Integrating Mental Health into Primary Care: Expanding a Community-based Mentorship and Enhanced Supervision (MESH) Model to Address Severe Mental Disorders in Rwanda

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Inshuti Mu Buzima / Partners In Health

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Country overview

- Population: 11,780,000
- Catchment area population: 860,000
- Catchment areas: Burera, Southern Kayonza, Kirehe
- Health facilities in catchment area:
  - 3 hospitals, 42 health centers
- Specialty programs: HIV/TB, NCD/oncology, Mental Health
Inshuti Mu Buzima, (IMB)

Sustaining psychological, physical and emotional support for the victims of trauma has been almost impossible to provide because of the numbers of survivors and the prioritisation of resources.

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Background

• Overall mental illness point prevalence: 15.84%
• Rwanda National prevalence of PTSD in 2009 estimated at 26.1%\(^1\)


• Mental Health legislation and policies:
  – Mental Health Care was limited to Ndera psychiatric hospital created in 1972. No local training programs in psychology or psychiatry. No National Mental Health Policy
  – 1994 genocide against Tutsi, increased burden of mental disorders. This led to the development of the FIRST National Mental Health Policy in 1995.
<table>
<thead>
<tr>
<th>PROGRAMS</th>
<th>MAIN OUTPUTS</th>
<th>INDICATORS</th>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS</td>
<td>• Access / quality of HIV / AIDS services improved</td>
<td>% HIV Prev. in PW / ANC</td>
<td>Baseline: 1.5 (TRACnet)</td>
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<td></td>
<td></td>
<td>% HF with VCT / PMTCT</td>
<td>94 (TRACnet)</td>
</tr>
<tr>
<td>Malaria</td>
<td>• Access / quality of Malaria services improved</td>
<td>Malaria Prevalence women / children &lt;5 yr</td>
<td>Baseline: 0.7 / 1.4</td>
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<tr>
<td></td>
<td></td>
<td>% HH with 1 LLIN or more</td>
<td>82 (DHS/HMIS)</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>• Access / quality of Tuberculosis services improved</td>
<td>TB Treat Success rate SS+</td>
<td>Baseline: 87.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TB/HIV patients receive ART</td>
<td>67</td>
</tr>
<tr>
<td>Mental Health</td>
<td>• Mental health integrated in all HC/DH</td>
<td>% HC with MH services</td>
<td>Baseline: 16</td>
</tr>
</tbody>
</table>
| Neglected Tropical Diseases | • Integrate NTD is general services | % Children of 1–15 yrs dewormed | Baseline: 83 | Targets*: 90 
| Noncommunicable Diseases | • Access / quality to NCD services improved | 4 baseline studies | Baseline: 0 | Targets*: 1 / yr |
|                    |                                                   | # of HF providing NCD services according to national norms | Baseline: 0 | Targets*: 500 |

Third Health Sector Strategic Plan, Government of Rwanda, Ministry of Health
Collaborations with the Rwanda District Hospitals/Health Centers

- MoH staffs and leaders at District Hospital and Health Center also play a key role in implementing mental health interventions.

- PIH/IMB leadership and MH program staffs role is to support, facilitate and accompany the MoH leadership/staffs in the implementation process at all level.
The PIH/IMB MESH MH program model

• The MESH MH program is based on guidelines provided by the MoH and the World Health Organization’s Mental Health Gap Action Programme (mhGAP) for non-specialist providers, as well as other PIH domain clinical lessons learned.

• The aim for this model is to provide the MoH with a practical, sustainable approach through which to continue to realize its mental health policy in rural areas.
Partners In Health Model: Strengthening Public Sector Health Delivery Systems

District Hospital

Health Center

Community

Specialty health services coordinated with health center and community based care

Standardized screening assessment and treatment, including support for behavior change and care management

CHWs trained in health promotion, case finding, referral, adherence and follow up
Providers

- **Types of providers:** Physicians (few specialists in psychiatry), Nurses, psychologists, CHWs

- **Butaro district hospital:** 215 staffs
  - 18 midwives, 94 nurses, 16 doctors/physicians (4 permanent specialist doctors, 12 GPs)

- **Burera district:** 10 MH staff
  - Psychiatric nurses, psychologists, data officers and social workers
  - 5 are MOH and 5 are IMB

- **Burera district 19 Health centers:**
  - The health care providers at health centers are all nurses (A1 & A2)
  - # of nurses at each health center varies between 16 to 20 nurses
  - Each health center has 2 nurses who were trained in mental health care, receive regular clinical mentorship and supervision

- **Community level:**
  - Rwanda MOH has around 1500 community health workers (CHWs) in Burera district
  - 946 CHWs have received 3 days of basic training on mental health basics skills
Task Shifting of MH services in Burera District through MESH QI Model
Mentoring and Enhanced Supervision at Health Centers (MESH)

1. Decentralized initial training of health center nurses and CHWs
   - Improved nurse practices
   - Improved quality of care at health centers

2. Ongoing, on-site mentorship of HC nurses by traveling psychiatric nurse
   - Improved patient outcomes

3. Routine mentorship, supervision & data for quality improvement
Mental Health Integration into Primary Care

A generalist government nurse, mentored by a government psychiatric nurse from the district hospital, provides mental health care.

Bungwe Health Center, Burera District, Rwanda, 2014

A generalist government nurses pre-services training group
Burera District Health Center mental health Service Use: November 2014 to April 2015

Burera District Mental Health Services, 11 Health Centers, Nov 2014 – Apr 2015

Average # visits per month per health center: 376
Average # of visits per month at 3 select health centers prior to MESH MH program initiation: 13

Burera District Mental Health Services Rendered: MESH MH Health Center patient follow up, Nov 2014 to Apr 2015

- Initial visit, # of patients
- # returning within 90 days

District average follow up within 90 days: 70%
Burera District Health Center mental health Service Use: September 2014 to June 2016

Number of visits

Months

- Sept -14
- Dec-14
- Mar-15
- Jun-15
- Sep-15
- Dec-15
- Mar-16
- Jun-16

831 1262 1792 1962 1915 2152 2059 2252
It (community based mental health care) cut-short the journey I used to make; now there is no problem because I am getting the mediation from near my village.” – Patient, Mucaca HC
MeSH Supervisory Visits and Observed Clinical Interviews (4 select health centers)
Nov 2014 to July 2015

- Gitare: 14 visits, 57 checklists
- Mucaca: 15 visits, 47 checklists
- Rusasa: 23 visits, 55 checklists
- Ruhunde: 15 visits, 58 checklists
Mean GHQ-12 and WHO-DAS Brief scores at Baseline, 2 months and 6 months

<table>
<thead>
<tr>
<th></th>
<th>Baseline (n=146)</th>
<th>2 months (n=127)</th>
<th>6 months (n=121)</th>
<th>p-value</th>
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<tbody>
<tr>
<td><strong>GHQ-12 score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All available obs</td>
<td>25.0 (8.3)</td>
<td>13.1 (6.5)</td>
<td>11.8 (5.9)</td>
<td>p&lt;0.0001</td>
</tr>
<tr>
<td>Last value carried</td>
<td>25.0 (8.3)</td>
<td>14.9 (8.1)</td>
<td>13.8 (7.8)</td>
<td>p&lt;0.0001</td>
</tr>
<tr>
<td>IPM weighted*</td>
<td>25.0 (8.3)</td>
<td>12.9 (7.0)</td>
<td>11.7 (6.5)</td>
<td>p&lt;0.0001</td>
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<tr>
<td><strong>WHO-DAS Brief score</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>All available obs</td>
<td>25.5 (11.6)</td>
<td>11.3 (9.9)</td>
<td>8.0 (7.4)</td>
<td>p&lt;0.0001</td>
</tr>
<tr>
<td>Last value carried</td>
<td>25.5 (11.6)</td>
<td>13.4 (11.8)</td>
<td>10.7 (10.7)</td>
<td>p&lt;0.0001</td>
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<tr>
<td>IPM weighted*</td>
<td>25.5 (11.6)</td>
<td>11.1 (10.6)</td>
<td>7.9 (8.0)</td>
<td>p&lt;0.0001</td>
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*Analyses weighted by the inverse of the probability of having complete data. At 2 months, only health center predicted a missing value and informed the weights. At 6 months, health center, baseline GHQ-12 score, age, and household assets all predicted a missing value and therefore informed the weights.

Cronbach’s α: GHQ-12 0.93
WHO-DAS 0.90
Results and Next Steps

- 1,418 unique beneficiaries accessing MESH MH services (since October 2014 to May 2016)

- Mixed Method Outcomes Evaluation
  - Quantitative evaluation completed
  - Qualitative interviews completed, translation and data analysis continues

- 2016-2019: Expansion of MESH MH to two other districts and integration of psychotherapy intervention across IMB

### Economic Outcomes - Preliminary

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<th>Baseline (n = 146)</th>
<th>6 months (n = 121)</th>
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<tr>
<td># reporting inability to work in past 30 days as a result of mental illness</td>
<td>71 (49%)</td>
<td>6 (5%)</td>
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<tr>
<td># needing help with activities of daily living</td>
<td>59 (40%)</td>
<td>8 (6%)</td>
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<tr>
<td># with primary caregiver leaving income generating work to care for patient (avg 8.4 days)</td>
<td>60 (41%)</td>
<td>5 (4%)</td>
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Community health workers training session on mental health

Community health workers group photo after a training session on mental health
Case finding, treatment and Follow up
Community health worker supervisor on a home visit

Burera District, Rwanda, 2012

Case finding, follow up, treatment adherence, social support, and stigma reduction in the community

Burera District, Rwanda, 2014
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Partners In Health
Inshuti Mu Buzima

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