Regional Disparities in Birth Weight: Unveiling Determinants Across India's Diverse Landscape: An Insight from NFHS Data

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Abstract

Birth weight is an important marker of neonatal and long-term health, but some inequalities in terms of regional, socio-economic, and demographic aspects still exist throughout India. This research focuses on the distribution of birth weight and its relations to maternal health, availability of healthcare, living standards, etc. by taking insights from the National Family Health Survey (NFHS) data. Low Birth Weight (LBW) is found to be the most prevalent in the Central region of India with poor access to healthcare and education compared to Southern region where outcomes of birth are improved due to increased maternal levels of education as well as stronger healthcare infrastructure. The prevalence is higher in rural areas compared to urban areas with the influence from accessibility of healthcare, maternal levels of education, and nutrition. Caste and religious inequalities are observed to further impact birth weight outcomes, with disadvantaged groups being at greater risk due to socio-economic disadvantages. Maternal health determinants such as pregnancy complications, antenatal care, and nutritional interventions have a significant impact on birth weight. Policy interventions aimed at addressing these disparities should target improving maternal education and healthcare infrastructure, increasing access to antenatal care and upgrading social-economic conditions. An integrated strategy that combines healthcare enhancements with focused maternal and child health programs is needed to curtail LBW prevalence in India.

Keywords

Birth weight, India, multinomial regression, NFHS.