



Determinants of Coverage for Various Stages of DPT Immunization in India

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To explain the wide variation in vaccination rates across districts in India, numerous studies have examined socio-economic and demographic determinants together with health care system drivers, of immunization coverage. However, most studies focus only on determinants of full immunization but determinants of various stages of partial immunization have not been previously studied. We examine determinants of uptake at each stage of diphtheria-pertussis-tetanus (DPT) vaccination. Using data from District Level Health and Facility Survey 3, we examined factors determining uptake of DPT dose 1 and uptake of successive DPT doses among infants who have received previous doses. We considered socioeconomic and demographic characteristics of individuals and households, together with district-level covariates and village-level structural determinants of vaccination uptake. Demand-side factors, such as parents' level of educational attainment, household wealth quintile, and mothers' general health knowledge were found to be important for both DPT1 and for dropout between doses 1 and 3. Village-level supply-side factors, such as access to health care facilities and workforce availability, were not found to be associated with the completion of the 3-dose DPT series. On the other hand, proportion of illiterate women and proportion of households with higher birth order children in districts were found to be strongly associated with the dropout. Our results suggest that dropping out after the first DPT dose is perhaps more of a demand-side issue. Our findings can aid policy makers in developing strategies and interventions tailored to meet the needs of the most vulnerable groups.