Role of Indian Legislative System in Ensuring Childhood Immunization

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Abstract

Background: Immunization plays a significant role in protection of child health from various infections that may leads to significant morbidity and even deaths also. Immunization of children is not only medical necessity, but also a legal obligation towards ensuring rights of health and life.

Objective: To look out decadal (2005-2015) change in vaccination coverage against basic vaccines (includes BCG, DPT, measles and polio) of children in India, due to legislative interventions through schemes.

Methodology: Data has been obtained from two sources firstly from data pertaining to different legislations and schemes on implementation of immunization, and secondly database viz., National Family Health Survey (NFHS) of third (2005-06) and fourth (2015-16) rounds on Indian children belong to the age group of 12-23 months. The estimated decadal percent change in vaccination coverage against basic vaccines in Indian States as well as at various demographic levels has been obtained.

Results: Results have been shown that in a decade (2005-15) Indian government has launched comparatively more number of schemes. In a decade, at both country as well state levels immunization coverage against basic vaccines includes BCG, DPT, measles have increased except third dose of polio. At various demographic classification levels also immunization significantly increased.

Conclusion: The obtained results have been shown that in a decade (2005-15) Indian legislative system is very efficiently and effectively formulated, and with launching proper initiatives on time lead to a significant increase in the vaccination coverage at all socio-demographic levels.

Keywords: Vaccination Coverage, National Five-Year Plan, Basic vaccines, Child rights to health

1. Introduction

Children are the future of every nation; therefore, the issue of child health deserves utmost priority and attention. The government of India has undertaken various legislative initiatives through different Five-Year Plans, and through policies and programs towards ensuring the Right to health for children [1]. Nevertheless, various Constitutional Provisions, statues enacted by the Indian legislature, and have been also enshrined in various National and International laws on issues concerning the protection of child health and their rights. Laws have been made. Such initiatives highlight the intentions of the government for providing health-related facilities accessibility and availability, which are required for the future building of any nation.

Immunization has been a key component of primary health care[2]. Vaccines have been crucial in preventing the epidemic spread of various infectious-disease outbreaks[3].

In child health-related studies, the basic vaccinations coverage includes Baccille Calmette Guérin (BCG), Diphtheria Tetanus Pertussis (DPT), Polio and Measles-containing vaccine (MCV), which protects them from many life-threatening diseases[4-5] including diphtheria, tetanus, pertussis, influenza, and measles and provides healthier lives. As a precautionary measure, the proper vaccination has been recommended from the very beginning of childhood to acquire immunity against measles viruses[6-8]. According to the Integrated Child Development Services (ICDS)[9] program in India, a child should have received basic vaccinations in the 12-23 months of their age.

Everyone is awarded for the significance of vaccination. In this context, creating a facility is not sufficient. The facility must reach the endeavor, which might be situated in the city or in a remote village. The government of India has been launched immunization schemes and policies, but the question of interest is “what is the coverage”. Just because a facility exists, it is meant to be available and accessible also for everyone. Immunization and legislation on the implementation of immunization are two wheels of the same cart. Without having any

legislative system, it is meaningless to talk about its credibility in terms of coverage. With this background, the authors have tried to look out the legislative aspects (both state and central levels) of implementing the immunization program universally and its significance in terms of vaccination coverage of children in India as their rights to health and life.

2. Legislative initiatives towards immunization in India

Legislations are important from the perspective of effective, efficient, and protective enforcement of laws under various enactments to protect children from different infectious diseases. In order to ensure fundamental rights Government of India in 1950 constituted the Planning Commission. Every five years the commission reviews the aspects required for interventions policies and schemes for the betterment. From 1951 to 2017, twelve national five-year plans have been completed and the thirteenth is continuing, the major resolution passed in the context of vaccination coverage among children has been summarized in Table 1A of Appendix.

The legislative provisions and schemes, in addition to fundamental rights, that ensures protects children from infectious diseases through vaccination are the **Vaccination Act, 1880; Tamil Nadu Public Health Act, 1939**(under Section 81-82); **Andhra Pradesh (Andhra Area) Public Health Act, 1939 (**Clause (a) of Sub-section (3) of Section 76**); Punjab Vaccination Act, 1953 (**Sub-section (7,10,11, 13) of Section 2, Section 7,8 and 10**); Declaration of Alma Ata, 1978; Rights of the Child (CRC), 1989** (Article 20); **World Summit for Children, 1990; Transforming Our World: The 2030 Agenda for Sustainable Development, 2017 (**Paragraph 26**).**

Those schemes launched to improve the vaccination coverage among children and the Indian states or territories covered under that specific scheme have been presented in **Table 1B** of the Appendix.

3. Methodology

The data

Data for this study has been obtained from two sources:

(a) Data pertaining to different legislations: By using government websites of health department of various Indian states or territories websites, a list (**Table 1B** of Appendix) has been prepared on schemes that have been implemented in relation with the vaccination coverage among children.

(b) Demographic and Health Surveys (DHS) database on Indian children's health. DHS provides a nationally representative database consisting of information on the population, including health, anthropometry, and nutritional status of selected individuals. Here, we have considered the dataset of the last two rounds of DHS, viz., National Family Health Survey (NFHS) of third (2005-06) and fourth (2015-16) rounds. In the present study, it is assumed that children belong to the age group of 12-23 months is considered as a study population. Since immunization is required for every child and every child has an equal possibility of being vaccinated from all vaccines, therefore, the analysis is done without incorporating the weight variable.

Study parameters

To visualize the implication of legislative enactments and various national or state schemes under all demographic or social classifications, the distribution of immunization coverage a decadal percentage change over two periods (2005-06 and 2015-16) has been compared. Based on the study objective we have two types of parameters:

a) Generated from a comprehensive source of literature for different legislatures that have been presented in **Table 1B** of Appendix.

b) Demographic parameters, which can illustrate the effect of those legislatures on the immunization coverage viz., religion, place of residence, gender of the child, maternal age and qualification, and wealth index have been assessed. Religion is classified into three classes, Hindu, Muslim, and others. The type of place of residence is classified as rural and urban. Mothers' age was subjectively reported, and grouped into seven disjoint subgroups: 15–19, 20–24,…,45–49. Mothers' educational qualification is classified into four classes, no formal education, primary, secondary and higher. The socio-economic status of the family is classified based on their wealth index as poorer, middle income, and richer.

4. Results

The Indian government is very sensitive to the issues of child health, and in every National Five-Year Plan (Table 1A of Appendix) from 1951 to 2017; its associated initiatives are discussed. In the decade 2005-06 to 2015-16, eight different schemes have been launched, and eight more have been launched from 2017-to 2019 (Table 1B of Appendix), by both state and central governments to ensure the quality of life and required facilities so that child rights to health can be assured.

Table 1 presented the decadal (during 2005-06 and 2015-16) percentages growth in vaccination coverage among children (12-23 months) against basic vaccines *viz.,* BCG, DPT, measles, and polio in India, based on NFHS 3 and 4. The decadal percentages growth in vaccination coverage among children has been assessed at the region, residence, gender of child, mother's age and educational qualifications, and economical status levels. Information about a total of 51555 and 259627 children, of which 51% were males, during 2005-06 and 2015-16, respectively, was included in this study. Majority of the study population were from rural part [NFHS-3 (62.2%); NFHS-4 (76.3%)], belongs to Hindu religion [NFHS-3 (69.0%); NFHS-4 (76.4%)], and without formal education or primary level educated [NFHS-3 (78.0%); NFHS-4 (76.2%)].

In a decade [2005-06 to 2015-16], the percentage of vaccination coverage among children from basic vaccinations of BCG, DPT, and measles has been elevated, except for the third dose of the Polio vaccine. The decade growths in vaccination coverage among children have been observed at every socio-demographic level corresponding to each vaccination of BCG, DPT, and measles. The decadal growth in vaccination coverage from 2006-06 to 2015-16 higher in rural area [22.64% in BCG,21.50% in DPT1, 40.27%in DPT3 and 41.0% in measles], among Muslim community [25.30% in BCG, 38.16% in DPT1, 41.60%in DPT3 and 41.0% in measles], girl child [17.95% in BCG, 17.04% in DPT1, 30.00% in DPT3 and 32.01% in measles], of mother's above 35-49 years [(26.72-41.46)% in BCG, (26.83-31.37)% in DPT1, (40.82-58.91)% in DPT3 and (44.51-55.65)% in measles], of mothers without any formal education [35.18% in BCG, 35.60% in DPT1, 65.40% in DPT3 and 66.47% in measles], and belongs to poor [40.67% in BCG, 41.42% in DPT1, 80.26% in DPT3 and 78.04% in measles]. The negative decadal growth in vaccination coverage has been found among children belonging to mothers having higher qualifications [-2.83% in BCG, -5.38% in DPT1, -5.90% in DPT3, and -4.62% in measles].

In order to compare the imbalance in the vaccination coverage corresponding to each of the sub-classified socio-demographic categories during 2005-06 and 2015-16 odds have been calculated in **Table 2**. To compare the change in terms of coverage in a decadal gap, odds ratios have been also calculated. The result has been shown that except for those children belonging to mothers having higher qualifications the odds ratios improve in all vaccinations coverage.
In order to depict the state-wise decadal growth in vaccination coverage during 2005-06 and 2015-16 based on NFHS-3 and 4, from each of the basic vaccines viz., BCG, first and the third dose of DPT, measles, and third dose of polio, has been presented in **Figure 1**.

5. Discussion

The legislative system defines the mechanism required to implement any policy or enforcement of the law, through their legislative enactments, and the same is a requirement for the protection of child health from any infectious disease. The Indian legislative has been very concerned about the protection of child health and in a decade by launching more than eight different state and national based schemes on immunizing tried to ensure the quality of life also. In order to support vaccination, the Indian legislative system not only ensured effective implication but also tried to build mechanisms vaccines must available to every child irrespective of socio-demographical or economical status. It is evident from Table 1B that for a decade (2005-06 to 2015-16) the Indian legislature has been very concerned about vaccination coverage for children. The trend in the scheme presented in Table 1B raises the question of whether the Indian legislature with respect to children's rights to health in terms of vaccination coverage is sufficient. The first step with any changes in preventive and beneficial agents, which guarantees the right to health care of a child in India, should be a focus.

To assesses the effectiveness of the implication of legislative enactments and various schemes in vaccination coverage at state or territories levels towards the protection of child through immunization, the percentage of vaccination coverage corresponding to BCG, first and third injections of the DPT, three doses of Polio and a single dose of measles, percentage of decadal growth in vaccination coverage based on NFHS 3 (2005-06) and NFHS 4 (2015-16) has been presented as Figure 1 (A-E). Figure 1 shows that the Indian legislative and policy (both at central and state levels) are very concerned about immunization coverage, and as a result, the percentage of vaccination coverage in children is showing a significant increment in vaccination

coverage. In a decade (2005-15), at the country level, immunization coverage as compared to 2005-06 increased during 2015-16, BCG increased by 55% (except in 4 states); DPT-1 increased by 90% (except in 9 states and India as a whole); DPT-3 increased by 186% (except in 7 states and India as a whole); measles increased by 190% (except in 6 states and Country as a whole). The vaccination coverage of the third dose of Polio, i.e., Polio-3, needs more concern as it increased by 35%, and in most of the states, coverage declined.

The objective of the Indian legislative system is not only confined to making the laws and policies but also to reduce various social, economical, and demographical disparities in terms of the implication of any policy. To evaluate the effective governance in terms of implication immunization coverage, Table 1 presented the percentage change in immunization coverage based on social, economic, and demographical the during NFHS 4 (2015-16) as compared to NFHS 3 (2005-06).

The percentage of immunization coverage of all selected vaccinations (except polio 3) among Hindus is higher than that of Muslims or other religions. But in terms of rate, the immunization coverage is higher among children who belong to the Muslim religion. A similar pattern is observed based on the type of residence; among urban children immunization coverage is higher than that of rural children. But in terms of rate, the immunization coverage is higher among children belonging to rural regions.

Immunization coverage among children to mothers aged 35 years and above has increased as compared to those below 35 years. Immunization coverage among children to mothers' who are illiterate and primary educated has increased, whereas, it decreased among higher educated women. Vaccination coverage among economically weaker sections (poorer) has increased as compared to middle-income and richer groups. Except for the immunization coverage against the third dose of polio vaccines, the policy, and its implications are very effective in the deliberation of the other selected vaccines in all social, economical, and demographic groups.

Table 2 presented the improvement in vaccination coverage corresponding to all basic vaccines except the third dose of Polio. It has been found that in a decade, the Indian legislative system put more emphasis on reducing the non-vaccinated socio-demographical groups so that vaccines become available and approachable to every stakeholder of the society. The odds ratios of more

than one have shown that in a decade significant progress has been achieved in vaccination coverage.

6. Conclusion

The objective of any policy or legislative enactment in the context of vaccination coverage among children is to build a system that makes vaccination available, accessible, and approachable to every single child so that the future of the nation can be secured. Based on the obtained results that have been observed in a decade (2005-15), one can say that the Indian legislative system is very efficient and effective, and launching proper initiatives on time leads to a significant increase in vaccination coverage. Results have been shown also that even have much diversity in a population at various levels, a significant increment has been observed in a decade at all levels, such as children living in rural regions, belonging to the Muslim community, girl child, mothers without any formal education, and belongs to poor and middle families.

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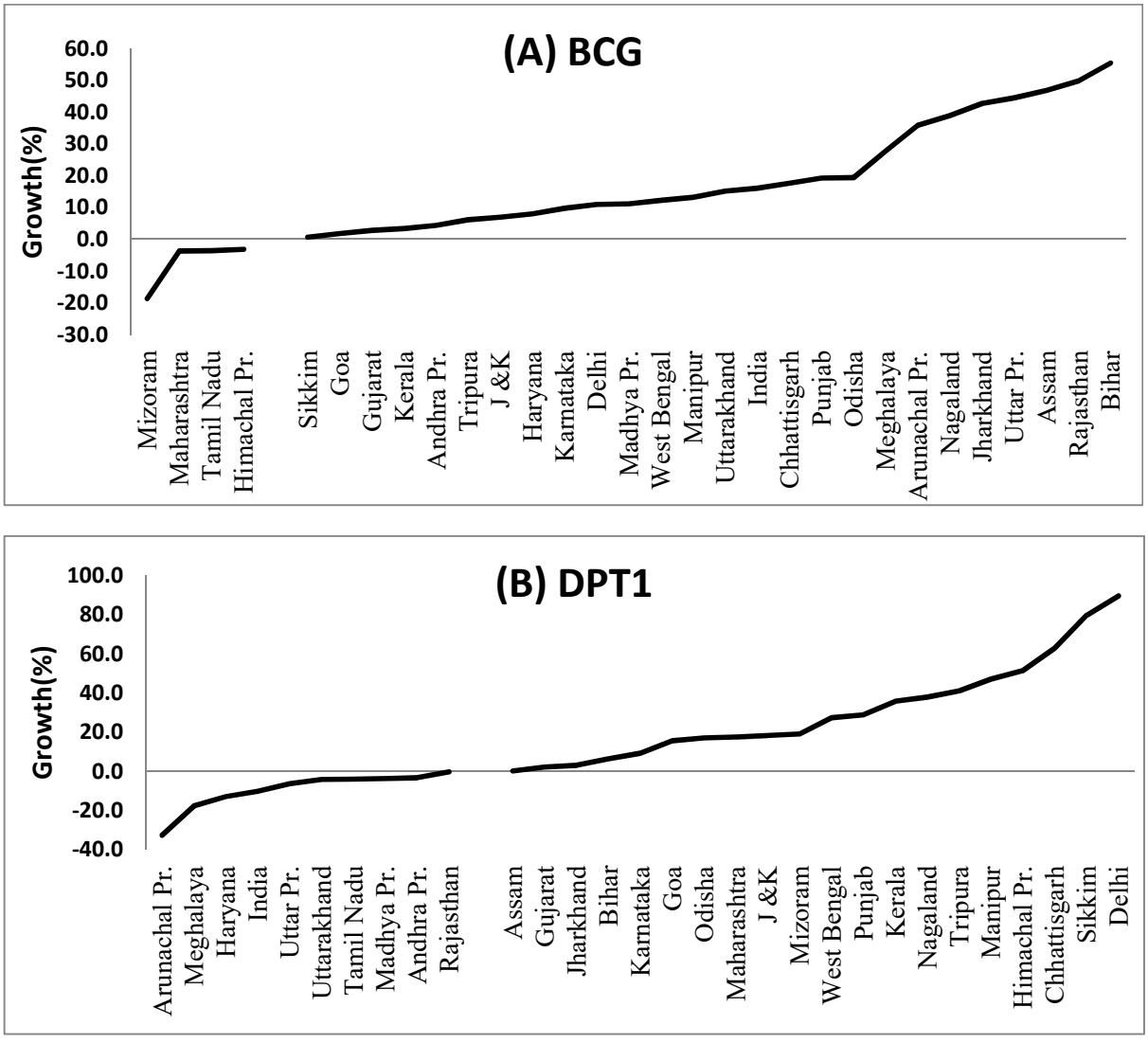
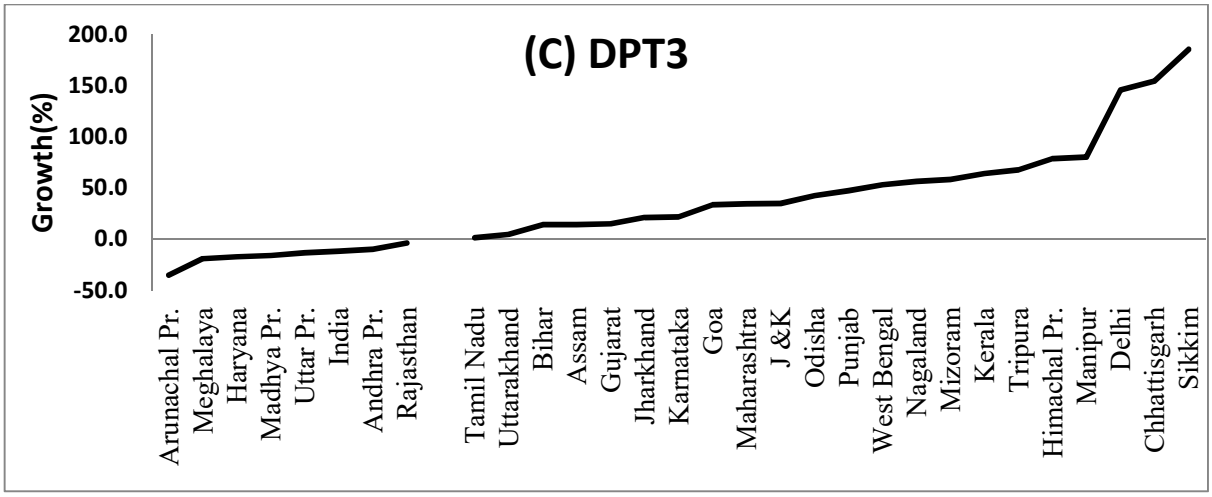
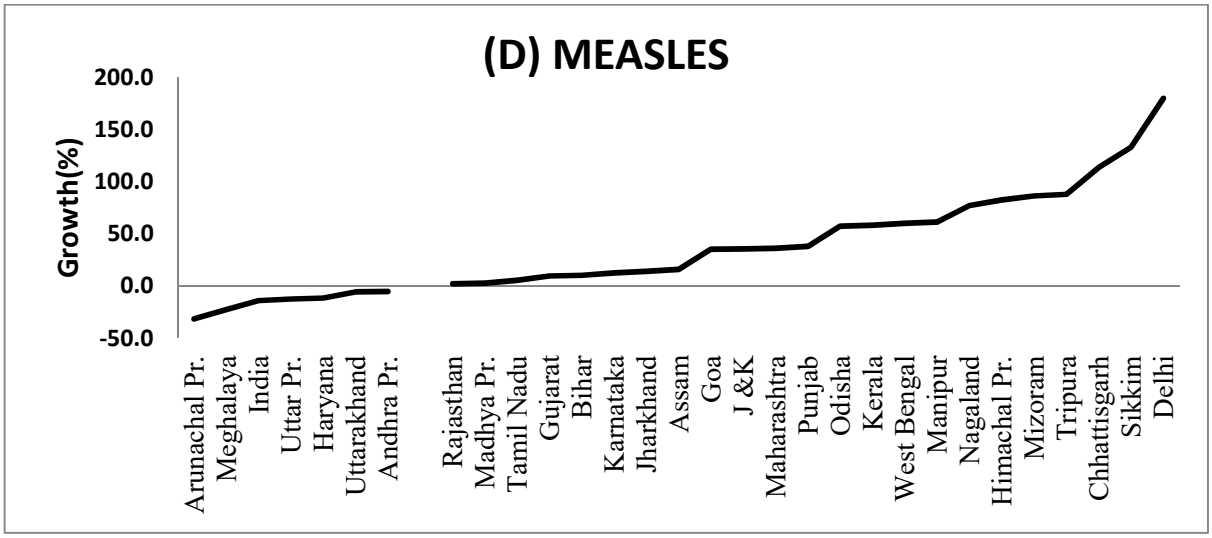



(C) DPT3
Growth(%)
200.0
150.0
100.0
50.0
0.0
-50.0
Arunachal Pr.
Meghalaya
Haryana
Madhya Pr.
Uttar Pr.
India
Andhra Pr.
Rajasthan
Tamil Nadu
Uttarakhand
Bihar
Assam
Gujarat
Jharkhand
Karnataka
Goa
Maharashtra
J &K
Odisha
Punjab
West Bengal
Nagaland
Mizoram
Kerala
Tripura
Himachal Pr.
Manipur
Delhi
Chhattisgarh
Sikkim


(D) MEASLES
Growth(%)
200.0
150.0
100.0
50.0
0.0
-50.0
Arunachal Pr.
Meghalaya
India
Uttar Pr.
Haryana
Uttarakhand
Andhra Pr.
Rajasthan
Madhya Pr.
Tamil Nadu
Gujarat
Bihar
Karnataka
Jharkhand
Assam
Goa
J &K
Maharashtra
Punjab
Odisha
Kerala
West Bengal
Manipur
Nagaland
Himachal Pr.
Mizoram
Tripura
Chhattisgarh
Sikkim
Delhi

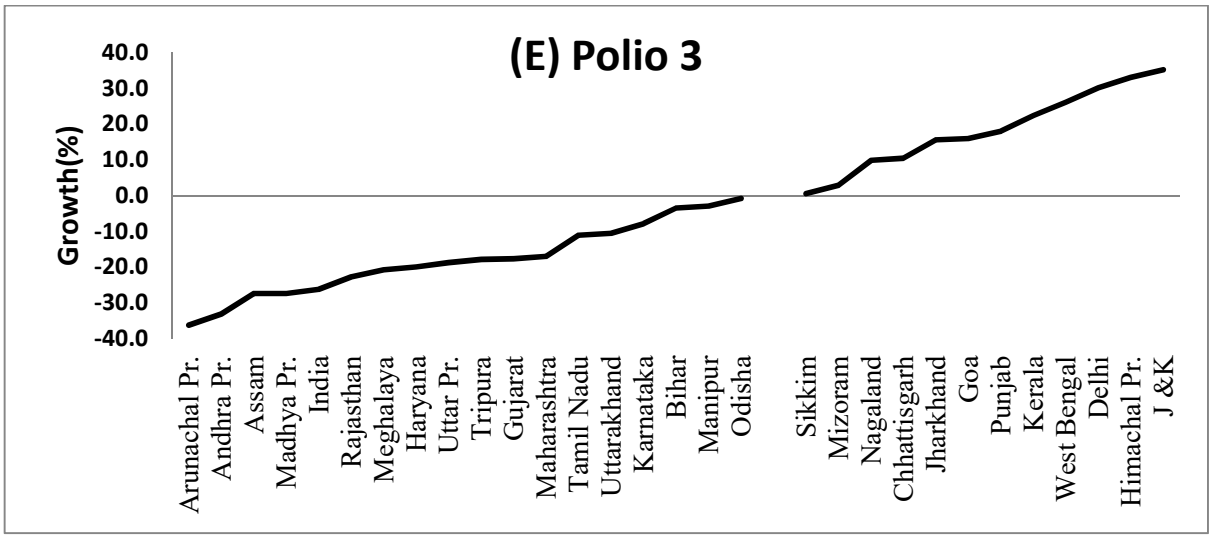

(E) Polio 3
Growth(%)
40.0
30.0
20.0
10.0
0.0
-10.0
-20.0
-30.0
-40.0
Arunachal Pr.
Andhra Pr.
Assam
Madhya Pr.
India
Rajasthan
Meghalaya
Haryana
Uttar Pr.
Tripura
Gujarat
Maharashtra
Tamil Nadu
Uttarakhand
Karnataka
Bihar
Manipur
Odisha
Sikkim
Mizoram
Nagaland
Chhattisgarh
Jharkhand
Goa
Punjab
Kerala
West Bengal
Delhi
Himachal Pr.
J &K

Figure 1 State-wise percentage growth(from 2005-06 to 2015-16) in immunization among children (12-23 months) against (A) BCG, (B) first dose of DPT, (C) third dose of DPT, (D) measles and (E) third dose of polio

Table 1. Decadal change (during 2005-06 to 2015-16) in percentage of immunization against BCG, DPT, measles and polio vaccines among Indian children (12-23 months) based on their demographic profile

Characteristics	NFHS 3 (2005-06)						Percent Change in NFHS 4 (2015-16) [100*(NFHS 4-NFHS 3) / NFHS 3]					
	Total (N)	BCG	DPT1	DPT3	Measles	Polio 3	Total (N)	BCG	DPT1	DPT3	Measles	Polio 3
Residence												
• **Urban**	19483	80.24	76.64	61.59	59.19	73.20	61379	9.06	8.16	14.69	15.34	**-11.95**
• **Rural**	32072	67.55	64.32	46.02	45.01	65.18	198248	22.64	21.50	40.27	40.99	**-8.76**
Religion												
• **Hindu**	35499	75.55	72.12	54.60	53.4	70.43	187573	13.92	12.81	24.63	25.32	**-12.58**
• **Muslim**	8595	63.53	59.14	43.53	41.68	65.58	40950	25.30	25.33	38.16	41.60	**-13.07**
• **Other**	7461	67.26	65.37	48.72	45.93	60.68	31104	14.32	12.35	25.82	26.17	**-1.30**
Child gender												
• **Male**	26799	73.46	70.18	53.04	51.71	68.96	135102	14.32	13.04	24.62	24.97	**-12.06**
• **Female**	24756	71.14	67.68	50.67	48.92	67.40	124525	17.95	17.04	30.00	32.01	**-10.01**
Mother Age												
• **15-19**	2677	64.85	60.48	36.57	29.88	50.35	6699	23.56	16.50	37.33	38.49	**-7.57**
• **20-24**	16657	73.67	69.76	50.72	47.58	66.29	78177	15.41	13.82	27.35	27.99	**-10.57**
• **25-29**	17838	75.33	72.18	56.00	55.43	71.35	99396	13.38	12.54	22.54	22.68	**-12.05**
• **30-34**	9327	72.91	69.96	55.33	55.46	71.23	49005	14.58	13.85	22.30	22.18	**-12.51**
• **35-39**	3758	62.53	59.42	45.00	44.78	67.75	19212	26.72	26.83	40.82	44.51	**-13.18**
• **40-44**	1033	56.63	55.18	39.59	39.79	67.57	5504	28.94	25.41	44.71	49.31	**-18.60**
• **45-49**	265	44.91	44.91	29.81	32.83	60.38	1634	41.46	31.37	58.91	55.65	**-22.97**
Mother Education												
• **No education**	21058	56.76	52.59	33.99	34.54	62.06	81087	35.18	35.60	65.40	66.47	**-15.45**
• **Primary**	7476	71.70	68.81	49.81	48.64	65.58	37938	14.84	12.82	27.65	30.04	**-10.37**
• **Secondary**	19102	85.08	82.16	66.28	63.18	73.16	116646	3.08	1.67	7.53	8.10	**-11.04**
• **Higher**	3919	95.30	93.11	82.04	76.27	82.14	23956	**-2.83**	**-5.38**	**-5.90**	**-4.62**	**-15.13**
Wealth Index												
• **Poorer**	18771	56.40	52.58	33.23	33.70	59.69	120675	40.67	41.42	80.26	78.04	**-6.72**
• **Middle**	10659	71.54	68.25	50.60	49.26	67.31	53064	19.50	18.32	33.72	33.35	**-7.34**
• **Richer**	22125	86.27	83.24	68.37	65.04	75.87	85888	3.70	2.41	7.53	8.23	**-12.26**

Table 2. Odd and Odds ratios of immunization with BCG, DPT, measles and polio vaccines in India during 2005-06 and 2015-16 based on NFHS-3 and 4.

Characteristics	NFHS 3 (2005-06) (odd)					NFHS 4 (2015-16) (odd)					Odds Ratio [Odd(NFHS4)/Odd(NFHS3)]				
	BCG	DPT1	DPT3	Measles	Polio 3	BCG	DPT1	DPT3	Measles	Polio 3	BCG	DPT1	DPT3	Measles	Polio 3
Residence															
• **Urban**	4.06	3.28	1.60	1.45	2.73	7.01	4.84	2.41	2.15	1.81	1.73	1.48	1.50	1.48	**0.66**
• **Rural**	2.08	1.80	**0.85**	**0.82**	1.87	4.83	3.58	1.82	1.74	1.47	2.32	1.98	2.14	2.12	**0.78**
Religion															
• **Hindu**	3.09	2.59	1.20	1.15	2.38	6.18	4.36	2.13	2.02	1.60	2.00	1.69	1.77	1.77	**0.67**
• **Muslim**	1.74	1.45	**0.77**	**0.71**	1.91	3.90	2.86	1.51	1.44	1.33	2.24	1.98	1.96	2.02	**0.70**
• **Other**	2.05	1.89	0.95	0.85	1.54	3.33	2.77	1.58	1.38	1.49	1.62	1.46	1.67	1.62	**0.97**
Child gender															
• **Male**	2.77	2.35	1.13	1.07	2.22	5.24	3.84	1.95	1.83	1.54	1.89	1.63	1.73	1.71	**0.69**
• **Female**	2.47	2.09	1.03	0.96	2.07	5.22	3.81	1.93	1.82	1.54	2.12	1.82	1.88	1.90	**0.75**
Mother Age															
• **15-19**	1.84	1.53	**0.58**	**0.43**	1.01	4.03	2.39	1.01	**0.71**	**0.87**	2.19	1.56	1.75	1.66	**0.86**
• **20-24**	2.80	2.31	1.03	**0.91**	1.97	5.68	3.85	1.82	1.56	1.46	2.03	1.67	1.77	1.72	**0.74**
• **25-29**	3.05	2.59	1.27	1.24	2.49	5.85	4.33	2.19	2.13	1.68	1.92	1.67	1.72	1.71	**0.68**
• **30-34**	2.69	2.33	1.24	1.25	2.48	5.08	3.91	2.09	2.10	1.65	1.89	1.68	1.69	1.69	**0.67**
• **35-39**	1.67	1.46	**0.82**	**0.81**	2.10	3.82	3.06	1.73	1.83	1.43	2.29	2.09	2.11	2.26	**0.68**
• **40-44**	1.31	1.23	**0.66**	**0.66**	2.08	2.71	2.25	1.34	1.46	1.22	2.07	1.82	2.05	2.21	**0.59**
• **45-49**	**0.82**	**0.82**	**0.42**	**0.49**	1.52	1.74	1.44	**0.90**	1.04	**0.87**	2.14	1.77	2.12	2.14	**0.57**
Mother Education															
• **No education**	1.31	1.11	**0.51**	**0.53**	1.64	3.30	2.49	1.28	1.35	1.10	2.51	2.24	2.49	2.56	**0.67**
• **Primary**	2.53	2.21	**0.99**	**0.95**	1.91	4.66	3.47	1.75	1.72	1.43	1.84	1.57	1.76	1.82	**0.75**
• **Secondary**	5.70	4.61	1.97	1.72	2.73	7.13	5.07	2.48	2.15	1.86	1.25	1.10	1.26	1.26	**0.68**
• **Higher**	20.28	13.51	4.57	3.21	4.60	12.51	7.40	3.39	2.67	2.30	**0.62**	**0.55**	**0.74**	**0.83**	**0.50**
Wealth Index															
• **Poorer**	1.29	1.11	**0.50**	**0.51**	1.48	3.84	2.90	1.49	1.50	1.26	2.97	2.62	3.00	2.95	**0.85**
• **Middle**	2.51	2.15	1.02	**0.97**	2.06	5.89	4.19	2.09	1.91	1.66	2.34	1.95	2.04	1.97	**0.80**
• **Richer**	6.28	4.97	2.16	1.86	3.14	8.49	5.78	2.78	2.38	1.99	1.35	1.16	1.28	1.28	**0.63**

Table 1A: Resolutions in context of vaccination coverage in India based various National Five Years Plan.

Year	**National Five-Year**	Resolution
1951-1956	First	Enhance number of BCG teams and BCG vaccination
1956-1961	Second	Improvement of institutional and domiciliary medical health facilities required to fulfill mass BCG Vaccination campaign.
1961-1966	Third	Launching reorientation and training programme to provide better health services to children of rural areas
1969-1974	Fourth	Re-vaccination to children belonging to the age-group of 0-14years, who has been taken at the interval of 3years. Launching scheme of immunization of infants and pre-school children with DPT vaccine
1974-1979	Fifth	Implementation of the ICDS and designed it to include the health, education, welfare, nutrition, and integration, and has reached to every child through a network of Anganwadi Centers (AWC)
1980 -1985	Sixth	
1985-1990	Seventh	Universal Immunisation Programme and National Diarrhoeal Disease Control Programme launched under the maternal and child health (MCH) programme to protect children against six major diseases viz., Diphtheria, Pertussis, Tetanus, Polio, Measles and Childhood Tuberculosis. Oral Rehydration Therapy Programme to prevent deaths from diarrhea among children
1992-1997	Eighth	Child Survival and Safe Motherhood (CSSM)programe was launched to strengthen MCH services. Pulse Polio Immunisation Programme also launched
1997-2002	Ninth	National Charter for Children and special activation Pulse Polio launched
2002-2007	Tenth	Improvement of vaccination overage levels through the universal vaccination program are carried out under the Reproductive and Child Health (RCH) programme
2007-2012	Eleventh	Initiation to root out polio from India through continuing the injectable polio vaccine deliberation
2012-2017	Twelfth	Strengthening the public sector in protecting and producing the capacity of domestic drugs and vaccination industry. Building a cost-effective and updated mechanism for inclusion of new drugs and vaccines in the public health system

Table 1B: List of schemes in relation with the vaccination coverage

Year	Scheme(s)	States/Territories
1975	Integrated Child Development Services (ICDS)	Central, Chhatisgarh, Uttar Pr., Odisha
1978	Expanded Programme of Immunization (EPI)	Mizoram
1985	Universal Immunization programme	Central, Jharkhand, Meghalaya, Manipur, Chandigarh, Himachal Pr., Uttarakhand, Puducherry, Andaman & Nicobar Isalands, Tamil Nadu
1986	Technology Mission On Immunization	Central
1995	Pulse Polio Immunization	Central, Chhatisgarh, Nagaland, Arunachal Pr., Chandigarh, Uttarakhand
2001	Universal hepatitis b virus vaccination Programme	Sikkim
2004	Typhoid Conjugate Vaccine (TCV)	NCT of Delhi
2007	Muskan (in English-Smile)	Bihar
2014	Routine Immunization	Central, Jharkhand, Nagaland, Punjab, Uttarakhand
2014	MI (Mission Indradhanush)	Central, Uttar Pr., Tripura, Manipur, Arunachal Pr., Chandigarh, Uttarakhand, Andaman & Nicobar Isalands, Andhra Pr.
2015	Electronic Vaccine Intelligence Network (eVIN) system	Central, Chhatisgarh, Madhya Pr., Uttar Pr., Odisha, Jharkhand, Bihar, Tripura, Manipur, Nagaland, Assam, Himachal Pr., Uttarakhand, Rajasthan, Telengana, Andhra Pr., Karnataka, Goa, Daman and Diu, Dadra and Nagar Haveli, Gujarat, Maharashtra
2015	Mukhyamantri Saghan Tikakaran Abhiyan (MSTA)	Bihar
2015	Inactivated Polio Vaccine (IPV)- introduced in 2015 (in 6 States) & expanded across the Country	Central
2016	Rotavirus vaccine (RVV) - 2016 (in 11 States) & 2019-20 (across country)	Central, Madhya Pr., Uttar Pr., West Bengal, Odisha, Jharkhand, Tripura, Assam, NCT of Delhi, Himachal Pr. , Rajasthan, Lakshadweep, Puducherry, Andhra Pr., Tamil Nadu
2017	Pneumococcal Conjugate Vaccine (PCV)	Central, Uttar Pr., Bihar, Manipur, NCT of Delhi, Himachal Pr., Rajasthan
2017	Measles Rubella (MR) vaccine	Central, Jharkhand, Manipur, Nagaland, Arunachal Pr., NCT of Delhi
2017	Tetanus and adult diphtheria (Td) vaccine	Central
2017	Intensified Mission Indradhanush (IMI)	Central, Chandigarh
2018	Mission Pratiraksha	Arunachal Pr.
2018	Taare Zameen par-a night vigil	Chandigarh
2019	Innovation under Immunization (Paalna- vaccination cradle)	Chandigarh
2019	Human Papilloma Virus (HPV) vaccination Scheme	Sikkim, NCT of Delhi