C2.2: Gender Effects on the Health and Development of Medically At-Risk Infants

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Abstract:

Introduction: Male vulnerability on infant health and development may differ depending on the nature of health problems. To examine gender-differentiated health and developmental outcomes in medically at-risk infants, we compared outcomes of boys and girls within three groups of infants: prematurely born infants, medically fragile infants, and infants seropositive for HIV. This secondary analysis hypothesized that girls are less vulnerable to health problems and development delays than boys over time regardless of their birth characteristics.

Method(s): Participants were 108 premature infants, 67 medically fragile infants, and 83 infants seropositive for HIV. Fifty-three percent of premature infants, 63% of medically fragile infants, and 54% of infants seropositive for HIV were boys. All premature infants, 58% of medically fragile infants, and 13% of infants seropositive for HIV were born prematurely. Neonatal health variables were obtained from the medical record. Later health was assessed through the technology dependence scores and frequency of common health problems reported by mothers. Data of physical growth and cognitive/motor/language skills were obtained through the actual measurement and the BSID-II during the home visits between 6 to 27 months corrected ages.

Results: The results obtained from GEE and mixed models showed that premature girls experienced more diarrhea and the boys were heavier, longer, and had larger head circumference over time. Medically fragile infants showed less technology dependence and infants seropositive for HIV showed fewer vomiting over time. The premature girls had better cognitive/motor skills at 9 and 27 months. The girls seropositive for HIV demonstrated better motor skills at 6 months. One of the most significant findings is the decrease in cognitive/motor/language developmental status over time in all groups.
Discussion & Conclusions: The premature infants were the group in which gender differences were most profound in developmental outcomes. Gender-differentiated cognitive/motor development is apparent even before the first year of life. Thus, health care providers need to consider gender as a potential predictor of health and developmental outcomes for infants, especially those who were born prematurely.

Abstract History:
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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