



The Baby TALK Newborn Encounter Randomized Control Trial: Examining the Effects of the Newborn Encounter on Parent Outcomes

I. Organization Mission and Goals

Baby TALK® (Teaching Activities for Learning and Knowledge) began in Decatur, IL in 1986 as a result of a collaboration of Decatur Public Schools, Macon County Health Department, Decatur Public Library, Millikin University and Richland Community College. The Baby TALK® Model employs a relationship-based universal approach, building community systems to cast a net over the childrearing population, particularly effectively identifying families with newborns who may be in need of intervention services. The mission of Baby TALK is to positively impact child development and nurture healthy parent-child relationships during the critical early years. Baby TALK carries out this mission through less intensive group services for families with fewer risk factors and more intensive home visiting and case management with families whose needs are greater.

One critical component of the model involves universal screening and the assessment of new mothers with their newborns. In some Baby TALK communities, professionals encounter families in hospital obstetric units or even prenatal clinics to begin their relationship with them early. performing a Newborn Behavioral Observation (NBO), designed by Dr. T. Berry Baby TALK prepares professionals with encounter protocols for each opportunity with families. The purpose of universal screening is to cast a net over a child-rearing population in order to ascertain that families have appropriate resources to successfully raise their young children. An added benefit is that a universal screening identifies families who may be at-risk in some way, enabling communities to provide more intensive case management or home visiting services to these more vulnerable families. Universal screening can be “strengths-based” rather than seeking families based on deficits. Baby TALK staff approach families looking for the strengths of both the infant and the parents.

At hospital obstetric units, Baby TALK staff use the Baby TALK Newborn Encounter Protocol with each family. This protocol guides professionals in using their time with families to establish a relationship. The Baby TALK Newborn Encounter includes Brazelton, to demonstrate the competencies of both infants and parents. The NBO gives Baby TALK practitioners a way to explore the behaviors of the infant with his parents in order to gain more information about his competence and his particular style of interaction.

The Baby TALK Newborn Encounter Protocol promotes reflective listening skills, enabling professionals to identify needs at a critical time in a newborn family’s development while setting a strong foundation for engagement and referrals in the future. Professionals using the Newborn Encounter Protocol reported serving higher rates of families with greater needs, and these families eventually demonstrate lower levels of parental stress, heightened sense of parental competence, and more connectedness with community resources.

II. Project Description and Expected Outcomes

The Baby TALK Newborn Encounter Randomized Control Trial is a study designed to examine rigorously the differences in outcomes across parental sense of competence, parental stress, and community connectedness based on whether or not new mothers experienced the Baby TALK Newborn Encounter. The aim of this study is to provide preliminary rigorous evidence of the positive parental outcomes associated with Baby TALK’s Newborn Encounter Protocol and this will be done through randomly assigning new mothers to experience a Baby TALK Newborn Encounter. This small-scale efficacy study will set the foundation for larger scale randomized control trials examining outcomes associated with this tool in the future.

The study seeks to test the following hypothesis:

New mothers who experience the Baby TALK Newborn Encounter Protocol have lower levels of stress, higher sense of parental competence and more connections to community resources than mothers who do not receive the interventions.

A total of 150 mothers will be identified at two Decatur-based hospital obstetric units at the start of the study beginning in March 2015. Table 1 provides an overview of the study.

Table 1: Baby TALK Newborn Encounter Randomized Control Study

Study Overview	
Evaluation Team Lead	Dr. Christine Leow, PhD and Dr. Aimee Hilado, PhD, LCSW
Type of Study	A 6-month randomized controlled trial examining parental stress levels, parental competence and community connectedness tied to the BT Newborn Encounter
Sample Size	Targeted recruitment of 150 new mothers
Sample Characteristics	<p>The study will involve a universal screening of parents of diverse demographics, which includes a particular search for families with risk factors, paralleling MIECHV/MIHOPE risk qualities that include:</p> <ul style="list-style-type: none"> • Low-income, • Young mother, • Single parent, • Low social support, • Parent with physical or mental health needs, • History of domestic violence, • History of substance abuse, • Child with special needs/disability, and • Adult with disability.
Sample Location	Mothers identified in hospital obstetric units in Decatur, Illinois
Treatment Criteria	<p>Treatment Group (75 mothers) – Participants experience a Baby TALK Newborn Encounter prior to discharge and one-month follow-up in addition to the Parent Information Form, Parenting Stress Index (PSI), Community Resource Tool, and Infant & Early Parenting Index at the designated data points.</p> <p>Control Group (75 mothers) – Participants complete the Parent Information Form and Community Access Assessment and receive print materials at the hospitals. They will be given the PSI, Community Resource Tool, and the Infant & Early Parenting Index at the designated data points.</p> <p>Families in both groups will receive diapers on each postpartum visit as an</p>

incentive for participation.

Nature of Intervention

Treatment group will experience a Baby TALK Newborn Encounter prior to discharge (baseline) and at one-month

Timeline for Interventions

Mothers will be identified in the hospital and assessed prior to discharge (baseline) and one-month, three months, and six months from discharge. The assessment tools administered will be based on the participants' study assignment.

Table 2 provides a description of the assessment tools that will be used in the study

Assessment Tools	
1. Parent Information Form (Treatment and Control Group)	
<i>Survey to obtain demographic, parent well-being, and family conditions information. This will only be administered prior to discharge (baseline)</i>	<i>Respondent: Parent</i>
2. Parenting Stress Index (PSI-4) (Treatment and Control Group)	
<i>Standardized tool to gauge parent's level of stress and origins of the stress</i>	<i>Respondent: Parent</i>
3. Infant & Early Parenting Index	
<i>Questionnaire on parent sense of competence</i>	<i>Respondent: Parent</i>
4. Newborn Encounter Documentation Form (Treatment Group only)	
<i>Tool designed to reflect on learning about families and document the experience following the Newborn Encounter</i>	<i>Respondent: Baby TALK Practitioner</i>
5. Community Resource Tool (Treatment and Control Group)	
<i>Survey developed to determine level of connectedness to community resources (study developed)</i>	<i>Respondent: Parent</i>

Data Collection

At the official start of the study, participants will be randomly assigned based on their delivery date in the selected hospitals. Mothers who are in the Decatur Memorial Hospital OB unit on Tuesday/Thursday/Saturday and in St. Mary's Hospital OB unit on Monday/Wednesday/Friday will be assigned to the experimental/treatment group. Mothers in the OB unit on opposite days will be assigned to the control group. The four data collection points will be as follows: Prior to hospital discharge, one-month, three-months and six-months following delivery.

The data collected prior to discharge will serve as the baseline. All study families will receive diapers with subsequent data collections and occasional check-ins to encourage participation.

Experimental Group Families will experience a Baby TALK Newborn Encounter prior to discharge and also at the one-month data collection. The Newborn Encounters will be documented on the Newborn Encounter Documentation Form. All participants will complete the Parent Information Form and the Community Access Assessment prior to discharge.

The PSI, the Community Resource Tool and the Infant & Early Parenting Index will be administered to both groups at each data collection period after discharge. The timeline and tools are outlined in the following chart:

Table 3: Data collection tools by group and period.

Data Collection Period	Experimental Group	Control Group
At hospital OB Unit	Parent Information Form *Newborn Encounter Form Community Resource Tool	Parent Information Form Community Resource Tool
One-month from discharge	PSI *Newborn Encounter Form Community Resource Tool Infant & Early Parenting Index	PSI Community Resource Tool Infant & Early Parenting Index
Three-months from discharge	PSI Community Resource Tool Infant & Early Parenting Index	PSI Community Resource Tool Infant & Early Parenting Index
Six-months from discharge	PSI Community Resource Tool Infant & Early Parenting Index	PSI Community Resource Tool Infant & Early Parenting Index

Analysis Plan

Each parental outcome (i.e. stress, community connectedness, parental sense of competence) will be analyzed separately. Multiple regression will be used to control for risk factors and prior exposure to Baby TALK (these would be obtained from the Community Resource Tool). A dummy indicator (i.e. being in treatment or control) will be included in the regression—a significant value on the indicator will indicate that there is a significant difference between mothers who experienced a Baby TALK Newborn Encounter and those who did not. Changes in parental outcomes will be examined from one data collection point to the next. Descriptives will also be provided for each measure at each data collection time point.

As each data collection time period is completed, the data will be entered and verified and descriptives will be provided. Two months is allocated at the completion of all the data collection time points for data analysis and report-writing.

Expected Outcomes

Table 4 provides an outline of the constructs of interest based on the data collection method/measurement tool.

Table 4: Constructs of interest, including method, by type of measures

Construct	Method	Measure
• Demographics	Parent report	Parent Information Form
• Being in Treatment or Control	Random assignment by day/ Practitioner report	Newborn Encounter Documentation form
• Community Connectedness	Parent report	Community Resource Tool
• Parental Stress	Parent report	Parenting Stress Index
• Parental Sense of Competence	Parent report	Infant & Early Parenting Index

The results of the analysis will be used to inform best practices for professionals using the Baby TALK® Newborn Encounter protocol, professionals identifying needs with new mothers and newborns, and professionals working in hospital obstetric units. Findings will be disseminated through peer-reviewed publications, research reports submitted to ERIC.gov, and local and national presentations such as the Zero to Three National Training Institute and other venues reaching early childhood professionals and stakeholders. Finally, the findings will serve as a foundation to seek additional funding for larger scale randomized control trials examining the effectiveness of the Baby TALK® Model nationally.

III. Deliverables

We plan to submit an initial report for SAMHSA review in January 2016 and a peer-reviewed article for review within that same time frame.

***All 600 completed data forms will be scored by the data collectors and spot-checked by Christine and Aimee during and after data entry to ensure accuracy. Forms will either be mailed or scanned for review (final review protocol to be determined).*