

Examine the linkage between the socio-economic, demographic background characteristics of mother and child health status in India

We investigate the relationship between between the socio-economic, demographic background characteristics of mother and child health & nutritional status. We used cross-sectional data from third round of National family Health Survey conducted in 2005-06. The analysis is based on 51,555 children below five years of age. The main outcome variables related to health status of children are-diarrhea, and acute respiratory infections. Anthropometric measures of weight-for-age, height-for-age and weight-for-height are used to assess the nutritional status of children. Cross-tabulations and logistic regressions models have been used to fulfill objectives of the study

We find significant association between demographic, socio-economic characteristics of mother and child health and nutritional status in India. Education and household economic status remains critical factors governing child health and nutrition in India.

Introduction

A million or more infants and children die each year from diseases directly related to inadequate provision for water and sanitation, and hundreds of millions are debilitated by illness, pain and discomfort. Their nutritional status is often compromised by water-related disease (especially diarrhea and intestinal worms).The sanitation sector is often worse than water supply. Some 2.6 billion people, half of the developing world, live without improved sanitation. Sanitation coverage in developing countries (49 per cent) is only half that of the developed world (98 per cent) In developing countries, rapid population growth and urbanization is creating an added demand for housing, infrastructure services including sanitation services. Providing sanitation services especially for the poor who are living outside the designated residential areas like illegal settlements or slums is a challenge. The World Bank estimates that almost 26% of the global urban population, over 400 million people, lack access to the simplest latrines (World Bank, 2000).Aproximately 50% of under five deaths worldwide are associated with undernutrition(pelleter1995;caulfield2004) undernourished children suffer from delayed cognitive development and perform worse in school(pollittetal.1993;Behrun1996). Malnutritional is primarily a function of nutritional intake, disease incidence and environmental factors and the disease such as use of safe water and clean sanitation, access to health facilities and the disease environment. given that catch-up of growth for children is observed to take place mainly before the age of three, the impact of access to water and sanitation during childhood can have life-long consequences.

Need of the study

The health burden of poor water quality is enormous. It is estimated that around 37.7 million Indians are affected by waterborne diseases annually, 1.5 million children are estimated to die of diarrhea alone and 73 million working days are lost due to waterborne disease each year. The resulting economic burden is estimated at \$600 million a year.

The 2001 Census reported that 68.2 per cent of households in India have access to safe drinking water. According to latest estimates, 94 per cent of the rural population and 91 per cent of the people living in urban areas have access to safe drinking water. Data available with the Department of Drinking Water Supply shows that of the 1.42 million rural habitations in the country, 1.27 million are fully covered (FC), 0.13 million are partially covered (PC) and 15,917 are not covered (NC). However, coverage refers to installed capacity, and not average actual supply over a sustained period or the quality of water being supplied which is the most essential part.

However, recent evidence suggests tremendous shortage of essential housing, water and sanitation facility in India, especially among the poor. How the unavailability and deficiencies in amenities (housing, safe drinking water and sanitation facility) influence the health status of population, especially child health status in India is not properly understood, and poses critical challenges for health professionals and planners, given relatively poor nutritional status and high infant & child mortality scenario.

Objectives:

- We investigate the relationship between availability household amenities (quality of housing, drinking water, sanitation facility and cooking fuel) and child health & nutritional status after adjusting for critical socioeconomic, demographic and contextual confounding variables.
- To examine regional variation in stunting, wasting, under weight, ARI and diarrhoea in India

Data & Methods

We used cross-sectional data from third round of National family Health Survey conducted in 2005-06. The analysis is based on 51,555 children below five years of age.

The main outcome variables related to health status of children are diarrhoea, and acute respiratory infections. Anthropometric measures of weight-for-age, height-for-age and weight-for-height are used to assess the nutritional status of children. Cross-tabulations and logistic regressions models have been used to fulfill objectives of the study. Results have been mutually adjusted for age, sex, birth order, family size, birth weight, birth size, and breastfeeding status of the child; mother's age, height, education and exposure to mass media; household's wealth index, religion and caste.

Conclusion

We find significant association between demographic, socio-economic characteristics of mother and child health and nutritional status in India. Education and household economic status remains critical factors governing child health and nutrition in India.