Research Brief

Preconception and prenatal predictors of early experiences of risk and protection among Alaska children

Background

Early childhood is a period of both potential, and vulnerability given the rapid growth and change that occurs during this time. To effectively mitigate risk and enhance protection during childhood, early identification of families who may benefit from services is important.

We linked 2009–2011 Pregnancy Risk Assessment Monitoring System (PRAMS) data with administrative data from the Office of Children's Services (OCS) and 2012–2014 Childhood Understanding Behaviors Survey (CUBS) data. Using these data, we identified groups of AN/AI and non-AN/AI children with similar experiences or "clusters" of seven risk factors and four protective factors prior to age three years. We then examined preconception and prenatal predictors of membership in identified group clusters.

Key findings from this study

Non-Alaska Native / American Indian children

Non-AN/AI children fell into two clusters: low risk, high protections cluster and moderate risk, moderate protections cluster Predictors of membership in the moderate risk, moderate protections cluster by age three include:

- o Partner stress
- o Maternal education <12 years
- o Maternal substance use
- o Younger maternal age

Alaska Native / American Indian children

AN/AI children fell into two clusters: low SES, moderate protections clusters and high risk, moderate protections clusters. Predictors of membership in the high risk, moderate protections cluster by age three include:

- o Partner stress
- o Maternal education <12 years
- o Maternal substance use
- o Financial stress

Implications and recommendations

Understanding predictors of membership in groups with risk and protective factors that cluster together among AN/AI and non-AN/AI children can help inform public health prevention efforts. The interplay between these factors could inform eligibility criteria for prenatal home visiting programs and highlight screening questions that may be important to incorporate into prenatal visits with healthcare providers. For example, some home visiting programs target low-income, first time mothers. These results indicate that it may be beneficial for programs to also target mothers who have lower levels of education and multiple children in the home. The results suggest that screening for and addressing maternal substance use during the preconception and prenatal periods may help to identify those most in need of support.