Operational challenges in the implementation of an anti-stigma campaign in rural Andhra Pradesh, India

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Abstract:

Background: Despite of literature available on mental health related stigma interventions, little is reported about operational challenges faced during the planning, implementation, and evaluation phases.

Methods: The SMART mental health project was implemented in 42 villages of the West Godavari district in India. Andersen's Behavioural Model for Health Services Use is adopted to understand factors influencing anti-stigma campaign delivery and strategies identified to overcome these challenges.

Results:

The challenges faced during the planning and implementation phase included distance and time taken for travel by the field staff, inadequate mental health services and infrastructure within communities, engagement of community with the field staff, and community's poor mental health literacy and knowledge. Strategies used to overcome these challenges were regular engagement with community stakeholders, understanding mental health literacy levels and seeking inputs from the community regarding campaign design, organising live drama shows at community's preferred time and place, screening of recorded drama video clips where lives shows were difficult. The evaluation phase posed challenges such as non-availability of key stakeholders and inadequate time and funding to evaluate the entire study population.

Conclusion: The reported findings can help in planning and scaling up of the anti-stigma campaign in large trials in similar settings.

Keywords: mental health stigma, anti-stigma campaign, challenges, rural communities, India

Introduction:

Mental health-related stigma is one of the major global barriers for accessing care in a community setting and contributes to the treatment gap (the difference in the number of

people who need care and those who receive care).[1,2] Stigma has been recognised as a mark of humiliation, disgrace, or discontentment which often results in a person being discriminated against or excluded from participating in a range of aspects of society.[3] Mental health-related stigma is a global and multifaceted phenomenon.[4] This stigma exists at all levels: individual, healthcare providers', caregivers',[5,6] community and legislation. In low- and middle-Income countries (LMICs) factors such as limited mental health literacy, resources to provide mental health care and trained mental health professionals are also problematic. Together, these factors may affect help seeking behaviours, self-management, and lead to poor treatment adherence.

Though there have been studies [4,7] where a variety of stigma reduction strategies (e.g. increasing mental health literacy, improving knowledge and attitudes towards people with mental disorders within communities), have been used earlier, little is known about the challenges that are being faced when delivering and evaluating such interventions. We implemented a complex intervention to improve access to mental health services as part of the large pilot Systematic Medical Appraisal, Referral and Treatment (SMART) Mental Health Project.[8] The project had three key elements – an anti-stigma campaign, training of primary health care workers to provide mental health care, and an electronic decision support system to enable lay health workers and primary healthcare centre (PHC) doctors to provide basic mental health care to villagers experiencing stress, depression/anxiety or at an increased risk of self-harm.[8]

The results of the process evaluation of the pilot SMART Mental Health Project[9,10] including the anti-stigma campaign has already been published[11] In this paper, we describe the operational challenges we faced during the planning, implementation and evaluation of the large anti-stigma campaign routinely and steps taken to overcome them. Operational challenges provide a more nuanced understanding of the processes that were involved in delivering the anti-stigma campaign, strategies used to overcome those challenges, and how that information led to improved delivery of the campaign and plan for future activities.

Methods:

The SMART Mental Health project was implemented in 42 villages of West Godavari district of Andhra Pradesh in India as a pilot before-after project between 2014-19.[8] The main

occupation of the people in this district (coastal belt of Southern India) was fishing and agriculture. Thirty out of the 42 villages chosen were small and belonged to the Scheduled Tribe (ST) Areas. They had poor quality roads and limited health infrastructure, access to markets, public transport, and other amenities. The Constitution of India characterise Scheduled Tribes based on their 'primitive traits', geographical isolation, distinct culture, wariness of contact with larger communities, and 'limited economic means'.[12,13] The remaining 12 villages were large and non-tribal.

Mixed methods were used to evaluate the anti-stigma campaign. The activities and phases of delivering the campaign are outlined in Figure 1. The anti-stigma campaign was designed and implemented using a multimedia approach which included:

- Developing Information, Education and Communication (IEC) materials, e.g., posters and pamphlets for a door-to-door campaign in the villages. The door to door campaign was conducted by field staff who were recruited from the local community
- Drama: staging a drama by a local theatre group in the villages –as live shows and recorded video-shows
- Social contact: screening a video of a person who shared his experiences about living with, and seeking care for, depression
- Promotional video by a local celebrity: screening a video featuring a local film star advocating seeking help for mental illness.

The campaign was implemented in each community for three months. Mixed methods evaluation of stigma and MH awareness was done across all 42 villages, however only 2 of the villages in ST villages had a proper before after evaluation. For the remaining villages, the pre assessment of the campaign using quantitative measures was missing. This was because of limited time and resources and the fact that stigma assessment perse was thought of later. During the evaluation, before and after the campaign was implemented, community members in two villages were asked about their mental health stigma perceptions, knowledge, attitudes, and behaviours. There was a third evaluation at the end of the pilot project which happened after 2 years.[14,15] The results of the main study and the process evaluation have been reported previously.[8,9,11,15,16,17,18] In brief, the SMART Mental Health pilot project resulted in a significant increase in appropriate mental

health services use by villagers experiencing stress, depression/anxiety or at an increased risk of self-harm, and a reduction in depression and anxiety symptoms over the intervention period. We found improved mental health awareness and reduced stigma perceptions related to help-seeking for mental disorders amongst villagers.

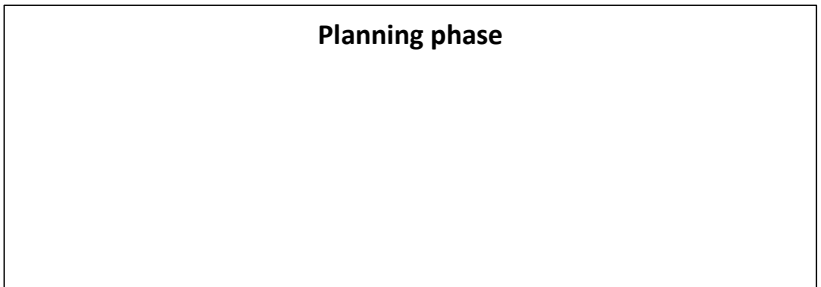
Data Synthesis and Analysis

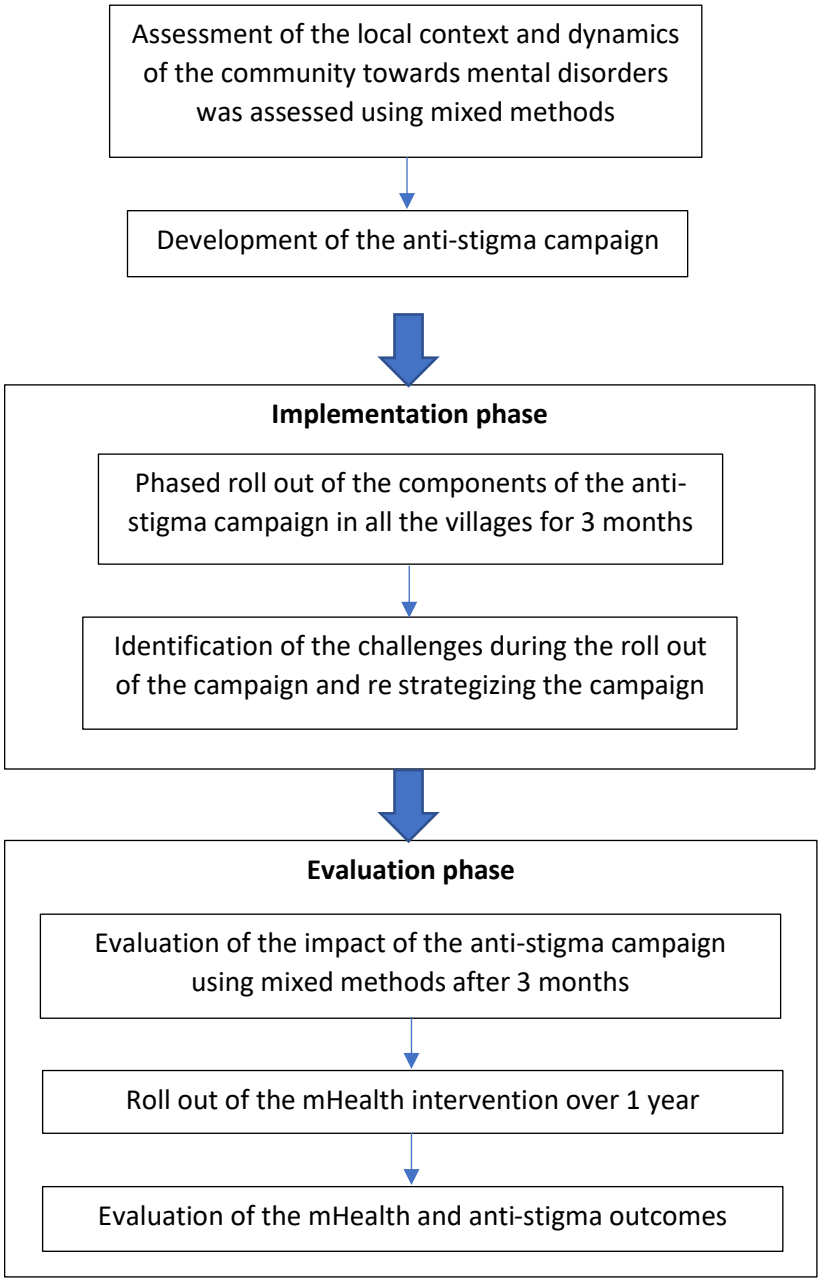
Notes were taken by the research and implementation teams at each operations meeting (held on a weekly basis). In the notes a broad range of operational challenges faced in the planning, implementation and evaluation phases of the anti-stigma campaign were documented. Challenges were discussed between researchers and field staff who were part of the activities related to the campaign. Notes were prepared which were circulated via email to ensure that action points relating to each challenge were described clearly. Based on this information the team developed and implemented strategies designed to overcome the challenges.

We used Andersen's Behavioural Model for Health Services Use [19] to map the operational challenges and barriers that influenced health service use and implement the anti-stigma campaign. The key components of Andersen's model are environmental, population characteristics, and health behaviour affect outcomes. This model mainly focuses on an individual's predisposition to use healthcare services, factors that facilitate use, and individual's perceived need for care. By using this model, one can evaluate measures of access (e.g., equitable, inequitable, effective, efficient) as well as understand the environmental factors (external or healthcare system) impacting access and use of healthcare services.

Themes and subthemes were developed from commonly repeated challenges in the meeting notes, other meeting summaries and notes taken following discussions with stakeholders and key community members. The challenges were grouped using Andersen's framework.

Figure 1: Flowchart describing the activities in the study





Results

Various operational challenges were experienced in the planning, implementation, and evaluation phases of the SMART mental health study. These, and our practical solutions, are summarised in Table 1.

Planning phase

The planning phase had challenges related to understanding the socio-cultural context of the villages and identifying the existing mental health policies and documents. There was

variation when planning the campaign in line with the resources at ST and non-ST villages. Though West Godavari district had a District Mental Health Programme (DMHP) which is a part of National Mental Health Programme (NMHP), it was not well implemented. This made it challenging for the research staff to have a reference for planning the campaign in both settings. The initial interactions with the community gave insights into existing mental health services, the knowledge and awareness community members had about mental health. Due to the remoteness of the ST villages, it was difficult to recruit staff who would conduct the campaign-specific activities. Help from a local NGO was sought to recruit people who would be familiar with the setting. These issues were not prevalent in the non-ST villages. However, there were difficulties determining current health beliefs and mental health care related help-seeking practices in ST and non-ST villages. In addition, the ST villages had limited access to transport and electricity, limited mobility of residents during the evenings as they would come back after a full day's work, arranging boarding and lodging of field staff in these areas, and understanding language/dialect used for mental health related concepts.

Implementation Phase

The key challenges faced during the implementation phase were in terms of daily travel by the field staff from the project office to reach the ST villages. Initially it was very difficult to travel almost 150 kms both ways to reach the field office. Later a project office was set up in the area. However, there were issues with providing a safe and decent accommodation for staff who were recruited to oversee the work. This issue was resolved by finding up a hostel which had basic facilities to allow our staff to be placed nearby. In case of non-ST villages, the villages were very large and identifying a proper place to do the live shows was a challenge. Sometimes there were unpredictable and harsh climatic conditions that hampered the delivery of the campaign. This was especially true in ST villages. Occasionally the villages were so remote the staff had to wade across streams to reach them. A heavy downpour would cut off the access to these villages. The distinct challenges with ST villages during implementation included forming rapport, gaining trust with the community because of language barriers (they spoke a different dialect), and with most of the population being daily wage labourers made the study contact difficult as they left their homes for work very early in the morning and returned back only in the late evenings . Other common challenges in both the settings included limited funding and duration of the campaign, availability of

electricity, transport and vendor facilities, lack of initial village administrative support, different village characteristics (size, placement of households, religious occasions, festivals followed, cultural beliefs, caste system) that varied from one village to another.

Evaluation phase

The evaluation phase posed challenges such as lack of availability of all the participants due to migration, shifting to another location, lack of funding and time for implementing an evaluation encompassing all villages

Environment: healthcare system, external system:

During the formative phase of the study we identified gaps in mental health awareness in the community, so we trained field staff to help familiarise the community about mental health. We used different methods to create awareness depending on the context/setting. The anti-stigma campaign was informed by the available policy documents. Other programs or festivals happening in the villages during the roll out of the campaign hampered the implementation of these programmes. These were discussed, and alternate plans were made to implement the anti-stigma campaign in that village.

The field staff spoke with the local administrative body (Gram Panchayat), village leaders, and health staff. This helped staff understand the village dynamics and identify the best ways to engage the community. Involving village administration provided additional logistical support to the project team for conducting the live drama shows and mobilising the community to participate in the campaign activities.

Implementation of the anti-stigma campaign required coordination between stakeholders like vendors to do logistic arrangements for the live shows, village administration to seek their willingness and permission to conduct these programmes. In addition to this, ASHAs/Anganwadi members/teachers/any other influential people in the villages were contacted to mobilise people to participate in the different activities of the campaign. Having support from these stakeholders mainly minimised the challenges encountered during the implementation phase in the resource poor settings like the ST villages.

Population Characteristics – predisposing characteristics, enabling factors, needs

The impact of local beliefs on perceptions and awareness of mental illnesses, and available resources for seeking mental health care in the community impacted the participation of

community members in the campaign. Use of and access to each of the components of the anti-stigma campaign was assessed in every village on a regular basis. Any gaps identified during this process led to the development of strategies to facilitate the implementation of the campaign- such as having multiple sessions to show the awareness videos to small groups of people, having a proper venue for organising the campaigns, and identifying the best possible days and times to organize the larger campaign events.

Health behaviour

During initial interactions with the community we identified views and opinions regarding the local context and cultural beliefs about mental health and mental disorders. For example people felt that the cause of mental disorders was due to a curse, or a result of a bad deed and thought it is better to get them treated by traditional faith healers. During these interactions, we were able to understand the mental health related stigma that existed in the community. This also helped in framing and developing the different elements of our anti-stigma campaign.

Interviews with village leaders and community members demonstrated that almost all participants had limited knowledge of mental disorders, regardless of their age, gender, or education. Some attributed their poor knowledge and understanding to stigma attached to mental disorders. Almost all community members, village leaders, and doctors thought that the communities would benefit from education about mental disorders. They felt this would increase knowledge and help reduce stigma. Almost all participants suggested there was a role for long-term use of drama or street plays, and videos to better inform communities and help them understand mental health issues.

One operational challenge that we could not resolve satisfactorily was the timing of the shows. We were unable to accommodate every community members' schedule, especially those involved in factories with multiple shifts, daily wage earners and businessmen.

Table 1: Mapping the challenges faced and strategies used to overcome them during the implementation of the anti-stigma campaign using Andersen's modified Behavioural model of Health Services Use

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
PLANNING PHASE		
Despite the National Mental Health Programme (NMHP) being in India since 1982, it was not implemented in this region.	**Category**: Environmental **Subcategory**: policy **Anderson classification**: Predisposing (social structure)	Referred to large programmes implemented in high-income countries to understand the process e.g. the Time to Change programme in the United Kingdom[20]
No information available on existing mental health services in the communities.	**Category**: Environmental **Subcategory**: Healthcare system **Anderson classification**: Enabling	Conducted a formative scoping exercise within the communities with stakeholders including village heads, the primary health workers who included the Accredited Social Health Activists (ASHAs) and doctors, community members.
Poor awareness of mental disorders within the community (low mental health literacy).	**Category**: Population **Subcategory**: Health behaviour **Anderson classification**: Predisposing (health beliefs)	• Kept records of formal and informal interactions with community members about mental disorders' knowledge and awareness. Referred to research evidence for other stigmatising health conditions like HIV and leprosy in similar settings; • Worked with the community to redesign questions specific to mental disorders.

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
No prior information on feasible and acceptable strategies to create awareness of mental disorders in the community	**Category**: Population **Subcategory**: Health behaviour **Anderson classification**: Predisposing (social structure, health beliefs)	We asked the community for suggestions for what might help reduce stigma associated with mental illness. This helped to design the anti-stigma campaign.
Determining current beliefs and practices in each community when seeking mental health care	**Category**: Population **Subcategory**: Health behaviour **Anderson classification**: Predisposing (health beliefs)	• Local beliefs and cultural practices followed by community members to address mental disorders were sought and considered when developing the anti-stigma material to help give the right message to the community. • The content of the drama was edited to cater to local perceptions. For example, the message was shared that seeking help from faith healers and traditional healers was fine if they provided beneficial counselling and referred more difficult cases to the specialists. The need for clinical interventions by trained doctors was also highlighted. • In addition, local idioms and language that the community is

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
		familiar with and use to talk about mental disorders was identified to help place the campaign material in context.
IMPLEMENTATION PHASE		
Large distances to be covered Climatic conditions and their impact	**Category**: Environment **Subcategory**: Understanding the geography **Anderson classification**: Predisposing (demographic)	• Field staff recruited to understand the setting and chalking out a plan to ensure the availability of participants. • Identify the best time of the year to conduct the campaign • Identify the time needed for completing the door to door campaign in a village based on the village population, location, and distance from the project office. Based on that number, the resources that would need to be recruited and trained was calculated
Funding and duration of the campaign Electricity and transport facilities Person-power Support from the community	**Category**: Population **Subcategory**: Availability of resources **Anderson classification**: Enabling (community)	• Since the study was conducted in rural areas, many of the places where live shows were planned had intermittent power supply. Checks were made by the field staff beforehand to identify the situation in the village and the timing and duration of the power cuts.

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
		• Support was received from the village administration for rolling out the campaign. • Some of the villages, especially in the ST Areas did not have proper transport facilities, hence it was difficult to gather members from each PHC/village at one place. This was resolved by forming smaller groups within the villages and conducting awareness sessions, including screening the recorded versions of the drama and other videos. • Thoughtful interactions with the village administration and village leaders helped to get them onboard to mobilise people to attend the sessions. They also helped to identify venues and provided other logistical support.
Engaging with the community	**Category**: Population **Subcategory**: Equitable access to campaign engagement **Anderson classification**: Need (perceived) & Enabling (personal/family, community)	The live shows conducted in the initial set of villages did not have sufficient participation for a variety of reasons: people not being aware of the live show, females of the house not being allowed to come out of the house, the socio cultural dynamics that exist in the villages and certain communities

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
		meant some avoid visiting certain parts of the village due to caste issues. Some of these challenges were overcome by: • making announcements within the entire village about the event, • holding multiple awareness sessions by forming smaller groups of people and having discussions around video screening of the drama to involve those who could not watch the live shows and also in villages where live screenings of the drama were not feasible. • Generally, a venue was chosen that was accessible to everyone irrespective of socio-cultural factors and this needed discussion between the community and field staff
Ensuring everyone could participate	**Category**: Population **Subcategory**: Equitable access to campaign engagement	• The shows were scheduled at times that worked best for most after consulting the villagers (some people were unavailable as the

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
	Anderson classification: Enabling (personal/family, community)	timing of the shows were not suitable due to work schedules). • Identifying a good venue for organising the live shows was an issue as it needed to be accessible by everyone. Discussions were held with the villagers to identify such venues. The venue and time of the shows were announced through the village and neighbouring villages using autorickshaws. • The door to door campaign was advertised by ASHAs and Anganwadi (childcare centre) members from the community who helped to mobilise more people
Encountering easy access to the campaign within the community	**Category**: Population **Subcategory**: ?Equitable access to campaign engagement **Anderson classification**: Need (evaluated)	• Making short video clippings of the drama were showed to the people who did not attend the live shows in groups using tablets and a discussion was done after the screening. • Places where the live shows did not happen, also pre recorded version of the videos or dramas in a particular venue and also individually as a part of door to door campaign

Challenges faced	Key components from Anderson's model	Strategies used to overcome the challenges
		• When there were any festivals or large occasions in the villages, those days were avoided for doing these events. • ASHAs, village leader's support was sought in the villages where there were a lot of refusals for the door to door campaign
Identifying vendors, negotiating with transport services, getting permission from different types of government officials, liaising with different celebrities to do the promotional video at reasonable price, editing the video to make it more relevant to our project.	**Category:** Environment **Subcategory:** Setting up the context **Anderson classification:** External	Most of these minor challenges were resolved by collaboration with community and careful negotiation with the most appropriate stakeholders
EVALUATION PHASE		

Challenges faced	**Key components from Anderson's model**	**Strategies used to overcome the challenges**
Lack of availability of all participants	**Category**: Population **Subcategory**: Access to community members and stakeholders **Anderson classification**: Predisposing (demographic	Attempts were made by field staff to contact and interview as many community members as possible to understand the impact of the intervention
Difficulty involving stakeholders for the evaluation across all villages	**Category**: Population **Subcategory**: Access to community members and stakeholders **Anderson classification**: Need	Though different stakeholders like ASHAs, doctors, PHC staff, Anganwadi workers, teachers etc knew about the anti-stigma campaign, their involvement in delivering the campaign was limited as they were more involved in the mental health service delivery part of the intervention and other assigned duties. This challenge remained unresolved in some of the villages. This has been highlighted as a special consideration for future researchers
Social contact and theatre found to be the most effective strategies in the campaign	**Category**: Health behaviour **Subcategory**: Acknowledging and understanding the different strategies **Anderson classification**: Use of health services	This has implications for larger anti-stigma campaigns which traditionally depend on brochures and pamphlets, a strategy identified here as less effective unless supported by intensive door-to-door campaigns or use of innovative strategies such as drama, street theatre, and social-contact-related videos.

Discussion:

The SMART mental health study resulted in increased uptake of primary health care services (from 3.3% to 81%) for people with common mental disorders such as stress, depression, increased risk for self-harm and suicide[17] by reducing stigma related to help-seeking.[10,15] Careful planning of the anti-stigma campaign enabled us to understand the local dynamics within the community and help the research team to devise better strategies for implementation of the campaign.

Main findings of the study: Operationally there were major challenges during the planning and implementation stages of the study related to a lack of information about existing mental health services, knowledge and awareness of mental disorders amongst the community and primary health workers, a lack of resources including people and poor access. Culturally and locally acceptable campaign materials acceptable to different communities, genders other socio-demographic characteristics such as marital status, education levels were developed.

Andersen's model not only described the barriers related to the operationalising of the campaign, but the theoretical framework also allowed us to postulate how some of the stigma and service delivery outcomes that we observed[18] could have been affected by environmental factors, personal characteristics, and health behaviours of the communities. Such factors influence the decisions of the community when they need to access care, and this affects their long-term decisions and development of a sustainable system of care. In our study, environment factors such as local and cultural beliefs, also influenced the implementation of the campaign. Andersen's theoretical framework provided a useful structure and context to understand how these factors could have functioned synergistically when operationalizing the intervention.

What is known and what it adds: Most research on interventions to reduce mental health-related stigma and discrimination has taken place in high income countries.[6,21] Our study is the first that attempted to conduct such an intervention in India with formal evaluations over time. The operational challenges identified and the strategies we used to overcome them may be relevant to researchers in other similar low resource settings, too. Many challenges we identified e.g. lack of basic resources like transport, electricity, and mental healthcare at the PHC level were specific to low resource settings and were even worse in the ST areas, where

it was very difficult to understand the key stressors, or issues that led to mental disorders, due to the cultural differences in people, the way they made their livelihoods, their practices, and habits. Additionally, there were difficulties due to local dialect which made it difficult for the researchers. But recruitment of local staff built good rapport with the community made it easier to understand the issues and find solutions while operating the campaign in the ST areas. One of the key barriers that was unresolved, was that we were unable to accommodate all community members' schedules to facilitate their direct involvement with the campaign. Future strategies should ensure resourcing is available to accommodate shift workers.

The challenges identified in this paper give a detailed snapshot of implementing such campaigns in low resource settings. Our work also has provided an understanding the importance of the socio-cultural barriers that resulted in non-availability of participants in such campaigns. Though the campaign was delivered to the general community, attempts should be made to design and implement campaigns that target specific groups like youth, different ethnic groups, health care professionals, teachers and politicians who are very influential in the community. Similar studies in other LMIC settings have shown great results by employing other means of creating awareness like use of various forms of media and art to educate and discourage mental health stigma and discrimination.[22]

The pilot project is being scaled up as a cluster Randomised Controlled Trial in two different geographical settings in north and south India. The lessons learnt while implementing the pilot project in terms of planning, implementation, and evaluation, and understanding local issues that impacted those stages on mental health stigma was completed before the beginning of the study. Proper planning in terms of resourcing requirements for funding, transportation facilities, human resources needed for operationalising the campaign, planning the sequence of events and streamlining the modalities of rolling out the different aspects that directly informed the implementation the campaign in the larger cRCT.[23]

The National Mental Health Programme (NMHP)[24] was a nationwide program that was launched in 1982 in India to ensure the availability and accessibility of minimum mental healthcare for all, to encourage the application of mental health knowledge in general healthcare and in social development and to promote community participation in the mental health service development and to stimulate efforts towards self-help in the community. However there have been several concerns, in aspects of uniform coverage across regions,

lack of human and financial resources, training and monitoring, community participation and appropriately curated information, education and communication tools.[24] Many of the reasons for the failure of larger programmes such as the NMHP are some of the operational issues that we have identified. It is vital when planning for and executing large programs to mitigate known operational challenges that are relevant to local settings, in advance. To properly evaluate stigma-reduction interventions, a better understanding of the different aspects of stigma towards mental illnesses in the Indian context must first be identified and studied in detail. Strategies to enhance the impact of such interventions can then be established and evaluated. Promotion of such research and subsequent dissemination would make a scientific involvement locally and internationally, allow for stronger evidence-based policy, and inform future planning of anti-stigma campaigns in India and other LMICs.

Limitations: While we made every effort to record all challenges encountered it is possible that some minor challenges were missed or resolved and not conveyed to all the study team.

Conclusions: The operational strategies designed for the successful implementation of the anti-stigma campaign was helped in effective delivery of the intervention. This paper will help the researchers to understand the key procedures that are involved in planning and implementation of such stigma campaigns which can be developed for scale up and adapting in other similar settings.

Ethical standards

The authors declare that all procedures contributing to this work fulfil the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

Data availability

All data underlying the results are available as part of the article and no additional source data are required.

Competing interests

No competing interests were disclosed

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