Implementing a Depression Intervention for Older African Americans at Home and Community

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Objectives

- Background on mental health disparities
- Beat the Blues as an example of an embedded design in a service setting (a practical trial combining efficacy-effectiveness)
  - Project design and shared decision-making
- Evidence of feasibility and preliminary effectiveness
- Strengths and Challenges of embedded designs
Beat the BLUES

Project Team Members

• Center in the Park
  – Lynn Fields Harris, CEO
  – Megan McCoy, On-site project manager
  – Erika Barber, Screener
  – Susan Burgos, MSW, Interventionist
  – Barbara Parks, MSW, Interventionist

• Thomas Jefferson University
  – Nancy Chernet, MPH, On-site project manager
  – Laraine Winter, Ph.D., Intervention coordinator
  – Karen Morrison, MSW, Interventionist
  – Laura Holbert, MSW, Interventionist/interviewer

• Statistical consultation – Dr. Walter Hauck
  – Data analysts: Marie Dennis, Ph.D.; Edward Hess, M.S.

• Cost effectiveness – Laura Pizzi, PharmD, MPH; Eric Jutkowitz
Although most older adults are screened and treated for depression in primary care, older African Americans are underdiagnosed in this setting and underutilize mental health services.

Older African Americans at greater risk of depression due to high rates of chronic conditions (diabetes, heart disease), as well as social, economic and environmental detriments, all associated with depression.

African Americans have poorer access and less acceptance of traditional mental health treatment services (e.g. pharmacology, community mental health).

Depression services/interventions are not tailored to preferences of older African Americans.

Urgent need to develop and test new depression treatments that resonate with minority populations that are hard-to-reach and underserved and to evaluate their cost and cost-effectiveness.

BACKGROUND AND SIGNIFICANCE
Although most older adults are screened and treated for depression in primary care, older African Americans are under-diagnosed in this setting and underutilize mental health services.

Older African Americans at greater risk of depression due to risk conditions including high rates of chronic conditions (diabetes, heart disease), and social, economic and environmental detriments.

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Senior Centers

- An overlooked and underutilized system of care
- Federally and state-funded system in the USA
- Provide array of social services to over 9 million older adults, many of whom are vulnerable and underserved
- Routinely assess service needs and health status, serve as initial contact for a continuum of aging services, provide safety net offering meals, health checks, care management and referral services
- Are respected and trusted anchors in communities
Evolution of Trial

• Built on previous partnership and mutually identified areas of concern and interests by research team and Senior Center

• Followed principles of Community Based Participatory Research
  — Mutually identified problem area
  — Full participation of senior center leadership team who in turn involved its staff and members (older African Americans) in decision-making as design unfolded through focused discussion meetings

• Shared decision-making and project implementation

• Construct of intervention based on theory, evidence from previous depression trials (IMPACT, PEARLS, HIDEAS), research on older African Americans preferred coping mechanisms, staff knowledge, and our pilot research on site at the senior center
Study Overview

• **Trial Purpose**
  - Evaluate benefits of an in-home program designed to help older African Americans, with depressive symptoms, manage their feelings of sadness or distress using an intervention that builds on previous treatments and involves 5 components.

• **Study Design**
  - 2 group parallel randomized trial
    - Beat the Blues treatment group versus 4 month wait-list control
    - Wait-list control group received BTB following 4 month interview.
  - 3 interviews (baseline, 4-month, and 8-month interviews)
  - Wait-list (randomized after baseline into intervention or control group; control group receives intervention after 4-month interview)

• **Sample**
  - 208 African American participants 55 and older with depressive symptoms (≥5 on the PHQ-9)
Intervention Delivery Characteristics

• Up to 10, in-home or telephone sessions
• Four month time period
• 1-2 hours duration, weekly/bi-weekly
• Delivered by licensed master’s degree social workers
5 Treatment Components

• Depression education
  – What is depression
  – How to talk to your doctor and a doctor of a different race
  – Relationship between mood and activity

• Care Management
  – Assessment
  – Problem identification/resolution
  – Referrals and care coordination

• Referral and Linkage
  – Medication review
  – Psychiatric/psychological follow up
  – Referrals to physician/mental health services

• Stress reduction
  – Participants’ strategies
  – Deep breathing, counting
  – Guided imagery

• Behavioral Activation
  – Identification of valued activities and goals
  – Establishment of action plan for goal attainment
  – Monitoring of action plan
  – On-going goal identification
Depressed Mood and Symptoms

Lowered Mood

Decreased Pleasant Activities

Decreased Activity
Better Mood and Fewer Depressive Symptoms

Pleasant Activities

Decreased Depressive Symptoms

Improved Mood

Increasing daily activities improves mood and decreases symptoms of depression.
Recruitment (TJU and CIP)
- CIP In Home services; Members and community

Telephone Screening (CIP)
Stage 1 and 2 (≥5 PHQ-9)

Depressive Symptoms (≥5 PHQ-9)
Eligible and willing to participate

No depressive symptoms (<5 PHQ-9)
Ineligible for study

Ineligible or unwilling to participate

Baseline Interview (TJU)

Randomization (TJU) N=208
Stratified by Recruitment Source (In home vs other recruitment source)

Treatment Group (TJU and CIP) (N=106)

Waitlist Control Group (N=102)

4- Month Followup (TJU) Main trial endpoint

Intervention (TJU and CIP)

8- month Followup (TJU and CIP)

Post Study Evaluation of Acceptability, Perceived Benefit, Satisfaction with Study and Personnel (TJU)
Screening Process

• Involved 2 screens conducted in 2 week time frame
• Senior Center responsible for screening
• 17 care managers trained to use PHQ-9, provide depression education and make referrals:
  • 2 screened new members at intake
  • 15 screened individuals of the In Home Support Program for persons who are temporarily homebound (medically compromised group)
• Second screen performed by on-site screener dedicated to study
• Immediate Outcomes:
  • Enhanced professional skill set of staff
  • Enriched tool kit of care managers
  • Raised awareness among all senior center members
  • Depression screening now a routine part of senior center intake procedures for all programs
Screening Results

• 703 screened over 2 ½ years
  – 390 (55%) initial positive screens
• 279 (72%) successfully screened a second time
  – 208 (75%) eligible and willing to participate in BTB
<table>
<thead>
<tr>
<th>Recruitment Site</th>
<th>Activity</th>
<th>Screen #1</th>
<th>Referred to BTB @ Screen #2</th>
<th>Enrolled in Study (N = 208)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IHSP Program</td>
<td>Screen all IHSP clients</td>
<td>440</td>
<td>137</td>
<td>60</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>31%</td>
<td>44%</td>
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<tr>
<td>2. Total Community</td>
<td></td>
<td>263</td>
<td>253</td>
<td>148</td>
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<tr>
<td></td>
<td>Screen new members</td>
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<tr>
<td></td>
<td>CIP newsletter</td>
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<tr>
<td>CIP Senior Center</td>
<td></td>
<td></td>
<td></td>
<td>39</td>
</tr>
<tr>
<td>Community - at–large</td>
<td>Print media</td>
<td></td>
<td></td>
<td>109</td>
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<td></td>
<td>Presentations</td>
<td></td>
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<tr>
<td></td>
<td>Depression Education</td>
<td></td>
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<tr>
<td>Characteristic</td>
<td>Mean (SD)</td>
<td>%</td>
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<td>----------------------------------------</td>
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<tr>
<td>AGE IN YEARS</td>
<td>69.6 (8.7)</td>
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<tr>
<td>GENDER</td>
<td></td>
<td>78.9 % FEMALE</td>
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<tr>
<td>EDUCATION</td>
<td></td>
<td>&gt;50% HS/GED</td>
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<td>MARITAL STATUS</td>
<td></td>
<td>88% SINGLE</td>
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<td>ECONOMIC DIFFICULTY</td>
<td></td>
<td>67.8 %</td>
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<tr>
<td># HEALTH CONDITIONS</td>
<td>6.6 (3.5)</td>
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<td>MEDICATION USE</td>
<td></td>
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<tr>
<td>Anti-depressants</td>
<td></td>
<td>19.2%</td>
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<tr>
<td>Anxiety</td>
<td></td>
<td>16.8%</td>
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<tr>
<td>Pain</td>
<td></td>
<td>52.9%</td>
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<tr>
<td>PHQ-9 Score at screen #2 (score ranges = 0-27)</td>
<td>13 (4.9)</td>
<td>72% moderate to severe symptoms (10 - &gt;20)</td>
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**STRENGTHS OF APPROACH:**

- Empowers staff – offers new knowledge and skills
- If effective, setting has infrastructure and trained staff ready to go
- Facilitation of recruitment and enrollment of target population
- Design elements including implementation features are grounded in realities of setting and targeted community

**CHALLENGES**

- Obtaining balance between research control and empowerment of practice setting is a constant need
- Investment of time and energy of both practice site and research team (need buy-in from everyone)
- Role delineation and communication structure is critical
- Need right personnel – this is not right for everyone
What does it take:

• Shared vision, goals and commitment to excellence
• Mutual trust
• Mutual respect
• Communication skills
• Attention to team dynamics
• Continual clarification of respective roles and responsibilities
• Structured staff meetings
• Time lines and short and long-term goals
• Sufficient budgetary support for dual staffing, time for mentorship/education/training, offsetting hidden time of staff on site at a practice setting if indirects not allowed
What does it take

- **Practice site**
  - Respect for research and role of evidence to improve daily lives
  - Budget and grants management infrastructure
  - Ongoing staff education and enhancement of skills
- **Research site**
  - Respect for knowledge and expertise of community partner
  - Time, energy and commitment to train community partners in research participation
  - Creativity to assure RCT and scientific principles upheld
Conclusions

• BTB demonstrates importance of new models of care for underserved populations
  – Screening data, enrollment and excellent outcomes support feasibility of this approach
• Sustainability
  – Center in the Park continues to:
    • Educate new staff using depression materials developed as part of BTB
    • Screen for depressive symptoms of IHSP and new members
    • Create new opportunities for delivery of BTB
• This approach may cut the time from idea inception to implementation by 12 years