Effect of Household Sanitation on Child Undernutrition and Health Indicators: Evidence from Pakistan

Poor sanitation is a major public health issue linked to significant health outcomes. Several studies have associated sanitation with undernutrition and diarrhoea. Improved sanitation, however, is determined by household decisions, which may induce endogeneity that has been insufficiently explored in most of the previous literature. We assessed the effects of improved sanitation on children's height-for-age, weight-for-age, weight-for-age, and weight-for-height z-scores, and diarrhoea. Using an instrumental variable approach, our findings demonstrated that improved sanitation was found to have a positive and significant impact on anthropometric indices, mainly height-for-age and weight-for-age. Conversely, no significant impact was identified on weight-for-height and diarrhoea. The heterogeneity analyses add value to the literature showing that girls, children older than two years, and children with uneducated mothers significantly benefit by improved sanitation as compared to boys, children younger than two years and those with educated mothers, respectively. Our results suggest that policies focusing on enhancing access to sanitation can be very effective in reducing undernutrition.