CHAPTER-III

FINDINGS OF SERVICE PROVIDERS' INTERVIEWS AND DISCUSSIONS

This chapter presents the findings based on interviews conducted with health officials and functionaries associated with the routine immunization programme. Interviews and discussions were primarily conducted with district level officials such as CMOs/DIOs, MOICs/IOs and at the grassroots with ANMs and ASHAs who were key stakeholders in the implementation of the programme. The information presented in the chapter includes monitoring and supervision at different levels, logistics support and cold chain maintenance, preparation of micro plan for RI sessions and due list and frequency of its updating. Status of training of cold chain handlers and ANMs for RI, formation of AEFI committees, status of disposal of medical waste during RI sessions, strategy for coverage of left out areas, barriers in uptake of complete immunization and status of IEC activities undertaken to remove barriers and enhance the coverage have also been dealt with in this chapter.

3.1 Monitoring and supervision of UIP

For a successful implementation of any programme, it was essential to ensure proper monitoring and supervision of all activities to achieve optimum results. Attempt, therefore, was made to assess existing monitoring and supervision mechanism of routine immunization programme at different levels. The UIP programme like any other health programme was executed through the existing organizational structure. At the state level Director General (FW) was the overall in-charge and responsible for entire gamut of services offered under the family welfare programme in the state.

3.1.1 State level

Additional Director (UIP) and Joint Director (EPI) were the other state level programme managers extensively involved in various activities related to the planning and implementation of UIP programme in the state. As far as the monitoring of the routine immunization goes, it was done at two levels. At first, the monthly progress reports received from districts were analyzed and shared in monthly meetings held at state headquarter and appropriate instructions were issued to concerned districts. On the other, it was learned that AD (UIP) and JD (EPI) also undertake field visits to the districts from time to time and monitor the programme on various parameters.

Monitoring and supervision of routine immunization had been further strengthened after the launch of NRHM in Uttar Pradesh. A monitoring and evaluation (M&E) cell had been created in SPMU-NRHM for monitoring of various health care programmes including routine immunization. General Manager (RI) in SPMU-NRHM, who was

primarily responsible for budgetary allocations and release of funds to the districts for various RI related activities, was reported to be actively involved in monitoring and supervision of the programme as well. He, along with, his team undertakes visits to the districts on a monthly basis for monitoring of activities and progress made on initiatives taken towards strengthening of routine immunization programme in the state.

3.1.2 HMIS and its use in monitoring of routine immunization

Development of health management information system (HMIS) under NRHM has become a very handy tool for the state level programme managers involved in the monitoring of programme. It was reported during discussions that HMIS was used to analyze data related to the programme and share with concerned officials and suggest measures. It was also informed during discussions that now the facility-wise (sub-centre-wise) data related to delivery of services of various health care programmes including routine immunization was entered by data operator at the PHC level and sent to district and subsequently uploaded on HMIS site.

3.1.3 Role of other agencies in monitoring of RI programme

The study has revealed that apart from state officials, active role has been played by the representatives of various international agencies in monitoring and supervision of the programme at different levels. The agencies which were primarily assisting the Govt. in this task were UNICEF, NPSP (WHO), MI, CORE and M-CHIP. They were not only contributing in monitoring but also in preparation of micro plans, coordination among key stakeholders at different levels and ensuring the conduct of RI sessions as per the micro plan. UNICEF has its representatives at division, district and block level that were designated as Sub-Regional Coordinator (SRC), District Mobilization Coordinator (DMC) and Block Mobilization Coordinator (BMC) respectively. Besides the district coordinators the field volunteers of NPSP were also said to be posted at block level and playing a key role in various activities such as planning, micro plan preparation and monitoring.

3.1.4 Monitoring at district level

District level authorities such as CMOs and Dy. CMOs (UIP)/DIOs were also involved in monitoring and supervision of the programme in their respective districts. The study, however, indicates that it was basically the District Immunization Officer (DIO) who was responsible for all activities pertaining to routine immunization programme as CMO seldom got time from his busy schedule. DIOs were reported to be undertaking visits to PHCs/CHCs for on the spot reviews and monitoring during sessions and also attend the monthly meetings. Programme was also reviewed through data sharing mechanism which was now online as well as MPRs submitted

by respective CHCs and PHCs. They were also assisted in this task by the representatives of UNICEF and NPSP who coordinates with both the district officials as well as block level health functionaries. DIOs were reported to be visiting a couple of PHCs during their weekly visits for monitoring of routine immunization sessions.

3.1.5 Monitoring at block level

As regards the monitoring and supervision at the block level, all MOIC were asked what are the methods used for monitoring of routine immunization programme at block level and whether they undertake visits for monitoring of RI sessions. All the medical officers were further asked what they checked during the visit at sessions. Table 3.1 shows that 80-87 percent of MOICs checked the availability of vaccines, due list, conduct of RI sessions at fixed place as per micro plan and filling of tally sheet by ANMs. More than six to seven in every ten MOICs checked the presence of ANM, ASHA and AWW at session, starting of RI session on time, use of 4 ice packs in vaccine carrier, preparation and filling of immunization card and availability of medicines. Besides during discussions majority of MOIC had pointed out that the work progress related to routine immunization was also reviewed during weekly and monthly meetings based on the progress reports and due lists prepared for each sub-centre area.

Table-3.1 Percent of MOs by type of checks used for monitoring during RI sessions

Type of checks performed*	**Percentage**
Check the presence of ANM/ASHA/AWW	68.5
Availability of vaccines	87.0
Check due list	87.0
Starting of RI session on time	64.8
Conduct of RI session at fixed place as per Micro Plan	81.5
Poster/banner displayed	63.0
Filling of tally sheet by ANM	79.6
Preparing/filling immunization card	64.8
Use of 4 Ice packs in vaccine carrier	66.7
Availability of medicines	64.8
Disposal of bio-waste	31.5
Number of MOs	**54**

*Percentage would exceed 100 due to multiple responses

3.1.6 Feedback from ANMs and ASHAs about monitoring visits by supervisory staff

All ANMs were inquired about the monitoring visits by supervisory staff during RI sessions. Analysis of their responses has been presented in table 3.2 and 3.3. As can be seen in table 3.2, 99 percent of the ANMs affirmed about the monitoring visits. More than three-fourth of ANMs reported about the visits of medical officers while 59 percent stated about LHV. Slightly less than half (47 percent) had mentioned

about the visits of IO/HEO during the sessions. Four in every ten ANMs reported the visits of district officials and nearly a one-third of others such as representatives of UNICEF, NPSP and other agencies.

Table-3.2 Percentage of ANMs reporting about monitoring visit by supervisory staff during RI sessions

Particulars	Percentage
Whether anyone visit	
Yes	99.3
No	0.7
Total percent	**100.0**
Number of ANMs	150
Persons who visit	
Medical Officer	77.2
HEO/IO	47.0
LHV	59.1
District level health officials	40.3
Other officials (UNICEF, NPSP, MI etc.)	32.2
Number of ANMs reporting visits	**149**

On the other hand, 92 percent of ASHAs also averred about the monitoring visits by different level of health officials. Nearly two-third of ASHAs reported about the visit of MOICs and more than half about the LHV during the vaccination sessions. Visits of IO and HEO were mentioned by 45 percent of ASHAs. While nearly one-third confirmed about visits of district officials and quarter of them stated that other officials also come for monitoring of RI sessions which included persons of different agencies assisting the Govt. in this task.

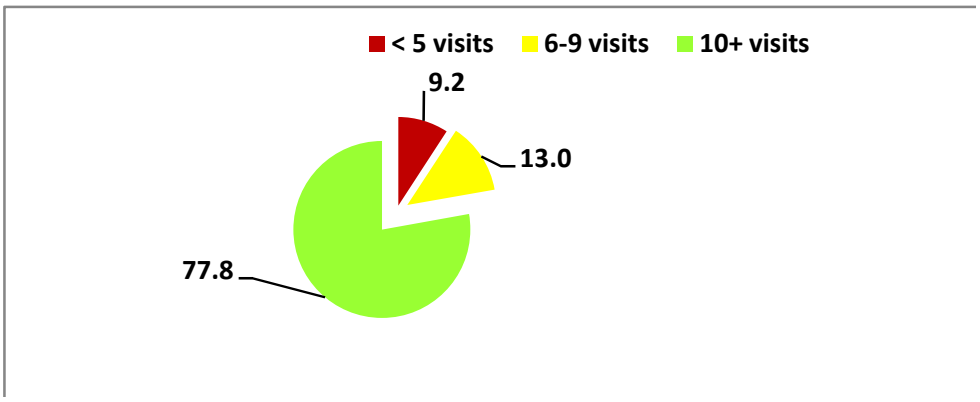
Table-3.3 Percentage of ASHAs reporting about monitoring visit by supervisory staff during RI sessions

Particulars	Percentage
Whether anyone visit	
Yes	92.0
No	8.0
Total percent	**100.0**
Number of ASHAs	150
Persons who visit	
Medical Officer	65.9
HEO/IO	45.0
LHV	52.1
District level health officials	31.1
Other officials (UNICEF, NPSP, MI etc.)	25.3
Number of ASHAs reporting visits	**138**

3.1.7 Number of visits undertaken by MOICs during last 3 months before the survey

All MOICs were enquired about the number of visits undertaken during last 3 months preceding the survey for monitoring of RI sessions. As can be seen from Figure 3.1, 78 percent of the MOICs had visited more than 10 times and around 13 percent 6-9 times during the period of 3 months preceding the survey.

Figure 3.1 Percent of MOICs by number of monitoring visits for RI sessions



3.2 Constitution of AEFI committees

In order to increase the surveillance and also deal with situations arising out of adverse reactions following the immunization, idea of constituting AEFI committees was initiated. All the district level officials and MOICs were enquired about the status of the formation of AEFI committees. All the district level officials and MOIC had affirmed the constitution of AEFI committees. Members of these committees as reported by most of MOICs were MOICs themselves, IO, ARO and pharmacist. However, in some PHCs besides MOICs and HEOs, Staff Nurse/ANM were also reported to be the members of AEFI committees. When queried about the responsibilities, most of them stated that on being informed about any adverse reaction following immunization the team reaches the spot and provide the necessary treatment.

All ASHAs and ANMs had been informed about the AEFI committees and instructed to inform immediately. In case of any adverse reaction reported by the mother of child, ASHA informed the concerned ANM. ANMs, often at their level, provided the treatment before informing the MOIC. It was, though, important to note that hardly any sample districts had reported about any serious case when queried in this regard.

3.3 Training of Cold Chain Handlers and ANMs for RI

In order to strengthen the cold chain system at the district level and to provide assistance to the DIOs in this regard a post of cold chain handler has been created on contractual basis under NRHM in all districts of the state. Study revealed that in all

the sample districts cold chain handlers had been appointed during 2011-12. All of them had received one day training during 2012-13.

As regards the RI training of ANMs, it was reported that all ANMs had received the training on routine immunization. Barring few, all ANMs during the interviews had affirmed that they underwent RI training during 2012-13.

Besides, all MOICs were also reported to have received training on routine immunization.

3.4 Logistics support and cold chain maintenance at district and PHC/CHC level

Cold chain is system of transporting and storing vaccines at recommended temperature from the manufacturer to the point of use. An effective cold chain is assumed to be crucial because vaccines loose potency when exposed to heat. The loss of potency depends on the temperature and duration of exposure and different vaccines react with varying degrees of sensitivity to the above two parameters. All vaccines retain their potency between (+) 2 degree Celsius to (+) 8 degree Celsius. It was learnt during discussions with district level authorities that for long storage, measles and polio vaccines were separately kept at sub-zero temperatures in freezers while DPT, DT, TT and BCG vaccines, which were require to be stored at higher temperatures are stored in refrigerators.

An attempt was made during discussions with district officials and interviews conducted with MOICs at the PHC/CHC level to assess the logistics support for cold chain maintenance and transportation of vaccines for RI sessions at the grassroots level. All the DIOs in the sample districts reported adequate number of Deep Freezers, ILRs and Refrigerators for storage of vaccines at the district level. In majority of districts DIOs reported that they had additional ILRs and Deep Freezers. In districts such as JP Nagar, however, DIO emphasized the need for additional ILRs and Deep Freezers. Observations revealed that due process was followed in storage of vaccines in most districts. Temperature charts were duly filled by cold chain handlers twice a day. While all districts had power backup arrangement in the form of Generators, all districts though reported about frequent power cuts during summer. Due to adequate power backup in all districts the power cuts did not affect the cold chain maintenance as generators were put in operation.

Regarding the maintenance of cold chain equipment, it was told that minor technical problems were attended by mechanics/cold chain handlers posted at the district level. In case of problems related to compressor and other serious nature snags were handles by refrigerator mechanic at the division level. The information was also conveyed to the state headquarter.

3.4.1 Cold Chain maintenance at PHC/CHC level

All the PHCs/CHCs covered under the study were reported to have adequate number of Deep Freezers and ILRs. MOICs as well as Immunization Officers responsible for storage and distribution and maintenance of logistics support for cold chain did not report any problem. Table 3.4 shows the percentage of PHCs/CHCs by number of ILRs Deep Freezers available and in working condition. It can be observed from the tables that nearly two-fifth of the PHCs/CHCs (37 percent) had 2 ILRs while around 43 percent had 3 and above. Only 20 percent had one ILR. If we look at the working status, 20 percent PHCs/CHCs had only one ILR in working condition. Proportion of PHCs/CHCs having two ILRs in working condition was 37 percent while slightly above 42 percent were observed to have 3 or more ILRs working at the time of study.

As regards the availability of Deep Freezers, table shows that slightly above 80 percent of the PHCs/CHCs had 3 or more Deep Freezers. More than three-fourth (76 percent) were found to have 3 or more Deep Freezers in working status. Remaining 20 percent were having 2 Deep Freezers while 4 percent had only one in working order. As such, barring few, none of the MOIC and IOs complained about the shortage of ILRs and Deep Freezers for cold chain maintenance vis-à-vis the requirement of the facility.

Table- 3.4 Percentage of PHCs/CHCs by number of ILRs and Deep Freezers

Number of Cold chain equipments	Available		Working	
	Number	Percentage	Number	Percentage
ILR				
1	11	20.4	11	20.4
2	20	37.0	20	37.0
3	12	22.2	15	27.8
4+	11	20.4	8	14.8
Deep Freezer				
1	2	3.7	2	3.7
2	8	14.8	11	20.4
3	16	29.6	19	35.1
4+	28	51.8	22	40.7
Number of PHCs/CHCs	**54**	**-**	**54**	**-**

Thermometers for temperature recording were found in working order in most of the PHCs/CHCs. A couple of facilities had broken thermometers while in one PHC it was replaced in the presence of the research team. Temperature chart were also found to have been properly maintained. Temperature chart was maintained by the Immunization officer who had overall responsibility of storage, cold chain maintenance and distribution of vaccines to the ANMs. In some of the PHCs, IOs were assisted by other supervisors such as the LHVs/HSs.

3.4.2 Power Backup arrangement at PHC/CHC level

It was a well known fact that power supply was irregular and erratic particularly in rural areas of the state. Thus an attempt was made to assess availability of power backup arrangement at PHCs/CHCs covered under the study. It was observed excepting 2 PHCs, all the PHCs/CHCs had power backup in the form of generators. Those who did not have the generator were reported to be hiring the same from outside **(Table 3.5).** When queried about the availability of generator exclusively for cold chain, nearly two-fifth reported there was separate generator for cold chain equipments **(Table 3.6).**

Table- 3.5 Percent of MOs reporting availability of generators at their facility

Number of generators	Number	Percentage
None	**2**	3.7
1	32	59.2
2	15	27.8
3	4	7.4
4	1	1.9
Number of MOs	**54**	**54**

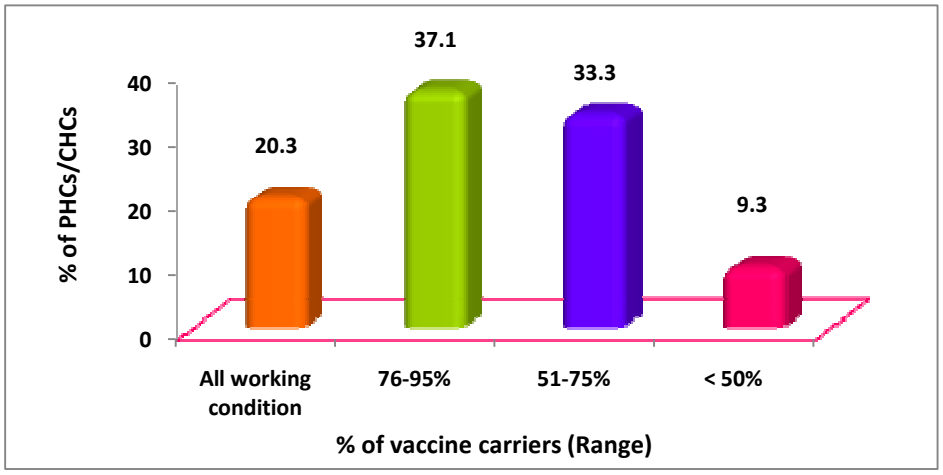
Table- 3.6 Percent of MOs reporting availability of separate generators at their facility for cold chain equipments

Number of Generators	Number	Percentage
Yes	19	35.1
No	33	61.2
Rented	2	3.7
Number of MOs	**54**	**100.0**

3.4.3 Availability of other logistics for cold chain

All the PHCs/CHCs were reported to have enough number of cold boxes as per their requirement. Shortage of vaccine carriers was, however, experienced by most of PHCs/CHCs in the study districts. Based on the data obtained from PHCs/CHCs an analysis was carried out about the availability of vaccine carriers and their working condition. As can be seen in Figure 3.2, 20 percent of the PHCs/CHCs had all vaccine carriers in working condition. Thirty seven percent of these facilities had 76-95 percent vaccine carriers in usable condition, while 33 percent had 50 to 75 percent. Around one-tenth had less than 50 percent of the vaccine carriers fit for use. During discussions, IOs had pointed out that vaccine carriers had not been supplied since quite a long time. None of the PHCs/CHCs however reported any shortage of Ice Packs.

Figure 3.2 Availability of Vaccine Carriers in working condition at PHCs/CHCs

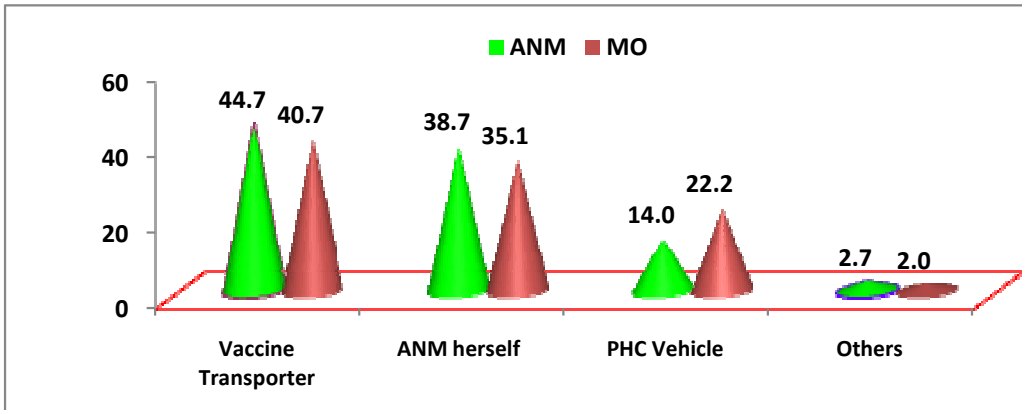


3.4.4 Transshipment of vaccines to RI sessions

Discussions with district as well as at PHC/CHC level revealed that transportation of vaccines from district to the PHC/CHC was not a problem. It was the responsibility of the district authorities to supply vaccines to PHC/CHC. In some instances it was reported that PHC itself collected the supplies from district headquarter.

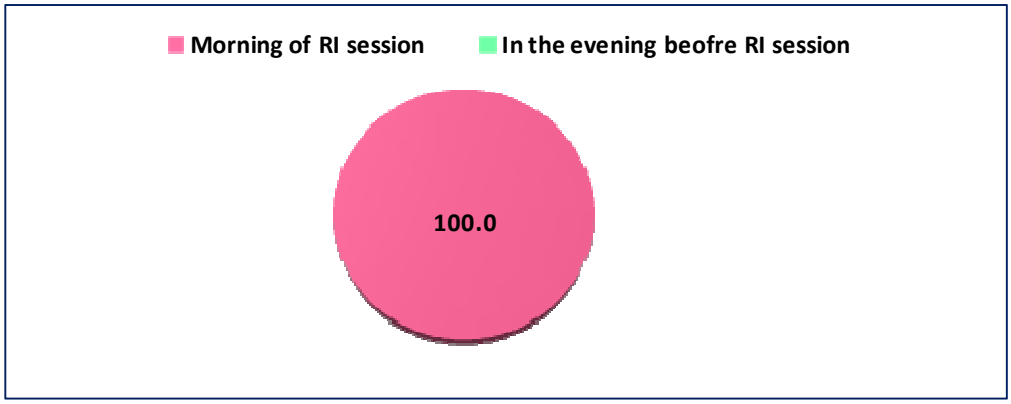
However, both MOICs and the ANMs were enquired about the existing system of carrying vaccines for RI sessions at the village level. Analysis of their responses has been presented in Figure 3.3. Forty four percent ANMs stated that vaccines for RI sessions were delivered through vaccine transporter, whereas 39 percent MOICs reported vaccine delivery through same mode. Nearly two-fifth of ANMs reported that they were themselves carrying vaccines for RI sessions from the respective PHC/CHC. Percentage of MOICs reporting about ANMs carrying vaccines was 35 percent. More than one-fifth MOs reported use of PHC vehicle, this figure for ANMs was only 14 percent.

Figure 3.3 Means of carrying vaccines for RI sessions as reported by MO and ANM



ANMs were also asked, if the transporter delivered the vaccines, when they received vaccines from them. Analysis shows that all ANMs reported receiving vaccines by vaccine transporter in the morning before RI session **(Figure 3.4).**

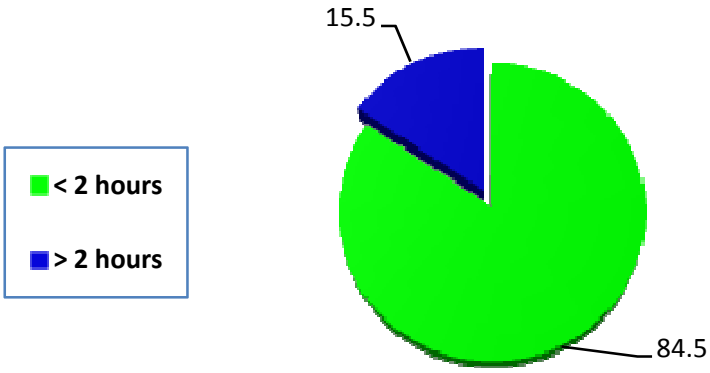
Figure 3.4 Timing of receiving vaccines by vaccine transporter (%)



Time taken in reaching session after collecting vaccines from PHC/CHC

All those ANMs who reported collecting vaccines themselves for conducting RI sessions were asked how much time they usually spent after collection of vaccines and start of session at their fixed site. Slightly above 84 percent of the ANMs who usually carried vaccines to the session by themselves stated that it took less than 2 hours between time of collection and start of session. On the other hand, 15 percent mentioned that it took more than 2 hours **(Figure 3.5).**

Figure 3.5 Time taken in reaching session after collecting vaccines from PHC/CHC (%)

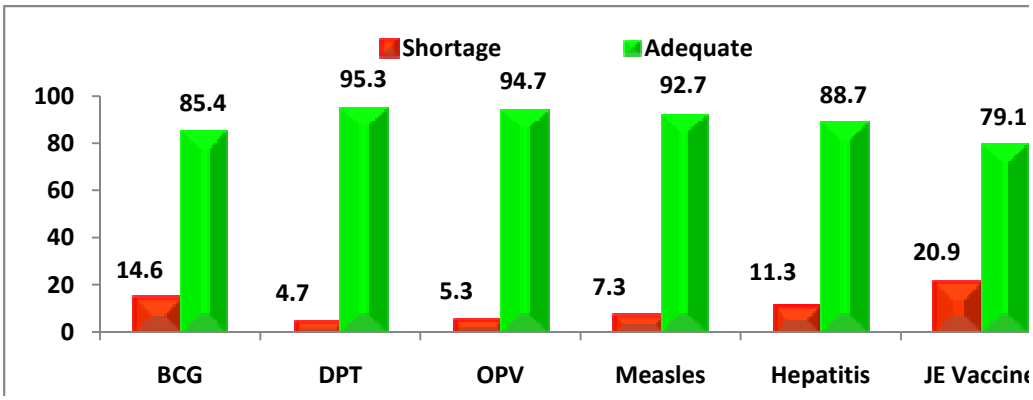


3.4.5 Supply position of different vaccines as reported by ANMs

As ANM was one of the key persons to know about the adequacy of vaccine supply, they were queried whether they used to get supply of vaccines as per the requirement of a particular session. Most of the ANMs were of the opinion that by and large the supply was adequate. They were further asked about the shortage of

any vaccines during last 3 months before the survey. Analysis in this regards has been shown vaccine-wise in Figure 3.6. About fifteen percent of the ANMs reported shortage of BCG vaccines from time to time. Shortage of BCG vaccine was also confirmed during discussions with DIOs as well as IOs in different districts. Although, supply of DPT and OPV vaccines was, by and large, adequate, around 5 percent of ANMs stated shortage of these vaccines at times. Less than one-tenth mentioned about inadequate supply of Measles. Inherent problems in supply chain may be attributed to shortage in supply of these vaccines at some point of time. But, 21 percent indicated short supply of JE Vaccines and 11 percent of Hepatitis.

Figure 3.6 Adequacy of different type of vaccines as reported by ANM s



3.5 Preparation of Micro Plan and preparation of due list

Preparation of micro plan was one of the most indispensable activities in overall planning for conduct of routine immunization sessions. All the medical officers were, therefore, asked about the preparation of micro plans for PHC as well as for sub-centres. All the MOICs confirmed that micro plans of all sub-centres under their PHC jurisdiction were prepared. Further, all MOICs had averred about the preparation of micro plans of their respective PHCs/CHCs. When queried about their role in preparation of micro plan, majority of the MOICs stated that they first called the meeting of the ANMs and other staff involved in the routine immunization programme. They also invited people from other agencies such as BMCs of UNICEF and field volunteers of NPSP. Representatives of these agencies played a very active role in preparation of micro plans, MOICs provided leadership and facilitated in its preparation. Other people involved were IOs, HEOs and AROs posted at the PHCs/CHCs level. ***ANMs were specifically asked about the receipt of computerized copy of micro plan, 69 percent ANMs reported receiving the same.***

3.5.1 Preparation of due list

All MOs were asked whether the ANM get the due lists of beneficiaries prepared for vaccination. Ninety four percent of the MOs confirmed the preparation of due list by all ANMs while rest 6 percent stated that most of them prepare it **(Table 3.7).**

Table-3.7 Percent of MOs reporting preparation of due list for vaccination by number of ANMs in PHC area

Number of Sub-centers	Number	Percentage
All	51	94.4
Most	3	5.6
Some	0	0.0
None at all	0	0.0
Number of MOs	**54**	**100.0**

As ASHAs play a vital role in preparation of due list of beneficiaries for vaccination, they too were asked about the preparation of due list. Nine in every ten ASHAs stated that they prepared the due list of beneficiaries for vaccination **(Figure 3.7).** All those who reported preparing the due list were further asked whether they match their list with the due list prepared by the Anganwadi worker. A little above three-fourth confirmed matching their due list with the one prepared by AWW while this proportion for ANMs was 69 percent **(Table 3.8).**

Figure 3.7 Preparation of due list by ASHAs (%)

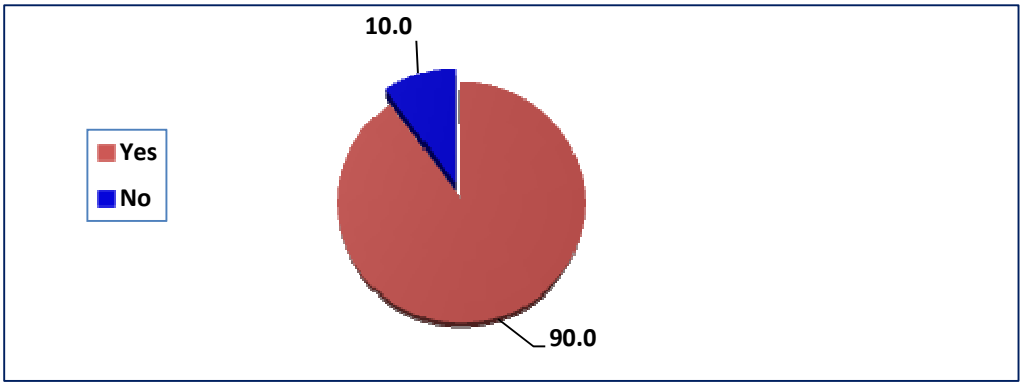


Table – 3.8 Percent of ASHAs reported matching their due list with the list of AWWs

Particulars	Percent	
	ASHA	ANM
Yes	76.3	69.3
No	23.7	30.7
Total Percent	**100.0**	**100.0**
Number of respondents	**135***	**150**

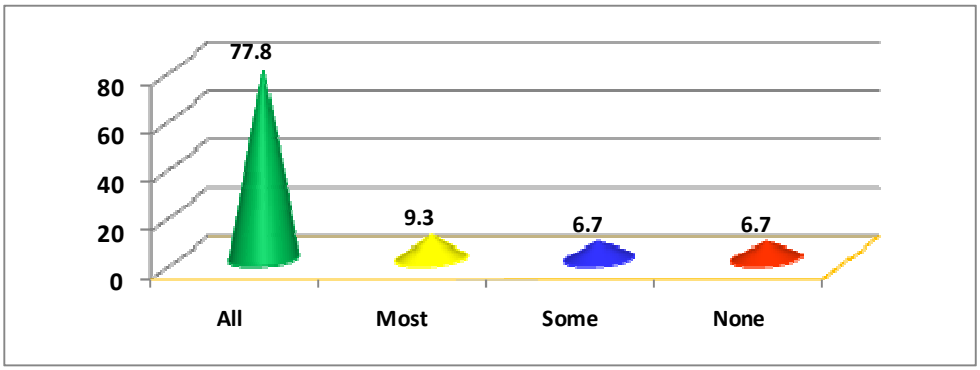
*Number of ASHAs who reported preparing due list

3.5.2 Feedback by ANMs on preparation of due list

All ANMs were enquired whether all ASHAs working in their sub-centre jurisdiction were preparing the due list of beneficiaries. More than three-quarter (78 percent) of ANMs reported that all ASHAs were preparing the due list of beneficiaries for

vaccination whereas nearly one-tenth said most of them did so **(Figure 3.8).** Ninety-three percent among the ANMs reporting preparation of due list by ASHA affirmed that they also helped ASHAs in its preparation.

Figure 3.8 Percent of ANMs reporting preparation of due list by ASHAs



3.5.3 Updating of due list by ASHA as reported by ANM

Ninety four percent of the ANMs who reported about preparation of due list by ASHA further stated that they update the list. When queried how frequently, 70 percent said that the due list was updated every 15 days by ASHA, while 26 percent reported the updating on monthly basis **(Table 3.9).**

Table- 3.9 Percentage distribution of ANMs by frequency of update of due list of beneficiaries by ASHAs

Particulars	Percentage
Whether ASHA updates the due list	
Yes	94.3
No	5.7
Number of ANMs reporting preparation of due list	**140**
Frequency of update	
15 days	70.5
One month	26.5
Three months	0.7
Sometimes	2.3
Total Percent	**100.0**
Number of ANMs who reported updating of due list by ASHA	**132**

3.6 Conduct of RI sessions

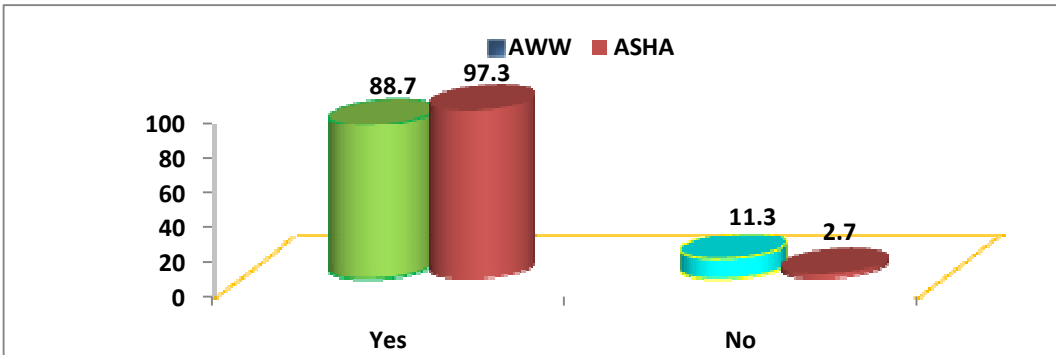
In order to assess the status on conduct of routine immunization sessions and related aspects, pertinent questions were asked to all stakeholders particularly, MOICs, ANMs and ASHAs. First the MOICs were queried whether the sessions were conducted in accordance with the micro plan. All MOICs had affirmed that RI sessions were conducted as per micro plan as no deviation was allowed. As has been

indicated earlier, extensive monitoring was done as the micro plan was shared with CDPOs, DIOs, UNICEF, NPSP and their representatives working at district and block level. Place of RI sessions were fixed as per the micro plan. When ANMs were also enquired about the conduct of sessions as per the micro plan, almost all of them (99 percent) reported that sessions were organized according to micro plan. All ANMs and ASHAs also affirmed that place of session was also fixed.

3.6.1 Presence of ASHA and AWW during sessions

As the routine immunization sessions were supposed to be conducted by ANMs with active participation of both ASHA and AWW, all ANMs interviewed, therefore, were asked about the presence of both of these grass roots workers during sessions. As can be seen in Figure 3.7, 97 percent of ANMs had reported the presence of ASHAs and 89 percent that of Anganwadi workers during the RI sessions (**Figure 3.9)**.

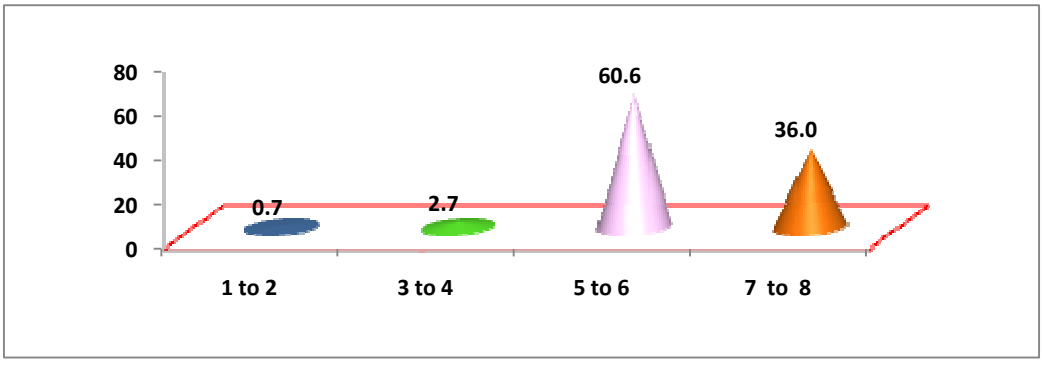
Figure 3.9 ANM reporting presence of ASHA and AWW during sessions (%)



3.6.2 Usual duration of RI sessions

All ANMs were asked about the usual duration of RI sessions. A little more than 60 percent of ANMs stated that each RI session often lasted between 5 to 6 hours whereas this figure for those reporting 7 to 8 hours as usual duration was 36 percent. Mean duration of each RI session was estimated at 6 hours.

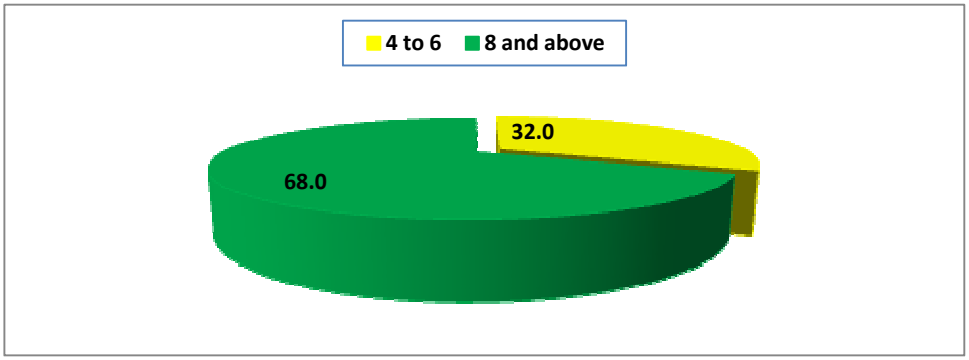
Figure 3.10 Usual duration of RI session as reported by ANM (%)



3.6.3 Number of sessions organized as per micro plan

All ANMs were asked about the number of sessions organized in their sub-centre area. As can be observed in Figure 3.11, slightly above two-third of ANMs reported that 8 and above number of sessions were organized in their sub-centre areas while nearly a one-third of ANMs stated about 4-6 sessions. Median number of sessions was estimated at 8 sessions per sub-centre.

Figure - 3.11 Percent of ANMs by number of sessions organized in their SCs



3.6.4 Four important messages given to mothers during RI sessions

Both the ANMs as well as ASHAs were enquired what four important messages given to mothers during RI sessions when they come for vaccinations of their children. Table 3.10 shows the messages given during sessions to mothers both by ANMs and ASHAs. Seventy seven percent of ASHAs and 72 percent of ANMs gave the message 'which vaccine was given today and the disease it protects from'. Ninety one percent ANMs told the mother about 'time of next vaccination' while this figure for ASHAs was 79 percent. More than three-fourth (77 percent) of ANMs told the mother about the possibility of 'some adverse reaction like fever after administering this vaccine', while only half of ASHAs said so to the mothers. About 69 percent ANMs advised mothers 'to keep immunization card safely' (ASHA-53 percent).

Table- 3.10 Percent of ANMs and ASHAs by type of 4 important messages given to mothers during RI sessions

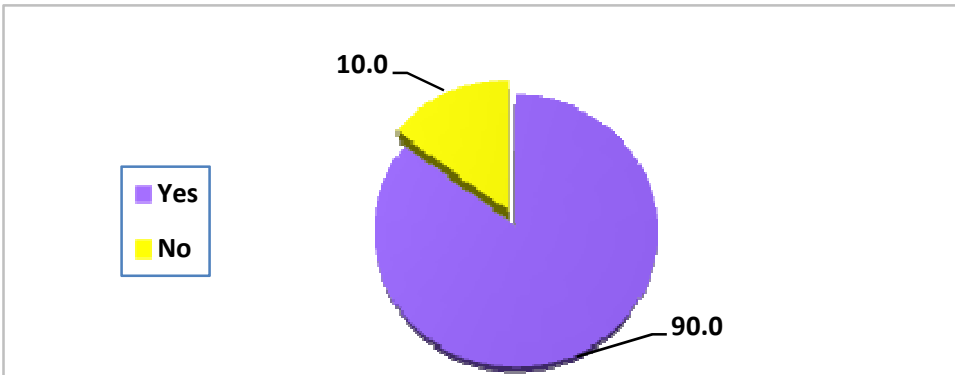
Important Messages given*	**Percentage**	
	ASHA	**ANM**
Which vaccine was given today and the disease it protects from	77.3	72.0
Time of next vaccination	79.3	91.3
There could be some adverse reaction like fever after administering this vaccine	52.0	76.7
To keep the immunization card safely	52.6	68.7
Number of ASHAs	**150**	**150**

*Percentage would exceed 100 due to multiple answers

3.6.5 ANMs asking mothers for half an hour stay after vaccination

All ANMs were enquired whether they were asking mothers to stay at the session for half an hour after the vaccination of child. Analysis indicates that 90 percent ANMs were asking the mothers to stay at the RI session for an half an hour **(Figure 3.12).**

Figure 3.12 Percent of ANMs asking mothers to stay at session for half an hour



3.6.6 Any child got seriously sick after vaccination during last 6 months

All ANMs were asked whether any child got seriously sick after vaccination during last 6 months in their areas. Slightly above one-tenth of ANMs stated about child developing serious sickness after vaccination in their sub-centre areas. They were further enquired about the action taken in this context. Nearly six in every ten ANMs reported that they had themselves given the treatment. Three out of every ten mentioned that the child was referred to PHC/CHC for treatment **(Table 3.11).**

Table-3.11 Percentage of ANMs reporting serious sickness of any child in her area after vaccination and action taken by her

Particulars	**Percentage**
Whether child developed sickness	
Yes	11.3
No	88.7
Total percent	**100.0**
Number of ANMs	**150**
Action taken by ANM	
Given treatment herself	58.8
Referred the child PHC/CHC	29.4
Others	11.8
Number of ANMs who reported about sickness	**17**

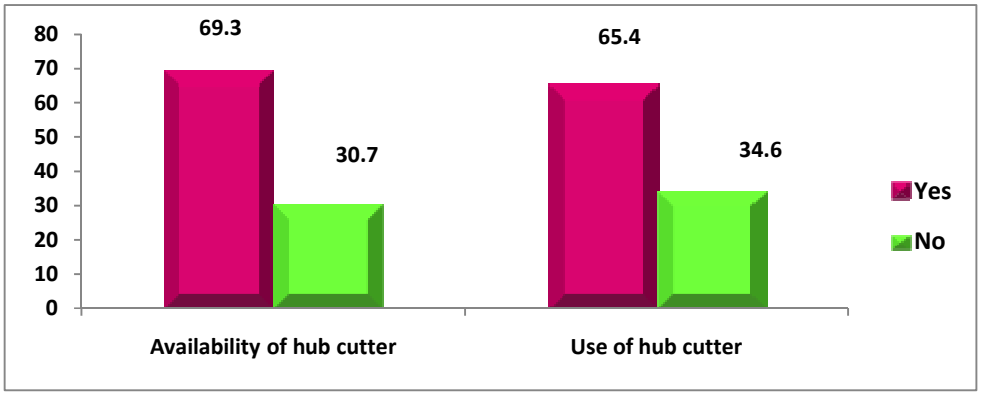
3.7 Disposal of medical waste during RI sessions

In order to understand the existing practices regarding disposal of medical waste all the ANMs were asked certain related questions such as the availability of hub cutter and its use during RI sessions. They were further enquired about the methods adopted in disposing off the medical waste.

3.7.1 Availability of hub cutter and its use

As can be observed in Figure 3.13, 69 percent of ANMs had hub cutter. Those who had the hub cutter were asked about its use. Among them, only 65 percent reported about its use.

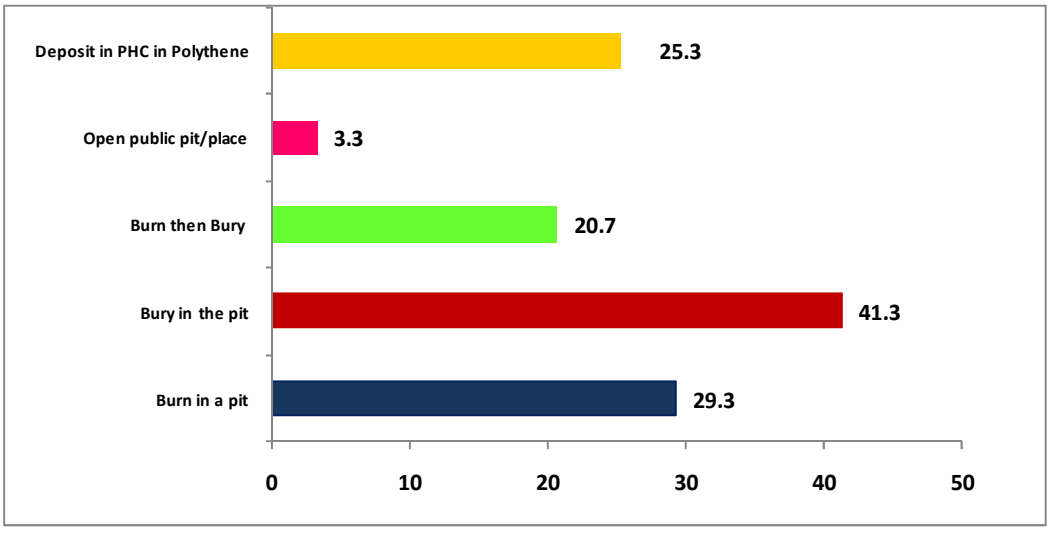
Figure-3.13 Availability and use of hub cutter by ANM at RI sessions



3.7.2 Status of disposal of medical waste during RI sessions

Regarding the disposal of medical waste during RI sessions, 29 percent of the ANMs stated that they 'burn it in a pit' while 41 percent said that they 'bury the waste in a pit'. Around one-fifth (21 percent) mentioned that they first 'burn the waste then bury it in a pit'. However, nearly one-fourth told they carried it to PHC/CHC in two different color polythien bags (red/black) for disposal **(Figure 3.14).**

Figure-3.14 Methods adopted for disposal of medical waste during RI sessions

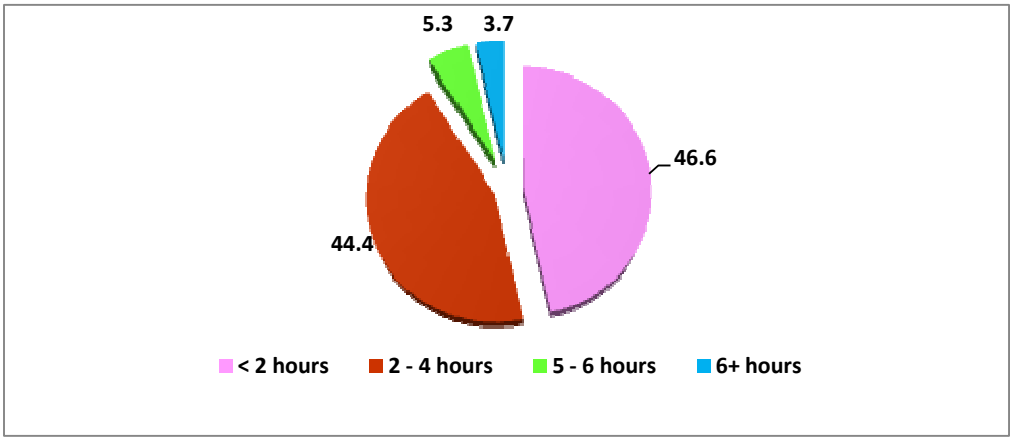


***Multiple options hence exceed 100 percent**

3.7.3 Action taken regarding open vials after RI sessions

The ANMs were enquired about the action taken regarding open vials after RI sessions. Around 90 percent of the ANMs told that they deposit the vials at the PHC. Those who reported about depositing the same in PHC were further asked how much time it took after RI session till they deposit vials in the PHC. About forty seven percent of ANMs informed that the open vials were deposited in the PHC in less than 2 hours. Proportion of ANMs who reported of depositing in 2-4 hours was 44 percent **(Figure 3.15).**

Figure 3.15 Time taken by ANMs in depositing the open vials at PHC (%)



3.7.4 Any specific problems that hamper smooth conduct of RI sessions

ANMs were asked whether there were any specific problems faced in smooth conduct of RI sessions. Analysis has been presented in table 3.12. Almost six in every ten (59 percent) ANMs stated that they did not face any specific problem that hampered the smooth conduct of RI sessions. Slightly above one-fourth, however, indicated about 'lack of cooperation from the people' and one-fifth mentioned that not getting desired cooperation from AWW.

Table-3.12 Percentage of ANMs reporting different problems faced in conducting RI sessions in effective manner

Problems*	**Percentage**
Lack of cooperation from the people	26.0
Lack of cooperation from AWW	20.0
Not getting desired cooperation from ASHA	3.3
Long distance of vaccination site	4.0
Shortage of syringes as per need	2.0
No problem faced	**59.3**
Number of ANMs	**150**

*Percent would exceed 100 due to multiple responses

3.7.5 Steps taken to vaccinate children left out of due list and in uncovered areas

An attempt was made in the study to assess what were the steps taken by ANMs to vaccinate children left out from due list and also those from inaccessible areas if any in their jurisdictions. They were also queried about the strategies adopted for those children who were delivered in health facilities but not given BCG dose.

Table 3.13 shows the steps taken by ANMs to vaccinate children left out from due list. More than two-fifth of ANMs stated that they vaccinate such children at their homes. Around 57 percent reported that they call them in the next RI session.

Table-3.13 Percentage of ANMs reporting different methods to vaccinate children left out from due list

Methods adopted	Percentage
Vaccinate at their home	42.7
Call them in next RI session	56.7
Take no action	0.7
Number of ANMs	**150**

Further, on the question related to BCG inoculation of those children who were not vaccinated in the hospital after the delivery, 88 percent ANMs said that they call them in the next RI session, while only 10 percent indicated that they were given BCG at their homes **(Table 3.14).** On the question related to uncovered areas, 97 percent of the ANMs had reported that there were no uncovered and inaccessible areas in their jurisdiction (Table not presented).

Table- 3.14 Percentage of ANMs reporting different methods to vaccinate children who do not get BCG vaccines in the hospital after delivery

Methods adopted	Percentage
Vaccinate at their home	10.7
Call them in next RI session	88.0
Take no action	1.3
Number of ANMs	**150**

3.8 Barriers for not getting full vaccination and non-vaccination

As ANMs and ASHAs work closely at the grassroots among various communities they were asked to tell the reasons due to which people were not opting for full vaccination of their children. Analysis of their responses has been presented in Table 3.15. Most important reason cited by more than half of ANMs (56 percent) and ASHAs (57 percent) was that the 'people don't understand the importance of full vaccination'. Fifty two percent of ASHAs mentioned about 'engagement of people in daily household chores' while only 23 percent ANMs thought this as a factor that make people not to go for full vaccination of their children. Lack of knowledge in this context was also cited as a reason by one-fourth of ASHAs.

Table-3.15 Percent of ANMs and ASHAs reporting different reasons for households not coming for full vaccination of children

Reasons*	Percentage	
	ASHA	ANM
People don't understand the importance of full vaccination	56.0	57.3
Not availability of Vaccine	5.3	12.0
Distance of vaccination site	11.3	1.3
Busy in other daily chores	52.7	22.7
Lack of knowledge about vaccines	25.3	0.0
Health worker are not friendly	5.3	-
Non availability of health worker at immunization session	4.0	-
Number of respondents	**150**	**150**

***Percentage would exceed 100 due to multiple answers**

3.8.1 Some households in their areas not coming for vaccination and reasons

Both ANMs and ASHAs were asked whether there were households in their areas that were not coming for vaccination and what were the reasons. Slightly above half of ANMs and ASHAs affirmed that there were households in their jurisdictions who were unwilling to get their children vaccinated. Ignorance about the importance of vaccination among such people was the key reason reported both by ANMs (63 percent) as well as ASHAs (67 percent). While 59 percent ANMs felt that there was misunderstanding among the people related to vaccination, only 24 percent ASHAs thought so. Instead 38 percent mentioned about 'fear of sui (syringe)', only 14 percent ANMs cited it as a reason for non-vaccination.

Table-3.16 Percent of ANMs and ASHAs reporting about some households not coming for vaccination and reasons for the same

Particulars	Percentage	
	ASHA	ANM
Unwilling to get vaccinated		
Yes	52.0	50.7
No	48.0	49.3
Number of respondents	**150**	**150**
Reasons*		
Don't understand the importance of vaccination	66.6	63.2
Misunderstanding among people	24.3	59.2
Non availability of vaccine as per requirement	1.2	2.6
Distance of vaccination site	5.1	2.6
Busy in daily chores	12.8	6.6
Lack of knowledge about vaccines	3.8	11.8
Fear of Sui (syringe)	38.4	14.5
Others	6.4	11.8
Number of respondents	**78**	**76**

***Percent would exceed 100 due to multiple responses**

District officials as well as other stakeholders at different levels had pointed out about a number of issues as impediments in full vaccination and non-vaccination of children. According to most of them the important demand side factors being 'people not understanding the necessity of full vaccination' and 'lack of knowledge'. While some of the officials also emphasized that illiteracy, especially among the women, cultural and religious outlooks were also the barriers among some sections. However, poor literacy particularly among women and resulting ignorance about the vaccines and importance of vaccination were primarily the demand side factors that hampered the achievement of full vaccination. As the study revealed while nine in ten children received dose of BCG which meant the vaccination has reached almost all households. Dropout between BCG and dose of Measles (23 percent) was the worrying factor and an indication of the fact that there was mix of factors in achieving the target of full vaccination.

On the provider side, some of the district officials had also pointed out about the shortage of ANMs, supervisory staff as well as attrition among ASHAs as barriers which needed to be tackled sooner than later.

3.9 Promotional activities for routine immunization

In order to increase the acceptance and create demand for routine immunization services among all sections of the society it was important to have proper IEC strategy in place. Attempt was made in the study to see whether any IEC activities were undertaken by the department at the grassroots level. Discussions with the district officials revealed that there was no budget for IEC activities to be carried out in the district to generate awareness among people on routine immunization. ANMs and ASHAs were also asked whether any IEC activities were organized in their areas.

Table- 3.17 Percentage of ANMs reporting about BCC activities aimed at creating awareness regarding routine immunization organized in their area

Particulars	Percent	
	ASHA	ANM
Any BCC/IEC activities		
Yes	52.7	66.7
No	47.3	33.3
Total percent	**100.0**	**100.0**
Number of respondents	150	150
Type of activities		
Nukkad Natak	5.1	10.0
Video film/Video van	11.4	4.0
Folk songs/cultural programmes	3.8	0.0
Puppet show	1.1	2.0
Magic show	3.8	5.0
Rally	24.0	30.0
Wall writing	44.3	62.0
Poster/Banner	58.2	70.0
Number of respondents	**79**	**100**

Table 3.17 shows the IEC activities as reported by ASHAs and ANMs. Around two-third of ANMs (67 percent) and above half of ASHAs (53 percent) mentioned about some IEC activities held in their areas. Important activities mentioned by both ANM and ASHA though in varying proportions included display of poster/banner, wall writings and rally. A little more than one-tenth ASHAs also told about activities through video van/video films. Enquiries revealed that no such programme was organized by the health department; Rotary International had, however, conducted some IEC activities in the villages through video vans which were also reported by mothers in their interviews.

The study revealed that, by and large, the promotion of routine immunization was restricted to display of posters/banners, rallies held in the village and wall writings. ASHA and grassroots workers were, however, involved in promotion of routine immunization through house to house visits in which they met the community as part of their daily activity, inform and educate them about various health programmes including routine immunization. ASHA was therefore an important and first contact between the community and the public health setup. During their interviews all ASHAs were asked about the advice given to mothers regarding routine immunization. Table 3.18 shows the advices given to mothers by ASHA in this context. As the table reveals, various important messages given to women by a large majority of ASHAs comprised 'benefits of immunization' (83 percent), 'timely immunization' (73 percent), 'complete vaccination is free' (49 percent). Sizeable proportions of ASHAs also informed the women 'about complete immunization' and 'about time and place of immunization (40-47 percent). The study thus infers that ASHA was the virtual IEC activist that informs, educate and communicate with beneficiaries for promotion of routine immunization.

Table - 3.18 Advise given to women in connection with the immunization

Advice given*	**Percent**
Benefits of immunization	83.3
Timely immunization	72.7
Information about complete immunization	46.7
About the time & place of immunization	40.0
Information about immunization card	50.7
Complete vaccination is free	49.3
To inform about disposable syringe of vaccination	20.0
Importance of vitamin-A dose	20.7
Number of ASHAs	**150**

*Percentage would exceed 100 due to multiple answers

3.10 Process of financial disbursement to ASHA under RI and related aspects

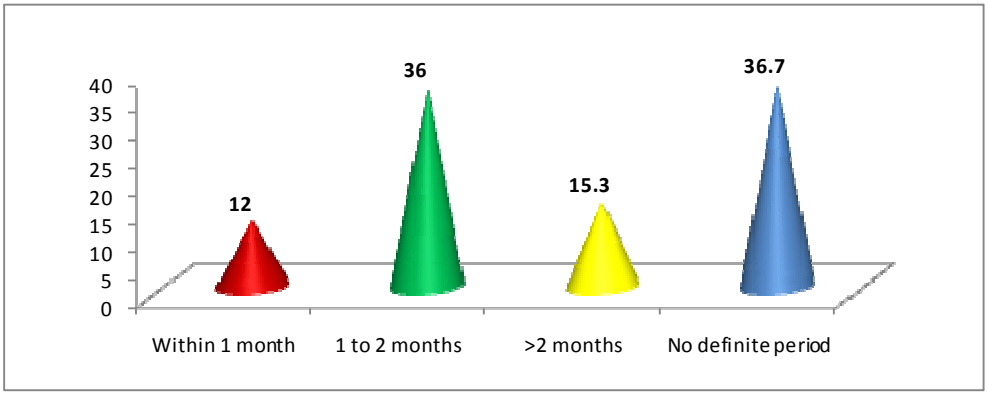
ASHAs are supposed to get incentive for full vaccination of children. Thus questions were asked about the time taken in getting incentive and mode of payment. They

were also enquired about the problems faced in getting incentive, whether they had received full monetary incentive related to immunization of last financial year and adequacy of incentive amount.

3.10.1 Time taken in getting incentive and mode of release

All ASHAs were asked how much time it takes to get the incentive for immunization. As the figure depicts, around 37 percent of ASHAs stated that there was no definite period for release. A little more than one-tenth of ASHAs said that payment was received within a month while another 36 percent stated that payment was received within one to two months time.

Figure 3.16 Time taken in getting incentive (%)



Further all ASHAs were asked about the mode of payment. It can be observed in Table 3.19; almost all ASHAs had received their payment through E-transfer.

Table – 3.19 Mode of payment for receiving incentive

Particulars	Percent
E- transfer in account	96.7
Cheque payment	2.6
Cash	0.7
Total Percent	**100.0**
Number of ASHAs	150

3.10.2 Problems faced in getting incentive

Nearly two-third of ASHAs mentioned that no problem was faced by them in getting the incentive for complete immunization. Delay in payment/no timely payment was reported by 22 percent of ASHAs. Nearly a one-tenth stated that to get incentive one has to part with some part of payment. To visit many times for getting incentive was reported by nearly 13 percent of ASHAs.

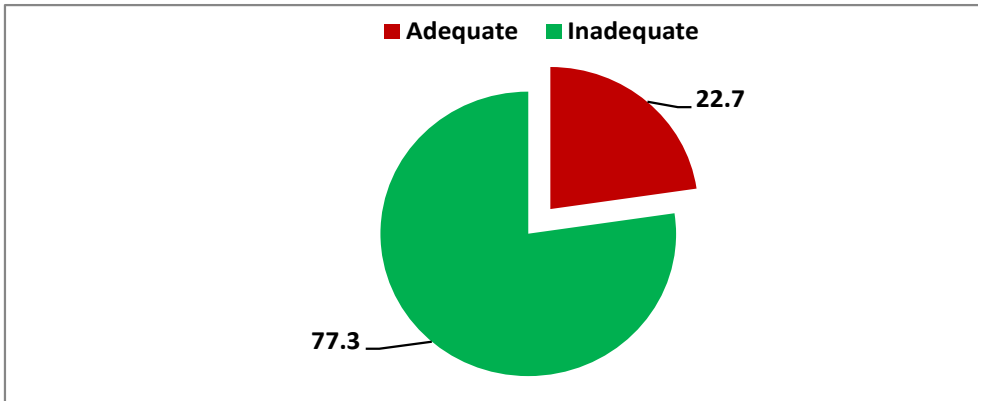
Table-3.20 Problems faced in getting the incentive of complete immunization

Problems faced	Percent
Delay in payment/no timely payment	22.0
Complicated process	5.3
To get incentive has to part with some part of amount	9.3
To visit many times for getting incentive	12.7
No problem	66.7
Total Percent	**100.0**
Number of ASHAs	150

*Percentage would exceed 100 due to multiple

When asked about the payment of full amount related to immunization for last financial year, 72 percent ASHAs informed that they had received full payment. On the question of adequacy of incentive for RI activities, only around 23 percent ASHAs felt that it was adequate. In other words, 77 percent of ASHAs found the incentive amount as inadequate (**Figure 3.17)**.

Figure 3.17 Adequacy of incentive amount



3.10.3 Steps needed to improve their working in relation to complete immunization

All ASHAs were asked what were the steps needed to improve their working related to activities for complete immunization. Fifty three percent of ASHAs stressed upon the need to increase incentive. An overwhelming majority of ASHAs (90 percent) demanded that fixed incentive should be given so as to improve their working in relation to complete immunization **(Table 3.21).**

Table- 3.21 Steps needed to improve their working related to activities for complete immunization

Steps needed	Percent
Increase the incentives	52.7
Fixed incentive	90.0
To provide refresher training	17.3
Number of ASHAs	**150**

*Percentage would exceed 100 due to multiple