Epidemiological Study of Developmental Progress in Vulnerable Oklahoma Families

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**Background:**

Developmental and behavioral difficulties (DBDs) are estimated to cost society nearly 250 billion dollars per year. With prevalence of DBDs on the rise, the economic gradient is steepening. DBDs predominantly persist among two groups of vulnerable children: 1) those susceptible to child abuse or neglect due to insufficient care or nurturance; and 2) those, who despite adequate care, suffer developmental and/or behavioral delays or disorders from a very early age. Both groups of children are disproportionately represented among low SES families. When gone unnoticed and untreated, the price of DBDs and the number of ensuing negative impacts increases. Fortunately, early interventions have proven effective at remediating and preventing many DBDs, but current resources for early DBD identification are extremely limited. The present study examines prevalence of DBDs among a sample of highly vulnerable children in Oklahoma, and attempts build the case for wise use of existing and future resources aimed at targeted therapeutic efforts.

**Methods:**

This study is part of a larger evaluation of Oklahoma home-visiting programs. Recruitment was based on eligibility for Medicaid and WIC services. Using an in-home survey, 1204 vulnerable families in four Oklahoma counties answered screening questions about the following developmental and behavioral concerns: general developmental and emotional delays (ASQ-3), autism spectrum disorder (ASRS, MCHAT, CSBS), child sexual behavior problems (CBCL items), and child abuse potential (BCAPI).

**Results:**

The ASQ-3 “at-risk” cut-scores are intended to reflect the bottom 2.5% of the population. Sample percentages in this study were as follows: 22% for Communication, 11% for Gross Motor skills, 20% for Fine Motor Skills, 12% for Problem Solving, and 13% for Personal-Social problems. When screening for ASD, 17% of the eligible participants (n=240) were classified “at risk” on the MCHAT (compared to 7% nationally), 26% on the ASRS (n=180) qualified for the “very elevated risk” category (98th percentile nationally), and 18% on the CSBS were “at risk” (n=658; 90th percentile nationally). The CBCL questions had responses ranging from 0% to 4% with no significant difference from the national norms. The BCAP child abuse scale indicated that 29% fell into the “at risk” category (n=568).

**Conclusions:**

The results show that the proportion at-risk for nearly all developmental markers far exceed normative expectations. These findings suggest that targeted screening and subsequent referrals for this population would be highly cost-effective use of existing early identification resources.