International Journal of Population Data Science

Journal Website: www.ijpds.org

Effect of short interdelivery interval between the first and second pregnancies in adolescence on low birth weight.

Vieira, Claudia^{1*}, Coeli, Claudia¹, Aguiar, Fernanda¹, Camargo Jr., Kenneth¹, Pinheiro, Rejane¹, and Flores, Patricia¹

¹Universidade Federal do Rio de Janeiro (UFRJ - Brazil)

Objectives

To estimate the effect of short interdelivery interval between the first and second pregnancies in adolescence on low birth weight.

Conclusion

This study suggests that a short interdelivery interval between the first and second pregnancies in adolescence has an independent effect on low birth weight.

Approach

A non-concurrent cohort study was carried out employing a probabilistic duplicate detection technique of the Brazilian Live Birth Information System (N=2,774,373 records). We evaluated 3,146 linked records of singleton live-born infants delivered between 1999 and 2009 in Rio de Janeiro City (Brazil), who were the second child of teenage mothers born in 1989. We estimated the association between short interdelivery interval (less than 24 months) and low birth weight (<2,500 g) using a logistic regression model, adjusting for low birth weight on the first pregnancy, adequacy of prenatal on the first pregnancy, mother's age and schooling. Covariates were assessed for inclusion using a directed acyclic graph.

Results

By the time of the second birth, the mothers' median age was 18 years (interquartile range 17-19 years). Almost half of the second children born to these teenage mothers (N=1,481; 47.1%) were born within less than 24 months of a previous birth. The prevalence of low birth weight in this group was 9.1% (confidence interval [CI] 95% 7.6 to 10.5), whereas in the group of children born within 24 months or more of a previous birth the prevalence was 6.5% (CI 95% 5.3 to 7.7) (adjusted odds ratio=1.4; CI 95% 1.1 to 1.9).

*Corresponding Author:

Email Address: claulima1979@gmail.com (C. Vieira)

<http://dx.doi.org/10.23889/ijpds.v1i1.37>

August 2016 © The Authors. Open Access under CC BY-NC-ND 4.0 (<https://creativecommons.org/licenses/by-nc-nd/4.0/deed.en>)