Anti-stigma campaign in rural Andhra Pradesh: Results from SMART Mental Health Project

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OUTLINE

- Background
- SMART Mental Health Programme
- Anti Stigma Campaign
- Quantitative assessment
- Qualitative assessment
BACKGROUND
BURDEN OF MENTAL DISORDERS

- Globally, mental and behavioural disorders and self harm account for 9% of all DALYs (Murray et al - Lancet 2012)

- In India, crude prevalence of all mental disorders varies between 24-73/1000 population across all studies (Gururaj et al - National Commission on Macroeconomics and Health 2005)

- Burden of common mental disorders (CMD) in the community is between 13-50% (Gururaj et al 2005)

- Treatment gap in low and middle income countries such as India is about 75-85% (The WHO World Mental Health Survey - JAMA 2004)
CAUSES OF INCREASED TREATMENT GAP

- Stigma against mental health is huge
- Few mental health professionals to manage the burden of mental disorders
- Lack of awareness about mental disorders in the community
- Lack of knowledge about appropriate care for mental disorders
AVAILBLE MENTAL HEALTH RESOURCES

- Recent mental health policy; has a mental health programme and mental health law

- Number of psychiatrists /100000 population
  - India - 0.3; England - 17.7 (Project Atlas - WHO 2011)

- Number of psychologists / 100000 population
  - India - 0.05; England - 12.8 (Project Atlas - WHO 2011)

- Number of psychiatric beds/100000 population
  - Mental hospitals - 1.5 (India); England - 8.0
  - General hospitals - 0.8 (India); England - 50.6
    (Project Atlas - WHO 2011)
MOBILE PHONE BASED TECHNOLOGY USAGE IN INDIA

- One of the largest number of mobile phone use in the world - ~80% of the population (~900 million people)

- Increasing penetration of mobile technology even in rural areas

- Increasing number of smart phone/tablet use
BRIDGING THE TREATMENT GAP USING MOBILE BASED TECHNOLOGY

- Need for innovative models of healthcare delivery to bridge the gap in service provision

- Use the power of mobile technology to reach out to remote areas

- Use mobile technology to develop applications that can be used by lay health care workers or primary care doctors with limited mental health training
THE SYSTEMATIC MEDICAL APPRAISAL, REFERRAL AND TREATMENT (SMART) MENTAL HEALTH PROGRAMME
KEY STRATEGIES PROPOSED

- Task shifting and strengthening skills of existing primary health care workers
- Using electronic decision support (EDS) systems
- Incorporating clinical decision support tools on a mobile phone platform
KEY OBJECTIVES

- Development of a multifaceted intervention

- Demonstrating feasibility, acceptability and effectiveness through a large pilot study that will inform a large cRCT
METHOD

- Phase 1: Development of a multifaceted intervention
  - Incorporation of PHQ9 and GAD7 as a mobile based application for use by interviewers and Accredited Social Health Activists (ASHAs)
  - Adapting the mh-GAP-IG algorithm relevant to depression, other emotional disorders, and self-harm to Indian context and developing an Electronic Decision Support (EDS) tool
  - Raising community awareness and conducting an anti-stigma campaign
  - Re-training of primary care health workers
METHOD

- Phase 2: Demonstrating feasibility, acceptability and effectiveness through a large pilot study
  - Baseline interview of adults ≥ 18 years in villages
  - Assessment of CMD using PHQ9/GAD7 and referral of screen positive cases to primary care doctors
  - Assessment and management of depression, other emotional disorders and self harm according to EDS based on the mh-GAP-IG algorithm by primary care doctors
  - Post-intervention mixed method assessment of all screen positive cases
1. Household screening for common mental disorders (CMD) depression, suicidal risk and emotional problems by interviewers.

2. Non physician health worker (ASHA) screens population for CMD using mobile based screening tools.

3. Screen positive individuals are referred to PHC physician.

4. Consented data from individuals uploaded to a secure health record via the OpenMRS system.

5. PHC physician reviews data for referred individuals.

6. Electronic Decision support based on WHO's mhGAP-IG algorithm is used by PHC physician to diagnose and manage patients suffering from CMD screened for by ASHAs. Complicated cases referred to trained mental health professionals.

7. Mobile based messages sent to ASHAs for ensuring adherence and follow-up of those individuals who are diagnosed as suffering from CMD by the physician.

8. Post intervention followup of individuals done by interviewers.
UNDERSTANDING STIGMA

- **Stigma** is an attribute, behavior, or reputation which is socially discrediting in a particular way: it causes an individual to be mentally classified by others in an undesirable, rejected stereotype rather than in an accepted, normal one – Goffman 1963

- **Stigma is** (Thornicroft et al 2007):
  - a problem of knowledge (ignorance/misinformation)
  - a problem of attitudes (prejudice)
  - a problem of behaviour (discrimination)
There is poor knowledge about mental health in the community, especially rural communities - Armstrong et al 2011, Kishore et al 2011

Providing biomedical explanations for mental disorders were worse than social stressors as causal factors for mental disorders along with coping mechanisms - Kermode et al 2009

Low literacy, societal perceptions and stigma are key factors leading to poor use of mental health services - Thornicroft et al 2009
Significant stigma against people with schizophrenia have been found amongst community and health staff – Loganathan and Murthy 2008

In a RCT, 42% reported negative discrimination and 79% reported internalized stigma – Koschorke et al 2014

A qualitative study from rural North India reported that social exclusion was common in the community for people with mental disorders – Mathias et al 2015
FRAMEWORK FOR CURRENT ANTI-STIGMA CAMPAIGN

- Prior research experience informing current activities
- Formative research
- Employing different strategies
- Mixed methods assessment - pre-post design
FORMATIVE RESEARCH

- Formative research using mixed methods approach was conducted in 3 villages supported by 1 PHC

- The focus was on:
  - Gathering information on the usability and problems of the mobile based applications used for the study
  - Gathering qualitative information about how the community and primary healthcare workers perceived mental health problems
  - This information supplemented materials developed based on prior research and provided a local context
EMPLOYING DIFFERENT STRATEGIES

Different strategies used across 42 villages:

- Brochure on mental health awareness and stigma
- Posters
- Door-to-door campaign in all villages
- Screening a video of a person with mental disorder and his caregiver talking about mental disorders and treatment
- Screening a video of a local film actor speaking about CMD and the benefits of getting it treated
- Staging live and recorded shows of a drama in local language that focussed on mental disorders and benefits of getting treated
Framed assessment conducted in 2 villages (N~1900) using a pre-post design employing mixed methods assessment

- Quantitative measures: using household survey
  - Barriers to Access to Care Evaluation: Treatment Stigma Subscale (BACE-TS version 3) - 12 item, 0-3 likert scale (Not at all, little, quite a lot, lot)
  - Knowledge, Attitude and Behaviour - mix of likert type (1-5 - Agree strongly-disagree strongly) items; multiple responses

- Qualitative interviews:
  - FGD and in-depth interviews
### QUANTITATIVE ASSESSMENT

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<th></th>
<th>Visit 1 (N=1872)</th>
<th>Visit 2 (N=2042)</th>
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<tr>
<td>Male/Female (%)</td>
<td>45/55</td>
<td>45/55</td>
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<tr>
<td>Age (Mean/SD) yrs</td>
<td>42.6/15.9</td>
<td>41.9/15.7</td>
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<tr>
<td>Occupation (%)</td>
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<td>Housewife/retired</td>
<td>36.7</td>
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<td>Organized sector</td>
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<td>Unorganized sector/others</td>
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<td>No schooling</td>
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<td>Primary/high school</td>
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<td>Graduate/others</td>
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<td>Marital status (%)</td>
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<tr>
<td>Currently married</td>
<td>79.5</td>
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<tr>
<td>Others</td>
<td>21.5</td>
<td>19.0</td>
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Knowledge, Attitude Behaviour

- TV, people and other sources were the commonest avenues to gather information about mental health.

- Almost 90% informed that health facilities were the main treatment centres.

- Less than 1/3rd knew someone with mental illness.
KAB ASSESSMENT - 2

Positive beliefs about people with mental illness
- they can recover fully
- treatment is effective
- they are less of a danger than believed
- society needs to be more tolerant
- willing to share personal information about mental illness with family/friends
- Willing to live, work, be in a relationship with someone with mental illness

Negative beliefs about people with mental illness
- tend to be violent
- cannot live a good rewarding life
- should not get married
- should not be given responsibilities
BACE ASSESSMENT - 3

- Total BACE score = 0.4 (SD - 0.08)

- Roughly 1/3rd reported that one or other of the question was an issue

- 3 highest ranked stigmatizing issues were:
  - Not wanting a mental health problem to be on my medical records
  - Concern that my children may be taken into care or that I may lose access or custody without my agreement
  - Concern about what people at work might think, say or do
QUALITATIVE ASSESSMENT

Objectives

- To gather knowledge about the process of delivering the anti-stigma campaign - appropriateness and usefulness of each component of the campaign; relevance to local culture and settings especially from the perspective of the local governance

- To assess the impact of anti-stigma campaign on the community environment
RESULTS - 1

Method

- 4 FGDs (n=33) with community members (18 male; 15 female; 22-65 years), 2 FGD in each village
- 1 FGD (n=10) with field investigators (6 male; 4 female; 22-34 years) of the anti-stigma campaign
- 4 In-depth interviews with ASHAs (females; 31-42 years) and 2 with Village leaders (1 male; 1 female)
- FGD conducted in local language then transcribed and translated
- 8-10 members per group
- Data to be analyzed using thematic framework
Key preliminary findings

- The campaign was deemed to be encouraging and useful.

- Community members and village leaders felt that they were better informed about some of the myths around mental disorders and need for treatment.

- Door-to-door campaign, drama and video of a person with mental illness talking about his problem were found to be more useful than posters and brochures.
CO-PRESENTERS

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