Evaluation of Universal Immunization Program in India (2004-2005): An IndiaCLEN Program Evaluation Network Study



## THE INCLEN TRUST

<u>Central Coordinating Office</u> Clinical Epidemiology Unit (Name)Medical College Thiruvananthapuram, Kerala

<u>IPEN Office</u> INCLEN Executive Office 18, Ramnath Building, 5<sup>th</sup> Floor Community Centre, Yusuf Sarai New Delhi

With Support from USAID & Ministry of Health & Family Welfare (MOHFW), Govt. of India

## <u>Draft Report</u>

#### Name and Designations of all Investigators

#### a. Team Leader:

**Dr. Narendra K. Arora** Professor Department of Pediatrics, All India Institute of Medical Sciences, New Delhi

b. <u>Principal Investigator</u>:
Dr. Remadevi. S
Associate Professor
Department of Community Medicine
Medical College, Thiruvananthapuram

c. <u>Coordinating Centre</u>: Regional Clinical Epidemiology Research & Training Centre Medical College, Thiruvananthapuram (Room No: 7, Department of Community Medicine Medical College, Thiruvananthapuram)

#### Names of Central Coordinating Team

a. Dr. A.K.Patwari
c. Dr. S. Vivek Adhish
e. Dr. Sanjay Chaturvedi
g. Dr. Rajib Das Gupta
i. Dr. Sanjay.P.Zodpey
k. Dr. Thomas Mathew
m. Dr. S.S. Bhambal
o. Dr. Rajesh Kumar
q. Dr. Leela Itty Amma.K.R
s. Ms. Leena Sushant
u. Dr. Naveet Wig
w. Ms. Vaishali Chaturvedi

b. Dr. S.K. Pradhan
d. Dr. K.K. Ganguly
f. Dr. Sanjay K. Rai
h. Ms. Sneh Rewal
j. Dr. (Brig) S.L. Chadha
l. Dr. S.K. Kapoor
n. Dr. Abdul Rauf
p. Dr. Imrana Qadir
r. Dr. V. Chandrasekhar
t. Dr. Hemant Kumar
v. Ms. Moumita Biswas

#### Name of Partner Organizations

- 1. S.N. Medical College, Agra (Uttar Pradesh)
- 2. Aligarh Muslim University, Aligarh (UP)
- 3. M.K.C.G. Medical College, Berhampur (Orissa)
- 4. Gramin Sewa Sanstha, Bilaspur (Chattisgarh)
- 5. State Institute of Health and Family Welfare, Bhubaneshwar (Orissa)
- 6. Burdwan Medical College, Burdwan (West Bengal)
- 7. Darbhanga Medical College, Darbhanga (Bihar)
- 8. Society for Nutrition, Environment and Health Action, Dibrugarh (Assam)
- 9. M.R. Medical College, Gulbarga (Karnataka)
- 10. G.R. Medical College, Gwalior (Madhya Pradesh)
- 11. M.P. Shah Medical College, Jamnagar (Gujarat)
- 12. Dr. S.N. Medical College, Jodhpur (Rajasthan)
- 13. Regional Health & Family Welfare Training Centre, Kangra (Himachal Pradesh)
- 14. Medical College, Kolkata (West Bengal)
- 15. Kurnool Medical College, Kurnool (AP)
- 16. King George's Medical College, Lucknow (UP)
- 17. Kasturba Medical College, Manipal (Karnataka)
- 18. L.T.M. Medical College, Mumbai (Maharashtra)
- 19. Lady Hardinge Medical College, New Delhi
- 20. Patna Medical College, Patna (Bihar)
- 21. Rajendra Institute of Medical Sciences, Ranchi (Jharkhand)
- 22. Govt. Medical College, Srinagar (Jammu & Kashmir)
- 23. Medical College, Thiruvananthapuram (Kerala)
- 24. Christian Medical College, Vellore (Tamil Nadu)
- 25. Andhra University, Visakhapatnam (AP)

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## Abbreviations Used – UIP Report

ADHS	Assistant Director of Health Services (State)			
AEFI	Adverse Events Following Immunization			
AFP	Acute Flaccid Paralysis			
AIIMS	All India Institute of Medical Sciences			
ANC	Antenatal Care			
ANM	Auxiliary Nurse Midwife			
AWW	Anganwadi Worker			
BCG	Bacille Calmette-Guérin (TB Vaccine)			
СВО	Community Based Organization			
ССО	Central Coordinating Office			
ССТ	Central Coordinating Team			
CDPO	Child Development Project Officer			
СНС	Community Health Center			
CHV	Community Health Volunteer			
СМО	Chief Medical Officer (CM & HO) - District			
CNA	Community Needs Assessment			
DGHS	Director General of Health Services (Central)			
DHS	Director Health Services (State)			
DIO	District Immunization Officer			
DM	District Magistrate / Collector			
DMO	District Medical Officer (DM & HO)			
DOTS	Directly Observed Therapy Shortcourse (for TB)			
DPT	Diphtheria, Pertusis, Tetanus			
EPI	Expanded Program on Immunization			
FGD	Focus Group Discussion			
HQ	Head Quarters			
HS	Health Secretary			
HW	Health Worker			
ICDS	Integrated Child Development Scheme			
IEC	Information, Education & Communication			
IMA	Indian Medical Association			
IMR	Infant Mortality Rate			

INCLEN	International Clinical Epidemiology Network
IndiaCLEN	Indian Clinical Epidemiology Network
IPEN	IndiaCLEN Program Evaluation Network
IPPI	Intensified Pulse Polio Immunization
ΜΟ	Medical Officer (Block / PHC / CHC)
MOH&FW	Ministry of Health & Family Welfare
MPHW or MPW?	Multipurpose Health Worker (Health Worker -male)
NCCPE	National Certification Committee for Polio Eradication
NGO	Non-governmental Organization
NPSP	National Polio Surveillance Project
OPV	Oral Polio Vaccine
ORI	Outbreak Response Immunization
РНС	Primary Health Centre
PHN	Public Health Nurse
PMC	Partner Medical College
PPI	Pulse Polio Immunization (Program)
RAP	Rapid Appraisal Procedures
RC	Regional Center
RCH	Reproductive & Child Health (Program)
RI	Routine Immunization (UIP)
SHG	Self Help Group
SMO	Surveillance Medical Officer
SNID	Sub-national Immunization Day
UIP	Universal Immunization Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VPD	Vaccine Preventable (Infectious) Disease
WG	Women's Group
WHO	World Health Organization

## **Study Centers Map**



## List of Study Centers

	IPEN Office: All India Institute of Medical Sciences, New Delhi Central Coordinating Office: Medical College, Thiruvananthapuram (Kerala)					
S.N 0	Regional Centres	Partner Institutions				
1.	Regional Health & Family Welfare Training Centre, Kangra (Himachal Pradesh)	Govt. Medical College, Srinagar (Jammu & Kashmir)				
2.	S.N. Medical College, Agra (Uttar Pradesh)	King George's Medical University, Lucknow (UP)				
3.	Patna Medical College, Patna (Bihar)	Darbhanga Medical College, Darbhanga (Bihar)				
4.	Medical College, Kolkata (West Bengal)	Burdwan Medical College, Burdwan (West Bengal)				
5.	North East Indira Gandhi Regional Institute of Health & Medical Sciences (NEIGRIHMS), Shillong (Meghalaya)	Society for Nutrition, Environment and Health Action (SNEHA), Dibrugarh (Assam) Rajendra Institute of Medical Sciences, Ranchi (Jharkhand)				
6.	M.P. Shah Medical College, Jamnagar (Gujarat)	Dr. S.N. Medical College, Jodhpur (Rajasthan)				
7.	Gramin Sewa Sanstha, Bilaspur (Chattisgarh)	G.R. Medical College, Gwalior (Madhya Pradesh)				
8.	State Institute of Health & Family Welfare, Bhubaneshwar (Orissa)	M.K.C.G. Medical College, Berhampur (Orissa) Christian Medical College, Vellore (Tamil				
9.	Andhra University, Visakhapatnam (AP)	Kurnool Medical College, Kurnool (AP)				
10.	M.R. Medical College, Gulbarga (Karnataka)	Kasturba Medical College, Manipal (Karnataka)				
11.	Medical College, Thiruvananthapuram (Kerala)	L.T.M. Medical College, Mumbai (Maharashtra)				
12.	Lady Hardinge Medical College, New Delhi	Aligarh Muslim University, Aligarh (UP)				

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## CHAPTER –1 INTRODUCTION

#### Background

The *Expanded Programme on Immunization (EPI)* was initiated by the Government of India in 1978 with the objective of reducing morbidity, mortality and disability from six of the major *Vaccine Preventable Diseases (VPD)* by making vaccination services available to all eligible children free of cost through the public health sector.

In 1979-80 immunizations against Polio was included under the programme and in 1980-81 Tetanus were introduced to school children. *BCG* inoculation was initially included under the National Tuberculosis Control Programme in 1962 but was brought under EPI in 1981-82. Vaccination against *Measles* was the last one introduced under this programme during 1985-86. The Universal Immunization Programme (UIP) was formulated and introduced in 1985-86 and Vitamin-A supplement was added to this programme in 1990.

The reduced burden of vaccine preventable diseases is a measure of success of the UIP. Reported cases of the six main VPDs i.e. *Diphtheria, Pertusis, Total tetanus, Neonatal tetanus, Polio and Measles* have declined steadily in the past 15 years.

In 1986, Universal Immunization Programme was given the status of *National Technology Mission*. A specific Immunization Strengthening Project was planned for 2000- 2003, which included three main components: *polio eradication, strengthening routine immunization and strategic framework development*.

### Present Status of Universal Immunization Programme (UIP)

Though the coverage rates of various antigens have increased since 1990, a decrease in full immunization rates has been reported in the recent past. A survey was conducted in 244 districts of the country during 2002-03 and the data was compared with that obtained five years ago (1998-99). The data indicated that 72 percent of the surveyed districts reported an average decline of 15.4 percent in the full immunization rates. The northern states of Uttar Pradesh, Bihar, Rajasthan and Jharkhand have reported much lower coverage rates when compared to southern states.

In the past 5 years some states have experienced a drop in number of districts with >80% coverage. This trend is very disturbing not only for the UIP but it has a direct impact on the Polio Eradication efforts as well. The reasons for such a decline are being debated as some attribute it to intensified efforts and diverting of resources towards Polio Eradication, while others feel that it is due to complacency among health workers and decreased importance accorded to UIP over the years.

## Problems and Constraints in the Programme

The key problems of UIP are accessibility of immunization services and its acceptability indicating the service utilization. In the Multi Year Plan released by Ministry of Health & Family Welfare (MOHFW), some of the potential constraints hypothesized are:

- a. The vast health infrastructure is unevenly distributed and the segments of population whose health care needs are greatest, often have poor access to health care due to geographic and social inequities.
- b. Currently there is a mismatch in the reported and evaluated coverage especially the difference is marked in northern states, which may be due to pressure to perform on the health staff. Hence, the data is not reliable and cannot be used as a baseline for any corrective action.
- c. The implementation of UIP is a joint responsibility of centre, state and district. Problems have been identified in the overall governance, coordination, communication and flow of funds. Implementation in cities has been poor due to poor health service delivery in slums.
- d. The programme also experiences some managerial constraint i.e. vacant posts, inadequate training and lack of supervision and monitoring.
- e. Problems have been identified in the proper maintenance and replacement of cold chain equipment. Hence, there is a need to strengthen the cold chain monitoring system.
- f. The issue of safe injection practices and their disposal also needs to be addressed as vaccination has a substantial contribution.
- g. Low demand for immunization services by the community: The reasons for low demand maybe due to lack of knowledge regarding its importance; place and timings for accessing the services and handling of adverse events following immunization (AEFI). Community also needs to be motivated to change the attitude towards the government health services.
- h. The present system is not able to provide accurate information on the burden of disease due to other VPDs. The is surveillance needs to be strengthened so as to facilitate timely introduction of other vaccines.

## Importance of UIP for Polio Eradication

The World Health Organization's (WHO) recommendations for polio eradication also emphasize on high routine oral polio vaccine (OPV3) coverage besides supplementary immunization activities; better acute flaccid paralysis (AFP) surveillance system and good quality of mop up rounds. The coverage of three doses of OPV should be >80% for achieving high polio immunity among the children aged below 5. For successfully eradicating polio from the country, Universal Immunization Programme has a significant role to play.

From an internal analysis by National Certification Committee for Polio Eradication (NCCPE), New Delhi following factors was found to associate with continued circulation of wild polio virus or re-establishment of its local circulation:

- Immunity gap i.e. proportion of children <5 years who have received <3 doses of OPV increased to more than 12-15%. It was particularly significant if children with 0-dose were more than 5% of their total population.
- If the DPT-3/OPV3 routine coverage was less than 60%.
- Other factors like quality of AFP surveillance and population density

Hence, the performance of UIP has a direct bearing on the polio eradication and now when we are nearing this historic event the need to identify bottlenecks to improve UIP is critical.

## Rationale of the study

A process evaluation study is taken up in the good (coverage >70%) and bad (coverage <55%) performing regions of the country to determine strengths as well as the prevalent barriers to the Universal Immunization Programme deterring its performance in the respective regions.

To understand the present situation and the dichotomy between the providers' and clients' view, it was imperative to obtain the viewpoint of these stakeholders directly. The programme implementation strategies can be fine tuned most effectively, only when the constraints as well as suggested approaches to overcome barriers from both providers and clients are synthesized in true spirit of stakeholdership.

The rationale of this study was to understand the problems in procurement and distribution of vaccine, service delivery, injection safety, service utilization, VPD surveillance and data quality.

This exercise is to help us in understanding the strengths of present system, which need to be continued; the problem areas that need modifications and some new policies, which need to be adopted. This study is of policy relevance with the country being on the verge of polio eradication.

## CHAPTER – 2 OBJECTIVES

The current study was a **process evaluation** of Universal Immunization Programme in India. Focus of the exercise was to understand the management and implementation of programme activities at various levels and determine client perspectives.

#### **Primary Objective**

To assess the process of implementation of Universal Immunization Programme (UIP)

#### **Specific Objectives**

a. Programme Management and Inter-sectoral Co-ordination

- i. Sectors involved in planning and implementation
- ii. Responsibilities of participant sectors health department, ICDS and other non-health sector
- iii Manpower management
  - Training
  - Positions available / vacancies
  - Operational positions
- iv. Role of NGOs, leaders, professional organizations and other facilitatory groups in the programme implementation
- v. Management strategies for coordination: intra-departmental and inter-departmental
- vi. Programme monitoring and supervision
- vii. Unique and innovative features of programme management and inter-sectoral coordination
- viii. Limitations / shortcomings in programme management and inter-sectoral coordination and components that are sustainable
- ix. Differences in management and implementation process of UIP in good and bad performing districts
- x Financial Management
- xi. Implementation of UIP at district and sub-district level
  - micro planning
  - process of identification of clients
  - immunization of target clients
  - organization of outreach clinics
  - cold chain maintenance
  - ensuring regular supplies of vaccines, injection equipment and other logistics
  - reasons and handling of shortages and excess of supplies
  - monitoring of vaccine related complication
- xii. Management of logistics for UIP
  - identification of requirements at national, state, district and sub-district level
  - sources of supplies, process
  - lead time to obtain / identify supplies
  - storage
  - line management of supplies and distribution at district, PHC and sub-centre level

b. Social Mobilization

- xiii. Messages and their interpretation
- xiv. Media / channels of message dissemination
- xv. Awareness of programme implementers and clients
- xvi. Demand among clients for services provided under UIP
- xvii. Community participation in UIP
- xviii. Participation of political and important public figures and NGOs / CBOs
- xix. Limitations / shortcomings of social mobilization in existing form and components that are sustainable

c. Determinants of Client Behavior

- xx. Perceptions about programme services under UIP regarding accessibility, affordability, acceptability and availability
- xxi. Affect or emotional component about programme services and its utilization
- xxii. Socio-cultural beliefs about UIP and their influence on utilization of programme services
- xxiii. Facilitating factors (i.e. roles played by NGOs, local leaders / influencers, community participation) and physical constraints influencing the utilization behavior
- xxiv. Awareness about services available under UIP
- xxv. Influence of AFP occurrence in families and their neighborhood on the utilization behavior towards UIP
- xxvi Reasons for non-utilization of services and poor compliance to the immunization activities

## CHAPTER – III

## Methodology

The study was undertaken as a partnership exercise between implementers/doers and users of research with observations made during fieldwork as contributions from community and grass root level providers.

#### 3.1. Study Design

This was a cross sectional community based study. Data were collected through in-depth interviews

conducted with all categories of stakeholders selected for the study and focus group discussions

(FGDs) with health workers and medical officers and Utilizers and non-Utilizers of Universal

Immunization Program, .

Qualitative methods based on rapid appraisal procedures (RAP) were used to enable quick and systematic data collection. Planners and evaluators needed in-depth, unbiased information on the communities they serve and on the health related behaviour of the clients. This approach synthesizes multiple sources of information to rationalize and objectively balance the evidence. Thus, the technique involved assessing of opinions, attitudes, behaviour and motivation of both the client's clients of universal immunization program and also of those who delivered these services with their complex rational matrix of personal and social realities.

#### 3.2 Study Setting

Twenty-four centres in eighteen states of the country were identified for the study. The selection of the study centres was done keeping in mind the socio economic and geographical representation of the country. Seven of the eighteen states selected were good (coverage > 70%) performing states for UIP coverage while others represented the poor (coverage <55%) performing states.

#### **3.3 Study Population**

The population for the study comprise of stakeholders at central, state, district and peripheral levels. The information on program planning, management of logistics and supplies, the process of implementation and its acceptance among the target population was obtained from knowledgeable persons (key stakeholders) who were involved / participated in the program at different levels of policy framing, planning and implementation and as clients (community). Thus the participants interviewed were those who were well aware of the field situation. They are as follows:

<u>Policy Makers</u>: Stakeholders at national policy, planning and implementation levels viz. Ministry of Health, Program Managers and donor agencies, State Health Ministers and Health Secretaries.

<u>Providers</u>: Health and non-health officials at the district level and at block level i.e. PHCs / dispensaries in rural and urban sectors.

Implementers: Health and non-health workers (Anganwadi Workers) who delivered the

services at out reach immunization sessions.

<u>Facilitators</u>: Village Pradhans, religious leaders, influential persons, political leaders of the locality and representatives from local NGOs, CBOs, Self Help Groups (SHGs), Women's Groups (WG).

<u>Clients</u>: These were of two major categories, UIP clients and AFP clients. Mothers/ fathers of specified clients were interviewed.

#### A. UIP Clients

- i) Utilizers: Mothers or fathers of children less than 2 years and more than 9 months of age, who got complete immunization (all six vaccines viz. BCG, three primary doses of OPV, Diphtheria, Pertusis, Tetanus and Measles)
- ii) Partial Utilizers: Mothers or fathers of children less than 2 years and more than 9 months of age, who got more than one dose of any vaccine but not complete immunization.
- iii) Non-Utilizers: Mothers or fathers of children less than 2 years and more than 9 months of age, who did not receive any vaccine at all

## (Polio drops given as part of National Pulse Polio Immunization were not considered as part of UIP)

#### B. AFP Clients

- i) Identified AFP cases: Mothers or fathers of children with AFP cases identified in the district during the last 12 months (Those identified by National Polio Surveillance Project-NPSP)
- ii) Neighborhood Contacts of identified AFP cases who did not get AFP (AFP cases were selected from the list provided by the NPSP Staff in the district)

#### 3.4 Identification of Study Population

In order to be able to generalize the results to the whole country, the key issue was the representative

nature of the study sample at both the central and peripheral levels of program procedures. There is

always a trade off between research duration, quality and accuracy of collected information. The

principle of optimal ignorance and appropriate imprecision are acceptable and mandatory for such

qualitative methods. Thus, in order to minimize the sampling error caused by non-random selection, the

investigators' judgment to identify the study population, select the most informed respondents and

draw together the 'right' sample was crucial. The district was selected as the sampling unit. Stratified

and purposive sampling was done for convenience of data collection.

#### 3.5Sample Size

#### Central / State Level

The perceptions of top policy makers, planners and donor agencies operating at national and state levels were also obtained. A total of 20-25 in-depth interviews were planned with these stakeholders across the country. Interviews with central level program managers were the

responsibility of IPEN Office. Health Secretary, Deputy Health Secretary, State Immunization Officer, State Reproductive & Child Health Officer and Health Minister were to be interviewed at five state capitals (Kolkata, Lucknow, Mumbai, Patna, and Thiruvananthapuram).

## **District Level**

At each study site, 91 in depth interviews were planned with five categories of stakeholders; policy

makers, providers, implementers, facilitators and clients drawn from both urban and rural areas of the

district where study was conducted. Therefore, a total of 2184 in-depth interviews were to be

conducted across the country at the district level. In addition it was also planned to conduct a total of

96 focus group discussions, i.e. four per site: One with health workers, one with medical officers, and

one each with utilizer and non utilizer clients of UIP.

#### Key stakeholders

The district was selected as the sampling unit. Stratified and purposive sampling methods were used for the convenience of data collection. Various socio-cultural and geographic regions and areas with varying coverage levels reflecting the performance of UIP were selected to enable generalization of results. The stakeholders were selected from both urban and rural areas. The description of the proposed interviews with various stakeholders is given in Table 3.1

	č						
	Stakeholders		Inter	Interviews		FGDs	
Level of Operation			Per centre	Total	Per centre	Total	
District							
Non Health	District Magistrate (1)						
Health	Chief Medical Officer	(1)	3	72			
	District Immunization	Officer (1)					
	Urban	Rural					
Block	Dispensary Doctors (3)	PHC Doctors (3)	6	144	1	24	
Implementers	MPHWs, ANMs, AWWs (12)	MPHWs, ANMs, AWWs (12)	24	576	1	24	
	NGOs/CBOs (2)	NGOs/CBOs (2)	4	96			
Facilitators	Leader (1)	Leader (1)	2	48			
Clients							
	Utilizers (6)	Utilizers (6)	12	288	1@	24	
UIP	Partial utilizers (6)	Partial utilizers (6)	12	288	-	-	
	Non-utilizers (6)	Non-utilizers (6)	12	288	-	-	

## Table 3.1: Description of the proposed interviews for various stakeholders to be conducted at each study district

clients AFP clients	Identified AFP cases Neighborhood contacts	4 12	96 288	1#	24
Total		91	2184	4	96

@ FGDs at half of the centres with Utilizers and rest with Non-utilizers of UIP# FGDs with parents of identified AFP clients and their neighborhood contacts

#### 3.6 Study instruments

#### **Interview Schedules**

Separate interview schedules were prepared for different categories of stakeholders. A team of program evaluation experts, social scientists, epidemiologists and anthropologists at the IPEN Office conducted several brain storming sessions to identify the key issues to be evaluated keeping in mind the interest of policy makers, program managers, implementers and clients. Interview schedules comprised of open ended questions. The guiding principle was that the responses should be able to achieve / reflect the objectives of the project. The draft instruments were developed by the Team Leader, Principal Investigator and other CCT members in close partnership with the program managers and the funding agency. Pretesting of the instruments was done at five study centers to make sure that the questions were comprehensible to the target population.. The instruments were finalized during the National Protocol Finalization Workshop with inputs from the investigators at all the participating institutions. They were translated in to local languages and back translated in to English to make sure that the meaning has not been changed; thus improving the validity of the study)

#### Focus Group Discussion - Topic Guides

Topic guides for the FGDs with each of the stakeholders viz. health workers, medical officers, utilizers and non utilizers were also developed in accordance with the study objectives and finalized during the National Workshop.

#### Triangulation

Both data and method triangulations were used to enhance the internal validity of the data. *Internal consistency*: There were multiple questions in every interview schedules probing the same domains dealing with critical study objectives.

*Between stakeholders*: There were five categories of stakeholders namely policy makers, providers, implementers, facilitators and clients. Responses from different stakeholders were compared for confirmation.

*Between centres*: Key study questions were identified and responses compared across groups of centres among stakeholders for consistency.

*Between Methods*: In addition to the in-depth interviews of stakeholders focus group discussions were conducted with four important categories of stakeholders namely government health workers, medical officers, and parents of utilizers and non utilizers at every site. Thus responses obtained through the two methods facilitated comparison for the consistency of information.

#### **Unique Serial Number**

Every interview schedule was given a unique serial number and every participatory institution has a set of unique serial numbers assigned to it (Annexure). Thus, the partner institution, rural or urban and the category of stake holders could be tracked from a unique serial number.

#### 3.7. Data Processing and Analysis

The data was cleaned on the basis of the transcribed text sent by the partner institutions. The following steps were involved in analyzing the data.

#### Free-listing

The responses were listed to obtain the range of expressions for all open-ended questions in the

schedules for every category of stakeholders. The schedule unique numbers were affixed at the end of

every statement so that each response could be tracked to the respondent. During this process,

important statements forcefully conveying a point were marked along with the stakeholders'

identification for use in the report as reference material (quotable quotes).

#### Domain identification

Domains were evolved on the basis of responses that conveyed homogenous perceptions. Efforts were

made to retain common domains on similar issues throughout the stakeholder categories to enable

comparison.

#### Coding

Responses for every open ended question were coded according to the domains they belonged to. Besides the domain codes, uniform codes such as '0' – Don't know, '97' – Irrelevant, '98' – No response or question not asked and '99' – Not applicable were used to help identify those issues that were inadequately addressed or probably not fully understood by the respondents.

#### Summarizing

The results were first summarized and tabulated according to stakeholder categories. The first step in the overall analysis was on the basis of various categories of stakeholders and results were interpreted across categories. Later, analysis was done according to the study sites to check for consistency between centres and also regional differences, if any.

#### Report writing

The key areas of interest were listed in accordance with the study objectives and the results were

presented in a semi-quantitative form. The table below lists semi-quantitative qualifiers used to

summarize the results and the corresponding adjectives used to describe them.

Proportion of Respondents	Qualifier Used	Adjectives Used
< 10%	<1+	Very few
10-24%	1+	Some
25-49%	2+	Approximately half
50-74%	3+	Majority / Over half
75 - 89%	4+	Most
$\geq$ 90%	5+	Almost all.

Qualifiers and adjectives used for semi-quantitative expressions of observations

#### 3.8. Limitations of the Study

The potential limitations of Rapid Appraisal Procedures (RAP) are both intrinsic to the methodology and extrinsic for the purposes of generalization. The problems are primarily related to representative nature and subjectivity of the investigators. These problems may create a bias during the interviews and subsequently in their interpretation.

Certain issues associated with the present study design, which were likely to threaten the quality of data include:

- It was a multi-site qualitative study involving interviews conducted with five categories of stake holders (comparing thirteen types of respondents). Thus there was a real issue of the validity and reliability of the information obtained.
- Indepth interviews require persistence and sensitivity to the complexities of interpersonal interaction. Hence finding skilled and trained field investigators for a short duration of the study was a challenge.
- Convincing others about the validity and reliability of the qualitative research methodology adopted and hence the need for building assurance mechanisms at every step of the project design, implementation and analysis.
- Interpreting results in a manner such that the consumers of research i.e. the community program planners and providers are able to effectively disseminate and apply them.

#### 3.9 Expected Outcome

The study has to be viewed as policy and program relevant one. The results are to be ploughed back

into the Universal Immunization Program. The over all aim will be to further expand the reach of the

UIP program and hasten the process of global eradication of polio.

## **CHAPTER – IV FIELD OPERATIONS & QUALITY ASSURANCE**

#### Study Setting

In eighteen states of the country, twenty-four centres were identified for the study. The selection of the study centres was done keeping in mind the socio economic and geographical representation of the country. Seven of the eighteen states selected were good (coverage > 70%) performing states for UIP coverage while others represented the poor (coverage <55%) performing states. Twelve centres were nominated as regional centres to provide quality assurance support to their respective partners. As two of the Investigators took up new positions at other stations (Shillong, Bhubaneswar) during the study it necessitated shifting of the Regional Centres. Thus Shillong coordinated activities at Dibrugarh and Ranchi centres while the Bhubaneswar those at Berhampur and Vellore centres. These two centres were not involved in data collection.

#### 4.1. Network Organization

#### 4.1.1. Partners

The IndiaCLEN group conceptualized and implemented the program evaluation exercise by involving policy makers, program managers and important stakeholders as active partners. This facilitated research that was relevant at both the policy and program levels. The partners (Table-1) involved in the exercise were

- Ministry of Health and Family Welfare (MOH & FW)
- State Governments
- Multilateral Agencies: WHO, USAID, UNICEF
- INCLEN
- IndiaCLEN
- Academia from Partner Medical Colleges
- Medical College, Thiruvananthapuram
- AIIMS, New Delhi

#### Table – 4.1 Matrix of Evaluation Exercise

	MOH & FW	Multilateral			
Users of	collaborating	Agencies	Donor Agency	Program	
Research	Ministries at the	UNICEF,	Eg: USAID	Evaluators	
	Centre & States	WHO	-		
Douticiponta	Medical College,	Academia			
Participants of Dogoomek	Thiruvananthapuram;	(Medical	IndiaCLEN	INCLEN	
of Research	AIIMS, New Delhi	Colleges)			
			Facilitators:	Community	
Participants	Policy makers:	Implementers:	NGO/CBOs,	Stakeholders:	
in Evaluation	Program managers	Health and	Community	Utilizers,	
(Stake	(Central, State,	Non-health	Leaders,	Partial	
holders)	District)	Workers	Political	Utilizers, Non	
			Leaders	Utilizers	

#### 4.2 Network Dynamics

The objectives of network dynamics were to:

- Develop feeling of partnership and foster camaraderie amongst the collaborators
- Encourage fellow feeling and to maintain motivation

- Facilitate common understanding of study objectives and methodology
- Assure highest level of quality
- Facilitate identifying problem situation and find prompt solution
- Maintain the fastest mode of communication between all involved in the network
- Adhere to a fixed time frame to make a functional network

IndiaCLEN Program Evaluation Network (IPEN) was used as a backbone for the current program evaluation. The project was coordinated by Medical College, Thiruvananthapuram (hence forth called the Central Coordination Office – CCO). Principal Investigators at 12 regional centres supervised the project activities at their own centres and that of their twin partners.

#### 4.3 Network Communication

Efficient channels of communication are crucial for operating the network. This was emphasized during all meetings and correspondence with the regional centres and partner institutions. A network directory containing office and residential addresses along with the telephone and fax numbers of senior investigators was compiled and circulated to every member of the network with the explicit request of establishing contact with CCO or their regional coordinating centres, in case of need at any time. The goal of network communication was to use the fastest mode of communication. Decisions were made quickly and no matter was kept pending for more than 24 hours at the coordinating centre. All network letters and completed schedules were mailed through speed post / courier, ensuring quick and safe delivery. All communications regarding project activities were directed to CCO, Thiruvananthapuram.

#### 4.4. Investigators

#### IndiaCLEN Program Evaluation Network (IPEN)

The IPEN Office is located at the clinical epidemiology unit, All India Institute of Medical Sciences,

New Delhi. Besides the Team Leader, 20 other investigators were co-opted from various medical

colleges and professional bodies to form the central co-coordinating team (CCT). The team included

the Principal Investigator from Medical College, Thiruvananthapuram; and representatives from the

Ministry of Health and Family welfare, Government of India, USAID and IndiaCLEN. The IPEN

Office and CCT provided technical and quality assurance support to the Principal Investigator at

Medical College, Thiruvananthapuram during project implementation. CCT members facilitated the

development of study instruments, undertook quality assurance visits to the study sites, supervised

conduct of focus group discussions, and provided inputs for data analysis and report writing.

#### **Central Coordinating Office**

The study was coordinated by Medical College, Thiruvananthapuram (hence forth called Central Coordinating Office – CCO). Besides the Principal Investigator there were one assistant research officer, three research associates, an office assistant and an attendant at CCO. Three computer operators were also appointed to facilitate data merging, cleaning and analysis. The CCO managed the network activities, coordinated with all 25 partner institutions, monitored the progress of network, screened the data to ensure quality, and processed and analyzed the data. CCO worked in close contact with the IPEN Office. The CCO alone responded to all the

queries from the 25 Partner institutions. The team at CCO interacted with the IPEN Office whenever there were doubts.

#### **Regional Centres and Partner Institutions**

Twelve of the 26? Partner institutions in the net work were designated as Regional Centres (RCs) and the remaining 14 partner medical colleges/NGOs in the network participating in the programme evaluation were designated as partner institutions. Each Regional center was paired with one or two other partner institutions in the vicinity (Table 4.2). The regional centres coordinated data collection and quality assurance activities of both their own centre and those of their partners.

#### Table 4.2: Study Centres for the Current Evaluation

IPEN Office: All India Institute of Medical Sciences, New Delhi					
	Central Coordinating Office: Medical College, Thiruvananthapuram (Kerala)				
S.No	S.No Regional Centres Partner Institutions				
1.	Regional Health & Family Welfare Training	Govt. Medical College,			
	Centre, Kangra (Himachal Pradesh)	Srinagar (Jammu & Kashmir)			
2.	S.N. Medical College, Agra (Uttar Pradesh)	King George's Medical College, Lucknow (UP)			
3.	Patna Medical College, Patna (Bihar)	Darbhanga Medical College, Darbhanga (Bihar)			
4.	Medical College, Kolkata (West Bengal)	Burdwan Medical College, Burdwan (West Bengal)			
5.	North East Indira Gandhi Regional Institute of	Society for Nutrition, Environment and Health			
	Health & Medical Sciences (NEIGRIHMS),	Action (SNEHA), Dibrugarh (Assam)			
	Shillong (Meghalaya)	Rajendra Institute of Medical Sciences,			
		Ranchi (Jharkhand)			
6.	M.P. Shah Medical College, Jamnagar (Gujarat)	Dr. S.N. Medical College, Jodhpur (Rajasthan)			
7.	Gramin Sewa Sanstha, Bilaspur (Chattisgarh)	G.R. Medical College, Gwalior (Madhya Pradesh)			
8.	State Institute of Health & Family Welfare,	M.K.C.G. Medical College, Berhampur (Orissa)			
	Bhubaneshwar (Orissa)	Christian Medical College, Vellore (Tamil Nadu)			
9.	Andhra University,	Kurnool Medical College,			
	Visakhapatnam (Andhra Pradesh)	Kurnool (Andhra Pradesh)			
10.	M.R. Medical College, Gulbarga (Karnataka)	Kasturba Medical College, Manipal (Karnataka)			
11.	Medical College, Thiruvananthapuram (Kerala)	L.T.M. Medical College, Mumbai (Maharashtra)			
12.	Lady Hardinge Medical College, New Delhi	J.N. Medical College, Aligarh (Uttar Pradesh)			

#### Capacity Building Exercise

The partners were generally being given greater responsibilities and options to improve their skills to undertake independent program evaluation studies, enhancing confidence to do large-scale studies along with developing small networks in specific

#### 4.5 Field Teams

Each of the partner institutions recruited a team of eight researchers - two investigators and six research associates. All centres were encouraged to co-opt the social scientist / anthropologist of the institution into the team. Research associates with a social science background or graduates in social work were given preference. Additional three research associates were appointed at the regional centres to screen and supplement the completed interview schedules, to check the quality of the tape recorded interviews, and data entry of their centre and those from their respective partners.

#### 4.6 Training

The study design laid great emphasis on the training and experience of both the trainers and investigators along with in-built mechanisms of quality assurance The National Protocol Finalisation

Workshop for Principal Investigators from all participatory institutions was organized at Delhi to

finalize the protocol and the methodology.

Regional Orientation workshops were conducted at six sites (Agra, Kolkata, Gulbarga, Gwalior,

Bhubaneswar and Delhi) for all the investigators and research staff to develop a common

understanding of the study objectives, methodology and the spirit of each question. To achieve

uniformity in data collection, arrangements were also made to give hands on experience in conducting

in-depth interviews with community stakeholders and health workers in actual field conditions during

these workshops.

Professional training for the practitioners of RAP was considered critical in order to overcome inherent

limitations mentioned elsewhere (3.9). At all stages, an insiders perspective was obtained to develop

cultural appropriateness in both eliciting the information and its interpretation.

#### 4.7 Data Collection

The data were collected at three levels

*Central*: The CCT members at IPEN Office interviewed the program managers and policy makers at the central level.

*State*: Senior Investigators at the five study sites located at the state headquarters (Kolkata, Lucknow, Mumbai, Patna and Thiruvananthapuram) interviewed the state level policy makers.

*District*: Stakeholders at the district level from both rural and urban settings were interviewed at all the study sites. In the rural areas, population and officials of the primary health center (PHC) formed the sampling frame. For urban areas reference point was the municipal hospital or dispensary.

In rural areas, three PHCs were selected depending on their distance from the district headquarters: farthest, nearest and intermediate. In urban areas, 3 dispensaries were selected such that each serves both a slum and a non-slum residential area.

The various providers at block level, implementers and UIP clients were identified in reference to these dispensary or PHC areas. For AFP component, clients' location was determined by areas where cases have occurred.

#### Tape Recording of the Interviews

Investigators were encouraged to tape-record as many interviews as possible. They were provided with tape recorders and funds for cassettes and dry battery cells. The objectives were to

- Give credence to the conduct and validity of the interviews
- Supplement the statements missed out while writing the responses during the interviews
- Cross check the transcript versions of cassettes with what has been written down in the interview schedules by the research associates

96 Focus Group Discussions were conducted in 24 centres across the country (Table 4.3). Service providers i.e., medical officers, implementers from health (MPHWs/ ANMs) and non health departments (AWWs), and clients were selected from both rural and urban areas in 24 districts across the country. The FGDs with AFP cases and their neighborhood contacts were not done owing to logistic problems in mobilizing them. Instead, FGDs with UIP utilizer and non-utilizer clients were doubled.

Stakeholder Category	Total Planned	Total Intervi	Total Interviews conducted		
	Interviews	Number	Percentage	Discussions	
Policy Makers Central Level	5	2	0.1		
State Level	17	15	0.68		
Providers District Level	72	64	2.92		
Block Level	144	144	6.57	24	
Implementers Health Workers	288	288	13.13	24	
Anganwadi Workers	288	288	13.13	24	
Facilitators NGO/ CBOs	96	96	4.38		
Leaders	48	48	2.19		
Clients UIP Utilizers	288	288	13.13	24	
UIP Partial Utilizers	288	288	13.13		
UIP Non Utilizers	288	288	13.13	24	
Identified AFP Cases	96	96	4.38		
Neighborhood Contacts	288	288	13.13		
TOTAL	2206	2193	100.00	96	

#### (Table-4.3) Characteristics of Interviews conducted for the Evaluation

#### **Characteristics of interviews**

Almost all stakeholders readily agreed to participate in the study and all interviews excepting two were tape recorded. A total of 272 interviews (12.4%) were randomly selected across all stakeholders and participating centres for quality check at Central Coordinating Office, Thiruvananthapuram (Table 4.4) during the early part of data collection and the comments were sent at the earliest to the partners for prompt rectification. The regional centres were given feedback from Central Coordinating Office on any discrepancies between the original text and entered data and got it corrected.

#### (Table 4.4) Quality check of interviews conducted for Evaluation of Universal Immunization

Stakeholder Category	Interviews Conducted	Interviews rejected@ (poor quality)	Schedules accepted for analysis	Interviews tape recorded	Interviews attended by senior investigators	Recorded interviews selected randomly for quality check
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		Ν	%		Ν	%	Ν	%	Ν	%
Central	2	0	-	2	2	100	2	100	0	-
State	15	0	-	15	14	93.33	15	100	0	-
District	64	0	-	64	64	100	62	96.87	8	2.94
Block	144	1	0.69	144	144	100	104	72.22	16	5.88
Govt. Health Workers	288	4	1.39	288	288	100	50	17.36	41	15.07
Anganwadi Workers	288	4	1.39	288	288	100	44	15.28	39	14.34
NGOs/CBOs	96	-	-	96	96	100	23	23.95	13	4.77
Leaders	48	-	-	48	48	100	14	29.16	5	1.83
UIP-Utilizers	288	2	0.69	288	288	100	33	11.45	37	13.6
UIP-Partial Utilizers	288	1	0.35	288	288	100	26	9.03	37	13.6
UIP Non Utilizers	288	3	1.04	288	287	99.65	33	11.45	33	12.13
Identified AFP cases	96	-	-	96	96	100	54	56.25	13	4.77
Neighbourhood contacts	288	1	0.35	288	288	100	51	17.7	30	11.03
TOTAL	2193	16	0.73	2193	2191	99.91	511	23.3	272	12.4

**Program in India**  *@ The rejected interviews were replaced with fresh ones by the respective centres* 

**4.8 Supervision** Supervision was carried out at four levels: Study Sites, Regional Centres, Central Coordinating Office and IPEN Office

#### Study Sites

- 1. Senior Investigators personally attended 23.3% of the interviews.
- 2. The last page of every interview schedule has a quality check sheet. The senior investigators checked the quality of interviews, quality of tape recording, transcript in local language and its English translation, legibility and perception of interviewer about the interviewee (whether cooperative or uncooperative).

Regional Centres

- 1. The regional coordinators did not accept the interviews unless signed by the senior investigators of study sites.
- 2. The additional research associates screened all the schedules along with tape recorded versions from their (regional) centre and also those from the partner medical college for validity, quality of recording, interviewing skills, completeness of transcripts and translations of the interviews.

The text from the schedules was entered verbatim in to a database given to them. These entered data was e-mailed to CCO on every Monday.

Central Coordinating Office & IPEN Office

- 1. Members of the CCT were present during the FGDs at all study centres. The objectives being to ensure the quality of data and consistency of the manner in which these were conducted.
- 2. The transcripts of 10 percent randomly selected tape-recorded interviews from every site were matched with the information in the corresponding schedules at the CCO and thereafter text entered in to the database was matched with the originals. In case unacceptable or high level of discrepancy between original text and computer entry was found the centres were requested to cross check or re-enter the material.

#### **Quality assurance measures**

To ensure quality at all levels various quality assurance measures were adopted during the evaluation. Uniform training with hands-on experience in data collection was given to all research assistants during regional workshops. At the level of partner medical colleges 23.3% of the total interviews were either conducted or supervised by senior investigators. All interview schedules were scrutinized by senior investigators for quality and then these were again checked for quality and content at the regional centres by the research associates appointed specially for this purpose. A total of 16 interviews were rejected by the regional centres for their poor quality. These were replaced with fresh interviews by the corresponding partners.

# One CCT member was present during each of the focus group discussions to ensure uniformity of procedure.

The following observations were made during quality check of interviews at the Central Coordinating Office, Thiruvananthapuram.

- Inappropriate selection of respondents (Health Supervisors instead of Health Workers)
- The interviewing techniques were not appropriate. The translated version of questions were read out to the respondents
- Interviewers did not pay attention to what the respondents were saying leading to some irrelevant answers
- Probing was not done properly
- Illegible hand writing
- Inappropriate translation of recorded responses

The problems encountered by some partners were communicated to all network partners thereby alerting them to avoid similar mistakes or problems at their centres

#### 4.9 Network Monitoring

The study objectives were ambitious and data collection was done strictly according to schedule. Additionally, qualitative methods were being used simultaneously at multiple sites. Therefore close supervision and monitoring of the network activities were crucial.

All partner Medical Colleges prepared an activity planner to accomplish the target number of interviews within- a stipulated time frame. This was closely monitored through weekly interview log sheets faxed to the regional centre and to the CCO (Annexure) Network progress regarding the interviews completed during the week was monitored at CCO. Whenever a partner medical college delayed in sending the weekly interview log sheet they were contacted by telephone / fax / e-mail to remind them or to check for a problem. Such phone calls were entered in a monitoring sheet (Annexure). In addition, the medical colleges dispatched the completed interview schedules (monitored through schedule log sheet – Annexure) on a fortnightly basis to their respective regional centres after initial quality checks. After the quality checks at regional centres the interview schedules were entered in to computer and the data was forwarded to CCO on the 1<sup>st</sup> and 15<sup>th</sup> of every month. They e-mailed the entered data to CCO on every Monday and this was monitored through computer data entry log sheet. CCO updated the IPEN Office about the network progress on a weekly basis (every Wednesday

Activity	During			
1. Preparatory Phase	1 <sup>st</sup> January 2004 - 30 <sup>th</sup> April, 2004			
2. Development of Study Instruments	1 <sup>st</sup> May, 2004 - 15 <sup>th</sup> June, 2004			
3. National Protocol Finalization Workshop	19 <sup>th</sup> June, 2004 -21 <sup>st</sup> June, 2004			
4. Regional Orientation Workshops	15 <sup>th</sup> July 2004 -10 <sup>th</sup> August, 2004			
5. Data Collection	1 <sup>st</sup> August 2004 -30 <sup>th</sup> September, 2004			
6. Data Analysis	1 <sup>st</sup> September 2004 -31 <sup>st</sup> December 2004			
7. Report Writing	1 <sup>st</sup> January 2005 -28 <sup>th</sup> February, 2005			

#### 4.10. Time Line



#### 5.1.6. Impact

In the present study an attempt was made to assess the impact of UIP programme on the occurrence of vaccine preventable diseases (VPDs) and the health of children in general. The changes made in the programme over the time and the outcomes were also captured.

#### **Fully immunized infants**

[60] Approximately half (2+) of district managers, MOs, HWs and facilitators (NGO & Leaders) and majority (3+) of AWWs perceived that more than 90 percent of infants were fully immunized by the age of one year. Another half (2+) of all categories and some (1+) AWWs mentioned it to be around 75 – 89 percent and some (1+) from all the categories indicated that it would be between 50 – 74 percent. Yet, some (1+) district managers thought that it was not more than 25 – 49 percent.

\* More than 99% in our report of 2003- 2004. If it is calculated in correct way as per drop out rate then the actual immunization will come about to 50-55%. Drop out rate is very high. False reporting is also there.

(District Immunization Officer ~08002~ Gwalior)

\* I try to ensure that 90 percent of the children are fully immunized. But, whenever the survey was done it was found that the percentage of fully immunized children was much less. A national survey was conducted by the Ministry of Family Welfare in 2002, on the basis of that it is 34.8%.

(Chief medical Officer ~01003~ Agra)

\* If it is even 50% in the slums, I believe, it will be an achievement. In areas having awareness, and educated population, it can be 90% or even 100%. I don't think they are able to manage more than 50-60% vaccination in the slums because no one knows anything. No body is aware

(NGOs ~02087~ Aligarh)

#### Vaccine Preventable Diseases & Action Taken

[61] When asked about the occurrence of vaccine preventable diseases in the area, a majority (3+) of HWs and AWWs indicated that such diseases did not occur in the area. However, a majority (3+) of District Managers and MOs disagreed with them and confirmed occurrence of VPDs in the district in the last one year.

[62] Regarding action taken in the event of a case being reported, a majority of (3+) MOs mentioned providing treatment to the affected children. Also, nearly half (2+) of MOs and some(1+) district level officials and HWs notified the case, conducted mop-up/out-breaks response immunization. Follow-up activities like surveys, case investigation, follow-up of cases supervision and monitoring etc, were mentioned by a majority (3+) of district managers and some (1+) of MOs and few (1+) HWs and AWWs. Approximately half (2+) of the implementers referred the case to hospital or doctor. Health workers (1+) and Anganwadi Workers (2+) mentioned intensifying IEC activities whenever VPDs were reported.

\* Give primary treatment with information to District Head Quarter. CDMO sent the team to give immunization and treatment. If patient was serious, immediately taken to the hospital (Medical Officer ~03009~ Berhampur)

\* We do survey of the whole village and give primary care. We search the unprotected children in the area and give them vaccines

(Medical Officer ~09007~ Jamnagar)

\*Specially, we send teams there and enquire whether it is due to non-immunization or immunization failure and take the needed action. We arranged teams for that (Chief Medical Officer ~22003~ Thiruvananthapuram) \* We got information about measles through our worker. The disease spread and 70 children of the village suffered. The local staff of health went there and stayed in that station continuously for 10 days. We provided all possible treatment to them and we avoided any death due to measles or ARI

(District Immunization Officer ~03002~ Berhampur)

#### Change in Performance of UIP

[63] District managers, MOs and implementers were asked to comment on changes in the performance of routine immunization during the last few years. Approximately half (2+) from all the categories indicated that the community awareness. has increased over the years. Nearly half (2+) district level officials and some (1+) MOs, HWs and AWWs mentioned about overall improvement in programme performance. A qualitative and quantitative improvement in service delivery was mentioned by some (1+) from all categories. Improvement in monitoring and supervision was reported only by some (1+) district managers. Some MOs (1+) and implementers could not perceive any change in routine immunization in the last few years.

\* Earlier they were afraid to give vaccines to their children. Parents' used to behave stupidity and tell if their children are given vaccines, they may get fever. We are telling them for a long time about the immunization and now all the children are taking vaccines

(Anganwadi Worker ~24032~ Visakhapatnam)

\* Previously, we had to make a lot of effort to make the mothers understand. Bu, t now they themselves ask about the immunization programmeme-when it would take place

(Health worker ~12018~ Kolkata)

\* Routinely there is an increase in users of UIP. People are more interested in getting rid of these diseases. Pulse polio programme has given a momentum to this. Earlier there was no such mammoth response. Such kind of awareness is there both among literates and illiterates except few (Chief Medical Officer ~13003~ Kurnool)

\* There is an improvement, awareness has increased, IEC activity has increased -40% children come by themselves. People come at our government institutions by themselves. Whenever there is a short supply of vaccines public ask us the reason

(District Immunization Officer ~10002~ Jodhpur)

#### Improvement: Reasons

**[64]** Approximately half (2+) of district and block level officials, HWs and AWWs opined that improved IEC activities were the reason for change in UIP performance. Half of them (2+) from all categories felt that pulse polio programme had a positive impact on UIP as it increased the acceptance of HWs among the people and improved the awareness through high media coverage. Some (1+) district managers and MOs felt that pulse polio programme had a negative impact by creating community fatigue and people were demanding/expecting other vaccines also to be administered at home. But, very few (<1+) implementers agreed to this view. Improvement in service delivery and making the services more accessible to clients was mentioned by some (1+) from all categories. Still some (1+) of them opined that pulse polio had no impact whatsoever on routine immunization.

\* Implementation of PPI definitely has educated the community in a better way that there is a need for vaccination. India's PPI has not affected the immunization programme because today programme is implemented throughout the country. In spite of that southern states have coverage like 85-90%. There also PPI programme is implemented so it has got no adverse effect. Rather it has helped in motivating the people.

(Central level - Delhi)

\* Actually PPI programme has received more importance now a days and it has over shadowed the UIP to some extent. There is no doubt about it. As the propaganda is very high for pulse polio. The common people in the rural areas are also completely aware about UIP. Though UIP is beneficial to pregnant women and children, the emphasis on UIP is inadequate and definitely it has been over shadowed by IPPI.

#### (ADHS- EPI, Kolkata)

\* Now-a- days PPI is much focused than the routine immunization programme. That may be creating a problem. A large exercise is done regarding the pulse polio immunization. The health facilities spend a lot of time and so many rounds are being performed. It is about six rounds in a year. But one thing is sure, that it raises the awareness of the community for routine immunization.

#### (Health Secretary / Commissioner, Kolkata)

\* I think it must have made some effect, because the routine schedule is disturbed. All the health personnel are busy in PPI. So what ever the schedules and sessions we have planned in these 8 days they get disturbed. In some states the number of NIDS and Sub-NIDS are many and therefore many sessions are now getting disturbed. That might have caused some decline. Due to this, the performance of the workers has declined.

#### (DGHS-Family Welfare, Mumbai)

\* PPI has made an impact. They have realized the importance of routine immunization. They have become more immunization conscious. More people are coming for immunization

(Health Worker ~11014~ Kangra)

\* They think that when Polio drops will be given to them at their homes, why routine immunization services cannot be delivered at home. This has made a much difference

(Health Worker ~14017~ Lucknow)

\* Regular immunization has decreased as pulse polio is given at doorsteps. Both literate and illiterate person expects BCG or DPT to be given at their homes and they don't come to the centre in desired numbers

(Medical Officer ~06005~ Darbhanga)

#### **Attitude of Community**

[65] When asked about the change in attitude of the community towards immunization programme in recent years, nearly half (2+) of providers and implementers opined that there was a positive change in awareness, and people have realized the harmful effects of non-immunisation. Another half from all categories talked about decreased resistance, change in behaviour and increase in voluntary acceptance of the programme. It was indicated that people from all strata of society are coming forward to get their children immunized. A few (<1) of them even reported that there was a demand for immunization from the community and the programme being accepted as their own. Some (1+) DIOs felt that positive change was more visible among literates in the urban areas indicating the need for more social awareness among the masses.

\* Earlier people had feelings that if the child is immunized they may fall sick or may have problems. Now things have changed. People feel that children should be immunized to be healthy

(Anganwadi Worker ~15031~ Manipal)

\* Earlier the parents used to hide their children in their houses. They never used to immunize their

children. But, now they themselves are coming and getting their children immunized. (Anganwadi Worker ~13023~ Kurnool)

\* There has been a change in the attitude of the community towards immunization programme in recent years. Earlier when a child was affected by measles it was said that it is due to the curse of goddess and the child was never taken to a hospital. Due to this fear our children were not immunized. Now the people are aware and come for the prevention of a disease

(Health worker ~17017~ New Delhi)

\* Much awareness is there in literate class about this and they have become active but illiterates and poor people are not showing interest in this still because they don't have the information until now. "Where and when vaccine are available free of cost"

(Medical Officer ~18004~ Patna)

\* Now community is giving a good attention to universal immunization programmes because 90% of people in the community are taking it as their right. Now, there is a change in behavior and mind set. They realize that it is their right and responsibility. So definitely we are not feeling any difficulties for immunization programme.

(Chief medical Officer ~22003~ Thiruvananthapuram)

\* The attitude is quite positive and improving day by day because every family is aware. The shift there. Now people themselves are aware

(District Magistrate ~16001~ Mumbai)

#### Impact on Health of Children

[66] Approximately half (2+) from all categories of providers and implementers indicated that the incidence of VPDs has come down. Another half from all categories mentioned reduction in morbidity and mortality and also reduction in IMR. Some (1+) district managers and nearly half of MOs and HWs and a majority of AWWs indicated improvement in nutritional/health status of children.

\* When we joined our service, we use to see cases of tetanus, but now there are none. Diphtheria has also vanished. Earlier whooping cough was in excess, but now it is non existent

(FGD Medical Officers, Dibrugarh)

\* Infant mortality is reduced. Previously IMR was 113 per 1000 live births. Now it is reduced to 87 to 88. Mortality rate reduced particularly in villages

(Medical Officer ~04007~ Bilaspur)

\* There is a favorable impact on all, mostly on vaccine preventable diseases like polio, measles, whooping cough, diphtheria. Neonatal tetanus has come down. We hardly see such case

(FGD Health Worker Ranchi)

\* Definitely there is a reduction in the rate of vaccine preventable diseases and even if there is incidence of disease, mortality is not that much. Earlier there was both mortality and morbidity. Mortality and morbidity both are reduced

(FGD Medical Officers, Lucknow)

#### 5. 1.7 Supervision & Monitoring

[67] As close and effective supervision facilitates timely identification of bottlenecks and opportunity for mid-course corrections, DIOs & MOs were asked about their visit to immunization sessions at PHCs and field levels in the last three months. Approximately half (2+) of MOs reported no visits or occasional visit to immunization sessions. This was endorsed by HWs and AWWs (2+). Some (1+) of them mentioned one or two visits and some others (1+) 3 to 4 visits in last 3 months. More number of visits (> 7 times in 3 months) were claimed by nearly half (2+) of the District Immunization Officers and some (1+) MOs but
only a very few (<1+) HWs & AWWs agreed with them.

\* At our setup, we have the programme to visit the immunization session on every Wednesday and Saturday. If for any reason we have more work at district headquarters then we are unable to go, otherwise we try to visit immunization sessions on Wednesdays and Saturdays

#### (District Immunization Officer ~02002~ Aligarh)

\* Actually medical officer directly is not involved in this programme. For monitoring we have other staff, the health educator and the community health officer, who are going regularly to the field and monitor the activities of all immunization. No, I don't go

(Medical Officer ~21007~ Srinagar)

\* Personally, I don't visit. I organize weekly meetings for workers. Workers give me detail report. So I don't have to go for visit

(Medical Officer ~04005~ Bilaspur)

\* They do not come at the time of UIP. They come during pulse polio

(Anganwadi Worker ~05033~ Burdwan)

\* Medical officer has not seen our area at all, not only in last three months, but also never in 17 years. Our supervisor also never comes

(Health worker ~09010~ Jamnagar)

\* Immunization is conducted only when doctor is there. Without doctor we don't conduct it. Supervisor will be there DMO, DIO come for inspection only

(Health Worker ~22021~ Thiruvananthapuram)

#### Activities Monitored During Visits

**[68]** District Managers, MOs, HWs and AWWs were asked about the activities related to UIP that were monitored during field visits. A majority (3+) of them mentioned about checking the registers and reports to assess the coverage of immunization and dropouts. Cold chain maintenance was monitored according to half to majority (2+ to 3+) of district managers, MOs and HWs. Monitoring the technique of giving injections and sterilization of equipments were mentioned by approximately half (2+) of District managers, MOs, HWs and some (1+) AWWs. Nearly half (2+) of District managers and some (1+) MOs reported that they monitored the logistic arrangements for vaccine transport which was endorsed by some (1+) HWs. Activities of HWs like organization of sessions, regularity of staff, coordination between workers were mentioned as monitoring issues by some to half (1+ to 2+) of MOs and district managers, but very few (<1+) HWs and AWWs concurred on this. Monitoring overall performance was mentioned by some (1+) from all the categories. Other activities related to UIP that were monitored included IEC activities, attending to community reactions, rectifying mistakes observed during the visits, proper disposal of waste materials etc (<1+)

\* They will inspect the vaccine carrier. Check the vaccines in the vaccine carrier and examine the stage of the ice packs. They see the methods of our immunization

(Health worker ~23013~ Vellore)

\* I did vaccine monitoring: maintenance of cold chain; whether the workers were doing their job carefully or not; and whether workers sterilize it properly or not; were the beneficiaries called or not and any other problem in immunization region. All were done by us

(Medical Officer ~08007~ Gwalior)

\* First of all I monitor cold chain, because if the cold chain is not maintained then there is no use of immunization. If an ANM is organizing any outreach session, then I see whether ice packs are fully

#### **Supervision: Benefits**

[71] HWs and AWWs were asked how the visit by the supervisors to out reach immunization sessions helped them to work better. Nearly half (2+) of the HWs and some (1+) of AWWs informed that such visits helped in motivating resistant clients and clarifying the doubts of public thus improving client acceptance.

Nearly half (2+) of AWWs and HWs referred to these visits as learning experiences as they got more information on proper conduct of immunization and clarified doubts. Supervisors shared work by giving vaccinations/screening children and served as a source of encouragement for health workers, according to some (1+) HWs.

\* It helps us a lot. Whatever is not possible for us to do become possible whenever our supervisor takes a part. They influence and convince the parents more than us in such sessions

(Anganwadi Worker ~21029~ Srinagar)

\* People feel better when vehicles and officers come. And even when other people visit, people feel good thinking that doctor has come and they come to consult him for treatment of diseases. And, when they come they take our vaccines too. They are feeling more comfortable and have more faith in us

(*Health Worker ~03021~ Berhampur*)

\* It is encouraging for us, we get motivated. I think that if they are going to check every day we are going to do much better. We do it, but it does make difference

(Health worker ~02014~Aligarh)

#### **Reporting:** Problems

[69a] Regular reporting is an essential component of monitoring of UIP activities. When providers and implementers were asked about the problems associated with immunization reports, a majority of (3+) MOs and a few (1+) District Managers perceived no problems. Late reporting was mentioned by nearly half (2+) of district managers and MOs. Incomplete and inaccurate reports were more of concern to district officers (2+) than to MOs (1+).

\* The reports, which come from peripheries, are monitored at block level. On the basis of data, which are coming from there, I have been giving feedback to them. I have given the instructions to check the reports for the material that has been distributed-match them for actual receipt and usage and balance. The second problem we face is that the reports should reach on time. We also face a problem that we receive report after several reminders.

#### (Chief medical Officer ~01003~ Agra)

\* Every time reports are not correct. Some times we receive wrong reports (District Immunization Officer ~21002~ Srinagar)

[69b] Talking about the reasons for such problems, approximately half (2+) of district managers confided that delay occurs at many levels as these reports are forwarded to district after consolidation at different levels. Lack of training and resultant ignorance of health workers in calculation and consolidation, shortage of manpower, poor work culture and subsequent laxity in work are the various reasons cited by district managers and MOs. Remote location of the health centers and preoccupation of health staff with other activities are mentioned by some (1+) medical officers.

\* The problem is workers are to be trained a bit. They are to be oriented in consolidating reports. Otherwise there is no problem.

(District immunization Officer ~21003~ Srinagar)

\* There are so many difficulties. Some where staff is less, some where they do not live there (Chief Medical Officer ~18003~Patna)

\* We have a Performa for monthly report, which we do not provide, as we have no supply of Performa. In that case what we tell them to prepare a Performa from a blank paper.

(Medical Officer ~12008~ Kolkata

[70] Chief medical officers narrated a few instances where the feedback from monitoring and supervision was used to change the implementation strategies of routine immunization. Besides attending to the training needs of health workers, motivating resistant groups, locating venues in village for outreach sessions and rectifying the shortage in manpower were the other aspects looked into. One of them mentioned the development of a booklet containing all the beneficiaries in an area for making appropriate entries during immunization so as to avoid mismatch between actual and reported coverage. Similarly an instance was mentioned regarding preparation of a manual on immunization and getting it printed with the help of a voluntary organization for circulation among the peripheral workers as it was realized that ANMs lacked adequate knowledge on immunization.

\* 32 children belonging to Muslim minorities were identified by some of our staff. I picked up UNICEF person and went there and we explained them regarding benefits of immunization. Success was that all the 32 got immunized

(District Immunization Officer ~13003~ Kurnool)

\* We sent reports to the higher authority stating that if a meeting of mothers could be arranged involving Health Workers and NGOs then it would have a good effect. They accepted our proposal. And, we conducted a mothers' meeting with staff. After this, we feel some improvement has occurred (Medical Officer ~05005~ Burdwan)

\* Earlier we use to give vaccine on Saturday. But, people of Jharkhand do not go to field on Thursday. So people stay at home and children are available on this day. So we changed the day from Saturday to Thursday. This was a gradual switch over

(Medical Officer ~20006~Ranchi)

#### Suggestions for Improvement in Monitoring & Supervision

[72] Some suggestions of district managers to improve the monitoring and supervision of UIP were elicited in the current evaluation. Monitoring the programme strictly at all levels and increased frequency of supervisory visits were suggested by majority of (3+) district managers. Other important points suggested by some (1+) included providing mobility support and adequate manpower, regular meetings with supervisors of health and ICDS, and involving NGOs and other agencies in monitoring and supervision.

\* Monitoring should be done at every level. At the Block level, Medical officer has been made the immunization in-charge. Because at the Block level he/she has to look after all the work, so a separate Medical Officer and staff should be there to looks after the immunization related work - right from keeping the vaccine to monitoring at the field level. This is at the block and sub-centre level.

(Chief medical Officer ~06003~Darbhanga)

\* Usually, if we start from the primary health centre level onwards we have to give training to the supervisory staff. Not only the motivation has to be improved, but they have to be given training too (District Immunization Officer ~22003~ Thiruvananthapuram)

\*I had told you before that we are not having mobility support. How it can be done. How to go and do supervision. That is main problem

(District Immunization Officer ~03003~ Berhampur)

Instances were quoted where the feedback from monitoring and supervision helped in changing the implementation strategies. Various functionaries tried innovative approaches so as to benefit the programme. New methods for motivating the resistant groups and improving the coverage were tried.

#### 5. 1.8. Co-ordination

[73 & 74] For better implementation of any programme interdepartmental and intra departmental coordination is necessary. When asked about the way in which CMOs shared information with DIOs, RCH and other programme managers, approximately half of the (2+) CMOs opined that sharing of information was done by coordination at different levels through coordination meetings with programme officers or during monthly meetings at block and district levels. A few (<1+) mentioned establishing personal contacts. A few (<1+) others opined that roles of each have been spelt out clearly and hence there was no problem in coordination.

\* There are different officers to check up different activities. To monitor the activities of different officers we have a review meeting on 14th of every month. In that meeting, the different officers come with their note sheets showing where they had gone and how they were doing, the loopholes etc. We rectify them and make the programme.

(Chief medical Officer ~05003~ Burdwan)

\* Every month we conduct a meeting at the district level. Gather all the medical staff and paramedical staff. In that meeting we discuss about concerned programmes

(District Immunization Officer ~24002~ Visakhapatnam)

\* RCH and other programme managers have a regular programme meeting at the district level every month, where we exchange our views. Then we have the monthly meeting where only Taluk health officer also come along with Women and Child Welfare officers. So we share our views and we take necessary action.

(District Immunization Officer ~15002~ Manipal)

# Contribution of ICDS Functionaries in Implementation of UIP

[75] Across the country, ICDS functionaries partner with health department / personnel in the implementation of regular immunization programme. District level officers and MOs were asked about their perception regarding the contribution of ICDS functionaries. A majority (3+) reported that they were the pillars of UIP - very supportive and contributing significantly in the implementation of UIP. Only some (1+) of the medical officers and a few district level officials mentioned that ICDS functionaries have minimal role or there is lack of cooperation from them.

\* They work along with ANMs at the grass root level and share their work. They do not distribute the tickets that are done by the ANMs. But, they arrange the cases and give vaccines that can be given orally. As they are related with the health department at grass roots level the staff work jointly.

(District Immunization Officer ~12002~ Kolkata)

\* Whether routine immunization or PPI, Anganwadi workers are the main stakeholder for both programmes. Anganwadi workers closely work with our ANM. Anganwadi workers cooperate in organizing the routine immunization sessions plus PPI

(Chief Medical Officer ~19003~ Dibrugarh)

\* Anganwadi workers is doing a lot of things, we health people are going and just giving immunization. The programme is because of the ICDS people

(Medical Officer ~03005~ Bilaspur)

\* At present I think this UIP programme can't be run without the help of ICDS workers. First thing they are exclusively women and as a result it is easier for them to communicate with women. Secondly they can motivate the people very well

(Medical Officer ~05006~Burdwan)

[76] Regarding the coordination between health department and ICDS at different levels most (4+) of the district managers opined that at grass root level ANMs are working in close coordination with AWWs, at block level CDPOs coordinate with MOs, and at district level CDPOs attend monthly meetings and coordination meetings with programme managers. During these meetings they share information and discus shortcomings or problems.

\* At our district level meetings, all the CDPOs attend and CDPOs also attend block level meetings. Also at the sector level, the Anganwadi worker meet and there our workers also go. And, the sector medical officer is also present. Always they are coordinating at all levels

(District Immunization Officer ~03002~ Berhampur)

\* For coordination I am conducting monthly meetings on every 24<sup>th</sup> of the month. CDPOs are invited and at the Block level these ICDS supervisors are conducting meetings with the BMOs and we are discussing the problems

(District Immunization Officer ~21003~ Srinagar)

Coordination with Anganwadi workers and helpers is mainly through requisiting their help in organizing and conducting outreach immunization sessions as reported by majority (3+) of HWs and AWWs. Communicating frequently, maintaining relationship and mutual cooperation and participation was mentioned by nearly half (2+) of them. Only some (1+) HWs mentioned that AWWs have no role in UIP and hence no need for coordination.

\* We are not able to work without the help of health workers and they are not able to work with out us. When they come for immunization in our Anganwadi if we do not take the child who are to be immunized, how would they know which child is to be immunized. So we have to help them

(Anganwadi worker ~17023~ New Delhi)

\* We work hand in hand with each other. When ever there is any date for immunization or survey, they tell us before hand and we reach on that very date and discuss and plan all the activities

(Anganwadi worker ~21031~Srinagar)

\* We do all the work together. It is not only the work of Anganwadi worker and helper. But, it is work of every body- to give better services to immunize children. If we do work alone we can cover only one lane from the area but with the help of Anganwadi worker our performance becomes better because they call people more in number. People have faith in us because they [Anganwadi worker] work in that areas, people trust them because they meet the people more than us

(Health Worker ~17021~ New Delhi)

# Coordination with Grassroots Level Organisations/Groups

[79] As coordination with non-health departments, organizations and personnel play a significant role in the implementation of any public health programmes, DIOs, MOs and implementers were asked about the ways in which coordination was achieved with NGOs, CBOs, self help groups and women's groups. Some (1+) district managers and approximately half (2+) of MOs reported that NGOs and CBOs had no role in UIP and hence no need for coordination. Some (1+) from both categories indicated that coordinated activities are confined to PPI only. Among those who coordinated, nearly half (2+) of DIOs mentioned that they seek cooperation on specific issues like motivating resistant cases and holding immunization sessions in remote areas. Some (1+) of the DIOs were of the opinion that coordination is done with these groups at certain levels only. Nearly half (2+) of the DIOs and some (1+) of MOs mentioned joint programmes, exchange of views, discussion of issues or inviting them in the planning stage itself as methods to coordinate activities with these groups. Some (1+) medical officers pointed out that they seek their help in implementation; especially organizing and conducting out reach immunization programmes by arranging venues and vehicles. Communicating frequently, maintaining relationship, giving mutual

respect and use of personal influence were mentioned by some (1+) MOs.

\* At block level our in-charge attends the Panchayat meetings every month (District Immunization Officer ~03002~ Berhampur)

\* During regular immunization programmes we don't come across any of these NGOs or any of the outside people. But only during the mass programmes like the pulse polio or any other mass programmes they are involved to mobilize the people, to give the information about the programme. (Medical Officer ~15004~Manipal)

\* As we have organized outreach in the remote areas, then we have to take the help of NGOs, because they have a public dealing. They communicate by taking their people.

(Medical Officer ~19007~Dibrugarh)

# Coordination with Panchayat

Regarding coordination with Panchayat members, approximately half of MOs (2+) felt that they had no role in UIP. Some (1+) DIOs mentioned their involvement in PPI only. Nearly half of DIOs (2+) and some (1+) of MOs reported joint programmes, exchange of views, involving them in planning stage itself as means for coordinating activities with Panchayat. Some (1+) MOs mentioned that they cooperate on specific issues and not on a regular basis.

# Problems in Coordination

[80] Coordination of activities in UIP between health and ICDS was reported by almost all (5+) of the stakeholders. When asked about the difficulties faced in coordination between health and ICDS at different levels, a majority (3+) of district level officers, MOs, HWs and most (4+) of AWWs reported that they did not experience any problems. Some (1+) MOs, HWs and AWWs had difficulty in working together i.e., difficulty in finding common dates, different working hours for AWWs and HWs, and frequent meetings for AWWs. A few (<1+) HWs and ICDS workers accused each other for not fulfilling their responsibilities or not coming in time.

\* There is not much difficulty in coordination. Whenever small problems come up we tend to solve them immediately. There are not many problems as far as immunization is concerned.

(District Immunization Officer ~15003~Manipal)

\* We can't get their help always because their working time and our working schedule usually do not coincide

(Health worker ~05020~ Burdwan)

\* There are certain difficulties, because whenever there is any new programme/guidelines we cannot directly apply those orders to the AWWs or ICDS people, because they are from a different department. So there are some difficulties in coordination

(Medical Officer ~21008~ Srinagar)

\* ICDS workers are mainly accountable to the CDPO. Administrative accountability is to CDPO and on the other hand the working accountability remains to health centers. The coordination among this is a troublesome

(Medical Officer ~05006~Burdwan)

\* ANM thinks herself to be senior to Anganwadi Worker. ANM treats her like junior that is why the coordination is not so good.

(Medical Officer ~06005~ Darbhanga)

#### **Communication of Operational Directives**

[77] Changes in operational directives regarding programme implementation issues were communicated from time to time from Center or State to District and from there to periphery. Different stakeholders were asked about the way in which these directives were communicated to health personnel and ICDS staff at field level. A majority (3+) of DIOs reported sending copies of guidelines or circulars to health personnel while only some (1+) did so to ICDS personnel. A majority of district managers and MOs (3+) and nearly half (2+) of HWs & AWWs reported that these directives are conveyed or circulated in monthly meetings / sector meetings or review meetings, for both health and ICDS staff. Nearly half to majority (2+ to 3+) of implementers and some (1+) providers mentioned that these directives are passed on through MO to supervisors and from them to field staff. Personal communication through telephone and during visits to PHCs/Sub centres was mentioned by nearly half of DIOs (2+) for health personnel and some (1+) of MOs for both health and ICDS personnel.

\* For communicating information separate meetings are held. During sector meetings doctor, sister supervisor come to give information

(Anganwadi worker ~16028~ Mumbai)

\* For informing any such changes or messages, routinely I conduct meeting every Friday with my workers. Monthly, we will have sectoral meeting for ICDS workers, in that we convey all the messages to them.

(Medical Officer ~07007~ Gulbarga)

\* What ever information we are getting from the state / center, we are making copies and sending circulars and giving it to ward MOH and health posts

(District Immunization Officer ~16002~ Mumbai)

\* Monthly meetings are held and directions are given in this meetings- BMO give direction in the monthly meetings. They tell the regional workers

(District Immunization Officer ~04002~ Bilaspur)

[78] District managers (CMOs) were asked about ways in which they ensured that the information was communicated to various levels without getting diluted and distorted. Half (2+) of the CMOs opined that the information was disseminated in meetings held at different levels so that all of them get the same message. The information is passed on from higher to lower levels so that every body knows about it and any distortion could be corrected. Guidelines are circulated in writing with instructions to avoid dilution or distortion.

\* Whenever I receive a notification or some kind of information about the revised guidelines, we make a copy of that and circulate it to all the PHCs.

(Chief Medical Officer ~15003~ Manipal)

\* Our aim is not to let this information diluted. So we give instructions in written form, as banners and posters, so there are less chances of it being diluted

(Chief medical Officer ~09003~Jamnagar)

# Balance Between Administrative Responsibilities and Field Visits

**[81]** District and block level providers are entrusted with administrative responsibilities as well as field visits in UIP. In response to a question how they kept a balance between the two, nearly half (2+) of them mentioned that they are doing both with the help of staff and that it has become a routine. Some to half (1+ to 2+) of them indicated that they kept a balance by proper time management and planning fixed time schedule for both – field visit in the

morning and administrative work in the afternoon. Some (1+) district officials reported working overtime to keep balance, while some (1+) others gave more attention to field visits and for them administration was secondary. Some MOs (1+) made field visits rarely or only when vehicles were available or free from administrative work while some others (1+) confided that it was indeed difficult to manage both because of paucity of time and shortage of staff.

\* Field workers' supervision and monitoring definitely suffers from my side. Because I don't have transport facilities. But, regarding this administrative part, I take care of these returns throughout. I make them understand, I educate the workers here in my office. We call a meeting here every month on  $20^{th}$ . They come with their returns, we just go through those returns and we pinpoint their mistakes - we tell them and we make them understand.

(District Immunization Officer ~21002~Srinagar)

\* Every month we will prepare tour programmes plan. Fridays and Saturdays are allotted for immunization field work and remaining five days are allocated to administrative work and other programmes

(District Immunization Officer ~24002~ Visakhapatnam)

\* It is not very difficult to maintain the balance between field work and administrative work, because all our staff help us wholeheartedly

(Medical Officer ~05005~ Burdwan)

\* Field work and administration work: as most of the curative and preventive work is done inside the hospital only. So field visit is not required much

(Medical Officer ~18006~ Patna)

#### 5.1.9. Social mobilization

[83] Social mobilization is an essential component of any public health programme to make people aware of the services being offered and thereby increasing their utilization. Providers and implementers were asked about the awareness activities undertaken to promote UIP in their area. Some (1+) from all the categories didn't feel the need for IEC activities, as people were well aware about UIP. Some (1+) others from all the categories mentioned routine personal communication given by HWs and AWWs during house visits. Nearly half (2+) of them reported awareness generation through mothers meetings, group meetings, health camps etc. and another half mentioned advertisements, slide shows, banners and announcements. Use of media either print or electronic was reported by some (1+) district officials only and very few (<1+) from other categories.





\* As far as immunization is concerned, there are a lot of NGOs who are involved in these areas and we are trying to activate them. We are trying to link the NGOs working with children with these routine immunization programmes, so that our immunization programme is strengthened

(District Magistrate ~14001~ Lucknow)

\* To create awareness about UIP activities, inter-personal communication is used. This method we are using maximum

(District Immunization Officer ~07002~ Gulbarga)

\* For strengthening at grassroots level, mothers meetings are held at Gram Panchayat, Stree Sakthi and Mahila Swastha Sanghas levels. The mothers are given full information about vaccines

# (Chief medical Officer ~07003~ Gulbarga)

\* Recently we had a camp in which our Deputy CMO, teachers, all field workers, religious leaders (Imams of Masjids) participated. In this awareness camp, the significance of immunization was discussed. In this programme, particularly the religious leaders (Imams of Masjids) played the best role as they talked in their respective Mohallas, about the significance of immunization.

(Health Worker ~21019~ Srinagar)

**[84]** Regarding the communication channels that were effective in motivating clients to utilize UIP services, a majority of district officials (3+) and half (2+) of MOs and implementer categories mentioned interpersonal communication as valuable method. Whereas electronic media was perceived as more effective by a majority of (3+) MOs, HWs and AWWs and half of (2+) district officials. Other communication channels were perceived as effective by only some (1+) from all these categories.





\* No doubt it is field visits. During house visits we could understand their problems. We could talk with them and they are also free to talk with us and they will also accept what we are telling them (Health Worker ~22015~ Thiruvananthapuram)

\* In every area, all sort of persons like to see television and when advertisements come on television, people use them and they follow them, Televisions has got special importance

#### (Health worker ~01011~ Agra)

\* Message should be given according to people's interest. Influential and popular cinema artists will attract them (people) now it (message) is also given like this

(Chief Medical Officer ~24003~ Visakhapatnam)

\* Most effective channel is the inter personnel communication between ANM and health worker and community. TV and Radio do not reach to all the areas., So the motivation by the health workers is of prime importance

#### (District Immunization Officer ~19002~Dibrugarh)

\* In it the involvement of local people, leaders and of Gram Pradhans is very important. With them we should communicate at the grass root level and in their own language. If their own person can talk then that would be more effective.

(District Immunization Officer ~02002~ Aligarh)

[85] When asked about specific messages used to promote UIP approximately half (2+) of MOs, HWs and AWWs and half (2+) to majority (3+) of client categories opined that there are no specific messages or they have not heard of any. Only some (1+) district managers shared this view. Nearly half (2+) of all categories i.e. providers, implementers, clients and facilitators (NGOs & Leaders) except non-utilizer clients reported that these messages are related to vaccine preventable diseases, benefits of vaccination and consequences of non-immunization. Some (1+) MOs, HWs, AWWs and facilitators mentioned that there are messages on polio. Approximately half (2+) of District Managers and facilitators, and some (1+) MOs and implementer categories mentioned that health information on UIP is available from various sources even though specific messages are lacking. But, very few (<1+) client categories agreed to this.

\* I have not heard any messages regarding immunization programme

(Utilizer ~15053~ Manipal)

\* I have heard about immunization that if we go for immunization in time, children can be saved from problems and diseases. Children who do not get immunization develop diseases.

(Partial utilizers ~17071~New Delhi)

\* "Tika Karan Karaye Aur Bimnari Door Bhagaye" (Get the vaccination done to keep the diseases away) (Anganwadi Worker ~17025~ New Delhi)

"Immunize your children to protect them from six deadly diseases"

(Medical Officer ~04008~ Bilaspur)

\* "Bachch Ka Jindegi banana hai Tikakaran Karwana hai"

(Medical Officer ~06007~ Darbhanga)

\* "Immunization is not waste it is an investment for the future generation" This is the slogan we are using

(District Immunization Officer ~13002~ Kurnool)

**[87]** Implementers were asked about the ways in which communication channels could be used effectively to inform beneficiaries about routine immunization. Most of (4+) HWs and AWWs emphasized interpersonal communication through HWs & AWWs during house visits, antenatal visits, group meetings etc. More publicity through electronic media, propaganda through printed media, IEC materials, messages in local languages were also suggested by nearly half of (2+) HWs and some (1+) AWWs. Other publicity channels like health camps, rallies, announcements in religious centres, use of folk art were mentioned by some (1+). A few (<1+) of them suggested publicity through influential persons in the community, involving NGOs, Panchayat and private practitioners, and higher authorities to motivate and mobilize clients.

\* For creating awareness, banner is one of the means. And another is a loudspeaker. These are used so that people listen to and understand. On hearing the loudspeaker an illiterate person would definitely come out of the house and listen to what is being said.

(Anganwadi worker ~01023~ Agra)

\* If we paste posters at places like junctions, bus stops etc. people see it, read and understand

(Anganwadi worker ~22032~ Thiruvananthapuram)

\* We should give more emphasis on the fieldwork. We should go to the field, as it is useful. As my experience is concerned, about 60% I am getting from field. If we will sit in the centre then no body will come. When we will go to the field it creates awareness among the people

(Health Worker ~21012~ Srinagar)

\* TV is present in almost all houses and all watch TV programmes. Thus, campaign through TV could be strengthened. CD cassettes may be prepared. Propaganda through FM wave will be beneficial. When people hear the message of UIP, they will pay more attention

(Health worker ~05019~ Burdwan)

# 5. 2. Client Behavior

#### 5. 2. 1. Health seeking

**[88]** Health seeking behavior of the clients in general influences the utilization of immunization programme also. When asked about the action taken by them when a child falls sick, almost all the (5+) client categories, utilizers, partial utilizers and non-utilizers reported that they consult doctors or go to hospital. Very few (<1+) mentioned about resorting to self-treatment, use of other systems of treatment or consulting traditional healers.

#### Decision Making in the Family

**[89]** A majority (3+) of utilizers and most (4+) of partial and non-utilizers reported that the decision in the family about the type and place of treatment is taken jointly by the couple or either by husband or wife. It is interesting to note that the decisions regarding treatment were taken by family members or other close relatives in case of approximately half utilizers and partial utilizers and some of non-utilisers.

#### Discussion about the Immunisation of the Child

[90] A majority (3+) of non-utilizers and nearly half (2+) of utilizers and partial utilizers never discussed immunization issues with other family members or neighbors. On the contrary, majority (3+) of utilizers, approximately half (2+) of partial utilizers and some (1+) non-utilizer clients did discuss benefits/ harmful effects of not giving immunization with family members and neighbours. Other issues discussed were side effects/adverse effects, immunization schedule, and reasons for non-utilization.

#### Role of Spouse in Immunisation of Child

[91] Besides the utilisers, partial utilisers and non-utilisers, the AFP cases and their neighbours were questioned about the role of spouses in immunization of child. Most (4+) of utilizers, majority (3+) of partial utilisers and neighborhood clients of AFP reported a supportive or facilitating and encouraging role whereas only nearly half (2+) of AFP cases and non-utilizers had this view. Some (1+) from utilizer categories mentioned that husband accompanies to immunization centre or see that the child gets immunized. Husband's role was neutral more among non- utilizers (2+) when compared to utilizers (1+). Some non-utilizers (1+) mentioned that their husbands discourage immunization or create problems if any side effects occur.

\* My husband also scolded me some times. And he advised me to take my children for immunization, as immunization is good. We have to go for immunization

#### (Partial utilizer ~24066~ Visakhapatnam)

\* If I am not free my husband will take our children for immunization, He encourages getting our children immunized.

(Neighborhood Contact ~24042~ Visakhapatnam)

\* *My* husband's role was more important than mine. He used to direct me not to cook on the day and take my child to immunization clinic for immunization in time.

(Utilizers ~05051~Burdwan)

\* My husband will not listen to me. He says my child is not having any health problem so don't go for immunization

(Non Utilizers ~07077~ Gulbarga)

Place of Immunisation

[92] Utilizer clients of UIP, AFP cases and their contacts were asked about the place where they took the child for routine immunization and the reasons for the same. Only some (1+)

AFP clients mentioned that they did not go for immunization. Half (2+) of AFP clients and a majority (3+) of all other categories reported that they took the child to PHC, sub centre or government hospital for immunization. Some (1+) of them from all categories got their children immunized at Anganwadis or other outreach centres. It was observed that most of them preferred government facilities. Some (1+) partial utilizers used private hospitals also. Approximately half (2+) from all client categories mentioned accessibility as the reason for place of preference. Availability of services – safe and better facility and availability of doctor was assigned as the reason by some to half (1+ to 2+). Some (1+) others mentioned acceptability of services i.e. behavior of staff, familiarity of staff and trust in the service provided.

\* Everybody told that immunization is done there, also they don't charge money. For example if you go to private, they charge money- Rs. 70 – 80 or so. That is why I went to government facility as they charge nothing

(Utilizers ~18059~ Patna)

\* It is a government place and it is good. There is nothing to worry about if any problem arises then immediately it will be easy to complain. This vaccination programme is generally held in civil hospital. (Utilizers ~19055~ Dibrugarh)

#### 5.2.2. Factors influencing the utilization of immunization services

Awareness: Diseases That Affect Young Children

[93] The utilization of any programme would largely depend on factors like awareness, acceptability, availability and accessibility of programme services. In this context all stakeholders including district and block level providers, implementers, facilitators and clients were asked regarding the important diseases affecting children below 5 years. A majority (3+) of district providers, implementers and facilitators and most (4+) of the client categories mentioned respiratory infections as important diseases among children under five years. Vaccine preventable diseases were reported by half (2+) of all categories except non-utilizers. Gastrointestinal problems were mentioned by nearly half of clients (2+) and a majority (3+) of other categories of stakeholders. Deficiency disorders like anemia, night blindness, and malnutrition were mentioned by half to majority (2+ to 3+) of providers and implementers but not indicated as an important problem by client categories. Some from (1+) all categories spoke about diseases like malaria, tuberculosis, leprosy, skin diseases and many other ailments.





Prevention of Diseases

**[94a]** When asked about the prevention of these diseases, nearly half (2+) of the utilizer clients and facilitators mentioned about immunization whereas only some (1+) of non-utilizers and AFP clients felt so. Treatment was suggested by approximately half (2+) from all categories. Improving personal hygiene and environmental sanitation, proper child care and nutrition were other means mentioned by some (1+) from these categories. Among NGOs / Leaders nearly half (2+) of them suggested health education to mothers to prevent these diseases in children.

\* We tell them that for the prevention of disease take injection at the correct time. We make them understand that if they are taking the injections at the right time, then they don't get the disease (Leaders ~22090~Thiruvananthapuram)

\* Health education is important component. If we educate mother and train her on child development, diet of children, immunization of children, treatment of diarrhoea, sanitation, then and problems related to children in slums will be reduced.

(NGOs ~16088~ Mumbai)

\* We should give polio drops and other immunization to our children at appropriate time so that we don't have to face any problems in future - it means they won't be suffering from any sort of disease in future.

(Partial Utilizers ~16062~ Mumbai)

\* I have heard that child should be immunized. It saves the child from disease like measles, polio. Recently I heard about all these. If I know about this earlier. I would have got her immunized (Identified AFP Cases ~17034~New Delhi)

\* Even for minor illness child should be taken to hospital. Prevention at home, I don't understand (Identified AFP Cases ~10035~ Jodhpur)

#### Source of Information About Immunization Services

[95] Nearly half (2+) of the non-utilizers reported that they never got information about immunization services. Half of the (2+) non-utilizers and majority (3+) of all other client categories and facilitators reported that they received information about immunization services from hospital, doctors, or other health personnel. Anganwadi Workers or helpers and mass media formed other sources as reported by some to half (1+ to 2+) from all categories.

\* We don't get any information. No body comes to us. So how we shall know.

(Non Utilizers ~11081~ Kangra)

\* I got the information from the Anganwadi worker during her home visit and when I visited Anganwadi school.

(Utilizers ~19053~ Dibrugarh)

\* I heard from the announcement. I got information through the TV also

(Neighborhood Contacts ~07039~ Gulbarga)

\* In the hospital the day after the delivery, first they give the BCG vaccine. They also gave the immunization card and told us to bring the child one month after this vaccine to the health centre. Health worker told.

(Identified AFP Cases ~12037~Kolkata)

#### Figure – 5. 15



#### Knowledge About Vaccine Preventable Diseases

[96] NGOs / Leaders are fairly knowledgeable about vaccine preventable diseases, nearly half (2+) of them mentioned all VPDs. In the case of clients, Polio was known to majority (3+) of them and measles to nearly half (2+) of them. Irrespective of their utilization status, only a few of them (<1+ to 1+) know about tuberculosis, diphtheria, whooping cough and tetanus. About half (2+) of the clients and facilitators reported that respiratory infections, diarrheal diseases, leprosy, AIDS and cancer could also be prevented by vaccination.

#### Venue of immunisation

**[97]** Over half of the respondents knew about the venue of immunization in their area. And nearly half (2+) including all non- utilizers could not mention the place in their area where children are immunized. Apparently, lack of awareness about the programme services is an important factor for non-utilization.

#### Accessibility and Affordability

**[98 - 99]** Easy access to the place of immunization is also a determinant of utilization. A majority (3+) of utilizers and partial utilizers informed that it took less than 15 minutes for them to reach the place of immunization; the distance is less than one kilometer from their house. Approximately half of them indicated that the venue is between one to four kilometers away from their residence and it takes them more than 15 - 45minutes to reach it. Most (4+) of partial utilizers and almost all (5+) the utilizers find the days and timing of immunization convenient.

\* Days are convenient. It is on three days i.e. Monday, Wednesday, Saturday, the immunization is given the (immunization) time also is alright use to give from 10.00 - 4.00PM

(Utilizers ~14059~ Lucknow)

\* It is convenient for us. It doesn't troubles us. Present timings are suitable for us. We have no problems

(Utilizers ~17058~ New Delhi)

\* What convenient. At that time there is huge rush. But, what can be done. Vaccination has to be given (Partial Utilizers ~11071~ Kangra)

Objections Regarding Location of Immunisation Centre

[100] The utilizers or partial utilizers clients were asked about any objections regarding the place of immunization. Almost all (5+) were satisfied with the location.

\* I have no objection. It is fine it is located inside the town, atmosphere is also favorable, sitting arrangements and open space is also available

(Utilizers ~19051~Dibrugarh)

**Difficulties During Participation in Immunisation Session** 

[101] In response to questions on difficulties and problems faced while attending the immunization clinic or outreach sessions, a majority to most of clients (3+ to 4+) and half (2+) of facilitators had no problems. Among those who had problems, lack of conveyance or problems in reaching the site was mentioned by majority (3+) of facilitator categories and nearly half (2+) of all categories. Inconvenience to clients like long waiting hours, clashing with household work etc were reported by some to half (1+ to 2+) of them. Affordability and side effects after immunization were other problems expressed by some (1+) of non-utilizers and a few from other categories. Some from all categories reported problems with the behaviour of the health personnel including doctors.

\* The problem is that immunization centre is located at one place only. And, the people who have to come from distant places face a great difficulty in reaching to the centre. They suffer because of transport problem. If one more centre is created near to their area, then there will be no problem as such.

(NGOs ~21088~ Srinagar)

\* If we start in the morning, we will come back in the late night. For us it is very far off place. We have to cross the streams and hills and also we have to bear the expenditure

(FGD Non Utilizer Visakhapatnam)

\* People of villages are workers. They have to leave their work to come. Women of villages who are working in the neighboring crush mill, they do not come leaving their work. There should be some arrangement in their own area so that they can come for vaccination leaving walk for few time.

(NGOs ~20089~ Aligarh)

\* Vaccines have not come (staff says) from where will I give? Go and get vaccinated from private doctors

(FGD Non Utilizers Darbhanga)

\* We have to wait for several hours in long queue. There is a crowd. Get the vaccines with too much difficulty

(Neighborhood Contacts ~17046~ New Delhi)

\* Due to non-availability of vaccine, some times the vaccinations do not take place in our area. And, we have to go to civil hospitals. Some times the centre tells us that due to non-arrival / availability of vaccine, the sessions will be delayed. This interrupts the schedule of vaccination some times by 15 days to 1 month. It happened most of the time. Some times vaccination

sessions are not there for three months. For that I had to take my child to get at least two doses in the Civil (district) Hospital. I had to vaccinate the 9 months vaccine at the age of 1 year at Civil Hospital

(district Hospital) (FGS Utilizer Ranchi)

Reasons of Cancellation of Immunization Session & Feelings of Clients

[102] Nearly half (2+) of partial utilizers and some (1+) clients from other categories mentioned that it happened to them that they went to the immunization centre but could not get their children immunized. Among those who had such an experience, nearly half (2+) of them from all client categories mentioned non - availability of vaccines as the reason for this. Other reasons reported by some to half (1+ to 2+) of them were not opening the vial for fear of wastage of vaccine, absence of health personnel, personal reasons (went late, over crowding, not having the card) illness of child etc. Approximately half to most (2+ to 4+) of the clients reported that they get anxious and worried, disappointed or annoyed over this.

\* If they open the vial a lot of vaccine will get spoilt. If there are 10-15 children, then they will open it and give

(Partial Utilizers ~14070~ Lucknow)

\* Once I went there it was postponed from Wednesday to Thursday I had to return (Partial Utilizers ~22067~ Thiruvananthapuram)

#### Acceptability

[104] Most (4+) of the client categories described the behavior of health personnel as friendly and good at the immunization and outreach sessions. Only very few (<1+) were not satisfied with the behaviour.

\* She (AWW) also behaves properly. In case of not attending, she calls us repeatedly. She knows every one by name.

(Partial Utilizer ~18068~ Patna)

\* Behave well. They offer balloons, chocolates to the children and do behave cordially with us during immunization. I am unable to express how good they are. Because of good behavior we go to them. (Utilizers ~05051~Burdwan)

\* Mostly dealing is not good. They have no manners. My child once developed fever in duration at injection site. My mother in law was very much annoyed. Their way of talking is not proper (Identified AFP Cases ~11037~Kangra)

# Remembering of Due Date For Immunisation

[103] UIP utilizers were asked how did they remember the next due date for immunization. Nearly half (2+) of them were informed by health staff. Due date written on the card helped half (2+) of them to remember when to go for the next immunization. Some (1+) reported that Anganwadi worker also informs about the due date.

\* She comes to our home and call. We get information in this way

(Utilizers ~04057~Bilaspur)

\* They issue us immunization card. They put the dates / day on that card. So we can remember by seeing the card

(Utilizers ~07051~ Gulbarga)

\* We get to know from neighbors too! Because ladies keep on discussing such issues in front of me (Utilizers ~16054~ Mumbai)

#### Socio-Cultural Beliefs that Influence Utilisation of UIP Services

[105] The acceptability of a programme depends to a greater extent on the socio-cultural beliefs and rumors related to the programme existing in the community. When asked about the socio cultural beliefs regarding UIP,half to majority (2+to3+) of stakeholders across all categories said that there were none. Some indicated that they have positive beliefs that a child should be immunized. Apprehensions about side effects or quality of vaccine were reported by only some (1+) from all client categories. Although nearly half (2+) of district and block level providers, implementers and facilitators agreed with the majority of clients, another half (2+) of them reported that superstitious beliefs related to immunization and apprehensions about its motives exist among the clients.

\* People under creamy layer are influenced by Homeopathy medicines and believe that all vaccines are mixed in a single dose of homeopathy. Hence avoid taking routine immunization

#### (FGD Medical Officer (Mumbai)

\* People don't come out of house with child less than 1 month of age so BCG vaccine cannot be given. They postpone the vaccine but generally don't refuse totally

(FGD Medical Officer Jodhpur)

\* Measles is considered to be a goddess, so they believe that no medicines should be taken neem leaves should be wrapped and tied on the door and the child should not be allowed out of the house, after crimsoning only can medicines be given

#### (Anganwadi worker ~09031~ Jamnagar)

\* Some parents do not want their children to get vaccinated. What they do is they make an impression on the child's abdomen by heated sickle. Even the newly born baby, they think, by doing so the child would remain disease free.

#### (Health worker ~20020~ Ranchi)

\* In a family of our relative a girl suffered from paralysis attack. She was buried up to trunk in cow dunk for cure. Even when she cried they did not listen to her

(FGD Non Utilizer Gulbarga)

#### Affect

[106 & 107] Almost all (5+) utilizer and partial utilizer clients were relieved much and felt positively about having given immunization for their children. They felt that it would have been harmful for their children if they were not immunized. Though a majority (3+) of the non-utilizers regretted, felt bad and were worried, nearly half (2+) of them mentioned that they did not feel any thing for not having taken their child for immunization.

#### Problems After Receiving Immunisation

[108]Utilizers and partial utilizers were asked about any history of side effects after immunization. A majority of utilizers (3+) and half (2+) of partial utilizers responded that their children did not experience any side effects after receiving immunization. Among those whose children had experienced any problems, a majority of them (4+) indicated that they gave medication/treatment as advised. Some had gone to hospital or consulted a doctor. Some (1+) of them mentioned house-hold level management by applying ice or sponging with cold water or putting an ointment. Nevertheless, Some (1+) of them did nothing and waited for the problem to be cured on its own.

\* They have already given the medicine for fever. So we gave that and the child was cured in a few days

(Utilizers ~22057~Thiruvananthapuram)

\* I approached the doctor. The doctor told me that I should not worry about it and no treatment is necessary for that. I followed the advice.

(Utilizers ~19052~ Dibrugarh)

# **Roles and Responsibilities of Implementers – Client Perception**

**[112b]** In replying to a question on who are all involved in running the immunization clinics, a majority (3+) of utilizers and partial utilizers mentioned health workers (ANM) and sisters (nurses) or other hospital staff. Involvement of doctor was acknowledged by about half (2+). Facilitators like leaders, NGOs, SHGs etc. were also reported helping at the immunization clinics by a few (<1+) utilizers and partial utilizers. Nearly half (2+) of them mentioned involvement of AWWs at these clinics/sessions.

#### Information Provided To Clients

#### Side - Effects

[113]When asked about what was told about the expected effects of immunization by HWs and AWWs, a majority of utilizers and partial utilizers (3+) indicated that they were told about the possible side effects such as swelling and fever and their management. Approximately half (2+) of utilizers and some (1+) of the partial utilizers mentioned that they were told about the benefits of immunization. However, some of utilizers (1+) and half (2+) of partial utilizers confided that the health workers did not tell them anything about the expected effects of vaccination.

# Next Visit

[114] Regarding what the clients were told about the next visit by Health worker or Anganwadi Worker, a majority (3+) of partial utilizers confided that they were informed or reminded about the next due date. Some (1+) clients reported that they were not told about the next visit. However, some (1+) indicated that they were informed only the need for regular follow-up.

# Action Taken When People Forget About The Due Date

[116] When asked about the action taken by HWs or AWWs in case people forget to take their children for vaccination, a majority (3+) of utilizers, partial utilizers and facilitators (NGO/Leaders) and nearly half (2+) of AFP clients, their neighborhood contacts and non utilizers, reported that the workers tried to motivate them by making house visits, conveying messages through somebody, insisting to get the next dose, explaining the importance etc. Some (1+) AFP clients, neighborhood contacts and facilitators confided that they were given immunization at home. Some (1+) from all other categories and half (2+) of non- utilizers mentioned that the workers did nothing in case they forgot to report for immunization.

\* They come to our place and inform us that you have forgotten the date of immunization. So they give us the next probable date of next month of immunization.

(Partial utilizer ~16064~ Mumbai)

\* They (ANM) send massages to our houses to bring our child to them. There is another lady (AWW), who informs us that the madam asked us to bring your child. They come again and tell us to immunize. (Utilizer ~13056~Kurnool)

#### 4.2.3. Reasons for non-utilization

Even though UIP aims for 100% coverage of all the eligible children, there were some children who remained un-immunized or partially immunized. To facilitate better planning and implementation through programmatic changes it was necessary to understand the bottlenecks and problems being faced by the clients.

#### **Defaulters**

[109 & 110] District and block level providers and implementers were asked about the families or groups who never bring their children for routine immunization and reasons for the same. Some to half (1+ to 2+) from both the categories reported that poorer sections of the community including low income families, scheduled caste and scheduled tribe populations, fishermen community and migrant populations were the ones who never bring their children for immunization. Specific Communities like Muslims were mentioned by all categories of providers as well as implementers (1+).

#### Reasons

The responses for not utilizing immunization services included lack of awareness about programme services, place of immunisation and absence of knowledge about perceived benefits among the clients as reported by half to majority (2+ to 3+) of providers and some (1+) from all client categories. Low motivation and resultant negligence were mentioned as reasons for not bringing children for immunization by some (1+) district and block level providers and some to half (1+ to 2+) of the clients. Socio-cultural beliefs and rumors were perceived as reasons by all stakeholders but more so by implementers than the clients. Side effects or fear of side effects prevented some families from utilizing immunization services according to nearly half (2+) of implementers and some (1+) of the other stakeholder categories. Affordability issues were reported by some (1+) clients from all categories as well as providers and implementers. Accessibility was not a major problem as only a few respondents from all stakeholders referred to it. Graph here

\* In this urban area, one thing is that a majority is working as labourer. So that is the main reason--the time when our hospital is open that is the time for their work. (Medical Officer ~03004~ Berhampur)

\* The family physicians here are mostly Homeopath. Some of them also advocate for not taking immunization, because that may cause reaction.

#### (FGD Medical Officer Calcutta)

\* People from "Jhuggi Jhopari", illiterate people, people below poverty line, people who don't have the knowledge about it do not come because they are not aware about its benefits and losses. They don't have proper information about it -- what are its benefits for the children. They don't have information about its availability and where it is given free of cost. Due to this also they are not able to come

#### (Medical Officer ~18004~ Patna)

\* It is also common to Muslim community, because of religious taboos. They are not willing to accept polio immunization because they believe that by giving polio drops, the fertility will be reduced. Although we have been able to surpass these ideas but still it remains in some areas.

#### (FGD Health Worker Burdwan)

\* They will not be having information, how can they go. If they have information they go. How can they take if they don't even know

#### (Identified AFP Cases ~08037~Jamnagar)

\* May not be aware of benefits of immunization. Their children may be remaining healthy with out immunization

(Utilizers ~11058~ Kangra)

\* We didn't come to know about this, we are illiterate people, know little. We didn't know when and what time and from which month they start immunization. We don't know from which month they start immunization when pregnancy is there and when the child is born, we do not know about the age at which it is given

#### (Non Utilizers ~17079~ New Delhi)

\* My mother-in- law is against immunization. She will not give food to me and will shout at me and she may send me to my mother's place

#### (FGD Non Utilizer Gulbarga)

\* The reason is that I went to that place twice or thrice. First time she told me that the child is weak. He cannot be immunized yet. Next time I took the child again. She gave me the card and asked me to come to Neela (Anganwadi Centre). When I took him to Neela she was not there. I went there twice or thrice with no benefit

#### (Non Utilizers ~21084~ Srinagar)

\* We have to loose one days wage for going to hospital for vaccination and at times we used to return without vaccination for non availability of vaccination or if we reach hospital a bit later (FGD Non Utilizer Dibrugarh)

#### Figure: 5.16 Reasons for non-utilization



[111] Regarding the reasons for partial utilization, nearly half (2+) of the MOs, HWs, AWWs and partial utilizers mentioned household problems like parents away for work, transfer of parents, illness of parents or any other family members etc. as major reason for incomplete immunization. Other reasons given by nearly half (2+) of them were poor access, ignorance, ill informed about next dose, poor affordability, inconvenience due to long waiting time etc. Irregular or inadequate sessions were a reason assigned by some (1+) partial utilizers and MOs. Adverse effects in last episode were mentioned as a reason by MOs and implementer categories (1+) but very few (<1+) partial utilizers. Ill health of child on due date and loss of immunization card or not remembering the due date were other problems expressed more by clients. Migratory nature of population was experienced as a reason by some (1+) MOs, HWs and AWWs.

\* If the mothers go for delivery to their mothers houses. The older children may miss immunization. Or if the child has loose motion or fever he/she may not be immunized.

(Anganwadi worker ~15025~ Manipal)

\* They believe that pulse polio drops will protect their children from all the diseases. When asked that how many injections were given to their child, they state that, injections are not given but drops are given

(FGD Medical Officer (Gulbarga)

\* They avoid the subsequent vaccination if the child develops some reaction like fever, swelling of the thigh, etc.

(Health worker ~05010~ Burdwan)

\* Reason is that only people are not aware of the vaccination, they felt that polio and BCG

vaccines are the only vaccines. They are not aware of others that is why people do not get

immunized properly.

(Medical Officer ~16009~ Mumbai)

\* No, I haven't given. It is difficult to go there. The elder daughter doesn't walk. I have to carry both of them. It is very difficult. So I can't take them.

(Partial utilizer ~22073~ Thiruvananthapuram)

[117] All client categories, NGOs and leaders were asked about their suggestions regarding involvement of family members, Panchayat, Local Leaders, School Teachers and NGOs/CBOs/Women's Groups in increasing the utilization of immunization services in their area. Motivating and mobilizing clients to health facilities was reported by half to majority (2+ to 3+) of all client and facilitator categories as a role the family can assume. Creating awareness among beneficiaries and accompanying them to immunization centres were the other roles, which can be played by family. Regarding the role which can be taken up by Panchayat, nearly half (2+) of all client categories responded that they do not cooperate whereas approximately half (2+) of NGOs and leaders believed that they could effectively motivate and mobilize clients to health facility. The role of Panchayat in creating awareness was also mentioned by some (1+) among the facilitator categories. The same was true with local leaders also. The role of teachers was perceived as useful more by these stakeholders as nearly half (2+) of them felt that teachers could be used in motivating and mobilizing clients. Regarding the role of NGOs / CBOs nearly half (2+) of all client categories reported that they

will not do anything. But, some (1+) of them opined that the facilitators could be involved in IEC activities for generating awareness about immunization among the masses.

\* The Panchayat members should be there in village meeting, tell about immunization and they should make arrangement of these immunization programme in their village itself and also keep in contact with the new development and tell the villagers about this. Discuss with villagers about this immunization.

(Partial Utilizer ~16062~Mumbai)

\* Mahila Mandals can discuss about immunization in their meetings or special camps. This will create awareness and even those who don't give vaccination to their children, will come forwards for this. (Partial Utilizer ~11071~Kangra)

\* In schools there are mother-teacher association (MTA) and parents – teacher association (PTA). Their meetings are regular. They can talk in these meetings about immunization. (NGOs ~11088~ Kangra)

#### Suggestions for Improvement

**118**] All stakeholder categories from district managers to clients were asked to suggest practical means to improve UIP in their area. Improving IEC activities was mentioned by approximately half (2+) of district managers and MOs, and majority to most (3+ to 4+) of clients, and NGOs and leaders. The district managers mostly (4+) felt that all aspects of programme management like training, procurement and distribution of vaccines, providing mobility support, monitoring the programme activities and coordination of activities within and outside health department need to be strengthened whereas medical officers were concerned more (4+) about ensuring adequate vaccines and other supplies, and mobility support for conducting outreach immunization sessions. Considering client conveniences in planning and conducting outreach sessions by increasing the number of sessions and giving it at places closer to where the people live were suggested by some (1+) from all stakeholder categories, providers, implementers and clients. Nearly half (2+) of MOs suggested adopting more client friendly approach by the implementers and also to consider giving incentives for motivating them to perform well.

\* One step we have taken is introduction of AD syringes as on today glass syringes are used in immunization. The glass syringes sterilized by the ANM. We have taken a policy decision that we are going to implement it by April 2005. This will definitely help in improving immunization coverage. Making provision for alternative vaccine delivery and requesting the state government to fill up the vacancy posts. Also requesting the state government to provide dedicated state immunization officer and ensuring timely supply of the vaccines.

#### (Central level - Delhi)

\* Mobility support, meticulous monitoring, arrangement (procure & distribute) of vaccine regularly, inaccessible / hard to reach areas to be covered by special campaign and monthly evaluation of the programme should be given special importance. IEC should be area specific - in a manner to alleviate the doubts about UIP among the public.

(State RCH Officer, Thiruvananthapuram)

\* There should be regulatory mechanism that should be binding on all the private health care providers to participate in routine immunization programme.

(District Magistrate ~17001~New Delhi)

\* Retraining of our HWs including AWWs. They should be regularly reoriented to the programme. (District Immunization Officer ~15002~ Manipal)

\* The health worker has to carry the vaccine to out-reach immunization session, if they are given any transport facility, there may not be any possibility of breakdown in cold chain. If they are provided

with good transport facility, the coverage will be good.

(Chief Medical Officer ~24003~ Visakhapatnam)

\* Some prominent persons should highlight these programmes. Like popular movie stars, and cricket players should highlight about immunization programme - like what they have done for polio. Then it may become more appealing.

#### (NGOs ~15087~ Manipal)

\* If you tell us properly what danger we have in not giving – then we may also come and give it. Now I just get scared that if the child suffers and disturbed how shall I manage it. We don't know any thing. If you explains that this will happens to your child or this will not happen if you do not take immunization.

(Non Utilizer ~12082~ Kolkata)

# CHAPTER – VI DISCUSSION, CONCLUSIONS & RECOMMENDATIONS

#### 6.1 DISCUSSION

An overall improvement in immunization rates have been noted since initiation of *Expanded Programme on Immunization (EPI)* in India in 1978. The reduced burden of vaccine preventable diseases is a measure of success of the UIP. Reported cases of the main VPDs i.e. *Diphtheria, Pertusis, Total tetanus, Neonatal tetanus, Polio and Measles* have declined steadily in the past 15 years.

The rate of immunization coverage, however is not sufficient and the proportion of children with full immunization declined in the recent five years. Providers planned and executed the programme, but many children could not be reached. Nearly three-fourths of the districts report an average decline of 15.4 percent in full immunization rates. This decline is primarily driven by low coverage in the northern states of Uttar Pradesh, Bihar, Rajasthan and Jharkhand. Also, averages mask substantial disparities. Low average coverage is due to significant pockets in a particular geographical area or among certain population subgroups. Disaggregated statistics also indicate disparities in coverage of children living in rural areas and children living in urban areas. Furthermore, coverage in urban slums is also cause for concern.

Given this lack of sufficient improvement, in 1986, Universal Immunization Programme was given the status of *National Technology Mission*. a specific Immunization Strengthening Project which included three main components: *polio eradication, strengthening routine immunization and strategic framework development*.

The trend is still very disturbing and the reasons for such a decline are being debated. Some attribute it to diverting of resources towards Polio Eradication, while others feel that it is due to complacency among health workers and decreased importance accorded to UIP over the years. These apprehensions were examined in the context of government's commitment to achieve 100 percent coverage of children with full immunization. Perceptions and .opinions of planners, implementers and clients associated with UIP have been presented in detail in the previous chapter. Based on the information provided by the various categories of stakeholders, the strengths, limitation and their suggestions are summarized in the following paragraphs. The conclusions and recommendations are drawn from the strengths and limitations of the programme.

#### 6.1. 1 Programme planning Management

There exists an immunization plan for the district / area for the current year (5+ DIOs, CMOs & 4+ MOs). Those who do not have a plan indicate that it is a routine programme and has fixed target of 100 percent immunization. According to District level officials, bottom-up approach is used for the preparation of the plan. The Block Plans prepared using Community Needs Assessment approach involving medical officers, health workers and supervisors, are consolidated by the District Reproductive & Child Health (RCH) Officers. The personnel involved in planning at the district level include District RCH Officer, District Magistrate (DM) & Chief Medical Officer (HO& CMO), other programme officers, District Public Health Nurse (PHN), Surveillance Medical Officer (SMOs), District Health and Family Welfare Officers and Statisticians in addition to Block Medical Officers.

Surprisingly, half of the MOs had no contribution in the preparation of the Immunization Plan as they acted as directed by higher authorities. Health workers at the grassroots level develop a plan based on vaccine requirement and on the number of beneficiaries. A few MOs either help Health Workers in preparing the plan or jointly prepare with them. They (2+ MOs) contribute mainly in planning immunization sessions for their area, allocate responsibilities to workers in conducting sessions, assessing the logistic requirements, planning for monitoring and supervision, identification of beneficiaries and training of workers.

Determining of eligible children and requirement of vaccines are important parameters or issues considered in the preparation of immunization plan for their area ((2+ MOs). Equal emphasis is given to planning complete coverage and holding immunization sessions as per client convenience. Other parameters considered in the preparation of immunization plan are maintenance of cold chain, planning of immunization sessions (number, date and venue) and strengthening work force (1+). Logistic issues like ensuring availability of vaccines, syringes and needles and transport facilities are pointed out by a few of them.

The approach is different between district immunization planning for UIP and Pulse Polio programme (DLOs). Routine immunization is a continuing programme and Pulse Polio is implemented in a campaign mode. The PPI needs micro-planning as it requires more immunization outlets, additional man power, inter-departmental coordination, and uniform planning at national level with a target to cover all below five children on specific dates. In contrast, the routine immunization is a health-center based activity, where different types of vaccines are given for different diseases necessitating extensive planning according to local needs. Another main difference is the intensive IEC activities and mass coverage over a short span in PPI and routine IEC in UIP. Also, in UIP, children are brought to the immunization sitet/centre, but PPI requires also house visits for complete coverage.

For improvement in planning process, both district officials and MOs suggested different measures. District officials (2+) suggested more community participation by involving NGOs and CBOs. Yet this approach was mentioned by a few MOs. The The planning process should target issues namely improving infrastructure, increasing manpower, monetary incentives and transport at the subcentre level as suggested by approximately half (2+) of the district managers and medical officers. These improvements are essential at the sub-centre level; otherwise it is difficult to implement the plan.

Nearly half of the MOs opined that planning should give emphasis on IEC activities for creating awareness among community members. A strong and well-designed management information system with performance reviews and development of proper feedback mechanism is suggested by nearly half of the district managers. But, only a few MOs agreed to this suggestion. Increasing sensitivity at different levels by training the functionaries, and considering geographic and local needs while planning are suggested by some district managers and a few MOs.

#### 6.1.2. Training

Health Workers with the assistance of Anganwadi Workers implement the Universal Immunization Programme. But nearly half of the AWWs and some of the health workers are not trained for routine immunization programme. Approximately half from both categories received such training during the last one-year while some health workers had it as far back as 10 years ago. Block level officials provided training to majority of HWs and remaining are trained by immediate supervisors, and district level officials. There is no formal training. Immunization issues are component of the monthly meetings. Some DIOs, MOs and HWs mentioned that UIP issues are discussed in training programmes once a year. Nearly half of the DIOs, MOs and implementers (HWs & AWWs) could not specify the usefulness of training in accomplishing immunization related tasks assigned to them. However, some DIOs and MOs and approximately half of the implementers think that training is helpful in improving skills and knowledge of several aspects of immunization. Furthermore, providers were unanimous in suggesting that such trainings are useful in improving the commitment of workers to achieve 100 percent coverage. The major gain spelt out from trainings for AWWs (2+) and HWs (1+) is capacity building in areas like awareness generation (social mobilization), cold chain maintenance, sterilization of injection equipment, dosage, administration of vaccines and changes in programme strategy. Also, a majority of district officials are of the opinion that it is desirable for the workers to have clarifications regarding vaccines and vaccination in general including vaccine preventable diseases (VPDs). But, very few implementers concurred with them. Majority of HWs and AWWs were complacent with the present situation. Nearly half of the MOs and some district officials also agreed with the implementers.

#### 6.1.3. Logistics

Vaccines are procured by the Chief Medical Officers from either state head quarters (HQ) or regional centers and then distributed to the periphery. A few) of them pointed out that the consolidated requirement is sent to the state headquarters by DIO through DM & HO and hence they only play a supervisory role in procuring the vaccines. Nonetheless, half of them owned the responsibility to ensure that vaccines reach the block and sub centre in time Estimate of requirement is based on consolidation of indents sent from PHCs or CHCs in the district. Usually, the plan is prepared for the entire year, yet some reported procuring the stock for 3 months at a time and some others stock vaccines for 6 weeks. Some receive periodic supplies from the head quarter.

Vaccine requirement is estimated primarily based on ,birth rate in a population. . Only some from all categories mentioned about using community Needs Assessment or actual data on beneficiaries collected by grass root level workers as the basis for estimating vaccine requirement. ANM's registers and immunization records are also used for calculating the actual number of beneficiaries. Calculation of vaccine requirement based on both estimated number of eligibles and actual number of eligibles seems to be acceptable and perceived as accurate by health providers.

. Rarely the estimate is prepared by office staff based on beneficiary list provided by AWWs or on OPD attendance (<1+).

Besides accurately estimating the vaccine requirement ,assessment of adequate quantities of vaccines at block / PHC / health facility are also based on an active process of monitoring by going through the reports of the usage and balance, observations during supervisory visits and feed back from Medical Officers. Also requirement is met in case of shortage. MOs have the primary responsibility for ensuring adequate quantity of vaccine for their area and ensure this by submitting fresh indents after consuming 75 percent of the previously received stocks.

Despite having an established system for procuring vaccines and ensuring its adequacy at health facility, there have been instances of short supply or irregular supply of vaccines in the past one year as per majority of the district level officials and MOs and nearly half of Health Workers,. In most cases the vaccines in short or irregular supply included DPT, BCG and Measles. District officials attribute this to shortage at state level due to delay in procurement by central government or short supply by

manufacturers. But, only some MOs and HWs agreed to this view. According to them the main problem was distribution or indent supply mismatch

In the event of a short or irregular supply of vaccines, half of district level officers, and majority of MOs and HWs resorted a very passive approach of waiting till the vaccine arrived, advising clients to report later or cancelling the sessions.Half of them from all categories reported that they would inform the higher authorities through letters, faxes or by telephone or redistribute the available stock. It is interesting to note that proactive steps were taken by only some of them: procure vaccines from the nearby centres or other hospitals, personally go to the district to collect the vaccines or locally purchase using HDC funds. (Please check regarding local purchase)

The health workers are well aware of the measures for assessing the quality of vaccines supplied for immunization sessions. They assess the quality by checking the manufacturing and expiry date and ensuring maintenance of cold chain by checking the temperature of ILR, looking for ice packs and observing VVMs. Nearly half of HWs assessed the quality by observing whether the vaccines are kept at the prescribed temperature or looking for fungus or sediments in the vaccine vials.

Excess stock, is not a problem as vaccines are never in excess. Approximately half of DIOs use the excess stock with short expiry date on a priority basis. Charts are maintained showing vaccines and expiry dates. Some of them arrange camps and utilize the excess stock. Assessment of the stock position is done on the basis of monthly reports or monthly submission of returns. Every month pharmacists send the reports on stock position and demand. Also, details are solicited from the health facilities about use of vaccines and its balance during indent/monthly submission of reports. Checking the stock registers and physical verification of stocks during field visits are also mentioned by some of them.

Vaccines are distributed to health facilities according to the requirement based on the number of beneficiaries/ target children to be covered by them. Some of them did so based on action plan or reports received from PHCs. In case the supply fell short, the vaccines are distributed as per the proportion of population/target children at each health facility (2+DIOs). Some of them borrow from the neighboring districts to cope up with the shortage. Vaccines are sent first to distant areas for out-reach sessions as a priority. Also priority is accorded to low coverage areas, PHCs or CHCs having inadequate stock, and for children who are due for 2<sup>nd</sup> dose or those who are to get the first dose.

There are sufficient budget allocations for transport and hence no problems are faced on this front as opined by half of district managers and some medical officers (2+DIOs & 1+MOs). Half of the district officials manage such problems by sharing the vehicle or funds for fuel or tied up with other programmes or officials. But nearly half of MOs used their own vehicle or spend from their own pockets. It was also observed that a few DIOs and some MOs plan field visits only when transport is available.

#### 6.1.4 Cold Chain

There are no problems in maintaining cold chain during storage and transport of vaccine according to nearly half of district immunization officers.. However, a few did not rule out the possibility of breakdown of cold chain at all levels. Approximately half of them mentioned problems at the peripheral level or during transport from periphery to vaccination sites. Major problems in storage of vaccine, leading to breakdown in cold chain, are shared commonly by district and block / PHC levels. They include inadequacy / mechanical problems of cold chain equipment, failure of power supply and absence of trained manpower for monitoring. Major coldchain problems while transporting vaccine from state/regional stores to district head quarters are breakdown of vehicles and careless handling by keeping the vaccine outside for long before loading to the vaccine van.. Regarding the breaks in cold chain during transport of vaccines from PHC to field, nearly half of the Medical Officers mentioned

that there are no problems, while another half mentioned problems such as exposure of vaccines to sun light, inadequate ice packs or no proper replacements and ignorance or carelessness of workers in handling vaccine vials. Also, a few mentioned reasons such as reaching inaccessible areas took too much time, inappropriate mode of carrying vaccine carriers and exposure of vaccine to heat. It may be noted that many of these problems at the outreach level are primarily related to the absence of mobility support.

A majority of MOs and nearly half of DIOs monitor the ILRs and freezers daily, check the vaccine temperature, maintain temperature chart, check ice packs, monitor power supply, ensure proper defrosting and check the storage of vaccines at district and block levels. This task is also entrusted to separate staff - Refrigeration Mechanic- at district level. Some of the MOs and DIOs supervise immunization sessions to ensure proper storage of vaccine in vaccine carriers and to see whether ice packs are fully frozen or not. Indirect monitoring functions are carried out by going through records and examining the log sheet. Monthly feed back from PHCs, and collection and testing of vaccine samples during surprise visits by a few district level officials and MOs are other ways of monitoring.

Electricity failure or voltage fluctuation is the main problem encountered in the maintenance of cold chain system across the country (3+ DMOs). Some mentioned shortage of necessary cold chain equipment (Deep Freezers, ILR/ Generator/Voltage Stabilizer) and mechanical problems of these equipments. Also, a few indicated inadequate transportation facilities and ignorance / carelessness of HWs

Minor problems in cold chain equipment are repaired locally. In case major problems with cold chain equipment nearly half of the MOs informed the higher authorities for necessary action. Nearly half took urgent steps to get it repaired by higher authorities. In both minor as well major problems, alternate storage arrangements are made by shifting vaccine to other cold chain equipments or transferring vaccine to other centers. Some of MOs follow a passive path of informing higher authorities and waiting.

The HWs have a good understanding of cold chain and its maintenance. A majority of health workers keep ice packs in vaccine carrier or replaces them if necessary. Other ways to maintain cold chain are keeping the vaccine carrier away from direct sun light, not opening the carrier frequently, ensuring maintenance of temperature at 2-8 degrees celsius, keeping the lid of the vaccine carrier tight, and collecting vaccines from PHC on the day of immunization and returning unused stock on the same day. Approximately half of the Health Workers do not have any problems in maintaining the cold chain in the field. Among those who face problems, a majority has\_difficulty in getting ice packs either because of power failure or some problems at PHC or difficulty in procuring and replacing ice in the field. Some face problems such as not getting suitable venues for conducting outreach sessions, keeping vaccine carriers in open sunlight, frequent opening of vaccine carrier as children do not turn up at one time, absence of mobility support to carry the big vaccine carrier forcing some of them to resort to alternate means like carrying vaccine in smaller flasks etc.

#### 6.1.5 Implementation

# Role & Responsibility

The major roles of district level functionaries include supervision and monitoring programme performance (3+) and management of resources (including procuring and distribution of vaccines and other materials / equipments, mobilization of funds, ensuring infrastructure and other support required for implementation). Health workers besides creating awareness generation, motivating and mobilizing children for immunization (1+), prepare for the immunization sessions by collecting vaccines, sterilizing syringes and needles (3+). A

majority of AWW assist by mobilizing children for immunization sessions. Some also organise outreach sessions and facilitate the process of immunization as well as awareness generation activities as their responsibilities.

In the absence of adequate staff not in position, alternate arrangements are made by appointing ANMs on contract basis, deploying ANMs from nearby centres or deputing additional staff. Some adjust with the available staff by sharing the work. Sometimes local practitioners, NGOs, SHGs etc are involved. Conducting of Special drives/camps to compensate for shortage of staff is mentioned by some of DMOs, but none of the MOs. A few MOs train grass-roots level functionaries, and encourage active participation of AWWs. Sometimes they reshedule sessions or combine sessions or arrange additional sessions.

#### **Identification of beneficiaries**

House to house surveys are conducted for identification of the eligible clients. Nearly half (2+) of the MOs, HWs and AWWs mentioned records and registers as methods used for identification Screening children while reporting to the centre or attending OPDs and verifying immunization cards are other methods of identification

#### **Outreach Immunization Sessions**

Outreach sessions are not organized in many areas. The frequency varies from place to place, twice a week to twice a month or even once a month. In some centres sessions are carried out according to fixed plans. The criteria for organizing outreach sessions in an area include number of beneficiaries, low socio economic status, poor access to health facility, and low immunization coverage. The venues for immunization are Anganwadi Centres, schools, local libraries, temples, homes of volunteers or a common place and even tree shades in villages. Vehicles are some times mobilized from the PHC or ANMs go on their own. Sometimes team approach is adopted and involves all health workers and arranging outreach sessions in difficult to reach areas. The transport is arranged, according to a plan two persons are dropped at each point and the vehicle moves forward to the last place.

Medical officers are responsible for the posting of staff and some times calculating requirement of vaccine. Beneficiaries are informed one day before about the venue and time of session. Equipment, and vaccines are arranged by HWs. Vaccines are taken in vaccine carriers. Also, HWs are responsible for sterilization of syringes and needles, giving immunization and keeping record of immunization. Some of the health workers involve influencers in the community: members of local panchayat, mahila mandals, NGOs etc in motivating community. Most of the times the support of AWWs is sought in conducting outreach sessions. Anganwadi workers are mainly involved in motivating and mobilizing beneficiaries for immunization. The services of Anganwadi helpers are utilized for bringing beneficiaries in case they do not turn up for the session. A few implementers conduct the session a day before or after if the fixed day turned out to be a holiday. If the number of children is more, they give DPT, Polio and hepatitis first, and BCG and measles later. Unused vaccines are carried back to PHCs in icepacks if they are not to be discarded.

#### **Fixed Days/Dates for Conducting Immunisation Sessions**

Immunization is administered in fixed sessions (5+). The frequency of conducting sessions varies. While half of HWs mentioned about fixed sessions twice a week or more, but, very few AWWs agreed with them. Once a week sessions on fixed days are mentioned by half (2+) of HWs and some (1+) of AWWs. Immunization session is conducted once a month as fixed sessions (2+AWWs) and some (of them reported it as monthly but not as fixed sessions.

During the last one year, a majority conducted 75-100 percent of the planned sessions. Some Medical Officers mentioned conducting 50 - 75 percent sessions. Nearly half of District Managers and some of MOs could not specify the proportion of planned sessions held. A few district level officials and some MOs did not conduct any outreach sessions. Majority of the HWs and AWWs did not cancel or postpone any sessions. But there were instances of cancellation or postponement of immunization sessions (2+ HWs & AWWs). Pulse polio programme and non-availability of health staff are main reasons for cancellation of the immunization sessions. Other reasons are non-availability of supplies, adverse climate, overlapping with other programmes and other inconveniences like holidays, festivals, venues etc. There is no adverse reaction (2+) when immunization sessions are cancelled as people are not bothered and attend the next possible session. Another half of district managers and some of all the other categories mentioned that the community reacts negatively, get annoved and express their resentment. Sometimes people complain to higher authorities such as MOPHC, District Level or health committee. People ask the reason for cancellation and cooperate if prior information is given about it. Non-cooperation of people next time round is mentioned by very few of the stakeholders from all categories. People express their concern about the delay while some parents/guardians get the immunization from private hospitals.

The major difficulty in conducting outreach immunization session is transportation. Another problem is shortage of manpower (2+). Except AWWs, non-availability of supplies was mentioned by some (1+) from all categories. Maintaining of regularity of services, without cancellation or postponement of sessions is difficult. Client related difficulties are population migration, inconvenient timing and resistance from some sections of community (1+ to 2+).

#### Handling of Adverse Effects

Some implementers had experienced adverse effects following immunization like abscess formation, local swelling, rash etc. In such situations parents get annoyed and react violently and blame health workers for negligence, faulty technique of immunization improper sterilization, poor quality of vaccines etc. Mothers express sorrow, get depressed and feel insecure. Adverse effects are counter productive and make parents / guardians hesitant to take their children for next dose of vaccines. In such situations, a majority of implementors resort to explaining and counseling the guardians. It is the HWs, who manage at her level - cases are referred to MOs and managed appropriately in the hospital. Some DIOs mentioned that precautions are also taken to prevent such incidences in future and also workers are trained.

#### **Improvement in Coverage**

Although a few do not make any special efforts to improve the immunization coverage. Others use varied steps including generating awareness using interpersonal and mass approaches to improve coverage. An important step is in improving intradepartmental and intersectoral coordination (2+). Attention is also paid to increasing infrastructure facilities (vehicles, ILRs, deep freezers etc), improving supervision and monitoring, ensuring complete coverage by special efforts and not missing outreach sessions. In addition workers are provided training and ensuring logistics support.

#### Areas with Inadequate Services

UIP aims at 100 percent coverage. Half of the health providers were of opinion that all children are immunized and there is no area or community without inadequate services. Nevertheless, communities such as Muslims, poorer sections, scheduled castes, schedules tribes and fisherman populations are without or inadequate programme services. Difficult to reach areas, habitations with poor access to health facility, people in slums and payment dwellers are poorly served.

### 6.1.6 Facilitatory Role

Facilitatory role played by NGOs/CBOs and leaders is considered important in the Pulse Polio Immunization Programme. But, there is no role for them in the routine immunization programme (2+). Awareness generation and social mobilization are the main roles played by non-health departments, especially social welfare department (3+). AWWs identify and mobilize beneficiaries to immunization session. Planning and conducting immunization sessions, are the major roles of HWs (4+).

No extra resources are mobilized for UIP activities by half to majority of district managers and medical officers.(2+ to 3+). <u>Among those who mobilized resources</u>, it was obtained in the form of vehicles, materials (syringes and needles), support, in IEC activities or human resource support

#### 6. 1.7.1 Impact

#### **Fully immunized infants**

Managers, providers and implementers do not agree about the proportion of infants fully immunized by the age of one year. Half of providers (2+) and majority (3+) of implementers perceive that more than 90 percent of infants are fully immunized. Another half of all categories and some AWWs mentioned it to be around 75 – 89 percent and some from all the categories indicated that it is between 50 – 74 percent. Yet, some district managers think that it is not more than 25 - 49 percent.

#### Vaccine Preventable Diseases & Health of Children

Vaccine preventable diseases do not occur in the area according to majority of (3+) HWs and AWWs). However, a majority of District Managers and MOs disagreed with them and confirmed occurrence of VPDs in the district in the last one year. It is observed that implementers are more complacent regarding the impact of the programme in terms of coverage and prevention of VPDs.

Nearly half from all categories mentioned reduction in morbidity and also reduction in IMR. Some district managers and nearly half of MOs and HWs and a majority of AWWs think that nutritional/health status of children has improved.

#### Performance of UIP

There is an overall improvement in programme performance over the last few years (2+.). Community awareness has improved according to approximately half of managers, providers and implementers. Some from all categories mentioned about improvement in service delivery. There is improvement in monitoring and supervision (1+DMs). However, some MOs (1+) and implementers did not perceive any change in routine immunization in the last few years.

Improved IEC activities are considered as the reason for change in UIP performance. Half of them from all categories felt that pulse polio programme has a positive impact on UIP as it has increased the acceptance of HWs among the people and improved the awareness through high media coverage. Yet, some district managers and MOs felt that pulse polio programme had a negative impact by creating community fatigue and people are demanding/expecting other vaccines also to be administered at home. But, very few implementers agreed to this view. Improvement in service delivery and making the services more accessible to clients is mentioned by some from all categories. Still some (1+) of them did not see any impact of pulse polio on routine immunization.

#### **Attitude of Community**

There is a positive change in awareness (2+), and people have realized the harmful effects of non-immunisation. Another half from all categories talked about decreased resistance, change

in behaviour and increase in voluntary acceptance of the programme. People from all strata of society are coming forward to get their children immunized. There is a demand for immunization from the community (1+) and the programme being accepted as their own. Some DIOs felt that positive change is more visible among literates in the urban areas indicating the need for more social awareness among the masses.

#### 6.1.7.2 Supervision & Monitoring

Supervision and monitoring of programme activities are far from satisfactory.Half of MOs (2+) made no visits or occasional visit to immunization sessions in three months period. This was endorsed by HWs and AWWs (2+). Some (1+) of them mentioned one or two visits and some others 3 to 4 visits in last 3 months. Claims of more number of visits (> 7 times in 3 months) are made by of the District Immunization Officers (2+) and some MOs (1+) but only a very few HWs & AWWs agreed with them.

Registers and reports are checked to assess the coverage of immunization and dropouts during the field visits (3+). Cold chain maintenance is monitored according to half to majority of district managers, MOs and HWs. The technique of giving injections and sterilization of equipments is monitored by approximately half of District managers, MOs, HWs and some AWWs. Nearly half of District managers and some MOs monitor the logistic arrangements for vaccine transport which is endorsed by some HWs. Activities of HWs like organization of sessions, regularity of staff, coordination between workers are monitoring issues mentioned by some to half of MOs and district managers, but very few HWs and AWWs concurred on this. Overall performance is monitored (1+ all categories). Other activities related to UIP that are monitored include IEC activities, attending to community reactions, rectifying mistakes observed during the visits, proper disposal of waste materials etc (<1+).

Visits of supervisors are useful in motivating resistant clients and clarifying the doubts of public, thus improving client acceptance (1 + to 2+). These visits provide learning experiences as the implementers get more information on proper conduct of immunization and clarifies doubts. Sometimes supervisors shared work by giving vaccinations/screening children and hence served as a source of encouragement for health workers (1+).

#### Reporting

MOs (3+) and a few District Managers (1+) do not have any problems associated with immunization reports. Nevertheless, late reporting is mentioned by nearly half of district managers and MOs. District officers (2+) and MOs (1+) find reports inaccurate and incomplete...

Delay occurs at many levels as these reports are forwarded after consolidation at different levels. Lack of training and resultant ignorance of health workers in calculation and consolidation, shortage of manpower, poor work culture and subsequent laxity in work are the various reasons cited by district managers and MOs. Some medical officers think it is the remote location of the health centers and preoccupation of health staff with other activities that cause delay in sending reports.

Feedback from monitoring and supervision is used to change the implementation strategies of routine immunization that include attending to the training needs of health workers, motivating resistant groups, locating venues in village for outreach sessions and rectifying the shortage in manpower.

#### 6.1.7.3 Co-ordination

At all levels information is shared through coordination meetings or during monthly meetings. Personal contacts are also established (<1+). Hence there is no problem in coordination.

#### **Coordination with ICDS**

District level officers and MOs (3+) find ICDS functionaries very supportive and contributing significantly in the implementation of UIP. Only some of the medical officers and a few district level officials find role of ICDS functionaries minimal and lack of cooperation from them.

At grass roots level ANMs are working in close coordination with AWWs, at block level CDPOs coordinate with MOs, and at district level CDPOs attend monthly meetings and coordination meetings with programme managers (3+DMs). During these meetings they share information and discus shortcomings or problems. Coordination with Anganwadi workers and helpers is mainly through requesting their help in organizing and conducting outreach immunization sessions (3+HWs and AWWs). They communicate frequently, maintain relationship and have mutual cooperation and participation (2+ HWs and AWWs). Only some HWs mentioned that AWWs have no role in UIP and hence no need for coordination.

A majority of district level officers, MOs, HWs and most of AWWs do not experience any problems. Some MOs, HWs and AWWs had difficulty in working together i.e., difficulty in finding common dates, and different working hours for AWWs and HWs, and frequent meetings for AWWs. A few HWs and ICDS accused each other for not fulfilling their responsibilities or not coming in time

#### Coordination with Grassroots Level Organisations/Groups

There is no role for NGOs and CBOs in UIP hence there is no need for coordination. Coordinated activities are confined to PPI only. Among those who coordinated, nearly half of DIOs seek cooperation on specific issues like motivating resistant cases and holding immunization sessions in remote areas. Nearly half of the DIOs and some (1+) of MOs mentioned joint programmes, exchange of views, discussion of issues or inviting them in the planning stage itself as methods to coordinate activities with these groups. Some (1+) medical officers pointed out that they seek their help in implementation, especially organizing and conducting outreach immunization programmes by arranging venues and vehicles.

#### Coordination with Panchyat

Panchayat members have no role in UIP (2+ MOs). Some DIOs mentioned their involvement in PPI only. Nearly half of DIOs and some of MOs reported joint programmes, exchange of views, involving them in planning stage itself as means for coordinating activities with Panchayat. Some MOs mentioned that they cooperate on specific issues and not on a regular basis.

#### **Communication of Operational Directives**

Changes in operational directives regarding programme implementation issues are communicated from time to time from Center or State to District and from there to periphery through sending copies of guidelines or circulars to health personnel. These directives are conveyed or circulated in monthly meetings / sector meetings or review meetings, for both health and ICDS staff. Nearly half to majority of implementers and some providers mentioned that these directives are passed on through MO to supervisors and from them to workers and field staff. Nearly half of DIOs have personal communication with health staff through telephone and during visits to PHCs/Sub centers.

District managers ensure that the information is communicated to various levels without getting diluted and distorted. It is disseminated in meetings held at different levels so that all of them get the same message and also the information is passed on from higher to lower levels so that every body knows about it. Guidelines are circulated in writing with instructions to avoid dilution or distortion.

# 6.1.7.4 *Balance* between Administrative Responsibilities and Field Visits

District and block level providers are doing both administrative responsibilities as well as field visits in UIP. A balance is kept between the two with the help of staff and also it has become a routine. Some to half of them keep a balance by proper time management and planning fixed time schedule for both – field visit in the morning and administrative work in the afternoon. Some district officials reported working overtime to keep balance, while some others give more attention to field visits and for them administration is secondary. Some MOs make field visits rarely or only when vehicles are available or are free from administrative work, while some others confided that it was indeed difficult to manage both because of paucity of time and shortage of staff.

#### 6.1.8 Social Mobilisation

Some from all the categories do not feel the need for IEC activities to promote UIP in their area as people are well aware about UIP. Interpersonal communication is considered as a valuable method by stakeholders across all categories.

Routine personal communication is given by HWs and AWWs during house visits and nearly half of them reported awareness generation through mothers meetings, group meetings, health camps etc.. Some district officials and very few from other categories use print or electronic media. Electronic media is perceived as more effective by a majority of MOs, HWs and AWWs and half of district officials

There are no specific messages or they (MOs, HWs) have not heard of any, to promote UIP. Nearly half of all categories i.e. providers, implementers, clients and facilitators (NGOs & Leaders) except non-utilizer clients think that the messages are related to vaccine preventable diseases, benefits of vaccination and consequences of non-immunization. Approximately half of District Managers and facilitators, and some MOs and implementer categories have the perception that health information on UIP is available from various sources even though specific messages are lacking. But, very few client categories agreed to this.

#### 6.1.9 Client Behaviour

#### Health seeking

When a child falls sick, almost all client categories, utilizers, partial utilizers and non-utilizers consult doctors or go to hospital. Very few resort to self-treatment, use other systems of treatment or consult traditional healers. Decision in the family about the type and place of treatment is taken jointly by the couple or either by husband or wife. Immunisation issues are never discussed with family members or neighbours. Clients did discuss benefits/ harmful effects of not giving immunization with family members and neighbours. Other issues discussed are side effects/adverse effects, immunization schedule, and reasons for non-utilization. Most of utilizers, majority of partial utilisers and neighborhood clients of AFP reported a supportive or facilitating and encouraging role of spouse whereas only nearly half of AFP cases and non-utilizers had this view. In utilizers category, sometimes husband accompanies to immunization centre or see that the child gets immunized. Husband's role is
neutral more among non- utilizers. Some non- utilizers mentioned that their husbands discourage immunization or create problems if any side effects occur.Discussion of the immunization issues in the family and the role played by husband in utilizing the service ,point to the need for involving the family especially the spouses in the awareness generation programmes.

Most of the clients prefer government facilities. A majority from all other categories take the child to PHC, sub-centre or government hospital for immunization. Some of them from all categories get their children immunized at Anganwadis or other outreach centres. A majority of utilizers and partial utilizers take less than 15 minutes to reach the place of immunization; the distance is less than one kilometer from their house. Accessibility is the main reason for place of preference. Other reasons are availability of services – safe and better facility, availability of doctor, and behavior of staff, familiarity of staff and trust in the service provided.

Nearly half of the non-utilizers do not get information about immunization services. Half of the non-utilizers and majority of all other client categories and facilitators receive information about immunization services from hospital, doctors, or other health personnel. Anganwadi Workers or helpers and mass media forms other sources information to some to half from all categories. A majority of clients know that polio and measles are vaccine preventable diseases. Only a few of them know about tuberculosis, diphtheria, whooping cough and tetanus. NGOs / Leaders are fairly knowledgeable about vaccine preventable diseases

Over half of the respondents know about the venue of immunization in their area. And, nearly half including all non-utilizers do not know the place in their area where children are immunized. Apparently, lack of awareness about the programme services is an important factor for non-utilization.

Almost all are satisfied with the location of immunization clinics. Also, a majority to most of clients and half of facilitators face no problems while attending the immunization clinic or outreach sessions. Inconvenience to clients such as long waiting hours, clashing with household work etc are problems faced by some to half of them. Affordability and side effects after immunization are other problems expressed by some of non-utilizers.

# Feelings of Clients When Immunization Sessions Are Cancelled

Nearly half of partial utilizers and some clients from other categories could not get their children immunized when they went to the immunization clinic. The main reason is non - availability of vaccines or not opening of vial for fear of wastage of vaccine. The other reasons are absence of health personnel, personal reasons (went late, over crowding, not having the card). Most of the clients reported that they get anxious and worried, disappointed or annoyed over this.

# Acceptability

Most of the client categories are satisfied with the behavior of health personnel and find them friendly and helful at the immunization and outreach sessions. Due date written on the card help them to remember when to go for the next immunization (2+). Also Anganwadi worker informs about the due date.

# Socio-Cultural Beliefs that Influence Utilisation of UIP Services

There are no socio-cultural beliefs and rumors related to the programme exist in the community (3+). On the contrary they have positive beliefs that a child should be immunized. Some from all categories expressed apprehensions about side effects or quality of vaccine. It is observed that existence of socio-cultural beliefs (negative) related to immunization and apprehension about its motives are perceived more by providers, implementers and facilitators as compared to client categories. Although nearly half of district and block level

providers, implementers and facilitators agreed with the majority of clients. another half of them think that superstitious beliefs related to immunization and apprehensions about its motives exist among the some clients.

Almost all utilizer and partial utilizer clients are relieved and feel positively about having given immunization for their children. They feel that it would be harmful for their children if they are not immunized.

# **Problems After Receiving Immunisation**

Children of a majority of utilizers and half of partial utilizers children have not experienced any side effects after receiving immunization. Among those whose children had experienced any problems, a majority of them indicated that they gave medication/treatment as advised. Some had gone to hospital or consulted a doctor. Some managed at house-hold level by applying ice or sponging with cold water or putting an ointment. Nevertheless, some of them did nothing and waited for the problem to be cured on its own.

# **Information Provided To Clients**

At the clinic, clients are told about the possible side effects such as swelling and fever and their management, and benefits of immunization. However, some of utilizers and half of partial utilizers confided that the health workers do not tell them anything about the expected effects of vaccination. Clients are informed about the date of the next visit (3+). When people forget about the due date workers try to motivate them by making house visits, conveying messages through somebody, insisting to get the next dose, explaining the importance etc.

# 6.1.10 Reasons for non-utilization: Defaulters

Poorer sections of the community including low income families, scheduled caste and scheduled tribe populations, fishermen community and migrant populations are the ones who do not bring their children for immunization. Specific communities like Muslims also do not get their children immunized. Lack of awareness about programme services& benefit of immunization and low motivation are the important reasons for non-utilization of immunization services as perceived by stakeholders across all categories. Socio-cultural beliefs and rumours are felt most by implementers and least by client categories. Side effects or fear of side effects prevents some families from utilizing immunization services according to nearly half of implementers and some of the other stakeholder categories. Affordability issues are reported by some clients as well as providers and implementers. Accessibility is not a major problem as only a few respondents from all stakeholders referred to it.

Regarding the reasons for partial utilization, nearly half of the MOs, HWs, AWWs and partial utilizers mentioned household problems like parents away for work, transfer of parents, illness of parents or any other family members etc. as major reasons for incomplete immunization. Other reasons given by nearly half of them are poor access, ignorance, ill informed about next dose, poor affordability, inconvenience due to long waiting time etc. Some partial utilizers and MOs assigned irregular or inadequate sessions as an important reason. Adverse effects in last episode are mentioned as a reason by MOs and implementer categories but very few partial utilizers. Ill health of child on due date and loss of immunization card or not remembering the due date are other problems expressed more by clients. Migratory nature of population is also a cause in some cases.

# 6.1.11 AFP Surveillance

# <u>Role</u>

District Immunization Officers (DIOs), medical officer and paramedical personnel at the periphery are important functionaries involved in this programme from health services. Case investigation with in 48 hours is the main role of DIOs. Initial identification and reporting, admitting and treating all suspected AFP cases, and sixty day follow up are their other responsibilities (1+). Initial identification and reporting are the important roles played by

majority of Medical Officers. Organizing outbreak ring immunization (ORI) and educating paramedical staff in AFP surveillance form other functions of MOs along with treatment and case investigation. As far as health workers are concerned they are mainly involved in case identification, reporting and referring suspected cases to higher centres. Door to door search for AFP cases and carrying out ORI are their other activities (1+). Some health workers also responded that they were not involved in surveillance activities as no AFP cases occurred in their area thus far.

### Training

HWs have not received any training in AFP surveillance. However, some said that MOs gave them informal training or discussed about AFP surveillance during monthly meetings. About half of DIOs and some MOs received training in the last one year while another half received it more than a year ago. Some MOs got information about AFP surveillance during the PPI orientation training. Nearly half of DIOs and MOs have not received any specific training on AFP.

Half of MOs who received training could not explain how the training helped in accomplishing the tasks assigned to them but simply stated that it was 'helpful'. In contrast, nearly half of DIOs considered it helpful in knowing the tasks to be done as it provided the necessary guidelines. Another half indicated that the training helped them in accomplishing the tasks like case identification and reporting. Nearly half of the health workers and MOs felt that there is a need of reinforcement for health workers. Only some health workers mentioned that reinforcement was needed but they too didn't specify the areas.

### **Reasons for Delayed Reporting**

The reasons for delay in work up of AFP cases is due to delayed reporting and lack of awareness among public about AFP surveillance and their approaching quacks or private facility for treatment (3+ DIOs). And, polio doctors abstain reporting for fear of loosing their clients. However, some denied that there is any delay in the work up of AFP cases.

Work up of AFP cases is complete according to half (2+) of DIOs.. For those who perceive it as incomplete, the most important reason is improper stool collection. Another reason assigned is delay in reporting by the family of patient. The stool samples collected from AFP cases is transported with out delay to regional laboratories (3+ DIOs). But, when the delay happens, the reasons ascribed is manpower shortage (2+) and distant location of the regional centres that prompts pooling of stool samples before dispatch (1+).

# **Community Involvement**

Communities are motivated for identification and reporting (2+MOs) and are made aware through HWs, AWWs and mothers meetings about the signs and symptoms of AFP. Facilitators like NGOs / Panchayat / Leaders / Teachers and families can make AFP surveillance more effective through awareness generation and motivating them for reporting AFP cases. But, facilitatory groups need to be trained in AFP case identification, so that they can help in identification and reporting of AFP cases.

Anganwadi workers and traditional healers are the first contact points (3+ stakeholders). Nearly half of DIOs think that it is the specialist doctors – child specialist, Neurologist or Orthopedic surgeons – who are consulted first. Anganwadi Workers (3+) refer cases to doctor or advice to consult doctors for management. Some (1+) accompany the patient to doctor for consultation.

In case of occurrence of an AFP case in an immunized child, family and community get

annoyed and blame the health worker and health system. People ask for clarification as to why polio occurred even after regular immunization. If AFP occurs in an un immunized child the family admits their lapse, blame themselves and regret in not having taken immunization (3+ DMs, MOs, HWs and facilitators). The providers and implementers felt that this helps to develop a positive attitude among the community leading to increased acceptance of immunization (1+). The officials get an opportunity for education and spreading the message in favor of immunization during this time.

### **Monitoring of AFP Surveillance Activities**

Monitoring AFP surveillance activities in their district, nearly half SMO or RCH Officer are not involved directly. District managers do the monitoring and review activities during monthly meetings attended by all block medical officers, programme officers and CMOs. Some ensure submission of regular and timely reports by establishing a system for reporting from various sources, assigning fixed day for each level for reporting and identifying personnel responsible for reporting.

### Socio-cultural Beliefs/Rituals Regarding AFP

No socio-cultural beliefs, rituals or practices are in vogue in the community regarding AFP (3+DM & 2+ all other categories). Nearly half of them think that superstitious beliefs exist regarding cause and cure of AFP. Some medical officers and a few others mentioned that people believe that AFP is caused by bad weather or unhygienic environment. People attribute it to intake of wrong medicine or injection, poor quality of polio vaccine or repeated administration of polio drops. Some among all client categories and some health workers think that people consider all AFPs as polio cases.

### **Reasons for Non-Reporting of AFP Cases**

It is due to ignorance, not knowing the seriousness of disease, ignorance about the importance of reporting or where and whom to report that AFP cases are not reported by the community. Poor financial position and un-affordability of treatment do not allow the family to report the case. Fear of stigma and superstitious beliefs regarding cause and cure and preference to traditional healers, polio doctors or home treatment are important reason for non-reporting of AFP cases (some across all categories of stakeholders & implementers) But, very few clients agreed to this view.

### 6.2 CONCLUSIONS

To protect India's children against VPDs, there is an urgent need to ensure: maximum coverage of routine immunization in all the strata of population; vaccine safety; and more importantly - effectively address parents' concerns about immunization. This would involve upgradation of several components of primary care systems.

The study suggests a large gap between government's intention and outcome. That is because children at the highest risk of VPDs are not reached. A large proportion of children of economically weaker sections of the community - including low income families, scheduled caste and scheduled tribe populations, fishermen community and migrant populations remain unimmunised. There are certain communities, like Muslims, which do not get their children immunized for several reasons. Also, children living in urban slums pose a challenge too. Severely compromised environmental conditions lead to a higher risk of transmission of VPDs. Absence of knowledge about perceived benefits and lack of awareness about programme services, and place of immunization are the important reasons for not getting children immunized. Low motivation and resultant negligence are some others reasons. Side effects or fear of side effects prevents some families from brining their children for immunization. Socio-cultural beliefs and rumors are perceived as reasons by all stakeholders but more so by implementers than the clients

Health care systems and immunisation provider services continue to harbor some major barriers to childhood vaccination, including - inaccessibility, insufficient staff, insufficient clinic hours, missed opportunities to vaccinate, and misconceptions about true and false contraindications to vaccination.

The drive for improvement will involve efforts at the levels of RCH care delivery. At the community level, families need to be empowered by providing them with information about immunization services that can help them improve health of their children. At the sub-centre and primary Health Centre, there is an urgent need of strengthening human resources and ensuring access to villages, especially the interior inaccessible habitats. And, at the district level, the vaccine supply has to be ensured and also accessibility and monitoring strengthened.

### 6.3 **RECOMMENDATIONS**

Following recommendations emerge through this qualitative evidence-base for further strengthening the immunization programme:

### Partnerships

Partnerships are imperative. This means leveraging available government resources with private resources where feasible – and making it feasible where possible. The UIP goal can be achieved, only in partnership with private and non-government sectors. It is a mammoth task and government with its existing human and financial resources needs additional resources. The additional resources exist in the form of private practitioners, RMPs, NGOs and Panchyat Raj Institutions.

In the rural areas, many private practitioners are mobile and visit the villages periodically to provide curative services. A large section of community has faith in them. Both monetary and non-monetary incentives could be considered to generate and sustain private practioners interest and motivation for immunization related activities. Certain villages could be assigned to them and their contribution should be publicly acknowledged.

For achieving better results in mobilization of community, partnering with NGOs is crucial. NGO's involvement often improves quality of governance and degree of community participation. because a large number of rural NGOs have the capacity to mobilize committed, and energetic human resource in a manner which can be complementary to the public sector efforts.

Involvement of Panchayati Raj Institutions should also pay off. Out of about three million elected representatives at the local level, one million are women. They must be involved to take charge of issues like reproductive and child health, especially immunization. It is not that the Panchyati Raj system is working perfectly well, in all places. Nevertheless, its participation is showing good results in several parts of the country. The good practices and success stories should be publicised and rewarded.

Partners should be involved in social awareness activities, community mobilisation and planning and coordination of outreach sessions etc. Community interactions need to provide an added focus on prevalent socio-cultural beliefs and methods of dispelling the wrong notions.

### Social Mobilisation

Almost all stakeholders recommend an aggressive social mobilization strategy to create awareness regarding immunization services including its benefits. This is especially important in inaccessible population. People who are aware have realized the harmful effects of non-immunisation. It is essential to decrease resistance, change in behaviour and increase in voluntary acceptance of the programme.

All channels of communication should be used to make the immunization programme a highly visible public health activity for child survival, growth and development. This is especially important for states, districts with low coverage. Mass media is essential to draw attention, but inter-personal communication is required for impacting behaviour. A family must be informed about the necessity of immunising child in the first year of life, during pregnancy only. ASHA and AWW must be well trained to play this role in immunization programme.

#### Planning

Planning exercise should involve all stakeholders with an emphasis on 100 percent coverage. Besides the district and block level plan, it is vital to develop Sub-Centre level plans. Bottom-up approach is needed to prepare these plans and participation of all stakeholders at a level in its preparation is important. Determining of eligible children based on child birth rate in a population and requirement of vaccines are important parameters or issues that need to be considered in the preparation of immunization plan for each sub-centre level. Also, emphasis must be given to planning complete coverage and holding immunization sessions as per client convenience. Focus of the block plan needs to be on allocation of responsibilities to workers in conducting sessions, assessment of logistic requirements based on geographic and local needs, identification of beneficiaries, training of workers for increasing sensitivity and monitoring and supervision. The other parameters need consideration at block and district levels are maintenance of cold chain and logistic issues like availability of vaccines, syringes and needles and transport facilities.

### **Programme Management**

In order to implement the plan effectively and efficiently, it is imperative to improve infrastructure, increase manpower, provide incentives and transport at the sub-centre level. It is just not possible for the workers to reach habitation in time by walking or use of public transport. It is because of this reason; many habitations in our country have never seen a government health worker for vaccination except for giving pulse polio drops.

Another issue that needs consideration is the quantity of vaccine in a vial. In small habitations health workers do not like to open vials for fear of wastage. Most of the clients get anxious and worried, disappointed or annoyed over this. And one such experience is enough for them to not come for the sessions. In a 1,000 population at a given month there are about 8 -10 children for a particular immunization. In smaller habitations, the number get reduced to 3 -5 children. Unless a health worker plan to work in 2 or 3 such habitations, she is hesitant to open a vial for 2-3 children. And, at the end it is these children who add to statistics of unimmunised children.

#### **Computerisation for Monitoring & Supervision**

Computerisation of RCH data is essential at primary care level. This will help organize the micromanagement of immunization activities to make sure target children are vaccinated at the appropriate time. The data can be used to give reminder to ANM for upcoming visits and also for planning visit to inaccessible habitations. Furthermore, it would facilitate health officials/staff to work individually and collectively at local and district levels to ensure that all children receive all childhood immunizations on time.