

**DETERMINANTS OF INFANT MORTALITY IN INDIA: A COMPREHENSIVE
MODELLING APPROACH ACROSS STATES**

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ABSTRACT

The study investigates Infant Mortality Rate across different regions of India i.e. Northern Region of India, Southern Region of India, Eastern Region of India and Western Region of India. The analysis was conducted on IHDS II dataset. The first analysis uses survival modelling. Using this method, IMR is estimated. The second method is structural equation modelling. The impact of certain socioeconomic and medical factors on infant mortality is estimated. A comparison of the estimated IMR using both the methods and the actual IMR was made. Logistic regression was used to assess the determinants of infant mortality. Impact of mother's education, BCG vaccine, toilet facility, income, private birth facility and no access to prenatal care was estimated. For most of the variables, the results were indicative of the general relationship between Infant mortality and other determinants. However, for some states, there is deviation from the obvious results due to some reasons.

Keywords: Infant Mortality Rate, Survival Model, Structural Equation Modelling