Impact of Depression Treatment on Families Living in Extreme Poverty

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What we know from research on depression treatment in poor families globally

- Over the last 10 years there is an exponential growth of depression treatment studies in Low and Middle Income Countries (LMICs)

  Bolton et al., 2003: Depressed Adults in Uganda
  Bolton et al, 2006: War-affected Teens in Uganda
  Arraya et al., 2003: Depressed Women in Chile
  Rachman et al., 2008: Perinatal Depression in Pakistan
  Patel et al., 2010: Depression in Primary Care in India

- These landmark studies informed critical questions that health, mental health, and development fields have asked for many years

Questions

- Why label human suffering “depression”?
- Is psychotherapy a luxury in these communities? Does it help individuals and families?
- Should we use western-based psychotherapy concepts and techniques in these communities? How will family members react?
- Would rigorous clinical trials in resource-poor settings be possible and appropriate? How do we measure impact on families?
- Even if the interventions proved to be effective, would it be sustainable and scalable?

What the studies showed us about depression assessment

- Culturally relevant assessment using depression instruments validated to capture:
  - local idioms of distress (e.g., Yo' kwekyawa : self-loathing, Okwekubagiza self-pity; stress-related condition)
  - culturally specific ways of expressing and communicating this distress ("thinking too much", somatic symptoms, etc.)
- Assessed impact of depression on functioning: **taking care of self and family (catastrophic impact of parental depression in LMIC)**

Assessment of Depression and Functioning

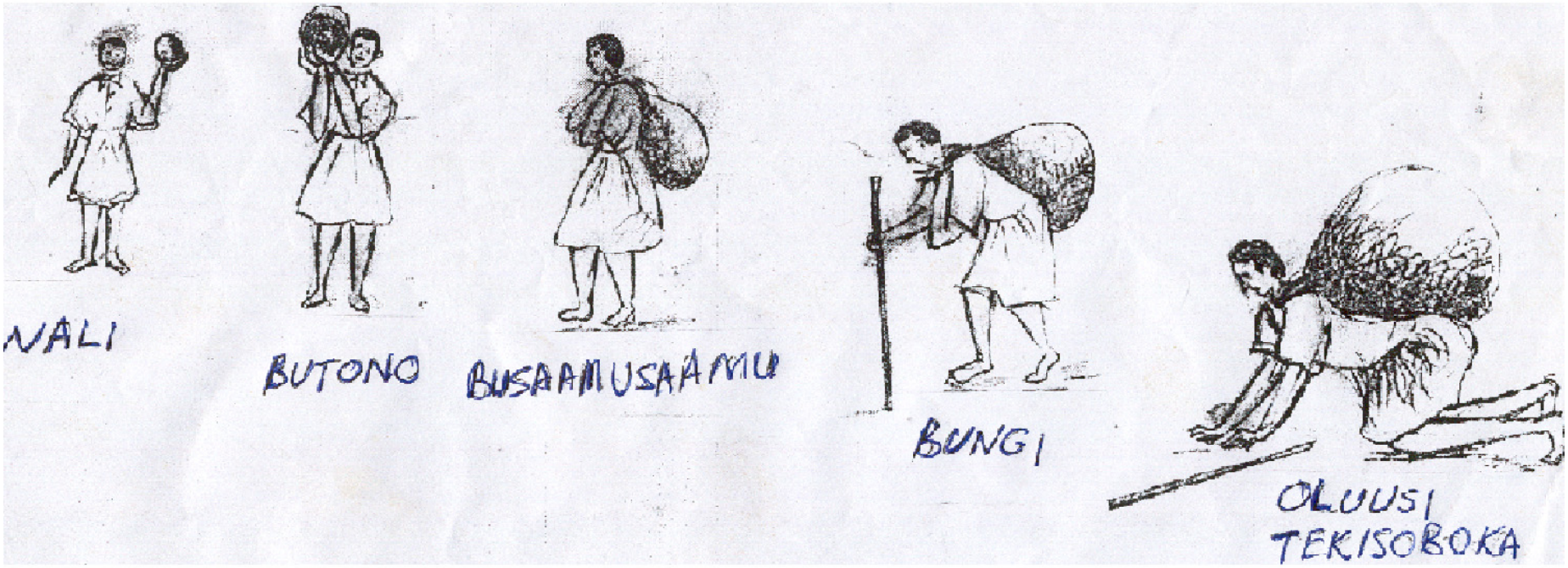
- Assessment of Functioning: Development of a Local Measure (Bolton, 2001; Bolton & Tang, 2002)

- Ethnographic methods derived gender-specific tasks viewed as essential elements of functioning (caring for self and family-community)

Items Comprising the Assessment of Functioning Scale

- Males
  - Personal Hygiene
  - **Farming**
  - **Head the Home**
  - **Manual Labor**
  - **Plan for the Family**
  - Participate in Community Development Activities
  - Attend Meetings
  - Participate in Burial Ceremonies
  - Socialize
- Females
  - Personal Hygiene
  - **Caring for Children**
  - **Cooking**
  - **Washing Clothes/ Utensils**
  - **Cleaning House/ Surroundings**
  - **Growing Food**
  - Participate in Community Development Activities
  - Attend Meetings
  - Console and Assist the Bereaved

Function Assessment Graphic



What the studies showed us about depression treatment and families

- Antidepressant psychosocial treatments needed to be adapted heavily in content and process to be culturally meaningful and acceptable to families:
  - In Uganda: grief work de-emphasized discussing negative aspects of the relationship with the deceased; dispute resolution took into account local family structure (e.g.,polygamy), and respect for familial power and intimacy codes
  - In Pakistan: instead of explicitly addressing perinatal depression, the lady health workers focused on well-being of the baby (a goal that all family members could accept)
- Therapists: Community Health Workers (CHW) → Task shifting

Outcomes: significant symptom reduction and improvement in self and family care

- **In Uganda**: significant improvement in family functioning after psychotherapy; ethnographic assessment 8 years after trial showed as the most frequently endorsed outcome "ensuring education for the children" (Lewandowski et al., in preparation).

- **In Pakistan**: improvement of maternal depression improved infant medical outcomes; increased mother-infant play time (attachment); increased contraception usage (Rahman et al., 2007)

Proposal on reducing perinatal depression in northern Nigeria (PI: Verdeli, Columbia University)

Achieving MDGs by Targeting Perinatal Depression:

- Improve maternal health
- Reduce child mortality
- Alleviate extreme poverty and hunger

Rationale for targeting perinatal depression

- In LMIC, perinatal depression associated with increased infant and mother morbidity and mortality
  - Fewer antenatal/postnatal visits
  - Lower rates of skilled assistance during labor
  - Lower rates of vaccinations and poor hygiene
  - Reduced use of contraceptives (limiting optimal spacing of pregnancies)
  - Decreased breast feeding
  - Reduced food security for family
- Most maternal deaths occur in the period immediately *following childbirth*
  - Perinatal period, a critical window of opportunity for intervention

Rationale for treatment and site selection

- Interpersonal Psychotherapy (IPT) is a feasible and effective community-based treatment for depression of men and women in sub-Saharan Africa
- Millennium Villages Project (MVP) is a 10-subSaharan country project that routinely monitors progress in MDGs including family health and nutrition outcomes
- The Pampaida MVP site in northern Nigeria is most affected by perinatal morbidity and mortality

MVP site of Pampaida

- Rates of perinatal death in the region (8.4% of mothers and 8.6% of infants): *among the highest in the world* (UNICEF, 2011)
- 1 in 4 Nigerian children who die before the age of five do so within the first month of life (WHO, 2006)
- Women participate in an average of 2.7 antenatal visits and only 13% of births are attended by skilled personnel (MVP, 2011)
- Nearly 1/3 of women in Pampaida endorse suicidal ideation within the previous month and over two-thirds report significant distress-related functional impairment (Sweetland, 2010)

MVP site in Pampaida (cont' d)

- 6000 people across 28 villages
- MVP health pyramid that employs community health workers (CHWs) and primary care personnel
- Case finding supported by smart phone-based decision tools, intervention prompts, and data entry that can feed into Health Management Information Systems for better continuity and quality of care

Proposed methods

- **Qualitative assessment** using focus groups to determine idioms of distress, and barriers/facilitators to access healthcare including mental healthcare on an *individual*, *family*, and *community level* *(engage religious leaders in collaboration with social scientists)*

- **Adaptation** of the IPT manual and training of CHWs

- **Pilot test** of the feasibility and acceptability of IPT for depressed pregnant women, recruiting women in the third trimester of gestation as participants

Exciting times for Global Mental Health

- NIMH has a Director of Global Mental Health office
- WHO distributed mhGAP guide for mental health assessment and treatment in primary care in LMIC
- Special session planned at the UN focusing on Mental Health

An emerging Columbia-based Center of Excellence for Global Mental Health

A collaboration among Columbia schools and institutes to:

- to train and mentor the next generation of GMH researchers and practitioners
- strategically extend the existing portfolio of innovative and rigorous GMH research; and
- promote awareness and acceptance of mental health conditions and services on a local, regional, and government level in LMICs.

Participating Schools/Institutes

- Dept. of Psychiatry, Columbia College of Physicians and Surgeons
- Teachers College, Columbia University
- Mailman School of Public Health

Structure of the Center

- Training on methods and content in the core GMH domains:
  - epidemiology
  - assessment
  - intervention (prevention, treatment, implementation & dissemination)
  - policy
- Research to expand the current GMH scientific platform by strategically establishing research priority areas and conducting studies to investigate them

Structure of the Center

- Service/advocacy core will :
  - partner with regional and national and international agencies/foundations to promote evidence-based practices
  - conduct legal advocacy in defense of mental health rights
  - collaborate with behavioral scientists from academia and industry to identify models to promote community engagement
  - collaborate with pharmacological manufacturers to provide low-cost essential medicines and other products
  - partner with governments of LMICs and upper-income countries to develop incentives to reduce brain drain

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