

Association of maternal age 35 years and over and prenatal care utilization, preterm birth, and low birth weight, in Mexico 2008-2019: A historical cohort study

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Abstract

Objective: We compared prenatal care utilization, preterm birth, and low birth weight neonates among women 35 years and older compared to women 20-34 years old in Mexico, 2008-2019. **Methods:** We used birth certificate data and conducted a historical cohort study of all singleton live births in Mexico from 2008-2019. Study outcomes were inadequate prenatal care (timing of initiation of care and number of visits), preterm birth, and low birth weight. We compared outcomes among women 35-39, 40-44, and 45-49 with births to women 20-34. We used logistic regression to account for individual and contextual confounders. **Results:** We included a total of N=19,526,922 births; 11.9% (n=2,325,725) were to women 35 and older. Compared to women aged 20 to 34, the oldest (45-49 years old) were more likely to reside in poorer communities, have less education, and be uninsured. The odds of inadequate prenatal care (aOR 1.12 95% CI 1.09-1.15 p<0.01), preterm birth (aOR 2.05 95% CI 1.97-2.13 p<0.01), and low birth weight (2.03 95% CI 1.95-2.12 p<0.01) were highest for women 45-49, compared to women 20-34. Patterns were similar among women 35-39 and 40-44 with the exception of lower odds of inadequate prenatal care (aOR 0.77 95% CI 0.76-0.77 p<0.01) for 35-39 compared to women 20-34. **Conclusion:** Women who deliver at 35 years old and over are a heterogeneous group in Mexico. Being 35 years old and older is associated with increases in preterm birth and low birth weight neonates. Women who give birth between 45-49 may be especially vulnerable.

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