

## Abstract

Though immunization forms the cornerstone of prevention of childhood illnesses, the immunization status of children in the epicenter of the war is unknown. Hence, a cross sectional descriptive study was carried out among 300 children aged 12-23 months and their mothers in the resettled population in Kilinochchi district. The objectives were to assess infant immunization coverage, age appropriateness of immunization, availability, quality of documentation pertaining to immunization and mothers' knowledge on immunization. The study sample was selected using the 30 cluster survey technique of the WHO. A check list and an interviewer administered questionnaire were used to collect data.

Immunization coverage for infant vaccines in the national schedule was high with the exception of measles (91.7 %). Study revealed that 91% of infants were fully immunized. A significantly higher proportion was fully immunized after the conflict. (p= 0.001)

Despite a high coverage, age appropriateness of all infant vaccinations was low except for BCG (94%). Age appropriateness was the lowest (28%) for the 3<sup>rd</sup> dose of DPT+Hepatitis B/Pentavalent and OPV. Only a small proportion had been vaccinated earlier than the recommended day (0.6%-3%). The proportion of children with delayed vaccination ranged from 4.6% for BCG to 71.2 % for the 3<sup>rd</sup> dose of DPT+Hepatitis B/Pentavalent and OPV.

A preceding delay was significantly associated with a subsequent delay in vaccination for all 3 doses of DPT+Hepatitis B/Pentavalent and OPV.(p<0.001). Though a significantly higher proportion received age appropriate vaccination during the conflict for all 3 doses of DPT+Hepatitis B/Pentavalent and OPV.(p<0.05, for measles vaccination age appropriate coverage was significantly higher after the conflict.(p<0.001).

All study participants had records pertaining to their immunization. The completeness of data in the immunization card was high for vaccination dates and batch numbers (> 88%).But it was around 50% for AEFI data. The legibility was high for all required fields (>95%)

Knowledge of mothers was assessed on vaccine preventable communicable diseases, vaccination, AEFI, and Vaccination schedule. The overall mean score for knowledge of mothers regarding immunization was 65.3%. Having fully immunized children ( $P=0.02$ ), more than 2 children ( $p<0.001$ ) and a family income of more than Rs 5000 ( $p<0.001$ ) were significantly associated with higher overall mean scores.

The study recommended the need for identifying partially immunized children and organizing catch-up immunizations for them. Health staff is advised to remind mothers the dates of subsequent vaccination and actively detect children with past dates for immediate vaccination during home visits. For the health staff, in-service trainings are suggested to update their knowledge with a view to adhering to guidelines pertinent to vaccinations of children with delayed preceding vaccinations, avoiding invalid vaccinations and ensuring completeness and legibility in immunization records. Public education programmes are also recommended to educate the resettling population on the need for immunization, their age appropriateness, AEFI and subsequent vaccination following AEFI.

**Key words:** Immunization, coverage, age appropriateness, documentation, knowledge