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**"What effect does drug exposure in utero have on children?"**

**Background:** Prenatal drug exposure in utero poses significant risks for the growing fetus, including higher risk for premature birth, low birth weight, and Neonatal Abstinence Syndrome (NAS)[1]. Following birth, as the child continues to grow and develop, they remain at risk for experiencing lasting physical and cognitive delays, especially in higher-order thinking skills, such as planning, problem-solving, attention, impulse control, and memory[2]. We hypothesized that children exposed to drugs in utero will show different and significantly lower scores in the developmental screening compared to those without drug exposure.

**Methods**: Using data from the LSUHSC Infant team, a Kruskal–Wallis test (a non-parametric One-Way ANOVA) was used to analyze the developmental scores from young children who were either previously in foster care or in foster care at the time of data analysis. Each child, age 0-6 years, experienced different forms of maltreatment, including prenatal drug exposure. Developmental data was obtained through caregiver endorsements on the screening measure, the Ages and Stages Questionnaire 3rd edition (ASQ). The ASQ tracks the child's development in communication, problem-solving, motor skills, and social interaction. The independent variable in this study was whether they were exposed to drugs, and the dependent variable was the developmental score.

**Results:** This study reviewed 40 children in foster care to examine whether prenatal drug exposure was associated with developmental delays. Nearly half (47.5%) of the children had documented maternal substance use. While most areas of development did not show statistically significant differences, the results were approaching significance in the social-emotional area ($\chi^2$ (1) = 3.48; $p$ = 0.06). These results were likely due to the lack of completed cases and participation. Furthermore, the means for ASQ communication, fine motor, problem solving, and personal-social were on the borderline of concern according to developmental screening standards.

**Discussion**: Our research focused on the developmental impacts that come with prenatal drug exposure in children who are currently or formerly in foster care. Overall, findings in social-emotional development were approaching significance in children with drug exposure. Results between normal and borderline should be monitored to keep track of developmental progress, even if there was no statistical difference. Limitations impacting our results include our small sample size, inconsistent ages of testing, and incomplete case data. Further research using a larger and uniform database is needed to confirm the findings and guide intervention systems.

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