

crisprd 1.0



Abstract

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PI Name: BUTZ, ARLENE M.

PI Title: ASSOCIATE PROFESSOR

Project Title: HOME NURSE INTERVENTION FOR IUDE INFANTS--3 YR FOLLOW UP

Abstract: *DESCRIPTION (Adapted from the Investigator's Abstract): The extent that fetal cocaine and opiate exposure produces specific, negative long-term effects on child health has not yet been determined, however evidence suggests that intrauterine drug exposure (IUDE) is a risk for long-term alterations of brain functioning. Early intervention programs, including home nurse interventions, can enrich development in biologically and environmentally challenged infants. Current work under this award has documented in preliminary analysis that 37% of 12 month old IUDE infants were "suspect or at risk" for visual attention deficits and 20% had abnormal neuromotor exams. Postnatal maternal drug use was 41% at 6 months. This continuation study is designed to determine if a Pediatric Nurse Specialist (PNS) home intervention will be associated with AIM 1: sustained effects of improved child health and AIM 2: will demonstrate cost effectiveness in the 204 enrolled IUDE infants up to age 5 years. AIM 3: To appreciate the full impact of the intervention we will compare the intervention children to a group of non drug-exposed control infants of comparable environment/socioeconomic status. Differences in growth, development, behavior and psychosocial functioning will be compared between the three groups (IUDE intervention children, IUDE control children and non drug-exposed control children). Data collection at 30, 36, 42, 48, 54, 60 months of age, will include growth, IQ, attention, neurological status, child behavior, play interaction, parenting stress measurements, and child protective service referral and foster care placement. Data analysis will include chi-square and t-tests, ANOVA, and multivariate generalized linear regression models. The Generalized Estimating Equation (GEE) will be used to address the correlation of repeated measures. Cost-effectiveness and cost benefit*

ratios will be generated to examine for differences in cost of care between groups. Study outcomes will provide important data on: the effects of a PNS intervention for IUDE children; the relative cost of this intervention; and the major components needed in meeting the needs of IUDE children. Data will be of significant use to researchers, health care providers, insurers and policy makers.

Thesaurus Terms:

child physical development, child psychology, embryo /fetus toxicology, home health care, infant human (0-1 year), nursing intervention attention, child behavior, emotion, health care service utilization, longitudinal human study, outcomes research, social psychology, social support network, visual perception behavior test, child (0-11), clinical research, human subject, psychological test

Institution: JOHNS HOPKINS UNIVERSITY
3400 N CHARLES ST
BALTIMORE, MD 21218

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