

COVID-19 Recovery Strategies and Coverage for Routine Childhood Immunization in Nepal - A retrospective analysis of National Family Welfare Survey Data 2020-2021



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Background

With the onset of the COVID-19 pandemic in 2020 in Nepal, there had been disruptions to the essential health services affecting all regions of Nepal. Immunization programs were significantly impacted in multiple ways, and those disruptions extended to multiple sites, outreach sessions and vaccination campaigns. As a result, large number of children missed vaccination during this period and several still had not caught up on their needed vaccines, making them susceptible to vaccine preventable diseases. Revival of routine immunization program needed efficient and effective interventions by the Ministry of Family Welfare Division of Nepal to strengthen and increase catchup vaccination campaign and the



Specific Aims & Objectives

To evaluate the national immunization coverage and the recovery strategies adopted during the COVID-19 Pandemic from 2020 to 2021 in Nepal.

Methods

We used the data from the survey done by Family Welfare Division of Ministry of Health and Population, Nepal, a cross-sectional survey which collected immunization information using Multi Survey Cluster Indicator data among (n= 596,205) children below 23 months of age in all seven provinces of Nepal from July 2020 to July 2021. Coverage of the following vaccine doses was considered: Bacillus Calmette-Guérin (BCG), DPT- Hep B-Hib 3 (Diphtheria, Pertussis, and Vaccine), OPV3 (Oral Polio Tetanus), flPV2(fractional Injectable Polio Vaccine), Rota 1 and Rota 2, PCV1 and 2 (Pneumococcal Conjugate Vaccine), measles and rubella first and second dose (MR1 and 2), and JE (Japanese Encephalitis).

Results

In comparison to the data survey generated from the year 2019 to 2020, immunization coverage for BCG increased by 5% (86% to 91%), DPT-Hep B-Hib3 increased by 10% (78% to 88%), OPV3 increased by 5% (77% to 82%), fIPV2 increased by 13% (69 to 82%), PCV1 and PCV2 increased by 2% each (85 to 87%) and (80 to 82%) respectively, MCV1 and MCV2 increased by 2% (80% to 82%) and 10% (71% to 81%) respectively and JE increased by 6% (78 % to 84%) from the year 2020 to 2021. Rota virus (1 and 2) vaccination coverage was 81% and 71% respectively from the year 2020 to 2021.

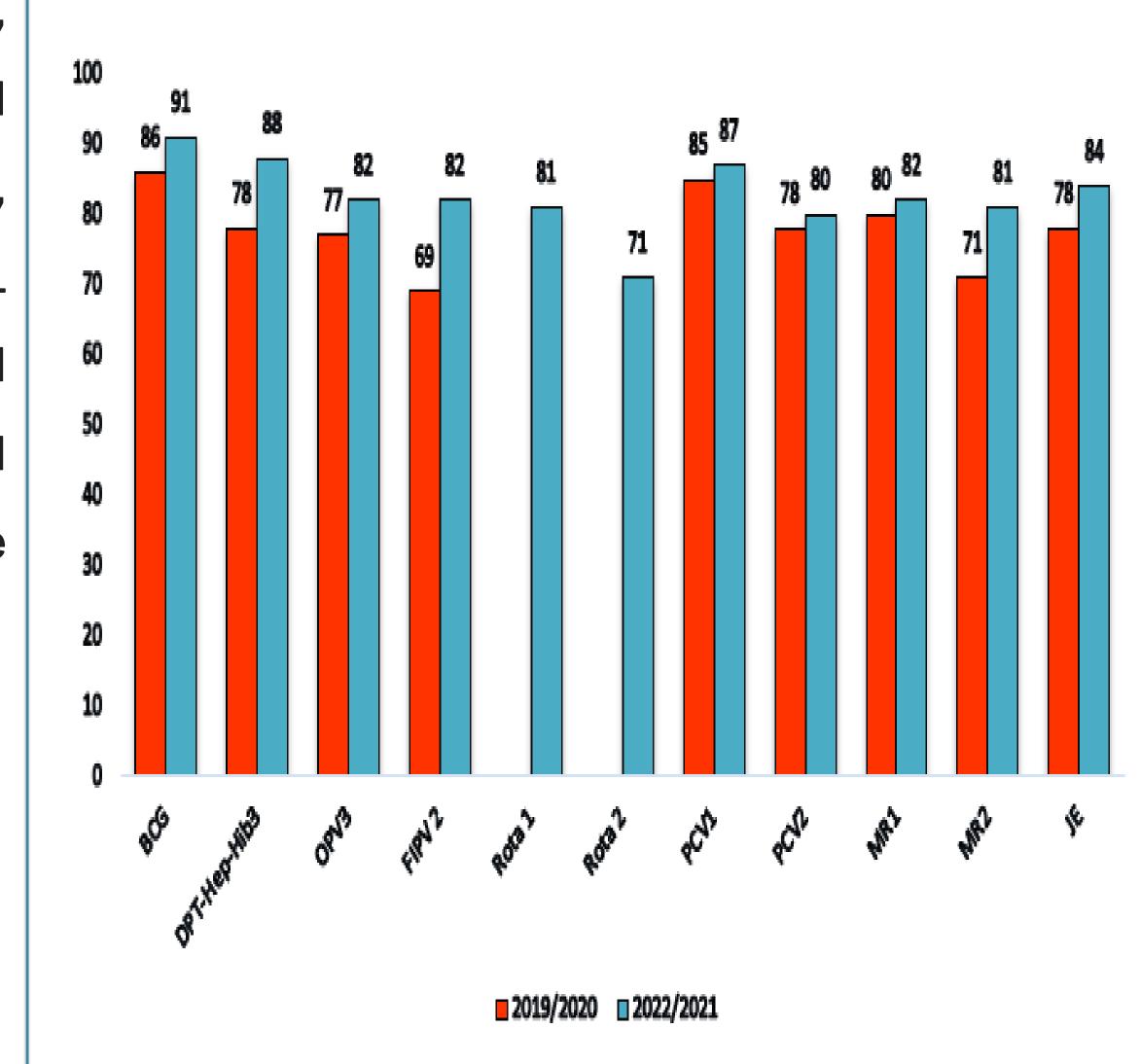


Figure 1: National Routine Immunization Coverage (%) 2019 -2021

Conclusions

Nepal was able to complete its nationwide vaccination campaign, as well as introduce Rota vaccine in the National Immunization Program and achieve high routine immunization coverage in 2020 to 2021. The National Immunization Program of Nepal was able to achieve these objectives by developing resilient immunization strategies such as development of vaccination guideline for delayed schedule, conducting five days provincial level workshop and training on immunization, review meetings, microplanning formulation at subnational levels, guidelines for Measles Rubella Outbreak Response Immunization, provision of adverse events following immunization kits at all session sites, strengthening of cold chain (expansion and extension) at all level, continued new vaccinator trainings at provincial level, immunization data verification, validation and monitoring for sustainability of municipality for Full Immunization Declaration program, continued adverse event following immunization surveillance at all levels.

Acknowledgements

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