

Abstract Submission for:

Title: Recent Infant Mortality Trends in Central America

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Abstract: This paper evaluates how socioeconomic, demographic and health services are associated with current infant mortality levels in four Central American countries, and assesses how these factors have affected recent trends.

A review of broad historic trends in infant mortality for Latin America with a special focus on Central America is provided as an introduction. Auxiliary information on health care services, vaccination coverage, and socioeconomic development will also be provided to better understand the context of current levels of infant mortality in these four countries. Empirical analysis proceeds in three stages: the first focuses on relative importance of sociodemographic and health care factors in infant survival; the second focuses on how the composition of births by these characteristics has changed over time; the third stage of analysis uses standardization techniques to assess the relative contribution of changes to mortality decline.

Individual-level multivariate analyses are based on the RHS and DHS surveys beginning in the early 1990s, and ending with the most recent surveys (Honduras, 1991/2 and 2001; El Salvador 1993 and 2003; Guatemala, 1993 and 2002, and Nicaragua, 1992/93 and 2001). Analyses are based on 5 sets of determinants: socioeconomic index and characteristics of housing, education levels of mothers, reproductive characteristics (maternal age, birth order, birth spacing), and health care service usage (prenatal and delivery care/facilities) on infant deaths in the 5 years prior to each survey. Logistics regression analysis will be used to assess the relative importance of factors for each period and country to better understand the “sociodemographic cause of death structure” and to appreciate how these factors vary overtime and among neighboring countries. Decomposition techniques using logistic regression coefficients in conjunction with the compositions of births by these variables are applied to evaluate the relative contribution of each set of factors in each country’s recent mortality decline. The series of standardizations provide an estimate of percent contribution of each factor in the model, as well as an estimate of contributions due to changes in the “cause structure of death” and other changes outside the model. Lastly, the standardization exercise is used to indicate the gains that could be garnered in child survival if all births occurred in the most favorable categories: higher socioeconomic conditions, better housing and water supply, higher education among mothers, birth spacing of at least 24 months, lower birth orders and appropriate usage of prenatal and delivery services.

An overall objective of this paper is to better understand how these four Central American countries are situated in the transition to low level of mortality. An analysis of trends, and a comparison of neighboring countries, should illustrate similarities and differences that can aid in programmatic endeavors geared to greater child survival.