CHAPTER-I

INTRODUCTION

1.1 Background

In order to deal with the issues concerning the health of children several programmes have been launched from time to time in our country. The basic aim of these programmes has been to bring improvement in their health status threatened by killer diseases in the early stage of life. Taking cognizance of the vulnerability of children, Govt. of India, in the early decades after independence has taken initiatives to protect vast population of its young citizens from life threatening diseases and diseases causing disability for the rest of life. The success of smallpox eradication in the mid-1970s had the spurring effect and drew attention of the Govt. towards the immunization programme in India.

Accordingly, 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 was 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. In 1986, Universal Immunization Programme was given the status of National Technology Mission. Later on in 1992, UIP became a part of Child Survival and Safe Motherhood (CSSM) programme and then of Reproductive and Child Health (RCH) programme in 1997. A specific Immunization Strengthening Project (ISP) was designed to run from 2000-2003, which included three main components (polio eradication, strengthening routine immunization, and strategic framework for development). Second Phase of RCH commenced in 2005 with three specific objectives to bring about a change in mainly three critical health indicators i.e. reducing total fertility rate, infant mortality rate and maternal mortality rate with a view to realizing the outcomes envisioned in the Millennium Development Goals, the National Population Policy 2000, and the Tenth Plan Document, the National Health Policy 2002 and Vision 2020 India

As part of national health policy, UIP is being implemented in the state of Uttar Pradesh and the state Govt. is fully committed for the complete immunization of children as programme has been given further impetus after the launch of NRHM in the state. Several initiatives have been taken to augment and streamline the

programme with special focus on trainings of staff on issues related to planning, preparation of micro plans for conduct of RI sessions, strengthening monitoring and supervision mechanism, formation of AEFI committees, training of cold chain handlers and improving the overall supply of vaccines.

As studies in recent past have revealed, there was improvement in percentage of fully immunized children in the state. Proportion of fully immunized children age 12-23 months has been increased from 25.8 (DLHS-2 (2002-04) to 30.3 (DLHS-3 (2007-08). Further, according to CES-2009 (UNICEF) in the state the proportion of fully immunized children has reached to 40.9. IMR has also declined to 61 percent per 1000 live births over the years. With meticulous efforts and assistance from international agencies state has also been able to achieve complete eradication of Polio. But continuous low proportion of fully immunized children against six killer diseases and still high IMR as compared to other states is a cause of concern for the policy makers and programme managers in the state. The questions now arise as to what were those factors both at the services delivery and community level that hampered and hindered the noticeable progress in coverage of children under the immunization programme in spite of significant changes affected in programmes and policies related to routine immunization programme.

1.2 Need for the present Survey

With the aforesaid perspective in mind, National Rural Health Mission (NRHM), Uttar Pradesh was keen to conduct an evaluation of Routine Immunization programme ***both at the progaramme and beneficiary level to have an understanding and evidence of issues and challenges that create impediments in full immunization of children. CREATE***; was commissioned by SIFPSA to undertake the survey in 18 selected districts of Uttar Pradesh.

1.3 Main objectives of the proposed survey

As per the Request for Proposal (RFP), the specific objectives of this survey are as follows.

- To determine the current status of complete immunization of 0-3 yrs age group
- How many newborn taken birth dose of immunization before discharge after delivery in the institution.
- Number of sessions being organized as per the Micro Plan and status of services provided by as per micro Plan.
- Status of due list of beneficiaries prepared by ASHA/AWW with the support of ANM.

- To evaluate the status of supervision and Monitoring by Block/District/State level Officers.
- Maintenance of logistic supply and cold chain mechanism at district and CHC/PHC at Block level.
- Training Status of cold chain handlers and ANMs for RI.
- To assess the constitution of Adverse Event Following Immunization (AEFI) committee and its role and how to strengthen AEFI reporting system.
- What strategy to be adopted to increase outreach sessions, where BCG coverage is poor.
- Status of disposal of medical waste during R I sessions.
- To identify the barriers and factors effecting the uptake of full/complete immunization.
- To evaluate the programmatic and behavior change communication (BCC) initiatives that could accelerate adoption of routine immunization scheme.

1.4 Methodology and Approach

1.4.1 Location of the Study

Evaluation of RI programme was conducted in 18 districts of Uttar Pradesh. Selected districts have been shown in the Map of Uttar Pradesh on Page I.9.

1.4.2 Research Techniques (Research Instruments)

In line with the objectives of the study, both the quantitative and qualitative research techniques were used to generate information on all important indicators. All the research instruments were developed by CREATE in Hindi taking into consideration various important aspects of the study to generate information.

However, all the questionnaires and guidelines were submitted to SIFPSA for its inputs and comments. SIFPSA, in turn, had shared these instruments with concerned officials in SPMU-NRHM, GoUP. Subsequently, a workshop was organized at SIFPSA headquarters where the participants representing CREATE, SPMU-NRHM, DoFW, GoUP, WHO representative and SIFPSA discussed all tools threadbare. Based on the opinions received all these tools were finalized by CREATE team. The type of tools and the specific information that was obtained using these instruments is given here as under

Quantitative Research Tools

Listing Format: This format was prepared for the listing of households in the selected villages and urban areas to develop a sampling frame of eligible women who had delivered a child (live) between April 1, 2012 and March 31, 2013.

Women Interview Schedule: A structured schedule was developed to canvass to the currently married women age 15-49 years who had given birth to a live child between April 1, 2012 and March 31, 2013. This schedule was designed to collect background information of mothers besides utilization of various antenatal care and delivery services during the last delivery that were being offered at public health outlets. The other important issues included vaccination of newborn child before the mothers were discharged from the hospital. Data was also obtained from mothers whether they were ever informed about vaccines given to children by any grassroots health worker, knowledge about vaccines and informed about immunization sessions. Besides collecting information from mothers about immunization coverage of all children aged 0-36 months), data was also obtained on place of Immunization, reasons for not getting full immunization and problems if any faced to get children immunized. All mothers were further enquired about a host of other issues pertaining to quality of services, problems if any faced by the child after immunization, treatment sought, usual place of immunization in the village and awareness about IEC activities held in the village.

ANM Interview Schedule: Broadly, information was collected from the ANMs on important indicators like background characteristics and years in service as an ANM, responsibilities, extent of interaction with ASHAs in her area and purpose. Cold chain maintenance (vaccine carriers), existing system of collection of vaccines for immunization sessions, transportation used for vaccines and problems faced and time gap between collection of vaccines and time when the session starts have been addressed in the questionnaire. The other important aspects covered included preparation of due list of children by ASHAs, RI sessions held as per micro plan and steps taken to cover children in outreach/un-served areas, impediments in utilization of RI and suggestions for overcoming bottlenecks and improving RI coverage

ASHA Interview Schedule: ASHAs has become an all important link between the community and the rural health system for promotion and delivery of various services. The questionnaire was designed to assess her role in promotion and implementation of RI programme at the village level. The important aspects covered included her interaction with ANM, purpose, role in preparation of due list, assistance provided on day of immunization, knowledge about vaccines to be given to children under one year of age, difficulties encountered in promoting RI and reasons for low coverage. Her suggestions were also sought for improving coverage and overcoming bottlenecks besides the issues related to incentive received for routine immunization, mode of payment and other issues related to incentive.

Qualitative Research Tools

The qualitative tools that were used in this survey include the following guidelines/semi-structured questionnaires:

- Guideline for discussion with CMO/DIO
- Guideline for discussion with MOIC (PHC/CHC)

Efforts were made during discussions with aforesaid key officials to gather qualitative information about the implementation of RI programme, promotion, coverage and various other aspects such as, logistic support, cold chain maintenance, constitution of AEFI committees, role and reporting system etc. Their views were also sought about bottlenecks if any in the system and reluctance at community level that might be hampering the successful implementation and enlisting their views to overcome these impediments at different levels to further streamline in order to achieve the complete coverage.

1.4.3 Sampling Design

As has been mentioned earlier, survey was conducted in 18 districts of Uttar Pradesh representing all 4 geographical regions in proportion to the number of districts in each region. While 7 districts each were selected from East and West, 2 district each from Central and Bundelkhand. Districts were selected through systematic random sampling arranged on RI coverage performance. List of selected districts was provided by SIFPSA.

Selection of PSUs: Sampling of PSUs was done by SIFPSA and list was provided to the agency for the rural and urban areas. In accordance with the sampling design survey was conducted in 150 rural PSUs and 54 Slums of all 18 districts. In all 204 PSUs were covered under the study.

In order to select villages, all villages in the district were divided into three strata e.g. Village with less than 2000 population, Villages having population between 2000 and 4000 and Villages with 4000+ population. In all 8-9 villages were selected from each district. However, number of urban PSUs selected in each district was based on the proportion of slums of that district in the universe of slums of all 18 districts taken together.

Selection of Eligible women: It was decided to cover 20 eligible women per PSU who had given births (live) during April 01, 2012 and March 31, 2013 both in rural and urban areas of the district. Systematic Random Sampling procedure was adopted to select required number of such women in each PSU. Altogether, 3000 households (20*150) were expected to be covered in rural PSUs while 1080 households (20*150) were to be covered in urban PSUs/slums. In case of the number of such eligible women, which had births since April 01, 2012 till March 31, 2103 was less than the required number of 20 in a PSU; all households identified were covered in that PSU.

Selection of ANM and ASHA: ASHA working in the sample village were automatically selected. However, it may be noted here that if there happened to be more than one

ASHA, only one was randomly selected and interviewed. In large villages, ASHA that was serving the selected segment was contacted for the interview. In case of ANMs, those who were serving the sample village in sub-centre jurisdiction were covered in the study. In all, 150 ASHAs and 150 ANMs were interviewed under the survey.

Selection of CMO/DIO, and MOICs (PHC): Discussions were held with CMOs/DIOs in all the sample districts. In rural areas, MOIC of the PHC of a selected PSU area were interviewed. Altogether, 54 MOICs of PHCs/CHCs in selected districts were covered under the study.

Interviews conducted and discussions held with different target respondents have been provided in the following table.

Table-1.1 Sample coverage

Target respondents	Sample	Completed
Quantitative Interviews		
Eligible women interviews	4080	4334
ASHA interviews	150	150
ANM interviews	150	150
Qualitative Discussions		
CMO/DIO	36	36
Medical Officer I/C (CHC/PHC)	54	54

1.5 Training of survey teams

Training of investigators was completed in one batch. Classroom training was given by professionals from CREATE. Senior professionals from R&E division also visited during the training and gave their valuable suggestions. More than 30 candidates attended the 4 days training. Besides the discussion on background and aims and objectives of the proposed evaluation, the classroom training sessions consisted of instructions in interviewing techniques, field procedure for the survey and a detailed review of each item in the questionnaires. Mock interviews were conducted in the classroom and candidates were taken to rural and urban areas to provide them firsthand experience of actual field situations. Every candidate canvassed two questionnaires each in the field. Subsequently, professionals prepared a list of common issues and problems encountered in the field by candidates which was followed by detailed debriefing session in CREATE headquarter so as to remove their doubts. Candidates who had performed well in training, mock and field trials were selected for the survey.

After the conclusion of interviewers training, a one day briefing session was also held to brief the coordinators, supervisors and field editors. These people were imparted

training on canvassing of questionnaires of ASHA, ANM and medical officers. More importantly, a session was also devoted to sensitize them about survey protocols and quality assurance measures.

1.6 Data Collection

In all, 4 teams were constituted for the survey with each team comprising one male supervisor, one female editor and 3-4 female interviewers. These teams were further grouped into Team-1 (2 teams) and Team-2 (2 teams). Each team was headed by an experienced field professional from CREATE to coordinate and monitor the fieldwork.

Keeping in mind the spread of districts, separate movement plans were prepared for each team. Movement plan with likely dates of visit for each selected district was circulated through the office of the Mission Director, NRHM at the state headquarter, a week prior to launch of survey so as to provide ample time to district authorities to intimate the concerned officials at the district and lower levels to extend desired cooperation during the course of the survey. Moreover, team coordinators followed it up with District Project Managers before the visit. Data collection was completed between May 10, 2013 and June 24, 2013 in all the 18 districts.

1.7 Quality Assurance

Quality of the study was maintained at all levels. To begin with, research tools were developed and finalized through due consultation with all stakeholders of the study. Further, all the questionnaires and guidelines were pretested in the field by a team of senior professionals from CREATE. Survey teams were thoroughly trained by the professionals so as to ensure proper understanding of each and every item in the questionnaires and interviewing techniques. Interviewers selected for the survey were those who had earlier worked in studies pertaining to reproductive and health sectors as also in ASHA studies.

As indicated earlier, all the survey teams were headed by experienced professionals of research agency who stayed in the field till the very end. Besides, senior research people from SIFPSA also visited the field and conducted spot-checks and observed interviews conducted by the interviewers.

1.8 Data entry, analysis and reporting

All the filled-in questionnaires of the respondents were sent regularly by field teams to the Lucknow headquarters of CREATE. After its scrutiny and desk editing, the data entry was undertaken through a customized package prepared in CSPro4.1. The data

were fully validated in terms of internal consistency checks before it was analyzed. The data entry programme had most of the in-built checks for quality control. The inconsistencies were sorted out by reexamining

Data processing was done in-house using SPSS software. Before the data analysis tabulation plan was prepared and discussed with SIFPSA officials. Tables were generated according to the tabulation plans and in-depth interviews were analyzed by the researchers having experience of qualitative research. Report was prepared by senior researchers of the agency.

1.9 Organization of the Report

The report is divided into three chapters including the present one. This chapter discusses the methodology of the study and provides details of the study design, sample size, sampling procedure and coverage of different types of respondents. While Chapter two discusses the findings based on the interviews of eligible women. The issues broadly covered in this chapter include the socio-economic and demographic characteristics of the households, antenatal and delivery care services received during last pregnancy, birth doses given to the newborn in case of the institutional delivery, knowledge about different vaccines given to children under one year of age, interaction with ASHA/other health workers and information provided related to vaccination, counseling during vaccination, immunization coverage and other aspects. Chapter three presents findings based on the interviews of CMOs/DIOs, MOICs, ANMs and ASHAs. Specific issues discussed comprised of supervision and monitoring of programme at different levels, status of due list preparation, maintenance of cold chain at district, PHCs/CHCs, training of cold chain handlers and ANMs for RI, constitution of AEFI committees and barriers in immunization coverage.