PRIME
programme for improving mental health care

Using Theory of Change as an approach to design complex mental health interventions: lessons from PRIME.

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Background

There is growing recognition that many health interventions are necessarily complex and require careful consideration of their design, evaluation and synthesis (Craig, Dieppe et al. 2008; Craig, Dieppe et al. 2008; Shepperd, Lewin et al. 2009). To address this, the Medical Research Council in the UK has published recent guidance on how to approach the design complex health interventions (MRC 2008). Although it promotes a thorough knowledge of the evidence base and underlying theory as well modelling the processes and outcomes, it gives little practical guidance on how to approach this and has been criticised for not including theory driven approaches to evaluation such as Theory of Change (Anderson 2008).

Theory of Change (ToC) is a structured and participatory theory driven approach to programme evaluation. It was developed further by Weiss (1995) and Connell and Kubisch (1998) as part of the Aspen Institute Roundtable on Community Change to design and evaluate comprehensive community initiatives which have many commonalities with complex health interventions. The ToC approach advocates for the development of a theory of how the initiative will achieve its outcomes in collaboration with stakeholders and may provide a structured approach to the design of complex mental health interventions (De Silva 2011).

The Programme for Improving Mental Health Care (PRIME) aims to generate research evidence on the implementation and scaling up of complex mental health interventions for priority mental disorders in primary and maternal health care contexts in in Ethiopia, India, Nepal, South Africa and Uganda. These complex mental health interventions will be in the form of district specific mental health care plans consisting of packages of care aimed at various levels in the health system, namely the health organisation, health facility and community levels. Draft mental health care plans have been developed using a ToC approach as well as other formative research (district situational analyses, semi-structured interviews, focus groups and a costing tool). Once finalised the district mental health care plans will be implemented, evaluated, modified as necessary and scaled up in collaboration with the national departments of health and other stakeholders in the five PRIME countries.

The aim of this study is to provide an outline of the ToC process across and within countries in developing the draft mental health care plans.

Methods

The ToC approach was used in the planning stages of PRIME within and across countries and included workshops with PRIME researchers as well as with stakeholders in all five sites. We describe this process and compare the process and experiences of the investigators across countries which were obtained through semi-structured interviews and workshop documentation and analysed using thematic analysis.

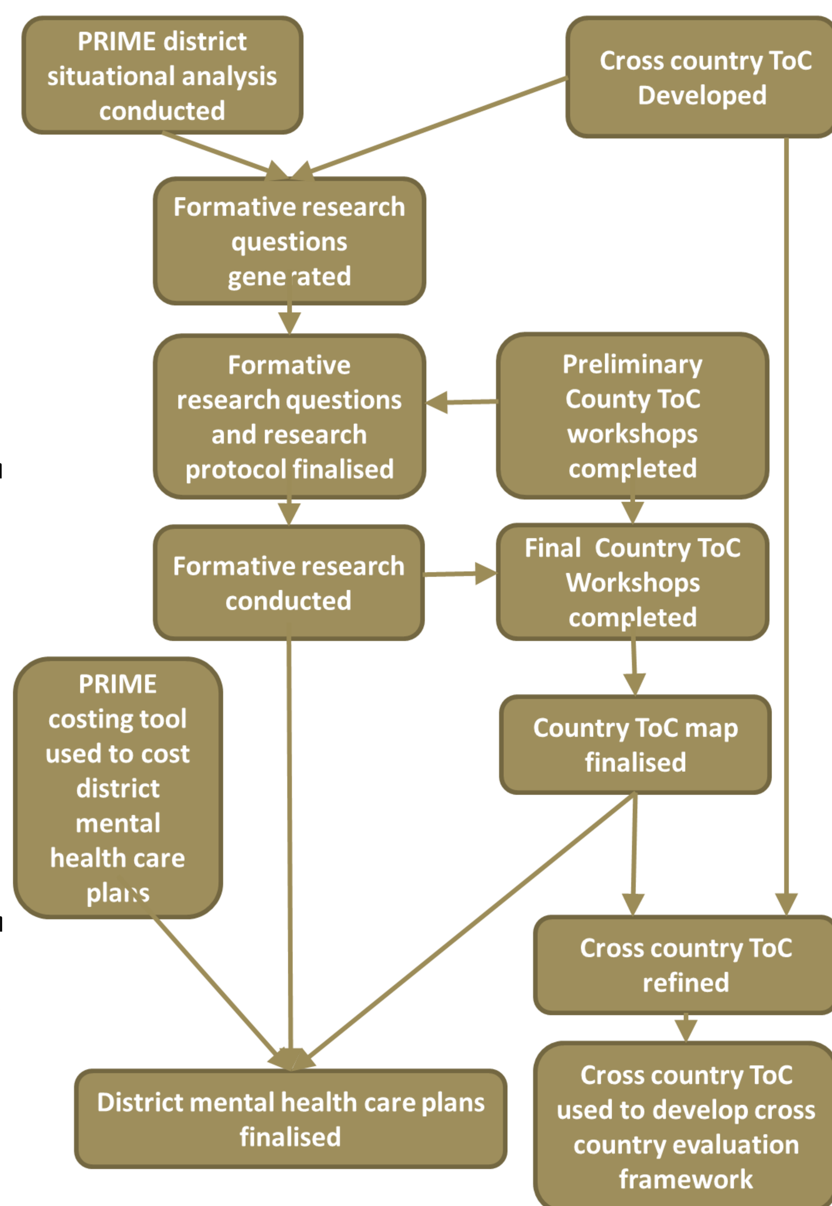

Figure 1: ToC and the development of the PRIME Mental Health Care Plans

Results

Process of ToC development

The initial PRIME cross country ToC was developed over three half days with PRIME country principal investigators, project co-ordinators and cross country partners and used to generate research questions for the formative research (Figure 1).

The cross country ToC This was subsequently revised, refined and condensed through discussion with PRIME members and external collaborators and a draft illustrated in Figure 2. The cross country ToC will be further refined following the finalisation of the country ToC maps and district mental health care plans and will be used to develop a cross country evaluation framework.

PRIME researchers develop a cross country Theory of Change (Photograph: Sanjay Shrivasta)

The country ToC maps were developed during two to four stakeholder workshops in each country at different levels of the healthcare system. These are summarised in Table 1.

These ToC workshops as well as the results of the formative research have led to the development of district specific mental health care plans (Figure 1).

Table 1: Summary of the ToC workshops across and between countries

Country	ToC Workshops	Level	Length	Structure
Cross country	Preliminary	PRIME Research Programme Consortium representatives	3x1/2 days	Following a lecture on the principles of ToC the group developed two disorder and country specific ToC maps working backwards from long term outcomes. These were merged them into a generic map which was reviewed and refined.
Ethiopia	Preliminary	District level representatives	½ day	Following a sensitisation meeting one week prior, the ToC was developed with the group within the structure of the cross country ToC.
	Final	National level planners	1 day	The workshop began with a review of the mental health strategy in Ethiopia followed by the review and refinement of the ToC developed at the district.
India	Preliminary	District and health Facility	1 day	Following an orientation to mental health and ToC, the group split into two where they developed ToC maps. These were fed back to the group.
	Final	District and health Facility	1 day	The work of the previous workshop was summarised. This was followed by group work looking at the details of interventions and assumptions at community, health facility and health organisation level in the existing ToC map. The integrated mental health care plan developed from the ToC was also discussed.
Nepal	Preliminary	Community, Health Facility and District	1 day	Following an introduction to PRIME and the ToC process, the group agreed on the long term impact. They worked backwards to determine the outcomes, interventions and assumptions needed to achieve this.
	Preliminary	National level planners	½ day	PRIME and the ToC process were introduced and the ToC from the district was presented. This was reviewed and refined by the group.
	Final	Community, Health Facility and District	½ day	The ToC developed in the preliminary workshops was reviewed and adaptation for specific disorders were discussed. Indicators to measure outcomes were chosen.
	Final	National level planners	½ day	The ToC developed in the district and adaptation for specific disorders was discussed. Indicators to measure outcomes were reviewed.
South Africa	Preliminary	Health facility, provincial and national level representatives	2 days	PRIME was introduced along with a brief introduction to the workshop process. Part of the cross country ToC was used as a framework. The group worked forward adding detail to each outcome for all four disorders.
	Preliminary	Community	1 day	PRIME was introduced. Part of the cross country ToC was used as a framework. The group worked forward adding detail to each outcome for all four disorders.
	Final	Health facility, provincial and national level representatives	1 day	The previous ToC workshop was reviewed and the mental health care plan (disorder specific and integrated) based on previous workshop was presented. The PRIME evaluation plan and next steps were discussed.
Uganda	Preliminary	District and health facility level	1 day	PRIME, mhGAP, challenges for mental health care and the ToC were introduced. Then the impact was agreed on and the group worked backwards to develop the outcomes, assumptions, indicators and interventions of the ToC.
	Final	District and health facility level	1 day	The group was re-oriented to the ToC process, PRIME and planned work. The ToC map from the last workshop was reviewed and refined.

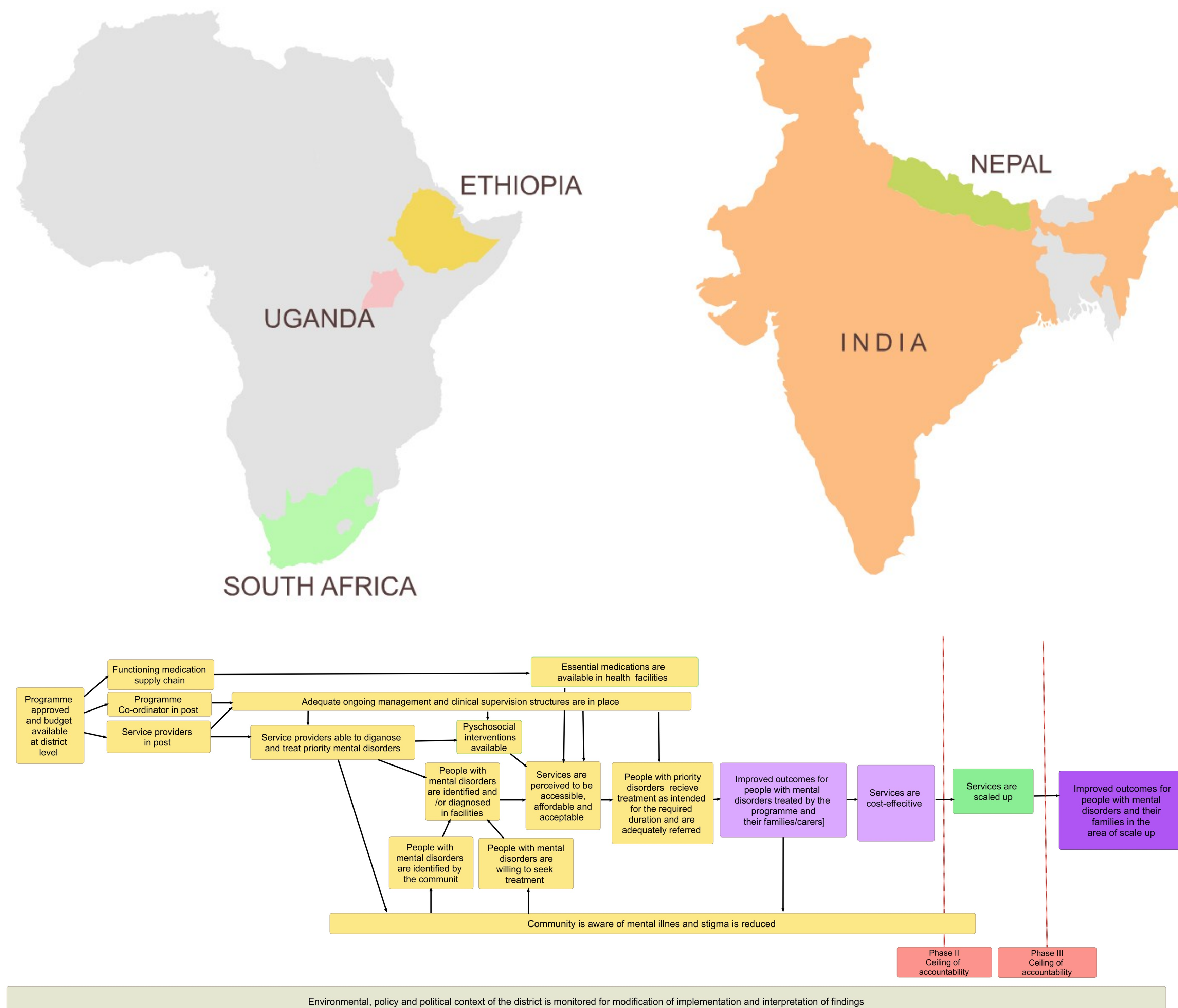

Figure 2: The condensed PRIME draft cross country Theory of Change map

Emerging Themes from ToC workshops

ToC provided a systematic approach to designing complex mental health interventions by a group of researchers and mental health professionals by explicitly mapping the causal pathway that will lead to expected outcomes and compelling stakeholders to articulate their assumptions and the rationale underlying the interventions. In addition, the ToC provided a framework to assist with the design of the monitoring and evaluation plan across and within countries.

ToC workshops within countries created a forum for knowledge exchange between researchers and other stakeholders, particularly those in implementation sites. The stakeholders gained knowledge in country workshops as they included an element of sensitisation to mental health before or during the workshop. The content and length of these were adapted to the audience and their previous exposure to mental health care.

The researchers gained contextual knowledge about the implementation site and the functioning of the health system. The majority of this information was obtained during the workshops which included stakeholders involved in service delivery. For example, in South African and Ethiopian sites identified additional community workers who could potentially be utilised for PRIME during the workshops. Constraints such as incentive structures for volunteers and medication shortages were also identified. The workshop structure allowed alternatives to be proposed by the stakeholders.

Workshops held with policy makers at a national level elicited less detail. However, they contributed to high level solutions to systemic problems, e.g. medication delivery in Nepal. Where multiple workshops were held, facilitators recognised a point of "saturation" where no additional information was gained from the workshops.

During the country workshops, various approaches were used to mitigate power imbalances due to the hierarchical structures within the health system. These included facilitation, limiting the participants in the workshop and stratification. This led to most participants being engaged during the workshops.

A ToC workshop in South Africa (Photograph: Amit Makan)

Conclusion

ToC provides a structured and participatory approach which can be used to guide the design of contextually relevant complex mental health interventions.

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