

# Asian Resonance

## Childhood Immunization: A Case study of Lalkhatanga Panchayat (Namkum Block) Ranchi

### Abstract

Immunization is one of the most important and most effective method of Preventing childhood diseases. In December 2014, The government of India launched mission Indradhanus to strengthen and invigorate the Programme and achieve full immunization coverage for all the children. This research paper highlights the immunization status of Lal Khatanga Panchayat. The Study is also concerned about the changing trend of vaccination. The research paper is based on the primary and secondary data and the personal Observations.

**Keywords:** Immunization, Vaccine, Lal Khatanga, Children, Weeks, Months.

### Introduction

In the last few decades immunization coverage rate have improved sufficiently in the developed part of the India, where as most of the part of country are still struggling with faltering rates like Jharkhand. According to the National family health survey (NFHS-III), Only 43.5% of children aged 12-23 months in India were fully immunized; 57.5% in urban areas and 38.6% in rural areas. In Jharkhand, according to AHS 2012-13, the immunized coverage for BCG vaccine was 94.8%, for DTP vaccine 80.0% and for measles vaccine it was 82.9%. Over all 69.9% of the children were found to be fully immunized in Jharkhand.

### Review of Literature

Bhatnagar P. (2015) in his research paper entitled "Estimation of child vaccination coverage at State and National level in India" have studied about the trends of child vaccination in India at state and national level.

Shrivastava, N. (2015) in their research paper entitled "predicators of vaccination in India for children aged 12-36 months" have studied about the predictor for under and non vaccination among India children aged 12-36 months.

Karir, S. (2015) in her research paper entitled "Assessment of sahiya in relation to antenatal care service: Ormanjhi, Ranchi", have studied about the role of sahiya or swasthya sahiya in child vaccination in their related area.

Munda, N. K. (2016) in his research paper entitled "Study of immunization Status among children between 2 to 6 age group in rural field practice area of Ormanjhi of RIMS, Ranchi", have studied about the coverage of immunization among 2-6 age group and the socio demographic profile influencing the immunization status of children.

Mishra, A. K. (2017) in their research paper entitled "socio-Demographic factors affecting the immunization status of pre-school children in Jamshedpur" have studied the status of immunization and various factors that affects the coverage of UIP and Optional vaccine in pre-School children in Jamshedpur.

### Objectives of the Study

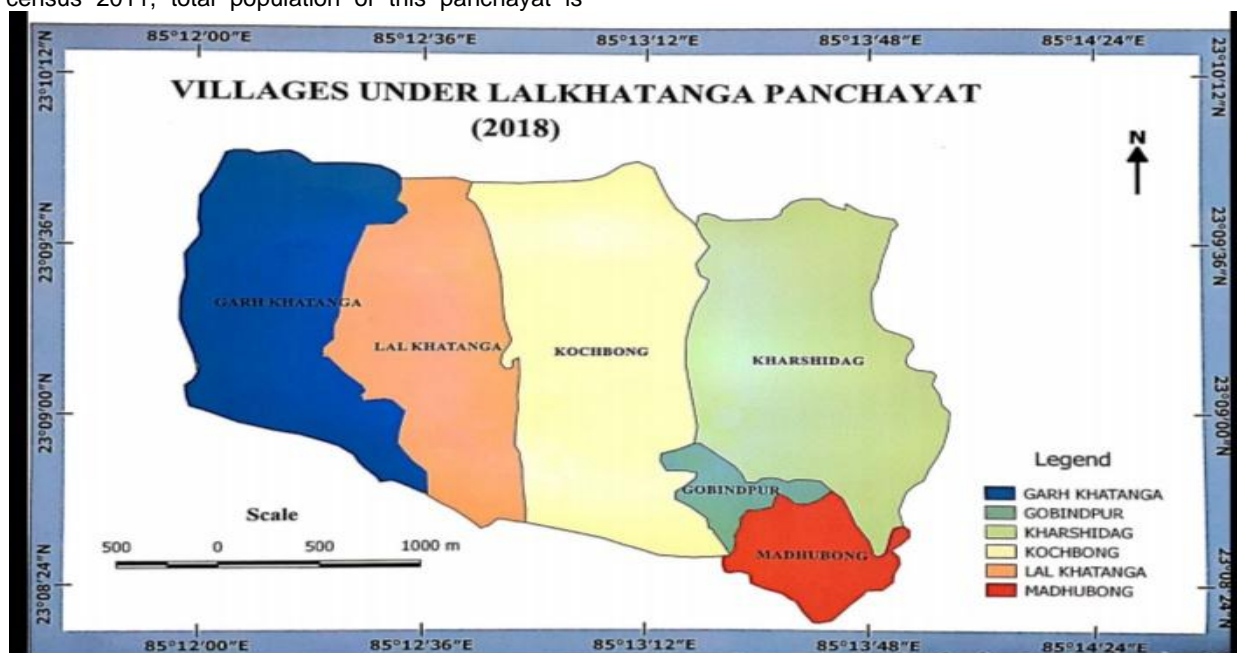
Objectives of this study are to identify the different types of vaccine for infant and children and the status of child immunization in Lal Khatanga panchayat.

### Area of the Study

Lal Khatanga panchayat is situated in Namkum block of Ranchi District. It consist of 6 Revenue village namely- Garh Khatanga, Lal Khatanga, Kochbong, Kharshidag, Gobindpur, madhubong. It is located in the central part of Namkum block. It's Latitudinal extension is 23°08'18" N. to 23°9'54" N. and longitudinal extension is 85°11'58" E. to 85°14'56" E. and



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Source :- Prepared by Author

### Methodology

This study is based on primary and Secondly data. Primary data collected through village field survey by schedule method and observations. Secondly data collected from RCH office, Namkum Block office, Panchayat office, related Journals. Random sampling is used by Author for survey and descriptive method is applying for this paper.

### Bacillus- Calmette Guerin (BCG) Vaccine Report

**Table- 1**  
Number of children got BCG vaccine

YEAR	2011	2012	2013	2014	2015	2016	2017	2018
BCG	77	34	20	11	37	25	32	42

Source:- RCHO

This is only one dose of BCG vaccine is given to infants its help in building immunities against

### Diphtheria, Tetanus and Pertussis (DTP) Vaccine Report

**Table :- 2**  
Number of children got DTP vaccine

YEAR	2011	2012	2013	2014	2015	2016	2017	2018
DTP1	79	65	62	46	0	0	0	3
DTP2	81	63	63	50	2	0	3	2
DTP3	72	64	62	56	5	0	2	0
DTP BOOSTER	64	64	66	63	57	49	47	52

Source :- RCHO

There are four doses of DTP vaccine is given to Infants, which protect them to three diseases namely Diphtheria, Tetanus and Pertussis. These four doses are given at 06 weeks, 10 weeks, 14 weeks

### Result and Discussion

Government of India with National Health Mission prepare a chart for Indian babies for their full immunization. In this chart their 8 vaccine and total 14 doses are included. Author identify types of vaccine report of his study area (Lal Khatanga) and this are as follows:-

tuberculosis. Table 1 shows that there is 278 children had got BCG vaccine from the year 2011 to 2018.

and 16-24 months of age. Table 2 shows that there is 1242 children had got DTP vaccine from the year 2011 to 2018.

**Table:- 3**  
**Number of children got Pentavalent vaccine**

YEAR	2011	2012	2013	2014	2015	2016	2017	2018
Pentavalent 1	00	00	00	02	57	50	49	63
Pentavalent 2	00	00	00	00	46	60	58	59
Pentavalent 3	00	00	00	00	46	63	61	64

Source :- RCHO

Pentavalent is a combined vaccine with five individual conjugate into one. It protect infant from five major diseases like diphtheria, Tetanus, Pneumonia, Hepatitis-B, Haemophilus influenzae. These are three doses of pentavalent vaccine which are given at the **Oral Polio Vaccine (OPV) Report :-**

age of 06 weeks, 10 weeks. Table3 shows that pentavalent vaccines are given to Infant Properly from 2015 and total 678 children had got pentavalent vaccine from the year 2011 to 2018.

**Table:- 4**  
**Number of children got OPV vaccine**

YEAR	2011	2012	2013	2014	2015	2016	2017	2018
OPV 0	35	05	03	03	07	09	05	03
OPV 1	58	52	60	48	57	56	55	59
OPV 2	53	42	61	50	48	60	63	52
OPV 3	48	48	61	56	51	63	57	61
OPV BOOSTER	36	41	64	63	57	49	47	44

Source :- RCHO

There are five doses of OPV are given to Infant to protect them to polio causing paralysis. These five doses are given to infant within 24 hours, 06 weeks, 10 weeks, 14 weeks and 16-24 month of **Hepatitis - B vaccine Report :-**

age. Table 4 Shows that OPV doses are regularly given to infant from 2011 to 2018 and total 1790 children had got OPV vaccine.

**Table:- 5**  
**Number of children got Hepatitis - B vaccine**

YEAR	2011	2012	2013	2014	2015	2016	2017	2018
Hepatitis - B0	00	00	00	06	00	00	00	00
Hepatitis - B1	00	49	64	45	00	00	03	08
Hepatitis - B2	00	47	66	50	02	00	02	00
Hepatitis - B3	00	38	69	54	05	00	00	07

Source:- RCHO

There are four doses of Hepatitis - B vaccine which are protect Infant against virus affecting liver. These four doses are given at the age of 24 hours, 06 weeks, 06 month, 12 months of age. According to Table 5 in the year 2011 Hepatitis - B vaccine are not given to any children. In year 2012-2014 last three doses of vaccine is given to children regularly, After that it is replaced by pentavalent vaccine and total 563 children had got Hepatitis - B vaccine from year 2011 to 2018.

### Conclusion

Immunization is most important method of preventing childhood diseases. The Government of India run a mission Indradhanus to strengthen and invigorate the programme and achieve full immunization. In this mission Government provide facility for free immunization upto age of 24 months. In Lal Khatanga panchayat the level of immunization is increase after 2014, which shows that the level of immunization has improved after the launch of

mission indradhnus. According to village survey conduct on 37 children, result has shows 92% full immunised and 8% partially immunised children are in panchayat. Lal Khatanga is one of those panchayat of Namkum block where population of girl child is more than boys. Negative tendency shows only in weight of children at the time of their birth so author conclude that level of immunization is very good in Lal Khatanga panchayat.

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### References

Bhatnagar, p. *Estimation of child vaccination coverage at state and national levels in India, Bulletin of world Health Organisation, article Id: BLT. 15.167593, Dec 2015.*

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*Dasgupta, P. Immunization coverage in India : urban conundrum, Economic and productivity weekly, vol. No. 21, july 2015*

*Fernandes, S. A bibliometric analysis of systematic reviews on vaccines and immunization, vaccine, vol. No. 36, Feb 2018.*

*Kumar, V. Immunization Status among children between 12-23 months of age attending immunization centre at Rajendra Institute of Medical science, Ranchi, Jharkhand, Health care and biomedical research, vol. No. 3, Issue no. 3, april 2015.*

*Madhavi, Y. Vaccine policy in India, Plos Medicine, vol. No. 2, Issue no. 5, May 2005.*

*Mishra, A. K. Socio- Demographic factors affecting Immunization status of pre-school Children in Jamshedpur, Current medical and Pharnaceutical research, vol. No. 03, Issue no. 06, June 2017.*