**EVALUATION OF MICHIGAN’S INFANT MENTAL HEALTH MODEL**

Catherine Liesman, Ph.D., Deputy Director
Development Centers, Inc.
Email: Cliesman@develctrs.org

Joan M. Abbey, LMSW
Research Scientist, Eastern Michigan University School of Social Work
Email: jabbey@emich.edu

---

**History of IMH Services**

- 1971 MI Dept. of Mental Health paid for 12 CMH staff to be trained (UM) Selma Fraiberg’s Child Development Project
- 1973 MI-AIMH formed by trainees held first conference
- 1974 small state grants to CMHs for IMH services
- 1986 MI Mental Health Code required service, 1996 optional service
- 1983-84 Objective-Problems Checklist (OPC) developed

---

**IMH History & Funding**

- 1996 – IMH consultation w/ child care programs
- Medicaid Home-based Services for babies, young children & parents - most IMH services funded under H-B option, requires 2 hours week face to face or collateral contact
- Another option is Medicaid Prevention Direct Service Model – no criteria for contact
- Both require endorsement at Level II by MI-AIMH.

---

**Michigan - Supporting Competencies and Reducing Risks in the First Years of Life**

**Basic Beliefs**

- Infants, toddlers & parents develop optimally within the context of nurturing relationships
- The birth of a baby offers the hopefulness of a new relationship & possibility for growth & change.
- All parents want what is best for their babies, including a wish for health & relationships that are stable & mutually satisfying.

---

**Basic Beliefs**

- Parents must feel nurtured in order to nurture their infants; fed in order to comfort; comforted in order to comfort.
- Attachment relationships provide a secure base from which infants & young children grow physically, emotionally, cognitively & socially.
- Early relationships serve as prototypes for later relationships.

---

**Basic Beliefs**

- All families have capacities. It is up to us to support them as they develop.
- Early developing attachment relationships may be disturbed or interrupted by parental histories of unresolved losses or traumatic life events.
- The therapeutic presence of an IMH specialist may reduce the risk of relationship failure and offer the hopefulness of nurturing responses.
Beliefs become practice

- The practitioner is an ally who stands beside the parent and infant to help them bring what is best to one another.
- The practitioner offers a therapeutic alliance as the instrument for support and change.

IMH Services

- Concrete Resources/Assistance
- Emotional Support
- Developmental Guidance
- Early Relationship Assessment/Support
- Advocacy
- Therapeutic Intervention with Infant or Toddler and Parent(s)

Concrete Resources/Assistance

- Accessing services to meet basic needs.
  - Offer to set up medical appointments
- Arrangements for transportation or child care
- Participate in family service meetings for enrollment in early intervention (Early On)
- Problem solving to reduce immediate stress

Emotional Support

- Emotional support related to an immediate crisis, e.g. the birth of a premature infant, hospitalization of a baby, mother's early return to work.
- Invitation to talk about present realities, care of the baby, crisis of parenthood.
- Thoughtful listening, with compassion for family's immediate realities.
- Empathic response.

Developmental Guidance

- Offer information specific to each baby’s unique pattern of growth, encouraging parental attention, interest & response.
- Make informal observations about the baby & invite each parent to do the same.
- Watch infant & parent together; ask parent what she or he sees that the infant is doing; support parent’s developmental awareness; think together about “what next.”
- Speak for the baby, identifying pleasures, wants or needs.

Early Relationship Assessment & Support

- Keep infant/toddler & parent(s) in the room & at the center of your work.
- Ask for & listen to parent’s observations, questions about the baby, & concerns.
- Observe & assess capacities, alerting parent to infant’s accomplishments/needs
- Informal/formal assessment guides/instruments used for diagnosis & treatment planning.
  - Create opportunities for parent-infant interaction & exchange.
  - Remain attentive & fully emotionally available, inviting each parent to set the agenda & take the lead with the baby.
  - Wonder about the baby’s capacities to elicit interest & care; each parent’s responses.
  - Reinforce each parent’s positive interactions & baby’s contributions to the exchange.

Infant-Parent Psychotherapy

- Use the therapeutic relationship to explore each parent’s thoughts & feelings about the infant or toddler, care-giving responsibilities, & relationships, past & present.
- Attend & respond to parental histories of abandonment, separation & loss as they affect the care of the infant, the parent’s emotional health, & the developing relationship between parent & infant.
- Allow core conflicts & emotions to be expressed; hold, affirm, & contain them.
- Stay emotionally available, curious, open, & reflective.
Infant Mental Health Services

- Meeting with parent(s) & infant together, most often in their own home
- Thoughtful questioning & listening
- Guidance & psychological support
- A secure & trusting relationship as a base for shared understanding, guidance & support about the infant, the parent, relationships past & present, & adjustment to care-giving role
- Enhanced capacity for self-observation & reflection through supervision

IMH Strategies

- Focus on emotional health & development of the infant & parent(s)
- Focus on relationships, past & present
- Require a safe & nurturing context in which parent(s) & specialist may think deeply about the care of the infant & the multiple challenges of parenthood
- Wonder about each parent's thoughts & feelings related to the presence & care of the infant
- Listen for the past as it is expressed in the present

IMH Strategies

- Allow relational conflicts & feelings to be felt & expressed
- Attend & respond to parental histories of loss & grief
- Attend & respond to the infant’s history of early care
- Identify, treat &/or collaborate with others (if needed) in the treatment of disorders of infancy, delays, disabilities, parental dysfunction
- Remain open, curious & reflective

Identifying Characteristics

- Who are the infants/toddlers served?:
  - premature, underweight, medically fragile
  - irritable, difficult to hold or soothe, unresponsive
  - difficult to feed, failing to gain or thrive
  - difficult to engage, avoidant, depressed
  - suspected developmental delays (social, emotional, cognitive, motor)
  - sensory processing or regulatory disorders
  - prolonged grief reaction
  - identified disorders, e.g. traumatic stress, reactive attachment

Study Population: Child Presenting Issues

<table>
<thead>
<tr>
<th>Chart 2: Child Presenting Issues by Type and Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism &amp; Child Abuse, 13</td>
</tr>
<tr>
<td>Traumatic Stress, 13</td>
</tr>
<tr>
<td>Internalizing, 13</td>
</tr>
<tr>
<td>Externalizing, 13</td>
</tr>
<tr>
<td>Physical Health &amp; Disability, 25</td>
</tr>
<tr>
<td>Developmental Delays, 13</td>
</tr>
<tr>
<td>School Issues, 13</td>
</tr>
<tr>
<td>Other, 13</td>
</tr>
<tr>
<td>Substance Use, 13</td>
</tr>
<tr>
<td>Suicide, 13</td>
</tr>
</tbody>
</table>

NOT FOR CITATION
Identifying Characteristics

- Who are the parents?:
  - Single, adolescent by age of behavior
  - Unprepared for the care of a baby, overwhelmed by parental responsibilities
  - Alone or unsupported; inattentive or unresponsive to baby’s needs; anxious, ambivalent, avoidant, abandoning
  - Depressed, stressed by economic deprivation or personal/social conflicts
  - History of unresolved loss(es) & grief
  - History of neglectful or abusive care
  - Diagnosis of significant mental illness

Study Population: Caregiver Characteristics (N=432)

- All but 12 of caregivers were females
- One-fifth pregnant at intake
- All but 8 birth parents of infant/toddler
- Mean age 24.7
- Slightly more than 40% Caucasian, slightly less than 40% African-American
- Two-thirds never married

More Caregiver Characteristics

- Two-thirds DSM-IV diagnosis (n=255) mostly depression/depressive disorders, bipolar & adjustment disorders
- 70 diagnosed low functioning or developmentally disabled
- Majority (88.6%) high school education or less
- 37.7% on TANF & 21% on SSI/SSD
- 40% infant/toddler their 1st child

IMH Evaluation Purpose

Process, Outcome & Cost Study of Michigan’s IMH Model

- To determine the efficacy of infant mental health services with two different at-risk populations:
  1) families with first time births/adoptions
  2) families with subsequent births/adoptions
- Assess impact of (worker to family) caseload ratio & service duration on outcomes
- Cost analysis evaluation objectives are determining model’s distributive efficiency

Data Collection Schedule

<table>
<thead>
<tr>
<th>Data Collection Points</th>
<th>ASQ-SE</th>
<th>OPC</th>
<th>Consumer Assessment Survey</th>
<th>Treatment Plan Goal Attainment Measure</th>
<th>FILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline/Intake</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Quarter of Service</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Quarter of Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd Quarter of Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th Quarter of Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Termination</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Month Post-service</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2 Months Post-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Months Post-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Months Post-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Months Post-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Months Post-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Michigan Infant Mental Health Evaluation Zip Code Coverage of Service Area

Map of Michigan's Infant Mental Health Evaluation Zip Code Coverage of Service Area

DATA COLLECTION SHADE
What are the Characteristics of IMH Staff? N=130

- All but one are females
- Mean age 38.28, range 22 - 64
- 92.4% Bachelors degrees & 98% Masters
- Mean years in field 5.24
- Ethnicity: Caucasian (69%)
- African American (18%)
- Latino (6.2%) & Middle Eastern (3.9%)

Other Process Results

- Self/family/friends one-third of referrals
- Health care provider/local public health 40.8% of referrals
- Majority of caregivers report using what they learned in the program at home & being in the program was not difficult
- Two-thirds staff high model fidelity, 1.4% low
- No IMH staff with MI-AIMH endorsement scored low fidelity to model

Duration in Program & Costs per Family by Months in Service for All Cases, Completers & Non-Completers

<table>
<thead>
<tr>
<th>Length of Service and Cost per Family</th>
<th>All Completers</th>
<th>Non-Completers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Length of Service Cost per Family</td>
<td>9.25 Months $3,302</td>
<td>12.33 Months $4,402</td>
</tr>
<tr>
<td>Modal Length of Stay Cost per Family</td>
<td>4 Months $1,428</td>
<td>12 Months $4,284</td>
</tr>
<tr>
<td>Range Low End Cost per Family</td>
<td>2 Months $714</td>
<td>2 Months $714</td>
</tr>
<tr>
<td>Range High End Cost per Family</td>
<td>31 Months $11,007</td>
<td>31 Months $11,007</td>
</tr>
</tbody>
</table>

Outcome Results from OPC Intake & Termination (N=173)

Paired Sample T-tests significance between Intake & Termination scores on all 9 OPC scales for Completers (n=80, 46.2%)

Successful Completers Baseline vs. Termination

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Intake</th>
<th>Mean Termination</th>
<th>T Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Needs</td>
<td>7.806</td>
<td>5.493</td>
<td>6.19</td>
<td>0.000</td>
</tr>
<tr>
<td>Caregiver’s Social Support</td>
<td>6.294</td>
<td>5.785</td>
<td>1.39</td>
<td>0.169</td>
</tr>
<tr>
<td>Caregiver’s Psychological Well-being</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Infant Toddler Related Family Issues</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Infant Toddler Physical Needs</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Infant Toddler Age-Appropriate Development</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Caregiver’s Understanding and Promotion of Infant Toddler Development and Behavior</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Infant Toddler-Caregiver Relationship</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Infant Toddler-Caregiver Psychotherapy Issues</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
<tr>
<td>Total Score</td>
<td>9.269</td>
<td>9.706</td>
<td>0.83</td>
<td>0.409</td>
</tr>
</tbody>
</table>
### Outcome Question Results

**Does participation in IMH services promote attachment by increasing parents’ appropriate interactions with infants/toddlers?**
- Completers scores on OPC subscale Infant/Toddler-Caregiver Relationship
- GAM attachment goal 55.5% maintained progress on goal, 50.0% report making additional progress on goal

**Do parents participating in IMH services demonstrate age appropriate expectations of child behavior?**
- Caregiver Understanding of & Support for Positive Infant/Toddler Behavior/Development’ scale. Sub-scale includes 5 items: Knowledge of infant/toddler needs, behavior & development; Expectations & promotion of child behavior; Verbal stimulation; Sensory stimulation; & Stability of child’s environment
- Child development 1st prioritized goal, 69.2% maintain progress; 76.9% additional progress; 2/3rd therapist observation supports goal maintenance

**Does participation in IMH services improve parental mental health status?**
- 57 completed cases for whom a DSM-IV diagnosis was available, 32 or 56.1% had diagnosis at intake & 35.2% with DSM-IV diagnosis at termination
- Pairwise t-test analysis of FILE results show statistically significant reduction in mean number of stressful events post program for family stress composite measure
- GAM caregiver mental health 1st prioritized goal 71.4% reported that progress on that goal had been maintained

**Do families receiving IMH services reduce health care costs?**
- 81.9% of caregivers reported no additional pregnancies while in the program
- At intake 15 families reported using a hospital emergency room in past four months - at termination 10 families reported using a hospital emergency room in past quarter
- Health stress items from FILE show some improvements in the adults’ & children’s physical well-being post-service

**Does participation in IMH services reduce child abuse and neglect?**
- FILE results reduction in physical abuse & violence in home during post-service period
- OPC self-report data for completers, 8% had children previously removed, non-completers 13% had children previously removed
- CPS registry checks for 71 completers & non; 13 cases investigated during/after IMH services only 3 of 13 new investigations were on completers; none of these cases were substantiated
Questions & Resources

Resources:
www.mi-aimh.org
www.zerotothree.org