Abstract

Grant Number: 1R01NR005263-01A1
Project Title: Nursing Support Intervention for Mothers of Prematures

Holditch-Davis, Diane PhD, RN, FAAN
Marcus C. Hobbs Distinguished Professor of Nursing
Associate Dean, Research Affairs

Abstract: DESCRIPTION (provided by applicant): Premature infants are at risk for developmental problems, and Rural, African American prematures are at higher risk for these problems than other prematures. This health discrepancy is probably due interactions among factors, such as poverty, barriers to service usage, the mothers' emotional distress from the infant's birth and hospitalization, and resultant parenting styles that may be less facilitative of infant development. The purpose of this study is to examine the effectiveness of a culturally congruent intervention providing support to rural, African American mothers of prematures from the time their infants are in intermediate care until they are 18 month of age. During phone calls and home visits, the intervention nurse will help mothers resolve emotional distress due to prematurity and reduce stress related to parenting in the context of work and family, support them in developing relationships with their infants, and help them identify acceptable resources and fit resources to her goals in order to meet complex infant health and developmental needs. The context for the intervention is a therapeutic relationship in which a culturally proficient nurse uses guided discovery to focus on the mothers' experiences and concerns and help the mother to identify ways to reduce distress, improve parenting, and tap into strengths available in her family and culture. Mothers receiving the intervention and mothers receiving usual care will be compared to determine whether the intervention affects psychological well being, mother-child relationship quality, length of use of child health and developmental surveillance services, and child development. We expect that improvements in maternal psychological well being will lead to longer use of services, better mother-child relationship quality, and better infant developmental status, particularly lessening the decrease in developmental status that is often seen after 12 months. The cost-effectiveness of the intervention will also be determined. Two hundred and twelve rural, African American mothers and their high-risk prematures will be recruited when the babies are in intermediate care and followed until they are 24 months corrected age. The mothers will be randomly assigned to control and intervention groups. The intervention will consist of an in-person contact in the hospital followed by a home visit 1-2 weeks after discharge and at 5, 10 and 15 months. Phoe contacts will be made weekly during the first month, bimonthly for 2 months, and then monthly. Maternal psychological well being will be measured using depressive symptoms, anxiety, posttraumatic stress symptoms, parenting stress, and minor daily stresses. The quality of the infant's social environment will be measured using a 1-hour naturalistic observation of mother-infant interaction, the HOME Inventory, and two measures of maternal perception of the child. Length of use of services will be measured by the Child Services Survey and immunization status, a proxy for adequacy of well-child care, and confirmed from medical records. Child development will be measured by the Bayley II and a language assessment.