

# Building global nursing research capacity from efficacy to implementation in Malawi: Sustaining a 20-year collaboration

Sigma Theta Tau International Research Conference, Washington D.C. November, 2019





#### **Authors**

Diana L. Jere, PhD Chimwemwe K. Banda, MS Lily C. Kumbani, PhD Kamuzu College of Nursing, University of Malawi



Kathleen F. Norr, PhD Saria C. Lofton, PhD Linda L. McCreary, PhD Crystal L. Patil, PhD University of Illinois at Chicago



#### Purpose

 To describe a 20-year ongoing collaboration between 2 colleges of nursing

College of Nursing, University of Illinois at Chicago



Kamuzu
College of
Nursing,
University of
Malawi

#### **Getting Started**



- Collaboration began with former international doctoral students
- Highlights the importance of mentoring to build trusting relationships

# 1990 - Botswana: HIV prevention for urban working women

- Emerging global health crisis of HIV
- First call international behavior change grants
- Increased women's knowledge, attitudes, safer sex behaviors
- Adopted by the Botswana
   Council of Women



#### Peer Group Education for HIV Prevention

### Primary Health Care

Community
 health system &
 university
 collaboration

## Social-Cognitive Learning Theory

- Active learning & skill building
- Power of groups to change norms

### Contextual Tailoring

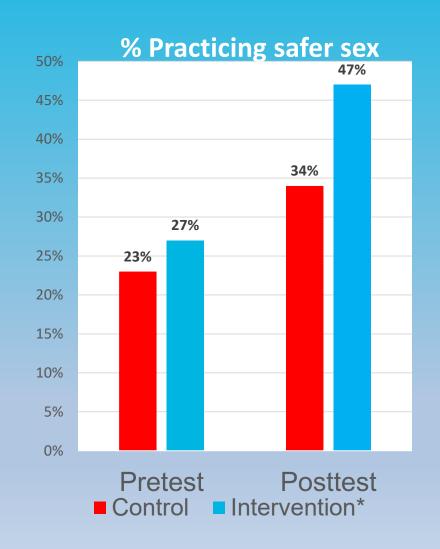
- Gender issues
- Sensitive topics
- Local leaders & resources

Peer Group Intervention for HIV Prevention

# Peer Groups for Urban Women in Botswana: RESULTS

#### Intervention group had more:

- Knowledge
- Condom attitudes and self-efficacy
- Personal safer sex behaviors
- Positive attitudes toward persons living with HIV
- Community HIV activities
- Adopted by the Botswana Council of Women



# Bringing peer education for HIV prevention to Malawi

- My former doctoral student, Dr. Chrissie Kaponda, had returned to Malawi
- HIV was rapidly increasing but without any prevention programs
- We obtained a Fulbright to enable us to bring this program to Malawi



# Bringing peer education for HIV prevention to Malawi

- Program modified to include men
- Called Mzake ndi Mzake (Friend to Friend)



- Conducted with primary school teachers in training
  - Participants had improved knowledge, attitudes and intentions to change behaviors.
- Program adopted by the Ministry of Education



# Bringing peer education for HIV prevention to Malawi

- Program modified to include men
- Called Mzake ndi Mzake (Friend to Friend)

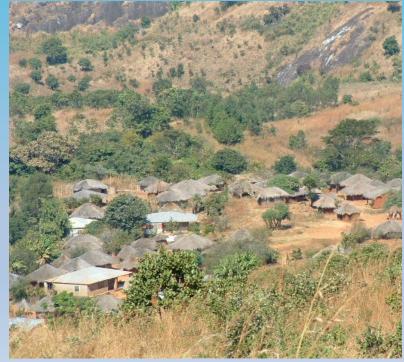


- Conducted with primary school teachers in training
  - Participants had improved knowledge, attitudes and intentions to change behaviors.
- Program adopted by Ministry of Education

#### Mzake ndi Mzake –Rural Prevention







#### Mzake ndi Mzake Peer Groups in Action



Training peer leaders



Role play in a youth group

Group member receives a certificate.

#### Mzake ndi Mzake intervention improved:

- Knowledge: (HWs, adults, youth)
- Attitudes Self-efficacy for safer sex
- Behaviors
  - More HIV testing
  - More safer sex communication
  - Lower overall risky sex (HWs & adults)
  - Greater condom use (adults & youth)
  - Increased involvement in community HIV prevention
  - For health workers, more universal precautions and teaching

# Mzake ndi Mzake for urban hospital workers

- We then took the program to a large urban hospital (tertiary level)
- Simple pre-post design
- Results:
  - More knowledge
  - NO safer sex changes
  - More HIV tests
  - More positive workrelated behaviors, including respect, handwashing & teaching





# Extension: Reproductive Health for Young Women



- Adopting adult sexual roles presents high risks – HIV, STIs, early pregnancy
- We integrated overall sexual health into the *Mzake* program
- 2 local young women facilitated groups
- Use of condoms, other birth control and no pregnancy in the last 6 months improved at 6 mo. but not at 12 mo. post-intervention
- Young women reported partners and parents did not support behavior
- May be more effective if whole community is involved



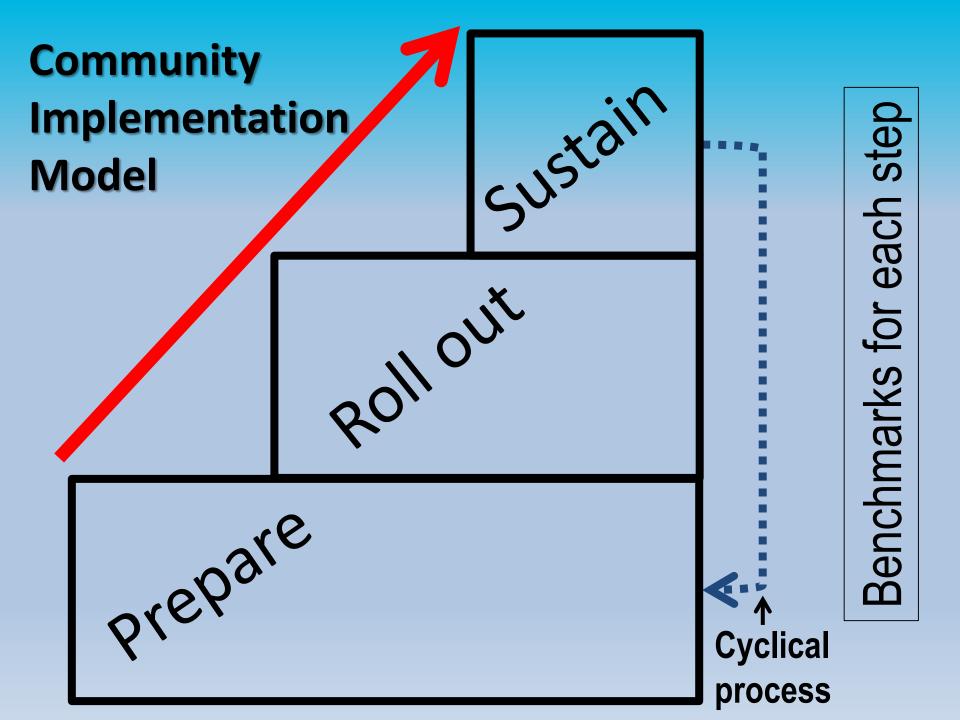


#### Phalombe Mzake ndi Mzake

# A Community-Based Implementation Model for HIV Prevention and Testing



Chrissie Kaponda, Diana Jere, Lily Kumbani, C. Banda Kathleen Norr, Linda McCreary, Crystal Patil Li Liu, Chang G. Park



# Prepare: Community Coordinating Committee - Orientation





Role Play & Condom Practice



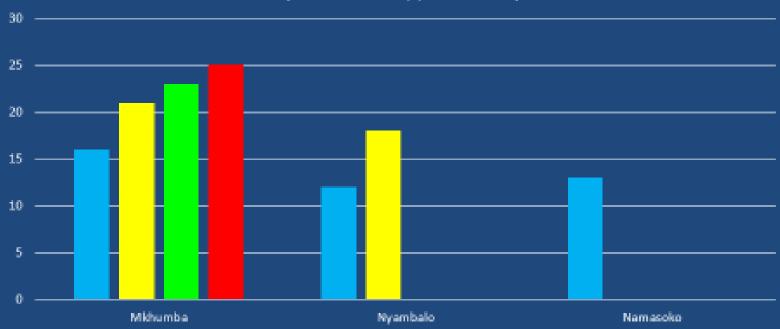
Explaining the Model



#### **Benchmarks Rise Over Time**



#### Benchmarks Rated by Leaders at Approximately 6-Month Intervals





### Capacity Building

Global research broadens perspectives and expands skills at both institutions



- Within the research
- Beyond research

This Photo by Unknown Author is licensed under CC BY-ND

- Our small Fulbright award led directly to 3 NIH grants and one foundation grant
- Build a track record to support new funding
  - Use a consistent conceptual model
  - Address an important global health priority
- Persist in collaboration despite failures and resubmissions



- Build a core team balanced with experienced and new investigators
- All partners need to build their careers
  - Include career mentoring, building specific research skills and capacities, and publication as a lead author and co-authors,
  - These activities have led to promotions and independent research funding for other initiatives.



<u>This Photo</u> by Unknown Author is licensed under CC BY-SA

- Dr. Lofton, a junior UIC faculty, was awarded a supplement to add Youth Photovoice, to our current implementation study
  - Youth discussed photos of places & situations that encourage risky sex
- Two master's students also completed small projects.





# Collaboration within research collaboration: Expanding focus



- We joined forces with Dr. Patil, Dr. Chirwa and other KCN faculty to integrate innovative group prenatal care with our HIV prevention model
- Conducted a successful pilot (R21)
- Now conducting an RCT to test if this model improves both mother and infant outcomes and HIV prevention

- Embrace the diversity that enhances the quality of research
- Demonstrate systematic progression
  - Formative intervention development research
  - Efficacy studies
  - Implementation
- This approach advances science and helps bridge the gap between discovery & scale-up

#### Related capacity building awards

- Malawi was included in UIC's 4-country AIDS International Training & Research Program (AITRP-UIC, J. Levy PI)
  - KCN faculty obtained four PhD and two MS degrees
  - UIC gained global recognition and training funds
- KCN received an NIH Fogarty capacity-building grant to establish a nursing research center.
- Our ongoing research helped support attaining these grants

### Tips for building partners' capacity

- Make sure administrators, staff and coinvestigators are all gaining
- Understand you are bringing together 2 different systems
- Leaders and priorities change, so frequently reacquaint collaborators to your vision
- Be sure to highlight how the research enhances:
  - The educational mission of each college
  - Nursing research
  - Country and global health and research priorities

#### Conclusions

 Our 20-year collaboration provides strong evidence that sustained multidisciplinary research and capacity-building can:



- Contribute to the urgent global priority of ending new HIV infections by 2030
- Contribute to the UN Sustainable Development Goals to address global health and development
- Strengthen global nursing research capacities at collaborating sites

#### Acknowledgements to our funders

- Botswana, USAID & The National Institute on Aging
- Malawi Teachers- Fulbright Sub-Saharan Africa Regional Research Award.
- Mzake ndi Mzake and Phalombe Mzake ndi Mzake: National Center for Nursing Research (NINR), NR015409 & NR08058
- Urban Health Workers World AIDS Foundation
- Young Women study: Eunice Kennedy Shriver National Institute for Child Health and Development, ND060461
- CenteringPregnancy Africa: NINR, R21, NR014413

### Thank You! Any Questions?



Goodbye from Phalombe!

The content presented is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health