

**Risk factors in pregnancy associated with infant maltreatment:
A longitudinal study of the 1996 Florida birth cohort**

Samuel S. Wu, PhD; Chang-Xing Ma, PhD; Randy L. Carter, PhD; Mario Ariet, PhD; Edward A. Feaver, MDiv, STM; Michael B. Resnick, EdD; Jeffrey Roth, PhD

APHA ABSTRACT

Context: More than 1 million children each year are reported to be victims of abuse, neglect, or threatened harm.

Objective: To identify risk factors during pregnancy that are associated with infant maltreatment.

Design and Setting: Longitudinal cohort study.

Participants: 189,055 mother-infant dyads in the 1996 Florida cohort.

Main Outcome Measure: Infant maltreatment was defined as a “verified” or “some indication” report of abuse, neglect, or threatened harm filed on a child between the age of three days and one year.

Results: 4,496 children (2.4%) of the 1996 birth cohort had documented instances of maltreatment before age one. Of fifteen biomedical and sociodemographic variables related to pregnant women, eleven were significantly associated with infant maltreatment. Relative risks (RR) in order of magnitude were: Medicaid beneficiary (RR, 3.1; 99% confidence interval [CI], 2.7-3.5); maternal education <HS (RR, 3.0; 99% CI, 2.6-3.4); smoking (RR, 2.7; 99% CI, 2.5-3.0); more than two siblings (RR, 2.4; 99% CI, 2.1-2.8); high score on Florida's Healthy Start prenatal risk screening instrument (RR, 2.2; 99% CI: 2.0-2.5); unmarried marital status (RR, 2.2; 99% CI, 2.0-2.4); infant born low birth weight (RR, 1.6; 99% CI, 1.4-1.8); maternal age <20 (RR, 1.6; 99% CI: 1.4-1.8); inadequate prenatal care (RR, 1.6; 99% CI, 1.4-1.7); and interpregnancy interval ≤15 months (RR, 1.4; 99% CI: 1.2-1.5).

Conclusions: Eleven biomedical and sociodemographic factors among pregnant women were found to be associated with an elevated risk for infant maltreatment. More attention needs to be directed at addressing pregnancy conditions that correlate with abusive and harmful treatment of infants.

Learning Objectives

1. Identify 11 biomedical and sociodemographic risk factors associated with infant maltreatment.
2. Identify the criteria by which reports of infant maltreatment are categorized.
3. Discuss how the identification of risk factors can be used to develop intervention strategies and programs.