Presented by Rick Wolthusen, MD, MPP

Duke University’s Monthly Spirituality and Health Research Seminar, June 2021
Objectives

• **Understand** the mental health treatment gap and contributing factors in an economically developing country

• **Discuss** design thinking as a tool to understand the problem and generate solutions to the problem in a non-hierarchical way

• **Recognize** the Brain Spirit Desk as one solution to overcome the lack of collaboration between spiritual leaders and mental health professionals
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• Setting the Stage
• Mental Health Care in Ghana
• Project site & previous projects
• Design Thinking
• Brain Spirit Desk
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• Setting the Stage ✓
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• The project site & previous projects
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Mental disorders contribute significantly to years lived with disability and are more prevalent than HIV and tuberculosis in Ghana.
Yet, mental disorders are significantly underfunded. The mental health budget mostly supports institutionalized care.

The Ghanaian government spends at least 2.5 x as much money on HIV (compared to mental health).
Deinstitutionalized Care: Mental Health in Ghana

The reality is that most of the mental health care in Ghana takes place in communities.

Institutionalized care mostly takes place in the South

In Ghana, around 70% of healthcare is provided by traditional healers in communities.
Population-Provider Ratio: Mental Health in Ghana

The population - care provider ratio is skewed towards community-based providers.

Ghana has about 15 psychiatrists – this translates to about 4 psychiatrists for a city as large as New York City.
Service user do not access facility-based care because…

**Demand side**

- disease vs. God’s challenge
- stigma
- financial resources: (in)direct costs
- people work during hospital hours
- people with mental illness are not always able to actively seek treatment or conform to highly structured settings (bureaucratic procedures etc.)
- treatment ≠ care

**Supply side**

- few psychiatric hospitals
- not enough mental health care professionals
- mental health care professionals usually only offer medication but not psychotherapy
- medication out of stock, too expensive
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The project site

- Roughly 200,000 constituents
What happened?

Rick’s clinical internships at Central Aflao Hospitals
What happened?

Rick’s clinical internships at Central Aflao Hospitals

On The Move e.V.
What happened?

Rick’s clinical internships at Central Aflao Hospitals

On The Move e.V.

Brain Awareness
Biopsychosocial model of care

- Culturally relevant and sensitive

BIO - PSYCHO – SOCIAL model of care
What happened?

Rick’s clinical internships at Central Aflao Hospitals

On The Move e.V.

Brain Awareness

Brain Cycles
What happened?

Rick’s clinical internships at Central Aflao Hospitals

On The Move e.V.

Brain Awareness

Brain Cycles

Home of Brains
Why? What? … How?

WHY
… in addition:
• Socioeconomic costs for patients and caregivers
  • Life quality

WHAT
• Fixing the supply and the demand side
  • Communities

HOW
?
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How: Design Thinking

Figure 1 – The Design Thinking Process (Source: ARS.de).
Empathize

**Before**
- Plan how to identify user needs
- Research user needs
- Summarize findings

**During**
- Initiate sessions
- Generate ideas
- Evaluate ideas
- Evaluate success of sessions

**After**
- Summarize findings
- Communicate results
- Implement changes

**Thoughts**
- Analyze
- Evaluate

**Feelings**
- Happy
- Interested

**Touchpoints**
- Web
- Phone

**Opportunities for Improvement**
- Evaluate tool
- Meticulous for success
Synthesize and define the problem

Similarities? Differences?
How Might We?
Problem?
Ideate
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• Brain Spirit Desk
Brain Spirit Desk

Community-based care  $\rightarrow$  Facility-based care

10% $\rightarrow$ 30%
## Partners

<table>
<thead>
<tr>
<th>Government</th>
<th>Donors and funders</th>
<th>Influencers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Authority</td>
<td>Department for International Development (DFID)</td>
<td>Rehabilitated patients (Bright Tavi)</td>
</tr>
<tr>
<td>Ghana Health Service</td>
<td>Jospong</td>
<td>Journalists (Albert Gooddays and Isaac Kaledzi)</td>
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<tr>
<td>Christian Health Association</td>
<td>International Brain Research Organization (IBRO)</td>
<td>Youtubers (Stanley Makafui)</td>
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<tr>
<td>MP Ketu South District</td>
<td>Voluntary offerings from religious institutions</td>
<td>Future of Ghana Hamburg (Germany) &amp; London (UK)</td>
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<tr>
<td>Ketu South Municipal District Assembly</td>
<td></td>
<td></td>
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<tr>
<td>Ketu South Municipal Health Directorate</td>
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## Unintended Consequences

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<th>Unintended Consequence</th>
<th>How can the consequence be mitigated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refusal of patient to seek care in hospital, if needed</td>
<td>Train religious leaders regularly on red flags, have them transfer patient (patient trust them more than mental health workers); have mental health workers appear regularly in community to increase trust</td>
</tr>
<tr>
<td>Brain Spirit Desk provides free care, reluctance to for government services</td>
<td>Education and awareness campaigns</td>
</tr>
<tr>
<td>Sustainability of model, incentive of government to step in/up</td>
<td>Work with influencers, work inter-ministerial and multisectoral</td>
</tr>
<tr>
<td>Case increase (demand cannot be met by supply, e.g., medication, human resources, working space, equipment such as laptops)</td>
<td>Increase number of laptops and working spaces; collaborate with pharmacy and do some baseline research (list of medication for known patients; permanent structure: every XX days we need these drugs; for new patients: start a list of 1st vs. 2nd choice medication); rotation system for mental health workers</td>
</tr>
<tr>
<td>Documentation prevents from patient work</td>
<td>No double entries (handwritten and on laptop, but entry only on laptop); employ staff members who is solely in charge of documentation and is trained on basics of mental health</td>
</tr>
<tr>
<td>Patient harmed by lay counseling/psychotherapy</td>
<td>Frequent supervision and random review of patient cases; establish hotline for cases of patient abuse</td>
</tr>
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Time for Q&A
**Problem Statement:** Mental health patient care in the Ketu South District in Ghana is currently leaving people behind. A baseline assessment suggests that only 10% of all individuals with a mental health condition are attended to in a healthcare setting. The existing system is siloed, lacking trained mental health professionals, and does not include culturally relevant solutions. The Brain Spirit Desk aims to build up community care and integrate religious institutions into a biopsychosocial model of continuous mental health care. In the long-term, the number of mental health service providers will be increased. The service providers will be connected and will be able to identify and treat patients with mental health disorders early. This will increase the number of treated patients from 10% to 30% in the Ketu South District in Ghana.

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**Inputs**
- Religious facilities and leaders
- MH facilities and professionals
- Ketu South Municipal Health Directorate
- Financial resources
- Equipment (such as laptops and a vehicle)

**Activities**
- **Recruit** MH professionals and religious leaders
- **Train** recruited stakeholders on MH, spirituality, and data collection
- **Facilitate** community-based MH discussions
- **Identify** cases of mental illness, defaulters, and relapses

**Outputs**
- **Recruiting:**
  - # of recruited MH professionals and religious leaders
- **Training:**
  - educational manuals developed
  - # of trained MH professionals and religious leaders
- **Facilitating:**
  - # of community-based MH events held
  - # of community members who attended MH events
- **Identifying:**
  - # of MH cases identified
  - # of MH cases counseled
  - # of MH cases referred
  - # of high-quality care cases

**Outcomes**
- **Recruiting:**
  - Increase number of MH care providers (increase accessibility and acceptance)
  - Build network of MH practitioners
- **Training:**
  - Increase knowledge about biopsychosocial care of MH (strengthen non-medical approaches to MH care)
  - Promote human-rights centered care
  - Increase MH documentation skills
  - Increase trust between different care providers
- **Facilitating:**
  - Increase MH knowledge, destigmatize mental illness
  - Promote good MH care practices - prevention
  - Increase community cohesion and well-being
- **Identifying:**
  - Increase ability to identify new cases, defaulters, relapses (better prognosis, less $ spent on MH care, safer environment, free up resources of MH care providers)

**Impact**
- **Individual:**
  - Time between symptom onset and initial treatment reduces, faster recovery // psychosocial reintegration improves
- **Aggregate:**
  - Awareness of MH issues and community capacity to deliver MH care increases
- **System:**
  - Desigmatization of mental illnesses // Promoting cost-effective biopsychosocial community-based model of care // Strengthen and increase community well-being

MH = mental health