Epidemiological Study of Developmental Progress in Vulnerable Oklahoma Families

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**Background:**

Early detection of childhood developmental disorders (autism, child sexual behavior issues) and child abuse potential offer parents many benefits. Early detection of these developmental disorders give parents the abilities to build upon the strengths their child already has while improving areas of weakness. The earlier intervention occurs, the better the opportunity for success for the child. When child abuse potential is detected prior to an occurrence, parents can receive help through one of the home-based parenting programs that are available in Oklahoma.

**Methods:**

This evaluation is a part of a bigger research study that is evaluating home-visiting program in accordance with the Maternal Infant Early Childhood Home-Visitation (MIECHV) evaluation. This study is employing an in-home longitudinal survey to vulnerable families in four Oklahoma counties (Oklahoma, Tulsa, Muskogee, and Comanche). This portion of the evaluation looked specifically at the epidemiology of vulnerable early childhood populations with regards to developmental delays via psychometric evaluation of screening instruments for autism, child sexual behavior problems, and child abuse and neglect potential.

Participants were recruited based on their eligibility for one of the home-based parenting programs available in Oklahoma. Depending upon the age requirements of the measures, eligible participants were given the opportunity to complete the following measures with regards to their youngest child at the time of participation: the Modified Checklist for Autism in Toddlers (MCHAT) the Autism Spectrum Rating Scales (ASRS), Communication and Symbolic Behavior Scales (CSBS), Brief Child Abuse Potential Inventory (BCAP), selected child sexual behavior questions from the Child Behavior Checklist (CBCL), and the Ages and Stages 3 Questionairre (ASQ-3).

**Results:**

With 1204 initial surveys completed, 17% of the eligible participants (n=240) were in the “at risk” classification on the MCHAT compared to 7% nationally. Males and females are evenly split. Of those who met the age requirements for the ASRS (n=180), 26% were in the “very elevated risk” category (males: 48%, females: 50%, unreported gender: 2%). Scores on the ASRS that are in the “very elevated risk” category are in the 98th percentile or higher on the normative scale. Of the autism screeners, the CSBS had the largest eligible population (n=658). The CSBS identified 18% “at risk” with males having a higher percentage then females (57% vs 43%). The CSBS established cut-off scores at 1.25 standard deviations below the mean. Scores falling in the “at risk” category are at or below the 10th percentile nationally.

The BCAP child abuse scale indicated that 29% fell into the “at risk” category (n=568).

The survey asked selected items from the CBCL regarding child sexual behavior. The responses to these question ranged from 0% to 4% and did not differe significantly from the national norms.

Responses to the ASQ-3 were divided into 5 subsections for 20 different age groupings: Communication, Gross Motor Skills, Fine Motor Skills, Problem Solving, and Personal-Social. The ASQ-3 has established cut-off scores 2 standard deviations below the national mean. Children scoring below these cut-offs are considered at-risk for developmental disorders and further assessment is recommended. Of the 1,103 participants answering the ASQ-3, 22% scored below the cut-off in communication, 11% in gross motor skills, 20% in fine motor skills, 12% in problem solving skills, and 13% in personal-social skills. The 2 standard deviation cut-off scores imply that 2.5% of the population will score in the at-risk category. The percentages from our sample are considerably higher than that of the national norm.

**Conclusions:**