If Mothers Had Their Say: Research Informed Intervention Design for Empowering Mothers to Establish Smoke-free Homes

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Conclusions & Implications

Given results for EMESH Project Phases I and II, there are several implications for future research. Mothers and other caregivers welcomed and requested ETS and TSR education. This is consistent with the findings of Cluss and Moss (2002) who reported that both smoking and non-smoking parents welcomed these conversations from their children’s health care providers. Mothers and other caregivers varied in their responses about elements that would assist them in creating a smoke-free home for their babies; this variation supports the empowerment spirit of this project which proposes a menu-driven intervention that can be tailored by each mother/caregiver to fit unique and changing needs.

Phase II suggests that there is a lack of routine documentation pertaining to ETS and TSR exposure conversations between medical staff and parents/caregivers. It is unclear if these conversations are or are not taking place; either way, the lack of documentation excludes vital information about babies’ environmental contexts. If ETS/TSR exposure is known, medical and social work staff have an opportunity to address smoking behavior and pass this information on to all members of the infant’s care team. Health and social work practitioners have extended periods of hospitalization and follow-up clinic access to work with mothers and caregivers toward reducing/eliminating infants’ ETS and TSR exposure.

Results

Phase I. Semi-Structured Interviews
Caregivers for 20 infants with bronchopulmonary dysplasia (BPD) were interviewed (6 in NICU and 14 in BPD clinic), if their babies were in regular contact with a smoker. Interview questions addressed motivators and barriers to changing the baby’s exposure, and what a menu of intervention options might look like. The brief interviews were conducted by trained outside (social work) interviewers, audio recorded with accompanying hand written notes, and transcribed. Interviews were coded with the coding scheme emerging from interview response sets.

Phase II. Secondary Analysis Medical Records Review
A total of 75 medical records were randomly selected from among 281 active NICU and follow-up clinic rosters. Infants’ records were coded for demographic, health care, and smoke exposure discussion notes. Coding schemes were initially composed, then modified according to actual response sets, and data were subsequently recoded. Ambiguous coding was resolved through consultation among team members. Results were discussed with health care team members for their interpretation insights.

All procedures in both phases were approved by the two IRBs involved.

Methods

Evidence indicates that the 60% of America’s children exposed to environmental tobacco smoke (ETS) exhibit significantly higher rates of health, learning, and behavioral problems. These risks are compounded for babies who experienced respiratory complications at or shortly following birth (Bock, Becker, & Borrelli, 2008; DiFranza, Aligne, & Weitzman, 2004; Hannover et al., 2008). Not only are they vulnerable to ETS exposure, second-hand smoke, but also to tobacco smoke residue (TSR) in the environment, third-hand smoke.

The long term health promotion goal of the EMESH (Empowering Mothers to Establish Smoke-free Homes) Project is to reduce infants’ exposure to ETS and TSR following release from neonatal intensive care units (NICUs) where advanced respiratory support was delivered. The EMESH project has completed the first two phases of development: semi-structured interviews of infants’ parents/caregivers and content review of infants’ medical records. These first two phases were designed to inform subsequent intervention phases of the project.

Introduction

Mothers and other caregivers welcomed and requested ETS and TSR education. This is consistent with the findings of Cluss and Moss (2002) who reported that both smoking and non-smoking parents welcomed these conversations from their children’s health care providers.

Important Elements in a Menu of Intervention Options
- ETS and TSR education and tools, smoking cessation resources, coaching and guidance for addressing other’s exposing baby to ETS/TSR, accessibility of services and resources (i.e. transportation assistance, childcare, take-home materials), assistance with professional cleaning of smoke residue from home and car.

Phases of Research

Phase I
- Motivators for Changing Baby’s ETS/TSR Exposure
  - Healthy baby/child, better self/family health, cleaner home environment, increased self-confidence & self-respect, financial savings, personal hygiene.
- Barriers to Changing Baby’s ETS/TSR Exposure
  - Personal attitude (i.e. apathy, selfishness, indifference), unaware of smoking-related consequences or their severity, physical and emotional addiction, difficulty of quitting, comfort/pleasure from smoking, fear of confronting others who smoke near baby, influence from other smokers, lacking quitting resources for self or others.

Phase II
- The total number of infants’ infantile days ranged 1-596; M=133 days (SD=105 days) and they attended an average of 6.8 BPD visits (SD=3.9).

Health Care

- The long term health promotion goal of the EMESH (Empowering Mothers to Establish Smoke-free Homes) Project is to reduce infants’ ETS and TSR exposure.

Infant/Family Demographics
- Infants ranged in age from 5-59 months (M=25 months)
- Baby boys outnumbered girls (65% to 35%)

Phase III

- Infants in NICUs had an average of 26.3 days (SD=15.3) with range of 3-72 days.
- Baby boys outnumbered girls (60% to 40%)
- Infant/Family Demographics
  - Infants ranged in age from 1-18 months (M=6.3 months)
  - Baby boys outnumbered girls (63% to 37%)

References


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