

審査の結果の要旨

氏名 モハメッド ラシェドウル イスラム
Md. Rashedul Islam

The main objective was to assess the progress towards of age-appropriate vaccinations in 41 low-and lower-middle income countries (LMICs) of Asia and Sub-Saharan Africa. The six specific objectives of this study were as follows. (1) To estimate the recent trends in the coverage of age-appropriate vaccinations and to derive projections of these indicators up to 2030 for 41 LMICs at regional, and national level, as well as by area of residence and socioeconomic status. (2) To quantify the probability of achieving the 90% coverage target for age-appropriate vaccination by 2030. (3) To assess the expected magnitude of wealth-based inequality in the coverage of age-appropriate vaccinations in 2030. (4) To evaluate the impact of decreasing DAH and health workforce due to COVID-19 on age-appropriate vaccination coverage. (5) To estimate the median delay in vaccinations using the most recent survey data from 41 LMICs and (6) To estimate the determinants of delay in vaccinations using the most recent survey data from 41 LMICs. Data were extracted from 174 household surveys conducted between 2000 and 2020 in 41 LMICs for this study.

The key findings of this study are as follows:

1. In the current trend scenario, of the 41 countries, only 10 countries for BCG vaccine, five countries for DPT3 vaccine, three countries for polio3 vaccine, and none for measles vaccine are predicted to achieve over 90% coverage in 2030.
2. A wider coverage gap between urban-rural and poorest-richest was observed in several African countries including Ethiopia, Niger, Nigeria, and Central African Republic. On the other hand, narrower coverage gap was found in Burundi, Cambodia, Rwanda, Sao Tome and Principe and Sierra Leone.

3. The lowest socioeconomic inequality in vaccine coverage was found in South Asia and South-east Asian countries, while a wider inequality was observed in Central and Western African countries.
4. The shortest median delay was observed in Cambodia, followed by Rwanda, Sao Tome and Principe and Zimbabwe. The longest median delay in vaccination was observed in Nigeria, followed by Ethiopia, and Niger.
5. Children with older age, large number of children, no access to mass media, residing in rural areas, being of lower socioeconomic status, and being an uneducated mother have been identified as key determinant of delay in vaccination.

The results of this study suggested that the coverage of age-appropriate vaccinations among children increased substantially at the regional and national levels as well as by area of residence and socioeconomic status in most countries between 2000 and 2030, but much higher coverage is required to achieve the 90% coverage target by 2030. To meet the global targets, LMICs of Asia and Sub-Saharan African countries should give importance in increasing age-appropriate vaccination coverage and decreasing inequality in underserved children by introducing appropriate policies and health system strengthening.

This is the first study to provide a comprehensive assessment of age-appropriate vaccinations coverage among children under five in 41 LMICs at the regional level, national levels by urban-rural residence and socioeconomic status. Thus, the policy makers identify the priority area and introduce context-specific intervention to increase the immunization coverage.

よって本論文は博士（保健学）の学位請求論文として合格と認められる。