

IMMUNIZATION COVERAGE AS PER UIP- A QUANTITATIVE AND QUALITATIVE STUDY IN SOUTH INDIA***R. S. Bharatwaj**

Professor Dept of Community Medicine Vinayaka Missions Medical College, Karaikal.

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Corresponding Author*Dr. R. S. Bharatwaj**Professor Dept of
Community Medicine
Vinayaka Missions
Medical College,
Karaikal.**ABSTRACT**

The immunization coverage both in terms of number of doses and the timing of doses is of relevance in efficacy of the vaccination process. In the backdrop of national rural health mission data reporting coverage percentages as low as 49% in Puducherry we wanted to check the health service efficiency in our field practice area for both, the number of doses, as well as, the timing of the doses. We found a 100% coverage as far as the adequate number of doses of vaccines as per the universal immunization programme, was concerned, but the correct timing of the doses was as low as 2.9% (5 out of 168) for all vaccines put together and varied for individual vaccines being highest for BCG and lowest for DPT-3, OPV-3.

KEYWORDS: Vaccination coverage, Puducherry.**INTRODUCTION**

Immunization is a vital component of maternal and child health services in any country and is one of the most cost effective and easy methods for child survival. This gains relevance with the fact that, 130 million children are born each year globally, 91 million of which are in the developing countries and around 10 million children under the age of five years die every year and over 27 million infants in the world do not get full routine immunization.^[1] Reports from the World Health organization showed a worldwide coverage of three doses of DTP, one dose of measles and three doses of polio vaccine were 83%, 84% and 84% respectively by the year 2011.^[2]

More than 20% of the world's children were prone to vaccine-preventable morbidity and mortality, mainly in low income countries as they were still not fully vaccinated at 12 months of age.^[3] It was observed that amongst the children aged 12-23 months in urban India; only

60% are fully immunized.^[4] The district level household and facility survey-4 report by the national rural health mission has given an immunization coverage of 81% overall and 49% in rural areas of Pondicherry for children aged 12-23 months in 2012-13.^[5]

With an aim to conduct an independent survey, the present study was undertaken to assess immunization coverage of the children residing in our field practice area that includes urban and rural regions situated in Pondicherry.

METHODOLOGY

House to house survey done in 4 different areas of Pondicherry amongst which 1 was urban & 3 rural areas. Randomly selected streets in 4 areas were the field of study. All children between 1 & 2 yrs of age were the study subjects and immunization details were collected from mother / guardian of the child. The information was cross checked with the immunization card in all cases. Not having an immunization card was an exclusion criteria for our study. The collected details were compiled and comparisons made between proportions. Statistical tests for significance of difference in proportions were utilized when indicated and a p value of less than 0.05 was considered as statistically significant.

RESULTS AND DISCUSSION

A total of 168 children were identified as per our study criteria and we found that all of them were fully immunized for their current age. All of the children had immunization cards that we could cross verify with. As for the timing of the immunization, as per the universal immunization program guidelines, it was noted that the total number of children fully immunized on time was as low as 2.9% (5 out of 168). Breaking up the different vaccines individually the number of children fully immunized on time for BCG was 158 (94%), for DPT-1, OPV-1 - 56 (33%), DPT-2, OPV-2 - 49 (29%), DPT-3, OPV-3 - 49 (29%), MEASLES- 70 (42%).

Table 1: Vaccination at the correct time as per the UIP Area wise.

Vaccine Received at the correct time as per UIP	Area 1 Rural (40)	Area 2 Rural (46)	Area 3 Rural (40)	Total Rural (126)	Area 4 Urban (42)	Total Rural Plus Urban (168)
For All the Vaccines	0	2 (4.3%)	1 (2.5%)	3 (2.3%)	2 (4.7%)	5
BCG	34 (85%)	46 (100%)	38 (95%)	118 (93.6%)	40 (95%)	158
DPT 1, OPV 1	04 (10%)	25 (54%)	20 (50%)	49 (38.8%)	07 (16%)	56

DPT 2, OPV2	11 (28%)	15 (33%)	13 (33%)	39 (30.9%)	10 (24%)	49
DPT 3, OPV 3	13 (33%)	15 (33%)	11 (28%)	39 (30.9%)	10 (24%)	49
MEASLES	16 (40%)	19 (41%)	15 (38%)	50 (39.6%)	20 (48%)	70

Poor qualitative percentage with regard to timing of the immunization may be due to the fact that PHC administers vaccines only once a week & hence mothers missing the specific day is more likely and then, they have to wait until the next week. Moreover most of the parents in some areas that we surveyed, are under “government guaranteed employment scheme” and they take their children along with them as they go for their work, so giving vaccine gets further delayed. PHC are closed on holidays and if it tends to be on day of vaccination, then it gets postponed by 1 week.

Accessibility of PHC is another concern. Overall mothers seem to have a very good knowledge about immunization but poor knowledge about timing between each vaccine and its consequences of missing the correct dates of immunization.

CONCLUSION

The coverage of vaccination is 100% but there is an important issue of administration of the vaccines at the correct time that needs to be addressed.

SUGGESTIONS

- To increase the number of days of immunization to more than once in a week to 2 or 3 days a week separated by a day or two in between e.g. Monday, Wednesday, Friday.
- Provision of adequate well trained motivated PHC staff at peripheral level for MCH care.
- Extra effort to be given to education regarding the various aspects of immunization to mothers during the postnatal period itself by the health staff, particularly a doctor to stress the relevance of timely vaccination
- To improve communication system using newer technology (mobiles) which are now universally accessible. By this, parents can be informed 1 or 2 days prior to the fixed date for immunization so that the day is not missed.
- Concerns of working parents being away from home with their child as part of “GOVERNMENT EMPLOYMENT SCHEME” needs to be addressed.

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