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<b>College *</b>	College of Public Health
<b>Department *</b>	Health Management and Policy
<b>Title of Research *</b>	Do the Effects of Prenatal Care on Infant Health vary by Birth Defects: The Case of Orofacial Clefts
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**Introduction & Purpose \***

Birth defects are one of the leading contributors to infant mortality and morbidity worldwide. Orofacial clefts (OFC) are one of the most common birth defects worldwide and have significant burdens on health. OFC decrease birth weight and increase infant mortality risks. Identifying if prenatal care effects vary for pregnancies with defects is important for developing interventions. Our objective is to assess and compare the effects of prenatal care use on the birth weight (BW) of infants with OFC, classified into OFC alone and OFC with other birth defects, and infants who are unaffected.

**Experimental Design \***

We employ a multi-country sample of 2,405 infants with OFC and 24,046 infants without clefts born in the same hospitals and months in seven South American countries between 1996 and 2007. We estimate the effects of prenatal care and other prenatal factors on the entire distribution of BW using ordinary least squares (OLS) separately for the three infant groups.

**Results \***

Based on OLS, the number of prenatal care visits significantly increases BW mean for all infant groups, but has larger effects for the more severely affected birth defect group (the non-isolated OFC group). Specifically, prenatal care increases BW by 113 grams (non-isolated OFC), 72 grams (isolated OFC) and 41 grams (unaffected infants) respectively.

**Conclusions \***

Prenatal care has larger positive effects on the birth outcomes of pregnancies complicated with OFC compared to unaffected pregnancies. Within the complicated group, pregnancies that are complicated with multiple birth defects benefit more from prenatal care. Also, there are variations in these effects by BW. This highlights the importance of providing interventions to improve the outcomes of pregnancies affected by or at risk of OFC.

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