

**RATIONAL AND EMOTIONAL APPEALS IN POLIO ERADICATION
CAMPAIGN IN INDIA: A COMPARATIVE STUDY BEFORE AND
AFTER 2002-03**

**GIRIJESH SINGH MAHRA
(FPM 2ND YEAR, AREA- COMMUNICATION)
RIMA MONDAL
(FPM 2ND YEAR, AREA- ECONOMICS)**

INDIAN INSTITUTE OF MANAGEMENT, INDORE

Abstract

Polio eradication Campaign was one of the most successful Health Communication Campaign in India. The WHO announced India as Polio free Nation in 2012. Before 2002-03, Polio cases were reported on large scale in India, but suddenly decreased after 2003 and then finally the count reached to zero in 2012. In villages, mass media as well as personalized efforts of vaccinators has played a major role in success of Polio eradication campaign. This paper aims in evaluating the Polio eradication campaign in India before and after 2002-03 on the basis of rational as well as emotions appeals of the campaign, which made the campaign successful especially after 2003.

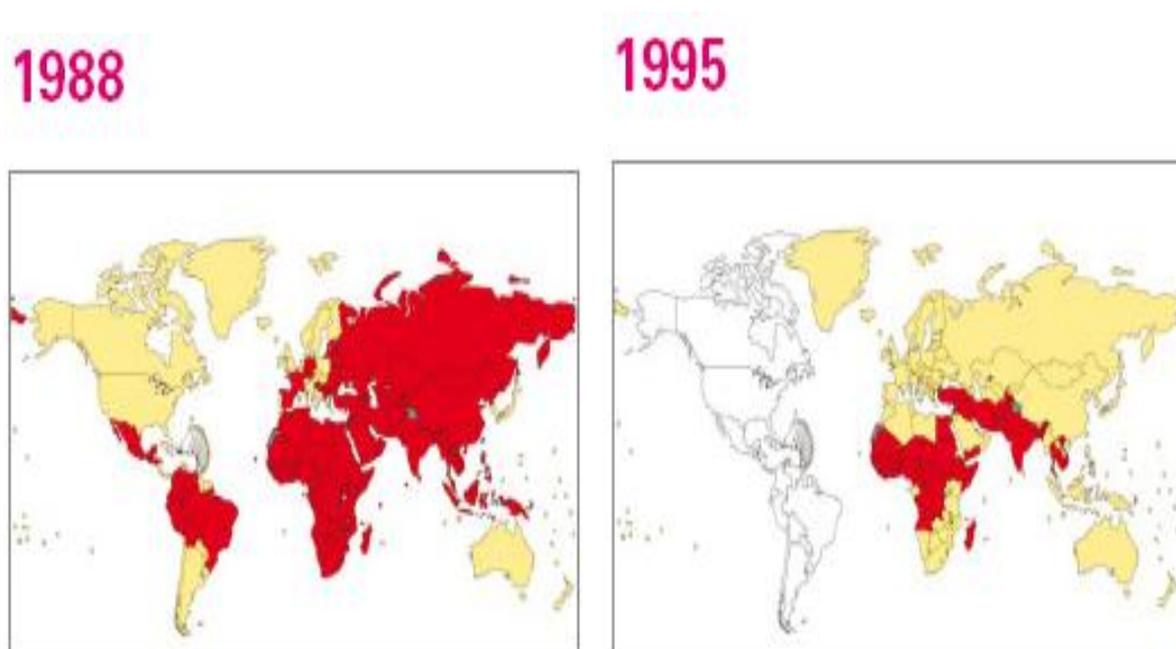
Keywords- VACCINATORS, RATIONAL AND EMOTIONAL APPEALS

RATIONAL AND EMOTIONAL APPEALS IN POLIO ERADICATION CAMPAIGN IN INDIA: A COMPARATIVE STUDY BEFORE AND AFTER 2002-03

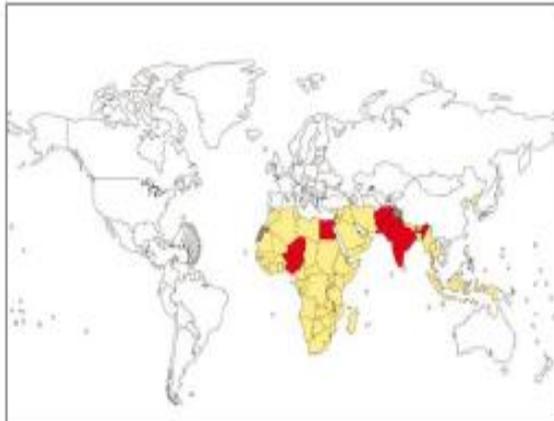
1. Introduction

Pulse polio immunization programme was launched in 1995 in India as a result of World Health Organization Global Polio eradication initiative. In 1985, as per WHO the reported cases in India were 28,757 which were 74.4% of the total cases reported in world. The WHO started the Global Polio Eradication Initiative in 1988 backed by a total investment of US \$ 3 billion, launched in 200 countries with 20 million volunteers. At that time polio was endemic in India. However after the launch of Immunization programme in 1995 the share of reported polio cases reduced to 46.4% of the world. Since 1995 India has made great leaps of advancement in reducing cases of polio and it was declared polio free country by World Health Organization in 2012.

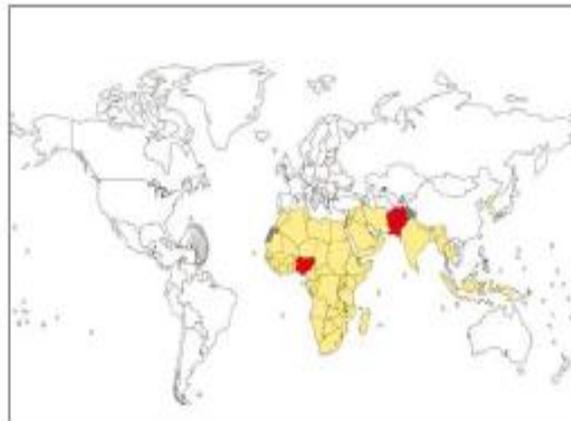
Figure 1: Countries with polio cases in the world over years



2003



2012

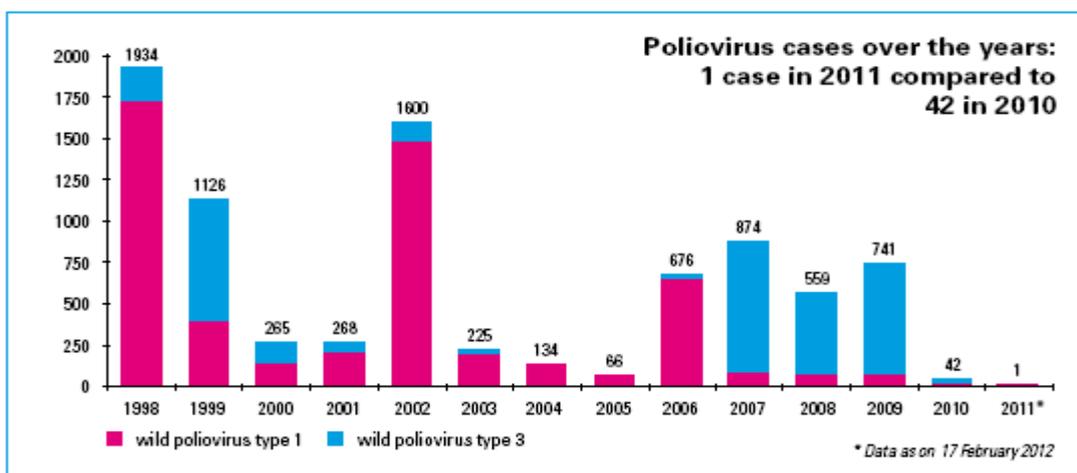


Source: *Polio Booklet 2012, World Health Organization*

Scenario of Polio in India

Compared to other Asian and African countries, India took longer to eradicate polio. The major reasons are non acceptance of polio vaccination by the people and lack of coverage in states of Uttar Pradesh and Bihar. After 2002 outbreak of polio in India, major initiatives were taken to increase coverage. The initiatives included mass awareness programmes, involvement of local level NGO's and community leaders, use of social media, carrying out surveys at local level taking district as a unit to identify high risk areas etc.

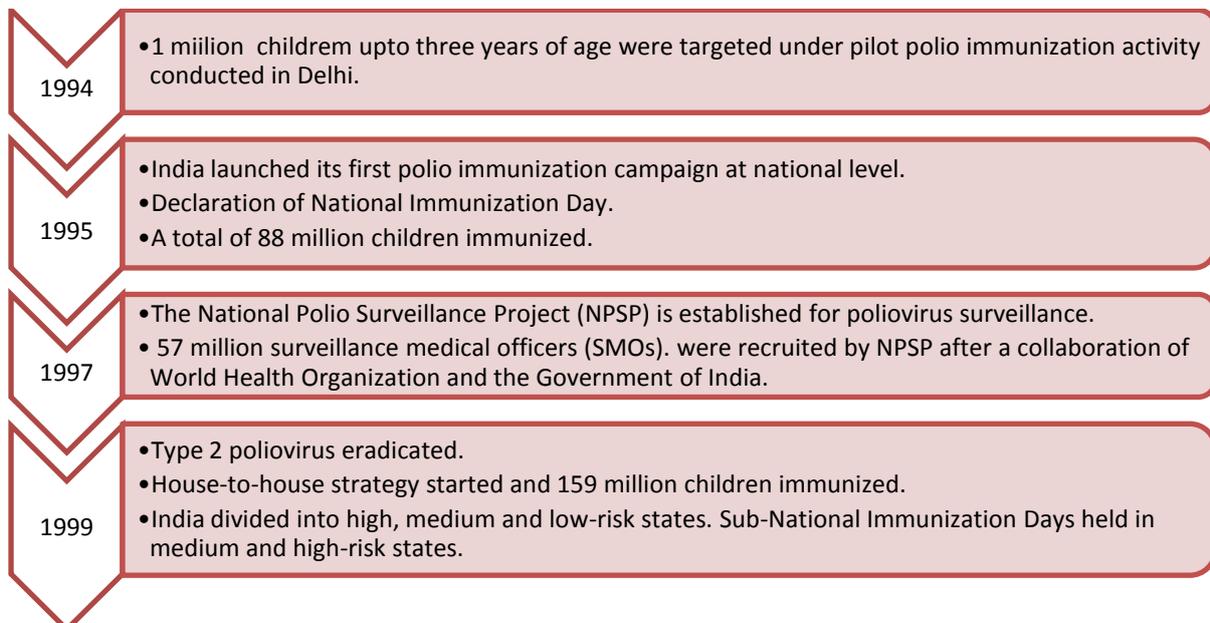
Figure 2: Polio cases in India over years

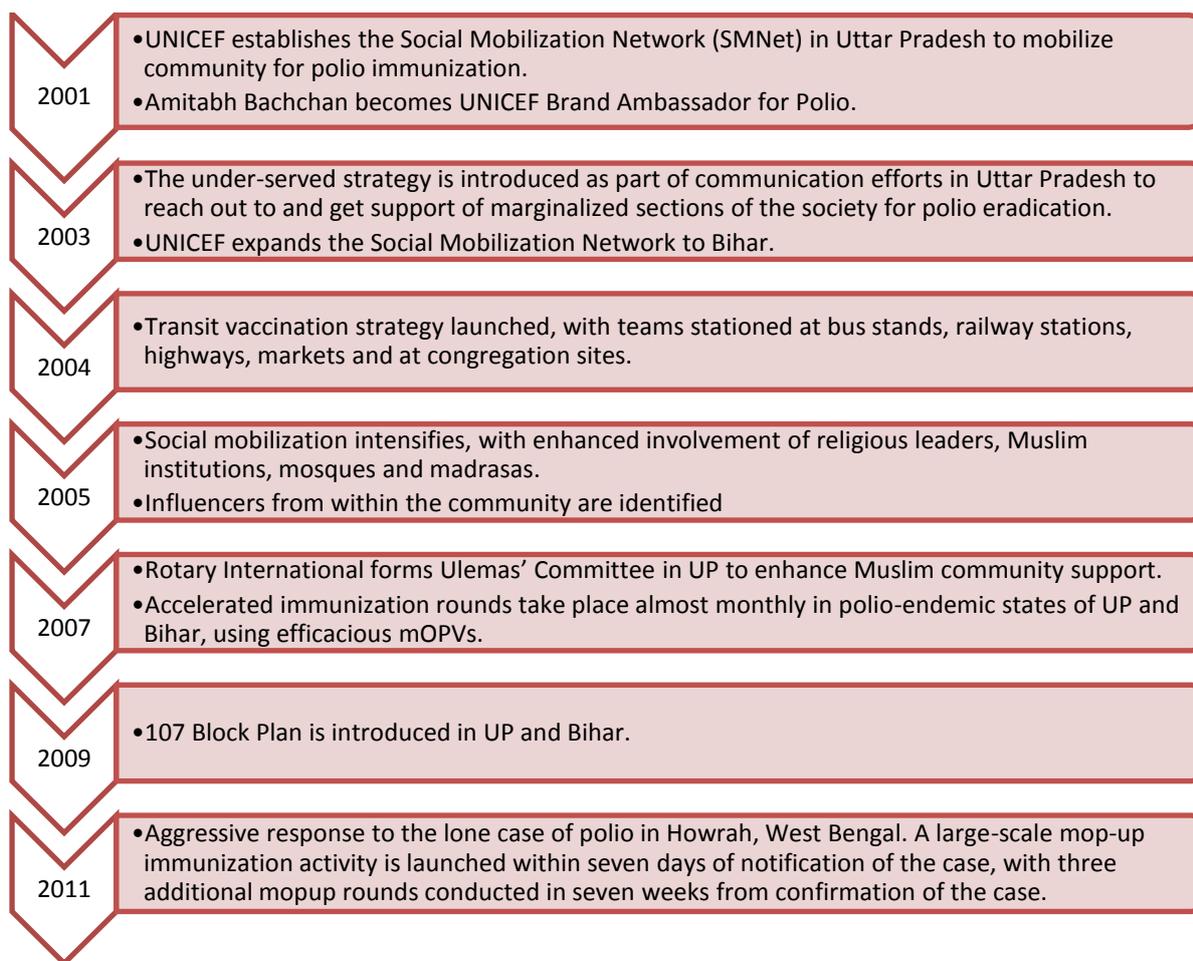


Source: *Polio Booklet 2012, World Health Organization*

After 2003 initiative, the cases of polio show a decreasing trend and it reduced to 66. However, after 2006 again there is an increase in number of polio cases and Moradabad and five neighbouring districts of Uttar Pradesh accounted for 70% of India's cases. The reasons are: Routine vaccination coverage in Uttar Pradesh was as low as 54% which was among the lowest in the country. Spread of virus was rampant due to missed cases which lead to germination of virus afterwards. Missed cases occurred due to lack of faith and resistance against polio vaccination among Muslims in Uttar Pradesh. In 2007, Bihar saw an increase of 724.5% (61 in 2006 and 503 in 2007, source: Indian National Polio plus Committee) of polio cases. This increase in number of cases in 2008 and 2009 is due to increase in water borne diseases as an after affect of flood in Kosi River in Bihar. This also limited the accessibility to remote area of Bihar as a result of which many missed cases were reported. However, after 2009, again campaign for polio vaccination picked up its pace and there is a reduction of 94.4% of cases.

Chronological sequence of events for eradication of polio





2. Review of Literature

Aristotle (1932/1960) claimed that there are three primary means of persuasion: ethos, logos and pathos, ethos refers to the character of the speaker, logos refer to the logic or rationality and pathos refers to the emotions in the message.

Binder (1971) gave a five stage model of political campaigns. Larson (2001) found that 5 stage model of Binder occurs in all Communication Campaigns, though the number and nature of these stages likely depends on the type of Campaign.

Stage	Also Known As	Description
Identification	Awareness	Themes, Groups
Legitimacy	Recognition	Endorsements, Potential efficacy

Participation	Behaviour	Activities
Penetration	Momentum	Violating expectations, Building 'Share'
Distribution	Perpetuation	Institutionalized, Maintenance

Table 1: Stages of Persuasive Communication Campaigns (Larson, 2000)

Reynolds and Reynolds (2002) claims that in order to influence the attitude change of recipients, recipients must cognitively process the information.

Petty and Cacioppo (1981,1986) while giving ELM model proposed that when individuals are highly involved with message topic (when topic is associated with their own lives) then evidence in support of persuasive communication will influence their attitude change more as compared to when they are relatively uninvolved.

Janis and Frick (1943) speculated that people are likely to let their preferences about the argument conclusion affect their judgement concerning the logical validity of the evidence.

Allen and Colleagues (1990) conducted studies on one sided and two sided rational appeals and found that two sided refutational messages were more persuasive than one sided messages, and the two sided non refutational messages were less persuasive than the one sided counterparts.

Guerrero et al. (1998) argued that emotional appeal has two components –positive and negative component. If the change is evaluated as being positive for us, the affective reaction will be positive, however if the change is evaluated as being bad for us, the affective reaction will be negative.

Dillard & Meijnders (2002) argued that the primary function of emotions is to guide behaviour, which ultimately create a behavioural response.

Witte (1992) claimed that fear appeals has three component – fear (negative valenced emotion), perceived threat (external stimulus that create the perception of negative situation) and perceived efficacy (message recommendations will reduce the threat depicted in message). Fear appeals having perceived efficacy with threat will influence the attitude of recipients.

Janis & Feshbach (1953) while describing drive model of fear appeal argued that the messages which arouses moderate level of fears will be more effective than those that arouse very low or extremely high levels of fear.

Witte & Allen (2000) analysed the EPPM (Elaborated parallel processing model) of persuasion and argued that high threat- high efficacy condition will produce strong levels of attitude and behavioural change. The other combinations of threat and efficacy will produce no change or little change.

James M. Jasper (2003) while analysing two books ‘Strong Feelings: Emotion, Addiction, and Human Behaviour’ (1999) and ‘Alchemies of the Mind: Rationality and the Emotions’ (1999) claimed that excess of any one will not produced desired results. A successful attitude change will occur if proper mix of both appeals appears in message. He argued that emotions should be rational and should add up in total rationality of a decision

3. Research methodology

This explorative comparative study was done on the basis of secondary data available in forms of Governments reports, UNICEF reports, WHO reports and Rotary International reports. Authors had used Larson’s model of communication (2001) campaign and McGuire Input-Output matrix of evaluating communication campaigns (1989) to compare the Polio Eradication Campaign on various parameters. Other comparisons are made on the basis of posters, pamphlets and advertisements of Polio eradication campaign in India.

4. ANALYSIS

Evaluation of Polio Eradication Campaign before and after 2002-03 using Larson's Model

I. Identification

Intensive Pulse Polio Immunisation (IPPI) was started in India from 1995, when all children under five years of age, irrespective of their immunisation status, were given additional doses of Oral Polio Vaccine (OPV) on National Immunisation Days (NIDs) and Sub National Immunisation Days (SNID). But the awareness was low before 2002-03 since only mass media channels were used which were not in reach of marginalised and undeserved communities of villages, especially of U.P. and Bihar. After 2002-03 Awareness drastically increased as mass media channels were equipped with inter personnel rational and emotional appeals in more personalised manner. The following table explains the steps taken which increased the awareness after 2003.

Year	Step Taken
2003	Focused on marginalised sector of villages
2004	Transit vaccination strategy launched, with teams stationed at bus stands, railway stations, highways, markets and at congregation sites
2005	Social mobilization intensifies, with enhanced involvement of religious leaders, Muslim Institutions, Mosques and Madrasas
2006	Enumeration, vaccination and tracking of newborns begins in UP and Bihar.
2007	Involved Rotary International and Accelerated immunization rounds
2008	WHO-NPSP further expands – 333 surveillance medical officers on the ground cover all parts of India.
2009	107 Block Plan is introduced in UP and Bihar
2010	The Government of India, through the India Expert Advisory Group on polio eradication, recommends responding to each case of polio as a public health emergency.
2011	All States and Union Territories prepare Emergency Preparedness and Response Plans (EPRPs) to respond to any case of wild Polio virus.

II. Legitimacy

Effectiveness of recommended behaviour (polio drops) were not established before 2002-03 due to following reasons

a) 80% of its rural population of India had no toilet at home, thus the polio virus prevails through sewage and open faeces. Thus the Ministry of Health and Family Welfare recommended eight to ten doses for each child in 4-5 visits, which created suspicion among villagers.

b) Rumour started that OPV was a contraceptive designed to control fertility in children

c) Failure of polio vaccines in several cases eradicated faith from villages, as several Children died even when they have given polio drops earlier back. Following table shows the degree of unawareness and rumours which eradicated legitimacy of Polio Campaign before 2003.

Year	% lack of knowledge			% lack of motivation					% fear
	Unaware of date, time and place	Unaware of need for additional doses	Unaware of the program	Out of town	Child too young	Child was sick	No one taking child to booth	Vaccinators did not show up at my house	
1999-00	21.8	10.1	Not asked	Not asked	9.5	5.5	4.8	2.6	43.4
2000-01	27.9	5.3	4.5	19.6	16.2	8.6	8	6.8	4.3
2001-02	23.4	5.8	9.3	5.3	16.8	4.7	25	28.3	11.6

Source: Coverage evaluation survey 1999-2002, Ministry of health & family welfare, GOI & UNICEF

Legitimacy was increased after 2002-03 by following activities:

a) A series of five 'Sub-National Immunization Days' (SNID) was launched which aimed at intensive vaccination of children in eight states where cases of paralytic polio were reported: Assam, Bihar, Gujarat, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal

b) Aganwadi vaccinators were involved, who persuaded the villagers about the benefits of Polio drops, by going door to door and showing them successful cases.

c) A judicious mix of mass media and interpersonal communication approaches was adopted

III. Participation

Due to low awareness and legitimacy of the Polio Campaign before 2002-03, participation and cooperation of masses was low. After 2003, following steps drastically increased the participation.



Figures3 & 4: Poor sanitation and outside faecal waste and parents hiding their children behind tree on the rooftop in Meerut (U.P.). This had reduced legitimacy and in turn reduced participation.

Newspaper and door to door strategy	Thematic film	TV advertisements	Radio advertisements	Credibility and emotional appeal
<p>Satisfied the doubts related</p> <p>(i) Why the need for NIDs again?</p> <p>(ii) Why the need for repeated doses?</p> <p>(iii) The concern – my child is too young to be immunized, and there might be side effect.</p> <p>(iv) The concern – my child has already received all doses under routine immunization and during earlier NIDs, so</p>	<p>one-minute film clip, describing achievement of IPPI for all Indian children, and the challenges that remained before Reaching the final goal of polio eradication.</p>	<p>The Parvez spot, The Pediatrician spot and The Paro spot ads of polio erased the doubts related polio Campaign</p>	<p>Five radio spots, highlighting the same issues as the TV spots and film, were produced and broadcast on 184 stations throughout India about 15 days prior to</p>	<p>Amitabh Bacchan became the Brand Ambassador of program, various emotional and action oriented ads of celebrities were broadcasted.</p>

no need to get more doses. (v) Misconceptions that polio drops would cause impotency/sterility in children, and (vi) Rumour that poor quality vaccine was administered to minority groups			NIDs and Sub-NIDs	
---	--	--	-------------------	--

IV. Penetration

Penetration before 2002-03 was low and increased rapidly after 2003. The following tables summarises the reasons of low penetration and high penetration, before and after 2003 respectively.

Low penetration before 2003	High penetration after 2003
Muslim and other minor communities were left aside mostly in U.P and Bihar, where more than 95 % cases of total reported cases of India were reported.	Muslim and other minorities' opinion leaders were made a part of campaign.
People were asked to report to Polio booths and only Polio booth attendance was maintained. Door to door strategy was employed at very few places.	Door to Door strategy was mass scaled. Special aganwadi wokers teams were organised for going to each and every house. Both booth as well as 'door to door strategy' attendance was maintained
Mass media channels were mainly engaged	Mass media channels were equipped with personal rational and emotional appeals. Various Celebrities like Amitabh Bachchan, A.R. Rahman made appeals. Organisation like Rotary International also joined the campaign
No systematic tracking system was used, which resulted in confusion among vaccinators whether a child has given polio drops or not. Cases where polio drops have failed to prevent polio were reported.	Proper tracking system with door marking and child finger marking was adopted. Proper availability and effectiveness of polio drops was maintained.
Social mobilisation was low	Numerous posters, campaigns, exhibitions, village seminars were organised with special focus on health camps (swasthya mela), kala jatha, wall paintings, folk drama and community meetings.

V. Distribution

Before 2002-03 mostly booth attendance were made and door to door strategy was adopted in few villages. During distribution, vaccinators were making following marks on doors of the targets-

‘X’ - symbolises that there was no one in house when vaccinators visited

‘P’ - Pass! Children were already vaccinated

‘P0’ - there was no targeted children in the house

‘XR’ - Obvert resistance to vaccination

But this system was not executed properly and often misinterpreted by vaccinators and thus routine immunization coverage had remained unacceptably low in UP and Bihar as a whole, at 22.3% and 11.6% respectively and 13 – 17% of houses were repeatedly missed during house-to-house vaccinations. There had been many reports of vaccinators chalk-marking P on houses, taking whatever parents said as true, without probing or checking. There were also incidents when X marked house remained locked whenever the team arrived, and no one bothered to check or ascertain whether children were hidden inside. Therefore the distribution system suffered heavily. The following table summarises the extent of reach and polio cases left up to 2003.

Year	% with at least 2 doses	% at booth only	% at home only	No. confirmed wild polioviral cases (U.P.)	No. confirmed wild polioviral cases (India)	U.P. as % of all India (WPV cases)
1998-99	91.8	99.9	0	881	1934	45
1999-2000	98	62.1	5.1	773	1126	68
2000-01	96.6	62.5	16.1	179	265	68
2001-02	97.3	64.3	23.9	216	268	80
2002-03		34.6	65	1241	1599	77

Source: Coverage Evaluation Surveys 98 – 02, Ministry of Health & Family Welfare, GOI & UNICEF WHO/National Polio Surveillance Project Office

In 2003, UNICEF transferred management of the SM Network from New Delhi to its Lucknow state office. A full team of communication and technical staff was appointed to supervise and monitor the Network's activities, ensuring closer coordination at each level of the 25 districts which ensured proper marking of X, P0, XR and P symbols in houses, solved fake cases and maintained efficient distribution. They followed following strategies which led institutionalization of polio campaign.

Door to door strategy- vaccinators visited each and every home and marked properly.

Social mobilisation strategy by arousing concern of villagers via posters and interpersonal persuasion

Caught at spot strategy- Vaccinators gave polio drops at trains, buses, autos, hospitals, meetings, seminars and other places.

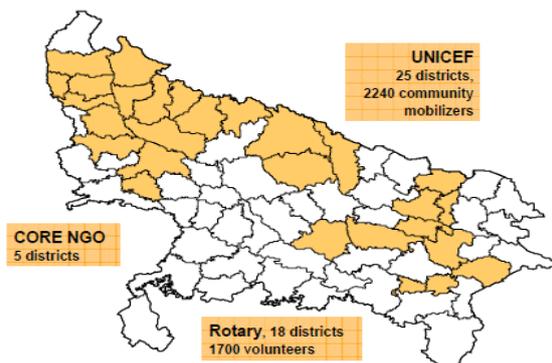


Fig. 5



Fig. 6



Fig. 7



Fig. 8

Figures: Fig.5 shows Intensive social mobilization – UP, 2003, Fig. 6 shows booth attendance by marking on fingers of child, Fig. 7 and Fig.8 shows P marked and X marked houses respectively.

Rational Appeals used in Polio Eradication Campaign before and after 2002-03:

The factors for analyzing rational appeal based on literature study are:

- Strategic actions to increase coverage to increase awareness
- Logical Reasoning: the logic behind the campaign
- Quality arguments: Arguments backed by logic to influence the mass
- Compelling: To force people to agree to a certain argument
- Conclusive based on premises: A premise is formed for drawing conclusions.
- Claim: To create awareness in a manner that people tend to identify themselves with the campaign.

Before 2003	After 2003	Conclusions
Strategic actions to increase coverage to increase awareness		
Advertisement through radio 15 days prior to National Immunization day, dubbed in four regional languages	Amitabh Bachcahn was launched as brand ambassador and his ads were heard everywhere 10 days before the January and February rounds of Immunization	Before 2003, radio was the prime mode for raising awareness to the remotest of location. After 2003, the focus shifted to television based mode and celebrities were promoted as brand awareness to influence the mass.
Four advertisements, produced in 13 languages and published in all the major publications in India	The ads were carried on all major national dailies in 18 languages. Announcement of Polio Ravivaar (one Sunday of every month) parents are at home	
Banners were mounted on strategic locations like bus stops and railway stations to enhance visibility	House to house approach to reach the remotest of population and Reminding of National Immunization Day by reaching the people to their houses	To increase coverage, ads were published in more regional languages (18) after 2003
	Transit vaccination' strategy was launched, with teams stationed at bus stands, railway stations, highways, markets and at congregation sites and provided polio vaccine to eligible children.	The focus of the campaign after 2003 was to maximize the reach to children, so Transit vaccination strategy was used along with house to house approach.
Special arrangement with India's national telecoms authority to replace the ring tone with a recorded message that reminded the public of the NID date whenever a call was dialled	Higher incentives to the volunteers to cover house to house visits in large numbers and Salary for the volunteers was increased and their travel expenses were also covered	After 2003, to increase coverage among all strata of society, higher middle class was also targeted at airports etc.
	For targeting higher strata of society, airport baggage tags which said 'End	

	Polio Now' were popularized	
Logical Reasoning		
Featuring of Muslim celebrities to remove misconception among minority that polio vaccination can cause infertility.	Involvement of Muslim celebrities and urban based Islamic institution were perceived with suspicion. To Remove the resistance against pulse polio movement, volunteers within the communities from Qureshis and Ansaris were involved.	Before 2003, help of Muslim celebrities was taken to promote the campaign among muslim in Uttar Pradesh but muslims considered celebrities as 'outsiders'. So, after 2002 outbreak more focus was put to identify local leaders who can effectively influence the masses and can restore the faith in them.
The Paediatrician spot in advertisement explained the meaning of polio eradication and why repeated doses were necessary for every child.	Rotary clubs advertised National Immunization Days by giving the statistics of number of vaccination booths, teams, homes visited and children immunised.	
Explaining why repeated doses were necessary through advertisement and volunteers/ workers.	Two types of surveys: Coverage Evaluation and Process Evaluation by UNICEF for fine tuning next round of immunization.	Surveys were done after rampant outbreak of polio in 2002 to identify high risk areas so that coverage on those areas can be maximized.
	Surveys were done by state, by religious group, caste, and campaign quality, including distance between booth and villages to strategize the campaign properly.	
	80% of the targeted Community Mobilizes were women.	Women Community Mobilizes can influence females of other households more effectively than males. Females were targeted because they were mainly responsible for taking the child to polio booths.
	Engagement of District Social Mobilization Coordinator who possess good understanding of various stakeholders, especially Health, ICDS, Panchayati Raj to ensure better implementation	
	Involving players of Kolkata Knight Riders to create mass awareness during IPL season.	
Quality arguments		
Credit for success of polio was given to the masses and it was argued that people should themselves take initiative.	Use of interpersonal communication approach and formation of special outreach team to interact with families to reduce resistance. Families were persuaded through logic, arguments and emotional appeal.	Through interpersonal communication, the volunteers personally persuaded the family members by giving them quality arguments and reasons for the need to vaccinate.

Thematic films describing achievement of IPPI and the challenges that remained provided quality arguments for creating awareness among people.	Training of the workers to persuade local leaders of Panchayati Raj Institutions through arguments and reasons.	After 2003 the workers were given training to effectively persuade the local leaders because they have a greater impact on villagers rather than the volunteers.
Compelling		
Children were vaccinated forcefully by the house to house volunteers. However, afterwards it increased resistance among local people	People were compelled by emotional appeal of ads and posters but no forceful mechanism was used to vaccinate.	Before 2003, children were vaccinated forcefully by volunteers who created a negative image of Immunization programme. To overcome this, after 2003, emotional appeal was mostly used to provoke the mass along with use of interpersonal communication skills.
Conclusive based upon premises		
	Promotion of concept of health as a basic right and reinforcing the idea by distributing pamphlets outside hospitals	Conclusive based approach was used after 2003, premise was 'health as a basic right' from which people can conclude the need of vaccination. This methodology was used only after creating a certain level of awareness among masses.
Claim		
	People can claim 'health as a basic right' and they take initiative.	After 2003, maximization of coverage was also ensured by making the people feel responsible for themselves by promoting the idea of 'health as a basic right'

Emotional Appeals used in Polio Eradication Campaign before and after 2002-03

Before 2002-03, Campaign did not focus on emotional appeals at much greater extent, but after 2003 various emotional appeals were utilised in order to make campaign effective and to persuade target villagers for their cooperation.

I. Fear Appeal

Before 2002-03 target audience were mainly conveyed the consequences of not giving polio drops to their child. They received the information related to diseases mainly of malformation

of body parts if they did not give polio drops to their child. But Campaign failed because it did not supplement the generated fear with credible solutions. Therefore suspicion was developed among villagers due to following reasons

- a) The Aganwadi members only focussed on consequences of polio during door to door strategy and did not emphasized on solutions. This created fear among target group of campaign.
- b) Campaign failed to make their polio drops credible; hence fear was not supplemented by solutions.
- c) Solution came from opinion leaders of minorities, whom they did not trust. And thus villagers drew some misleading inferences. They believed that polio drops are given to induce infertility in their children as a measure for population control.

After 2002-03 Campaign, posters, advertisements, pamphlets mainly focused on positive impact of polio drops and emphasized its necessity for a child to lead a healthy life. The focus on consequences of not giving polio drops was minimized and emphasis was laid on positive aspects of giving polio drops. Fear appeal after 2002-03 showed positive responses due to following reasons

- a) Fear appeal was supplemented by positive aspects of giving polio drops to children.
- b) Polio drops were popularised as ‘two drops of life’
- c) Successful cases were focused by Aganwadi members and trustable opinion leaders were involved.

Following table compares fear appeal of campaign before and after 2003 on three components of fear as given by Witte, 1992.

Components of fear	Before 2003	After 2003
Fear	High	Moderate
Perceived threat	High	Moderate
Perceived efficacy	Low	High



Figures: Fig 9- A mother in U.P. refusing polio drops with fear that polio drops will cause infertility in her child. Fig 10- A aganwadi worker mobilising children during village camps with positive message about polio drops.

II. Anger

UNICEF brought Bollywood celebrity Amitabh Bachchan to evoke anger appeal to those parents who have not yet taken their child to the polio booth. His advertisement appeared in four TV spots, with a similar recording for four radio spots, duplicated into 13 languages. Anger appeal was shown as follows

Spot 1: “Bring your children to the booth” showed the charismatic father figure walking up to a nearly empty booth. He asked the audience angrily: “Why have you stopped coming?”

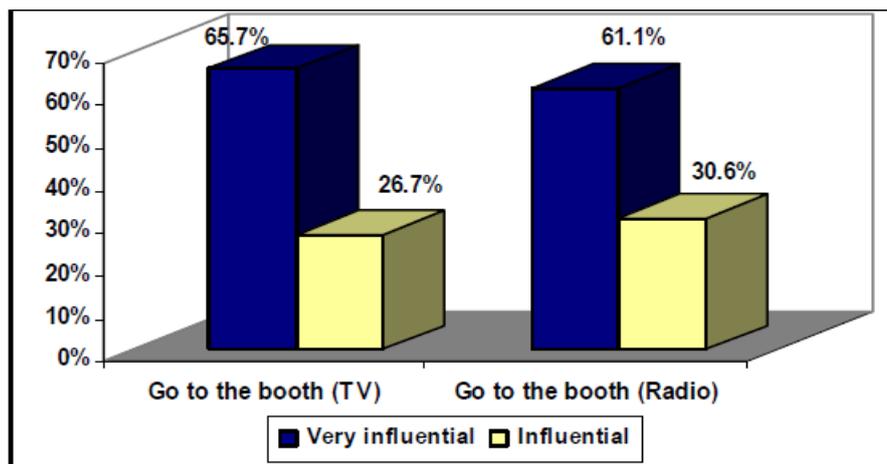
Spot 2: “Why polio keeps coming back” – Amitabh Bachchan looked at a wall plastered with polio posters, and pointed to the audience disapprovingly. “Polio keeps coming back because you don’t vaccinate your children anymore,” and urged them to not listen to rumours.

Spot 3: “Pulse Polio Immunization is for everyone.” – opened with Amitabh Bachchan reading a newspaper. He threw it away in disgust and talked to the camera: “The poliovirus knows no bounds, does not discriminate between caste, creed and race. It hurts a Hindi child as much as it hurts a Muslim child. No children should be excluded from polio vaccination; every child in India has the right to be protected from polio disease.”

Spot 4: “Applauding the people who get their children immunized” – opened with the tall, bearded Bachchan standing by a booth, facing the camera. “They are doing the right thing by coming back,” raising his hand to salute the crowd that was queuing up for polio drops.

Each ad ended with the star raising two fingers with the message: “Pulse Polio Immunization, two drops for life,” followed by the two dates recorded separately on sound. This anger

appeal aroused the parents as Amitabh Bachchan has high credibility among parents of all age and thus message become trustworthy. The TV spots were broadcasted four thousand times to over 80 million homes on Doordarshan and the radio spots were transmitted another thousand times to 54 million homes, including 30 million in rural areas. Following graph shows Amitabh Bachchan media spots influence on decision for visit to OPV booth



Source: TNS Mode/Johns Hopkins University, for UNICEF India



Figures11: IN advertisements, Amitabh Bachchan asking people to go to polio booth and Ashwarya Rai convincing people that Amitabh Bachchan had got angry since parents are not taking their kids to polio booth

III. Hope

Various ads were launched where hope and aspiration of parents were raised. In one famous and widespread ad Amitabh Bachchan recited a poem where he argued to parents that children are hope of their future and if parents were not going to polio booth then they are making their future handicapped. Various Posters of other famous celebrities were launched where appeal was – ‘now polio is going to end, we have to walk a little bit more’. The most

widespread was Rotary 'this close' Campaign. These posters created hope and motivated parents to cooperate in campaign.



Figure12: Rotary 'this close' campaign, where all are indicating that polio is just going to end.

IV. Trust and Team spirit

For building trust Rotary and UNICEF have engaged a number of other celebrities, including Preity Zinta, Rani Mukherjee, Jaya Bachchan, Hema Malini, Aishwarya Rai, Shah Rukh Khan, Amir Khan, Soha Ali Khan. Popular national and regional celebrities such as Farooq Sheikh and an actor/singer from Bihar – Manoj Tiwari – visited and interacted with communities in the toughest refusal areas to garner support for the vaccination programme. For generating team spirit Thomson Social launched a puppet show , which was shown at villge haats, market places, panchayat grounds, seminars and other public meetings. The puppet show was created around the conversation of four people: Jumman, a Muslim, Balwanta, a Sikh, Ramprasad, a Hindu and Dr. Saab, a medical practitioner. Humour was woven into three segments of a continuous dialogue between the four, which served to educate and entertain on:

1. Why repeated doses even though everyone was tired of OPV

2. The “science of eradication”, which was akin to spraying insecticide on the entire potato field. Each child left unvaccinated would expose another child to the risk, and the same applied to one’s own children.

3. OPV would not cause sterility or make children grow a tail, the virus was spreading as fast as rumours, and it would indiscriminately attack children of any caste or creed, of any socio-economic status.



Figure 13- Thomson special puppet show poster for generating team spirit and clearing doubts



Figure14: Various celebrities from diverse field generating trust and creating awareness

V Joy and Happiness

As Campaign was gradually moving towards success, various posters, ads and pamphlets were launched which showed that happiness and joy approached those parents who have given polio drops to their child. This institutionalized the campaign in minds of people, and parents accepted the arguments that polio drops are ‘two drops of life’





Figures- various posters of emotional appeals were launched and displayed in streets, hospitals of villages and cities and other public places

5. Results

On comparing the campaign on Larson's framework and on emotional and rational appeals we can frame results on the basis of Input output matrix of communication campaigns (McGuire, 1989)

INPUT \ OUTPUT	INPUT	SOURCE	MESSAGE	CHANNEL	RECIEVE R	DESTINA TION
		Credibility attractiveness	Type of appeal Type of information	Context Reach suitability	Personality traits Lifestyle Attitude, knowledge and skill	Overall impact /eradication
	Exposure to communication	Moderate	Moderate	Moderate	Moderate	Low
	Attending to it	Moderate	Low	Moderate	Moderate	Low
	Liking and interested	Low	Low	Low	Low	Low
	Comprehending it	Low	Low	Low	Low	-
	Skill acquisition	-	-	-		-
	Yielding to it (attitude change)	Low	Low	Low	Low	Low
	Agreement	Low	Low	Low	Low	Low
	information search and retrieval	low	low	low	low	Low
	Deciding on basis of	-	-	-	-	

retrieval					
Behaving in accord with decision	-	-	-	-	
Reinforcement of desired act	Low	Low	Low	Low	Low
Post behavioural consolidating	Low	Low	Low	Low	Low

Table 5.1: Input Output matrix of Polio Campaign before 2002-03

Adopted from: McGuire, W.J. (1989). Theoretical foundations of campaigns, *Public Communication campaigns* (2nd edition)

INPUT OUTPUT	SOURCE	MESSAGE	CHANNEL	RECIEVER	DESTINAT ION
	Credibility attractiveness	Type of appeal Type of information	Context Reach suitability	Personality traits Lifestyle Attitude, knowledge and skill	Overall impact /eradication
Exposure to communication	High	High	High	Moderate	High
Attending to it	High	High	High	Moderate	High
Liking and interested	High	High	High	Moderate	High
Comprehending it	High	High	High	Moderate	-
Skill acquisition	-	-	-	Moderate	-
Yielding to it (attitude change)	High	High	High	Moderate	High
Agreement	High	High	High	Moderate	High
information search and retrieval	High	High	High	Moderate	High
Deciding on basis of retrieval	-	-	-	-	
Behaving in accord with decision	-	-	-	-	
Reinforcement of desired act	High	High	High	High	High
Post behavioural consolidating	High	High	High	High	High

Table 5.2: Input Output matrix of Polio Campaign before 2002-03

Adopted from: McGuire, W.J. (1989). Theoretical foundations of campaigns, *Public Communication campaigns* (2nd edition)

6. CONCLUSIONS

The important conclusions of the study are as follows

a) Before 2003 Rational appeals were very low and after 2003 rational appeals were intensified under following heads Strategic actions, Logical Reasoning, Quality arguments, Compelling, Conclusive based on premises and Claim. Mainly two sided rational appeals are used to make persuasion more effective. This finding aligns with the findings of Allen and Colleagues (1990) who argued that two sided rational messages were more persuasive than one sided messages.

b) Before 2003 Emotional appeals were very low and after 2003 emotional appeals were intensified under following heads- fear, anger, trust, joy, happiness and team spirit. Before 2003 fear was not well equipped with effective solution but after 2003 fear is aligned with effective solutions (perceived efficacy) which increased persuasion. This finding aligns with findings of Witte (1992) who claimed that fear appeals having perceived efficacy with threat will influence the attitude of recipients.

c) Proper mix of rational as well as emotional appeals had made this campaign as a successful campaign and shown drastic positive results after 2002-03. This conclusion aligns with arguments of James M. Jasper (2003) who claimed that excess of any one appeal will not produced desired results and a successful attitude change will occur if proper mix of both appeals appears in message.

d) Before 2003 there was low identification and legitimacy which in turn resulted in low participation and penetration. But after 2003 identification and legitimacy were high which in turn created high participation and further high penetration. Thus we can conclude that Larson's five model stages are dependent on each other and each stage is important to reinforce the next one.

References

- Allen, M., Hall, J., Mongeau, P., Berkonitz-Stafford, S., Stafford, S., Shanahan, W., Agee, P., Dillow, K., Jackson, R., & Ray, C. (1990). Testing a model of message sidedness: Three replications. *Communication Monographs*, 57, 274-291
- Aristotle. (1960). *The rhetoric of Aristotle* (L. Cooper, Trans.). Englewood Cliffs, NJ: Prentice-Hall. (Original translation published 1932)
- Barrett S. Eradication versus control: the economics of global infectious disease policies. *Bull WHO* 2004; 82(9):683-8.
- Basu RN. Challenges in final stage of polio eradication. *Indian J Pediatr* 2004; 71(4):339-40
- Binder, L. (1971). Crises of political development. In *crises and sequences in political development* (pp.3-72) Princeton, NJ: Princeton University Press.
- CDC. International Task force for disease eradication *Mort Morb Weekly Report* 1990; 39(13):209-12.
- Dillard, J.P., & Meijnders, A. (2002). Persuasion and the structure of affect. In J.P. Dillard & M.W. Pfau (Eds.), *The Persuasion Handbook: Development in theory and practice* (pp.309-327). Thousand Oaks, CA: Sage
- Donovan, Robert J et al. (1998). "Appealing to Positive Motivations and emotions in Social marketing: Example of a Positive Parenting Campaign". *Social Marketing Quarterly*, vol.4, issue 4, pp 48-53
- Gaurav Glashan. (2003) 'Designing communication strategies for polio eradication campaigns: a case study', *Global Media Journal – Indian Edition/ISSN 2249-5835* Winter Issue / December 2011 Vol. 2/No.2
- Global Polio Eradication Initiative. Current cases count on August 25, 2006. Geneva, WHO.2006. Retrieved from <http://www.polioeradication.org/casecount.asp>
- Guerrero, L.K., Andersen, P.A., Trost, M.R. (1998). Communication and emotion: Basic concepts and Approaches. In P.A. Anderson & I.K. Guerrero (Eds.), *Handbook of Communication and Emotion: Research, Theory, Application and contexts* (pp.5-27). San Diego, CA: Academic Press
- IMB Report on the Global Polio Eradication Initiative February 2012, Retrieved from www.polioeradication.org/portals/0/.../imbreport_january2012.pdf
- Janis, I.L., & Frick, E. (1943). The relationship between attitudes towards conclusions and errors in judging logical validity of syllogism. *Journal of Experimental Psychology*, 33, 73-77

- Janis, I.L., & Freshbach, S. (1953). Effects of fear arousing communication. *Journal of Abnormal and Social Psychology*, 48, 78-92
- John TJ. Polio eradication in India: what is the future? *Indian Pediatr* 2003; 40: 455-62.
- Jones, S. and Owen, N. G. (2006). "Using fear appeals to promote cancer screening - are we scaring the wrong people?". *International Journal of Nonprofit and Voluntary Sector Marketing*, vol. 11, issue 2, pp. 93-103
- Larson, Nicole I.; Story, Mary T.; Nelson, Melissa C. In: Larson, Nicole I. and Story, Mary T. and Nelson, Melissa C. (2009) Neighbourhood Environments: Disparities in Access to Healthy Foods in the U.S. *American Journal of Preventive Medicine*, 36 (1). pp. 74-81. ISSN 07493797
- McGuire, W.J. (1989). Theoretical foundations of campaigns, *Public Communication campaigns* (2nd edition, pp.43-65). Thousand Oaks, CA: Sage
- Paul Y. Polio eradication program, some ethical issues. *Indian J med ethics* 2005; 2(4):115-6.
- Peetty, R.E., Wegner, D.T., Fabrigar, L.R., Priester, J.R., & Cacioppo, J.T. (1994). Conceptual and methodological issues in the elaboration likelihood model of persuasion: A reply to the Michigan State critics. *Communication Theory*, 3, 336-363.
- Reynolds, A., & Reynolds, J.L. (2002). Evidence in J.E. Dillard & M. Pfau (Eds.), *The Persuasion Handbook: Development in theory and practice* (pp.427-444) Thousand Oaks, CA: Sage
- UNICEF Working paper by United Nations Children's Fund Regional Office for South Asia 'A Critical Leap to Polio Eradication in India, www.unicef.org/rosa/critical.pdf
- UNICEF IMB Report march 2011 - Global Polio Eradication Initiative, www.polioeradication.org/.../UNICEF_IMB_REPORT_MAR_2011.pdf
- Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communication Monographs*, 59, 329-349
- Witte, K., & Allen, M. (2000). A meta analysis of fear appeals : Implication for effective public health campaigns. *Health education and Behaviour*, 27, 591-615
- World Health Organisation. Advisory committee on polio eradication- standing recommendations for responding to circulating polio viruses in polio free area. *Wkly Epidemio Reco* 2005; 80: 330-1.
- World Health Organisation. Laboratory surveillance for wild and vaccine derived poliovirus, January 2004- June 2005. *Wkly Epidemio Rec* 2005; 80:335-40.
- World Health Organization Polio Booklet 2012*, Retrieved from www.unicef.org/india/Polio_Booklet-final