Infant Mental Health: Awards of Hope LBWDC

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Definition

- **Infant Mental Health**: the ability for children to develop physically, cognitively, and socially in a manner which allows them to master the primary emotional tasks of early childhood without serious disruption caused by harmful life events. Because infants grow in a context of nurturing environments, infant mental health involves the psychological balance of the infant-family system.

  *WAIMH Handbook of Infant Mental Health, vol 1, p.25*
Infant Mental Health involves:

- Adolescent Parenting
- Alcohol and Other Drugs
- Assessment for Family Law Issues, including Child Abuse and Custody
- Assessment: Diagnostic and Clinical Issues
- Attachment Studies and Clinical Disorders
Infant Mental Health involves:

- Autistic Spectrum and Disorders
- Caregiving Contexts
- Cross Cultural Studies and Issues
- Emotion Regulation and Disorders of Temperament
- Evaluating Parent Infant Psychotherapy
Infant Mental Health involves:

- Father Infant interaction
- Infant Depression and Early Psychopathology
- Infant Mental Health Services and Training
- Mother & Infant Interaction
- Parenting and Family Process
Infant Mental Health involves:

- Prematurity and High Risk Infants
- Preventive Intervention and Community Context
- Psychodynamic Psychotherapy
Program Influence - Figure 1

High risk fetus and Infant

Family

Culture/society
Center for Parental & Infant Mental Health

Organizational Structure - Figure 2

UT Southwestern Medical Center
Dept of Psychiatry

Steering committee:

UT Dept of Pediatrics
- Perinatal-Neonatal Div
- General Pediatrics Div

UT Dept of Ob/Gyn

Psychologists
Medical Doctors
Residents
Fellows

Children's Medical Center Dallas
- NICU
- Psychiatry/psychology
- Low Birth Weight Clinic
- Social Work Dept
- Child Life Development

Parkland Hospital
- NICU
- High Risk Unit
- OB Comp Clinic

Community Based Organizations
- Low Birth Weight Development Center
  - Texas Association Infant Mental Health
- Salesmanship Club

Clinicians
Allied Health
Child Welfare & Development

Support Services
<table>
<thead>
<tr>
<th>High Risk Fetus and Infant</th>
<th>Research</th>
<th>Teaching</th>
<th>Clinical Provision of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPE</td>
<td>MC pregnant home weekly</td>
<td>Refer to OB</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Family Also foster and adoptive family</th>
<th>Research</th>
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</thead>
<tbody>
<tr>
<td>1. Depression Scales (Beck)**</td>
<td></td>
<td>Center classes moms-parenting</td>
<td>1. Family Therapy/PCIT</td>
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<tr>
<td>2. Earlier NICU discharge*</td>
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<td>2. Home Health Visitation (LBWDC)</td>
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<td>3. Anxiety*</td>
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<td>4. PTSS*</td>
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<td>5. Domestic Violence*</td>
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<tr>
<td>2. Utilization of Mental Health Services</td>
<td></td>
<td>Teen STAR to 8th grade, UD</td>
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</table>
What we have learned

Low Birth Weight Clinic
0-3 years WCC
Low Birth Weight Development Center
The Impact of a Post-discharge Intervention Program (IP) on the Health and Well Being of Adolescent mothers (AM) and their Premature Infants requiring Intensive Care (IC)

Elizabeth Heyne, MS, PA-C
Libby Kay, LMSW-ACP, ACSW
Jeffrey M. Perlman, MB ChB
2003-4
Hypothesis

We hypothesized that a substantial number of adolescent mothers with low birth weight infants would show signs of depression.
Objectives

Determine the incidence of signs of maternal depression among teen mothers including:

a. Factors predictive of depression
b. Co-morbidity associated with depression
c. Would an intervention of LBWDC help?
Medical Coordination with LBW Clinic at CMC

- Recognition of illness
- Transportation to clinic if required
- Encourage health care compliance
- Maternal mental health services
n=60

Experimental n=31
12/31 (38%) depressed
5/31 (16%) depressed

(at 1 mo)

Control n=29
10/29 (34%) depressed
8/25 (32%) depressed

(at 1 yr)
Lesson Learned

- Importance for screening for depression in parent’s during well child visits
- Screen for sexual assault/ 8th graders
- Routine depression screening at initial, 12 month, 24 and 36 months
- Referral to LBWDC
Other lessons learned

- The need for a safety net from the NICU after discharge to the home environment and to medical care for first 3 years
NICU Safety Net

- Help prevent infant mortality and morbidity among Parkland Memorial Hospital NICU graduates.
- Provide individual counseling and support group sessions at home, at the Parkland NICU and at the LBWDC.

• Continuum of Care is important to maintain so that the infants receive optimal care throughout the first three years of life.

• RESULTS: No deaths after NICU discharge if in LBWDC
  - No repeat VLBW deliveries
COPE

Creating Opportunities for Parental Empowerment

www.asu.edu/.../04v08n02/30FacultyandAdmin.htm
Creating Opportunities for Parent Empowerment

COPE/NICU Parent Program:
Helping your premature baby to grow and develop
COPE: Four phases and Two components-information and skills

- Within first week of delivery
- During second week of NICU stay
- Week of NICU discharge
- One week after NICU discharge in the home
COPE Study (Melnyk, et al. 2006)

- Randomized controlled trial with 260 families with preterm infants 2001 in Syracuse and Rochester
- Parents completed instruments
- Blinded observers rated parent-infant interactions in the NICU
COPE participants

- Mean gestational age: 31.3 weeks (26-35 weeks)
- Mean birth weight: 1650 grams
- 260 families randomly assigned to 2 study groups
- 33% public assistance
- 82% mothers completed high school
- 67% white, not Hispanic—all English
COPE Intervention

- All participants received 4 sessions of audiotaped and written materials in **English**.
- COPE group received information and behavioral activities about the appearance and behaviors of preterms and how to best to parent them.
- Controls received hospital policies.
Key findings for Parents

- COPE parent versus comparison parents had:
  - Less parental stress
  - Stronger beliefs/confidence in their ability to parent
  - More developmentally sensitive interactions with their infant
  - Less depressive symptoms and anxiety at two month CA after NICU discharge
Key findings for Infants

- Total NICU infant LOS was 3.08 days shorter for COPE group
  - Mean 31.86 days COPE
  - Mean 35.63 days for Control
- Infants <1500 grams at birth had 8.31 days less
  - Mean 51.81 days COPE
  - Mean 60.12 days Control
Both mothers’ and fathers’ early stronger beliefs at time 2 about their parental role and what to expect from their infants were significantly correlated with a shorter NICU LOS.
A Pilot Study of the COPE Program as a method for reducing NICU length of stay and improving parent-infant mental health outcomes in Hispanic preterm infants
Why bother with the NICU and why among Spanish speaking?

- The Challenge: the ELBW infant (extremely low birth weight infant) and the cost of intensive care
Increasing Rate of Prematurity (<37 wks.)

Texas & South/Southwest have the highest rates

March of Dimes Birth Defects Foundation, Peristats, Nov. 2005
Births by Ethnicity in Dallas County

- White
- Black
- Hispanic
- Other
NICU Costs

Source: Morrison, Obstet Gynecol, 1990

www.dcmsonline.org/.../sept99/hafigur0.jpg
Births at Selected Hospitals by Payer: DHS

- Parkland: 14.60% Self pay/charity, 58.50% Medicaid, 31.20% Commercial
- Baylor University Medical Center: 24.70% Self pay/charity, 62.80% Medicaid, 31.20% Commercial
- RHD Memorial Medical Center: 8.50% Self pay/charity, 7.30% Medicaid, 84.20% Commercial
- Methodist Dallas Medical Center: 3.10% Self pay/charity, 3.90% Medicaid, 93.00% Commercial
- Presbyterian Hospital of Dallas: 4.50% Self pay/charity, 68.70% Medicaid, 26.80% Commercial
- Methodist Charlton Medical Center: 2.80% Self pay/charity, 53.60% Medicaid, 43.60% Commercial
- Mesquite Community Hospital: 3.10% Self pay/charity, 21.40% Medicaid, 75.40% Commercial
- Baylor Medical Center at Irving: 7.30% Self pay/charity, 56.70% Medicaid, 39.40% Commercial
Maternal Reaction to VLBW


- Maternal anxiety at NICU discharge predicts later high parental perception of child vulnerability (PPCV) which correlates with worse developmental outcome at one year (Allen, et al. 2004)
Effects of Maternal Depression and Anxiety on the Child (Allen, 2004)

- High PPCV correlated with lower Vineland Adaptive Behavior and Bayley Psychomotor Development
- High PPCV correlated with lower adaptive development even after controlling for medical vulnerability
- Predicted by longer NICU days, higher maternal anxiety/depression
Parent-Child Interaction Therapy at LBWDC

PCIT
Eyberg Child Behavior Inventory - Intensity Scale

ES = -3.41
n = 61
p < .0001
Observed Parent Negative Behaviors

Eyberg, Funderburk, Hembree-Kigin, McNeil, Querido, & Hood (2001)
PCIT with Abusive Parents

- With abusive parents, some models work better than others. A good model can even work better than more intensive services (Chaffin, et al., 2003)

![Graph showing re-abuse rate at 2.5 year follow-up for PCIT, Parent Group, Intensive Family Preservation, and Wrap-Around services.](chart.png)
Beck Depression Inventory (mother report)

Total Score

- Total Score

p < .0001 for pre-post comparison

n = 61
Parent Stress Index – Short Form (mother report)

- Parental distress
- Parent-child dysf’n
- Difficult child

p < .0001 for all pre-post comparisons

n = 60
Crystal Charity Ball
Low Birth Weight
Development Center

Infant mental health program thanks all!