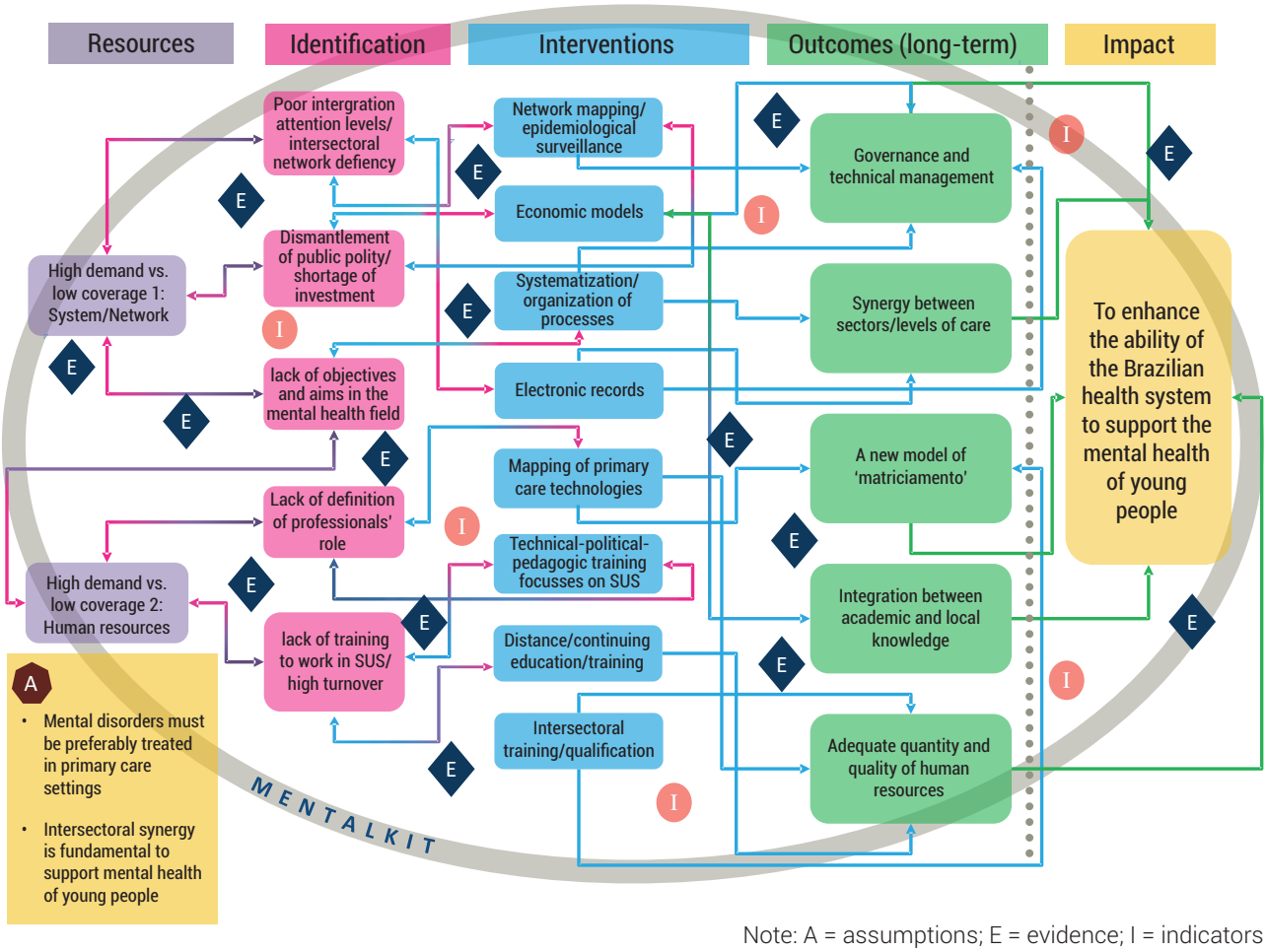
Even though everyone agreed that scientific evidence from academia is important, stakeholders highlighted that there are "good practices" in different services which are carried out in psychosocial care networks. They concluded that establishing partnerships between services and academia would help policymakers, managers and practitioners to "systematize local data". It would also motivate them to "invest in action/participatory research", which will help "convert existing good practices into scientific evidence".

4. THEORY OF CHANGE MAP APPLIED TO MENTALKIT PROJECT

Based on the themes that emerged from the discussion with stakeholders, we drew an initial version of a ToC map applied to MENTALKIT (Figure 2). The map shows potential pathways through which expected impact can be achieved, which helps to define strategies and to identify potential challenges to the operationalization of our project.

The map shows that, in relation to resources, stakeholders concluded that there is a mismatch between high demand for mental health care and the available resources to respond to such a high demand. This mismatch is identifiable in two dimensions: (1) in the **system/network dimension**, stakeholders concluded that whereas there is a paucity of services, the ones which exist tend to be structurally deficient, which makes even more difficult to deliver adequate and resolutive care.; (2) in the **human resources dimension**, the conclusion is similar: exiting human

FIGURE 2: TOC MAP APPLIED TO MENTALKIT PROJECT



Note: A = assumptions; E = evidence; I = indicators

resources are insufficient, and lack adequate training/skills to deal with young people with mental health problems in the public system.

A **situational analysis** trying to understand the paucity of resources shows that:

- **In the system/network dimension**, Brazil is facing a "dismantlement of public policies" which has led to significant reduction in public investment[9]. This might help understand why there are far too fewer services than are needed to provide care to everyone who needs it. When services do exist, cross-level (e.g., primary and secondary care) and cross-sector (e.g., health, education, social care and justice) integration is lacking. Poor synergy across levels and sectors erodes the system's efficiency and its capacity to offer adequate responses to the population's needs;
- **In the human resources dimension**, the main issues seem to be lack of "definition of professionals' roles" and of "adequate training to work on SUS", which leads, among other problems, to "high personnel turnover" and, as a consequence, to "discontinuity of services". "Clear aims and objectives" are also lacking, which affects both the system/network and human resources. Finally, resources are unequally distributed across the country, which leads to scarcity of professionals in many regions of the country – some stakeholders reported, for example, that there are no psychiatrists in many CAPS-III*, where such professionals are

* CAPS-III are level-3 "psychosocial care centres", which are specialised mental health clinics where sever patients should receive both in- and/or outpatient treatment.

essential. It is noteworthy mentioning that, even though guidelines from the Ministry of Health establish the minimal number of professionals that should be available in specialized services, such guidelines are not universally enforced due to scarcity of human resources.

Considering the issues raised above, the following interventions are suggested to strengthen the capacity of the psychosocial care network: "mapping the network" and implementing "epidemiological surveillance" are fundamental steps to estimate the network's real capacity and the actual demands for care. By doing so, it would be possible to precisely define which resources are available and which are lacking for the network to deliver appropriate care. The system's efficiency could be improved by implementing some short/medium-term actions, such as "electronic health records" and "systematization/organization of workflow". In the medium/long-term, "economic modelling" would be helpful to those who fight for more resources. It would also help to establish priorities when deciding how/where to apply existing resources.

"Mapping primary care technologies" and providing staff with "SUS-specific technical-political training" through "distance learning", "permanent education" and "cross-level and cross-sectoral training" are fundamental steps to promote synergy among professions who work across different care levels and sectors.

As potential outcomes resulting from such interventions, one would expect significant improvements in the "governance and technical management", which would lead to improved "synergy between sectors and levels of care". A new human resources training paradigm which prepares professionals to work in the public system would lead to a "new collaborative care model". This new model would provide specialists with adequate tools and knowledge so they would be able to support professionals from primary care and other sectors to properly treat and prevent mental health problems. The new paradigm should be founded upon the "integration between academic and local knowledge" to provide human resources with "adequate qualification".

The reasoning presented above is founded upon two important assumptions: (1) mental disorders should be, primarily, treated in primary care services; (2) the articulation between all sectors which are responsible for providing child and adolescents with care is fundamental to the treatment and prevention of mental health problems among young people.

Finally, stakeholders concluded that scientific evidence should be produced and utilized across the entire implementation process, and that indicators should be defined to allow permanent assessments and monitoring, so that adequate adjustments can be done in all parts of the system/network.

5. FINAL SYNTHESIS AND NEXT STEPS

It is worthwhile to mention that the workshop was carried out as part of the development of the MENTALKIT project. The project aims to develop a toolkit to provide policymakers and practitioners with access to scientific evidence to help design policy and implement effective interventions for the treatment and prevention of mental health problems among children and adolescents.

As a main outcome of the workshop stakeholders concluded that MENTALKIT would be a useful and important tool, as everyone agreed that using scientific evidence could help overcome existing barriers to the implementation of a mental health care network that would be capable to deliver care to those who need it.

Stakeholders highlighted that access to scientific evidence for those outside academia is very limited due to several barriers, such as language and communication style, costs and limited time due to work overload. Therefore, as a knowledge translation and dissemination platform, MENTALKIT should be friendly and easily accessible for those who are not familiar with academic culture and jargon.

An important concern expressed by stakeholders was that: "it is important to make sure that evidence available through

MENTALKIT is actually applicable and relevant to different Brazilian contexts, especially to the public system". Interventions suggested by MENTALKIT should be tested in contexts that are similar to those where they would be applied, in populations that are similar to patients in the real world, i.e., in primary care services. If sufficiently robust evidence is lacking, the best available evidence should be considered, taking into account their limitations and establishing strategies so they can be empirically validated.

One important recommendation: MENTALKIT should include tools to help stakeholders register interventions they deliver in a systematic way so the records could be used both to evaluate intervention and to produce new scientific evidence based on existing practices.

MENTALKIT must also be flexible and adaptable to be relevant to professionals from different sectors. It must be systematically updated based both on new scientific evidence and relevant data produced within the public system.

To make sure that MENTALKIT will be relevant, applicable and used by stakeholders in Brazil, participation of representatives of its target population throughout its development is fundamental. Representatives should include policymakers, managers and professionals from relevant sectors. Therefore, everyone who participated in the workshop agreed to continue working together to improve our ToC Map. This means that our research team will be permanently in touch with stakeholders and count on their feedback throughout the development and implementation of MENTALKIT.

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V APPENDIXES

APPENDIX I –WORKSHOP AGENDA

23 November 2018

Time	Tasks	Details
9:00	Project introduction: Enhancing the Brazilian Health system's ability to support the mental health of young people	Aims and objectives of the project
9:30	Theory of Change (ToC)	Introduction to Theory of Change framework
10:00	Coffee break	
10:30	Identification of challenges and assumptions	Group discussion about knowledge gap in children and adolescent mental health in Brazil
11:30	Consensus on definition of impact: "what does a successful policy mean to us"?	Group discussion about the project's impact using ToC framework (to help improve the child/adolescent mental health system/care network) Does everyone agree on that this is an objective which is worth pursuing?
12:00	Development of a "Map of outcomes": What do we need to achieve to make our objectives come true?	Group discussion to define short-, medium- and long-term outcomes which should be pursued so the expected impact can be accomplished – outcomes must be realistic and clearly defined.
12:30	Lunch break	
13:30	Logic and empiric validation (logic reasoning and search for evidence)	Group discussion on the following questions: (1) Does each outcome lead to subsequent listed on the ToC map? (2) If not, which are additional outcomes and/or interventions that could lead them? (3) Is there a need for more research/evidence before we can be sure that outcomes/interventions to expect results within relevant contexts?
14:30	Development of strategies and interventions: How do we achieve the expected outcomes/impact?	Group discussion based on the following questions: 1) Which strategies, interventions and programmes should be implemented so outcomes and impacts can be achieved? 2) Where, how, when and by whom should such strategies, interventions, programmes be implemented?
15:00	Coffee break	
15:30	We will be successful if... – verifying assumptions, indicators and evidence	Group discussion based on the following questions: (1) What conditions are needed for the outcomes to be accomplished? (2) Which are the parameters/evidence to assess success? (3) What is the role played by relevant contextual factors?
16:30–18:00	Final synthesis and next steps	