SOCIAL DETERMINANTS OF CHILD IMMUNIZATION IN THE STATES OF RAJASTHAN, ODISHA AND MADHYA PRADESH (INDIA): SPECIAL FOCUS ON SOCIAL GROUPS

Abstract of the doctoral dissertation
submitted by

Sumoni Mukherjee

Under the supervision of
Dr R. Nagarajan
Associate Professor
Population Research Centre

GOKHALE INSTITUTE OF POLITICS AND ECONOMICS
Deccan Gymkhana, Pune
Maharashtra, INDIA

JANUARY, 2015
SOCIAL DETERMINANTS OF CHILD IMMUNIZATION IN THE STATES OF RAJASTHAN, ODISHA AND MADHYA PRADESH (INDIA): SPECIAL FOCUS ON SOCIAL GROUPS

ABSTRACT

The fourth Millennium Development Goal emphasises hundred per cent of full immunization coverage among children aged 12-23 months. However, immunization coverage remains very low in many developing countries, including India. Schedule Caste/Schedule Tribe (SC/ST) were disadvantaged groups and immunization coverage among them was found to be lower than for children from other caste groups. On the other hand, social determinants have a substantial impact on routine childhood immunization. This study attempts to examine the role of social determinants particularly, social group affiliation on the coverage of child immunization in the three Empowered Action Group (EAG) states (viz., Odisha, Rajasthan and Madhya Pradesh) of India. To address the inequities in child immunization coverage between different social groups in the selected States of India, two major conceptual models - health belief model and Tanahashi model for health services coverage; and two hypotheses ‘characteristics hypothesis and interaction hypothesis’ adopted.

Data on immunization from the third National Family Health Survey (NFHS-3) for the 5,405 children (Rajasthan-1,519, Odisha-1,366 and Madhya Pradesh-2520) age 12-59 months among who had taken birth during five years preceding the survey in the three study states used for the analyses. Both bi-variate and multivariate analyses along with reliability tests have been carried out. The net effects of caste/tribe on dependent variables (specific vaccinations, immunization status, and Vitamin A supplementation), different multivariate techniques (logistic and multinomial logistic regression analyses) were adopted with four models Sequentially controlling for the effects of other socioeconomic and demographic modifying factors (residence, household structure, household standard of living, father’s education, mother’s education, mother’s work status, mother’s age at the time of child’s birth, birth order and sex of the child) and three proxy variables for programme factors (exposure to media, place of delivery and accessibility of health facility for mother). Finally, whether the social affiliation interacts with program characteristics, the interaction effects of caste/tribe with and three program variables on child immunization assessed.

Scheduled caste/tribes are significantly less likely to be fully immunized than the ‘other’ caste children in the three study states. However, results from multivariate analyses show that the caste/tribe affiliation per se does not operate independently on child immunization and it interacts with other socio-economic and demographic and programme factors. This supports the characteristics hypothesis that posits that the observed social group differences in uptake of child immunization are largely due to the differences in demographic, social and economic composition of the social groups. Results from the interaction analyses show strong influence of diffusion of knowledge and learning on child immunization coverage. Irrespective of caste/tribe in all the study the three States, the probability of full immunization coverage increases with the mothers’ exposure to media, institutional delivery and higher accessibility of health facility. From the analyses, clear evidence of good exposure to mass media; institutional delivery and higher accessibility of health facility have favouritism in the demand for immunization services, particularly among SC’s and ST’s. Therefore, dissemination of information on maternal and child health care through these medium helps to increase parents consciousness about the availability health care services and increase demand for vaccine, without changing the service delivery.