Improving the Mental Health of Mothers and Children through Community-Partnered Approaches

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All photographs are used with informed consent
Maternal Depression: Public Health Importance

- 20.6 million children live with an adult with a mental illness.\(^1,2\)

- 69.7 percent of depressed low-income mothers with young children have a condition classified as severe or very severe—to a degree that disrupts home, social, or work life.\(^3\)

- Children of depressed as compared to non-depressed parents are more likely to develop psychiatric illnesses, and are at greater risk for social, emotional cognitive, and medical difficulties.\(^2\)

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2 *National Academies of Science*, 2010
3 National Survey of Drug Use and Health (NSDUH), 2008–2010,
Public Health Impact of Maternal Depression

- Public Assistance
- Child Welfare
- Maternal Depression
- Education
- Early Intervention
- Health Care System

Adapted from Sontag-Padilla, RAND 2013
Our Experience with Screening

<table>
<thead>
<tr>
<th>Treatment</th>
<th>26%</th>
<th>18%</th>
<th>19%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Treatment</td>
<td>81</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td>Not in Treatment</td>
<td>234</td>
<td>208</td>
<td>156</td>
</tr>
</tbody>
</table>

N=366

only 30% are treated

Treatment = attended 1 appointment

Depressed Mothers are the “Hardest to Reach” but Most Necessary to Engage

- Between **28 and 61** percent of mothers in home visiting programs screened positive for depression.¹
  - Program effects suggest largest effect for mother’s with moderate to high depressive symptoms.²,³
  - But these mothers usually **drop out early or never enter programs**.⁴

- **10,367 participants 66 implementation sites:** mothers who had the highest dropout rate were:
  - younger
  - unmarried
  - African American
  - depressed

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¹Ammerman, RT. *Aggression and Violent Behavior* 15. 2010.
Ensuring the Emotional Health of Our City’s Families
Our Target Population

Low-income female caregivers with children under the age of 18.
Step 1: Partnerships

- All Our Kin
- Clifford Beers Guidance Clinic
- Housing Authority of New Haven
- New Haven Health Department
- New Haven Healthy Start
- New Haven Public Schools
- State of CT Department of Children & Families
- State of CT Department of Social Services
- The Diaper Bank
- Yale School of Medicine
The mission of the New Haven MOMS Partnership is to transform service delivery systems for mothers and children through community and neighborhood-based resources dedicated to wellness; thereby strengthening generations of families to flourish and succeed.
Step 2: Community Mental Health Ambassadors

- Outreach, engagement, brief intervention

- 10 CMHAs: significant changes in attitudes, behaviors, sense of competency over 6 months of employment

- 43 CMHAs trained across the City of New Haven
Step 3: Assess Needs

Needs and Barriers to Care

1.) Basic needs related to parenting
2.) Social isolation
3.) Maternal mental health and “stress”

Support: Food stamps, housing
Emotional Health Need (N=2,213)
Why Diapers Matter

Without Diapers — Babies Cannot Participate in Early Childhood Education
Without Childcare — Parents Cannot Go to Work

Why Does Early Childhood Education Matter?

Students that participate in early childhood education are 2.5 times more likely to go on to higher education.

Source: Economic Impacts of Early Care and Education in California, UC Berkley Center for Labor Research and Education

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NEW HAVEN CT 06510
203.821.7548
DIAPERBANKNETWORK.ORG
Step 4: Universal Strategies for Two Generations Matched to Goals

- **Promote Family Economic Success = Workforce**
  Effect size for increasing family household income $4K annually (0.41)

- **Promote Maternal Mental Health = CBT**
  Effect size for cognitive and social-emotional gains in children as a result of treating maternal depression (0.42)

Smith MV. Under Review *Soc Sci Medicine*
Step 4: Universal Implementation of Interventions to Build Capacity

- “MOMS Stress Management and Workforce Program”

- 8 and 10-week, skill-building cognitive behavioral therapy (CBT)

- Co-delivered by clinicians and CMHAs
Step 5: Innovation in Location “hubs’

- Integration of health in non health settings is essential to addressing chronic health needs

- Supermarket, Public Housing Complexes, Churches, Laundromats-- “HUBS”

1 IOM. Living Well with Chronic Illness: A Call for Public Action. 2012
Acknowledgements

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U.S. Office of Women’s Health
Yale-New Haven Hospital
Yale Center for Clinical & Translational Research
Two Generation Approach

Changing Outcomes For Children Facing Adversity Requires Transforming the Lives of Adults Who Care for Them

Violence
Mental Illness
Substance Abuse
Poverty
Adverse childhood Experiences

Strengthening foundational skills for parenting, employability, and responsible citizenship
Current Public Health Approach Used to Treat Maternal Depression: Screening

Perinatal depression affects as many as one in seven women.

ACOG recommends all pregnant women be screened at least once during the perinatal period.

#MHM2015
acog.org/MHM2015

In Treatment

<table>
<thead>
<tr>
<th>Time</th>
<th>In Treatment</th>
<th>Not in Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>81 (26%)</td>
<td>234</td>
</tr>
<tr>
<td>3 month</td>
<td>52 (18%)</td>
<td>208</td>
</tr>
<tr>
<td>6 month</td>
<td>51 (19%)</td>
<td>156</td>
</tr>
<tr>
<td>Any Tx</td>
<td>1 (0%)</td>
<td>205</td>
</tr>
</tbody>
</table>

N = 366

Only 30% are treated
Current Public Health Approach Used to Treat Maternal Depression: Home Visiting

- Between 28 and 61 percent of mothers in home visiting programs screened positive for depression.\(^1\)
  - Program effects suggest largest effect for mother’s with moderate to high depressive symptoms.\(^2,3\)
  - But these mothers usually drop out early or never enter programs.\(^4\)

1Ammerman, RT. *Aggression and Violent Behavior* 15. 2010.
Nationally, Low-income Mothers do not Receive Depression Treatment

- National estimates from the Medical Expenditure Panel Survey showed nearly 40 percent of mothers with depression had not received treatment, and only 35 percent of those treated had received adequate treatment\(^1\)

- Low-income women, the uninsured, African American women, and Hispanic women are at even greater risk of receiving no or inadequate treatment\(^2,3,4\)

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• Of the six studies that examined children's psychosocial outcomes, five found that mothers' treatment was associated with child improvements.

• Treatment of maternal depression was predictive of improvement in child academic functioning and mother-child relationships and interactions.

Gunlichs & Weissman, 2008 JAACP, 47 (4)
What we Know: Setting the Stage for Innovative Delivery Approaches

- **Social Risk Factors Related to Maternal Depression**
  - **Poverty** (lack of material resources for parenting)
    - Diaper need
    - Housing instability
  - **Social Isolation**
  - **High levels of stress**
  - **Difficulties with Employment**
    - Unemployment
    - Increased absenteeism
    - Reduced productivity

- **Intervention Targets**
  - Group-based AND incentivized
  - Treatment AND employment services
  - Skills-based AND cognitive restructuring = CBT
<table>
<thead>
<tr>
<th>Attendance at classes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended less than 4 classes</td>
<td>3 (7%)</td>
</tr>
<tr>
<td>Attended more than 4 classes</td>
<td>72 (94%)</td>
</tr>
<tr>
<td>Attended 8 classes</td>
<td>69 (89%)</td>
</tr>
<tr>
<td>Homework completion rate</td>
<td>73%</td>
</tr>
<tr>
<td><strong>Yes, I would recommend to a friend</strong></td>
<td>78 (97.4%)</td>
</tr>
</tbody>
</table>
Three MOMS’ cohort studies (n=225) found that mothers' treatment was associated with child improvements in internalizing symptoms and working memory, mental flexibility.

Treatment of maternal depression was predictive of improvement in child school attendance and mother-child relationships and interactions.