Original Research Article

Supervision and monitoring to assess quality of outreach immunization sessions in a rural area using a checklist

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ABSTRACT

Background: Immunization is one of the most cost-effective interventions to prevent the suffering that comes from avoidable sickness, disability and death. Outreach immunization services ensure that immunization is available to children who are unable to access a general practice in a timely fashion for their immunization events. Effective supervision and monitoring will help in improving quality and coverage of immunization.

Methods: This was an observational cross-sectional study conducted in the rural field practice area of a tertiary care hospital. 50 outreach sessions held in various outdoor places including Anganwadi were supervised and monitored using checklist. 110 mothers and 20 stakeholders were interviewed. Immunization records were assessed.

Results: Outreach immunization sessions were found to be of good quality. 89% children were fully immunized. ANMs and ASHAs were of the opinion that outreach session has significantly raised immunization coverage. 75.4% mothers had knowledge about services provided by outreach sessions.

Conclusions: There was increase in immunization coverage due to outreach sessions. There is need for adequate supervision on safety injection practices and regular timely incentive to ASHA.

Keywords: Accredited social health activist, Auxiliary nurse midwifery, Checklist, Monitoring, Outreach session, Supervision

INTRODUCTION

According to WHO, in 2018, an estimated 19.4 million infants worldwide were not reached with routine immunization services such as 3 doses of DTP vaccine. Around 60% of these children live in 10 countries: Angola, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Nigeria, Pakistan, the Philippines and Viet Nam. Immunization is one of the most cost-effective interventions to prevent the suffering that comes from avoidable sickness, disability and death. The benefits of immunization are not restricted to improvements in health and life expectancy but also have the social and economic impact at both community and national levels.

Outreach immunization services (OIS) are an important tool for increasing childhood immunization coverage. Outreach sessions are services provided in an attempt to immunise those children who have been identified as having missed some or all of their scheduled childhood immunizations. The outreach immunization services ensure that immunization is available to children who are unable to access a general practice in a timely fashion for their immunization events.

According to NFHS-3 report, 43.5% children of 12-23 months age were fully immunized (BCG, measles, and 3 doses each of polio and DPT) in India whereas according to NFHS-4 report (62%) percentage of children of 12-23 months age have been fully immunized.
Supervision provides opportunity for learning in case there are any gaps in the knowledge or skills of the service provider and provides means to overcome the problems. Monitoring is the continuous review of programme implementation to identify and solve problems so that activities can be implemented correctly and effectively. Monitoring involves regular collection and analysis of information/data on aspects of the program’s activities.4

Some of the challenges to immunization include limited capacities of staff, particularly in poor-performing states and at the field level, and gaps in key areas such as predicting demand, logistics and cold chain management, which result in high wastage rates.5 An effective, regular, monitoring of the sessions is essential so as to increase immunization coverage, more so in the view of ongoing polio eradication and other vaccine preventable disease control programme. Very few studies have been conducted on outreach sessions.6

This study was conducted with objectives, to assess the quality of outreach Immunization sessions in a rural area using a checklist. To study the extent of immunization coverage in the outreach sessions in the rural area. To study the role of the outreach sessions in the immunization coverage.

METHODS

Study period

A two months i.e., 15th October to 15th December study.

The study was carried out as a cross sectional observational study at outreach immunization sessions in rural area attached to RHTC, which is the field practice area of a tertiary care hospital and medical college in Maharashtra. 50 outreach immunization sessions were attended and taken as sample size using convenient sampling method and data was collected with the help of checklist given in the immunization Handbook of Medical officers on the MOHFW site. Immunization registers maintained by AWWs were check to assess the quality and extent of immunization coverage.

Exit interviews of 110 mothers (mothers of beneficiaries) and 20 stakeholders (ANMs and ASHAs) were taken. 2-3 mothers were interviewed per session as per their convenience. Data was collected using pretested and validated, semi structured questionnaire in suitable language (Marathi/ Hindi). Questionnaire for mothers and stakeholders had questions regarding their knowledge about immunization and difficulties faced.

Inclusion criteria

All sessions held in a month were included.

Exclusion criteria

Sessions not held were excluded.

Statistical analysis

All collected data were tabulated and graphically represented. The data was analysed using Microsoft excel software for descriptive statistical measures like mean, frequency. Data obtained from mothers and stakeholders were analysed qualitatively.

RESULTS

Significant findings obtained through checklist

Headcount survey was conducted for children under 2 years and pregnant women in the last 6 months as per ANM and ASHA. Due list of beneficiaries was available at all sessions. Majority of the beneficiaries were children due for next dose followed by pregnant women. Those children who had missed dose were also listed in the duelist. This list is updated before every session in advance by ASHA and AWW.

Figure 1: Distribution of beneficiaries in due list.

Figure 2: Injection practices followed by ANM during immunisation sessions.

ANMs were following faulty injection practices. Not cutting the needle immediately after administration was found in 40% of ANM. Some ANMs were found putting...
Adequate training is required to stop these faulty practices.

![FOUR KEY MESSAGES](image_url)

**Figure 3: Delivery of four key messages.**

**Four key messages which need to be delivered to mothers (beneficiaries)**

1. Which vaccine was given,
2. Minor side effects following immunization and measures to decrease it,
3. When to visit again for next dose,
4. Importance of MCP card and carrying it during all visits.

Key messages need to be delivered properly. 100% told about side effects following immunization and its management however emphasis on delivery of other key messages should be done.

Logistics other than vaccines and diluents were present adequately except few like there was insufficient supply of vitamin A, IPV vaccine and ORS packets.

ANMs were aware of vaccine administration sequence under 1 year of age. Their awareness on IPV administration schedule was however average probably due to recent addition in the schedule.

**Table 1: Result of interviews with mother regarding outreach immunisation session (n=110).**

<table>
<thead>
<tr>
<th>Heard about immunisation</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>83</td>
<td>75.4%</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>24.6%</td>
</tr>
</tbody>
</table>

A total 75.4% mothers responded that they have heard about immunization through neighbor’s, ASHA, ANM or doctors during delivery of their child in hospital. 24.6% said they had no knowledge and were compelled by ASHA to attend immunization sessions without understanding the importance.

Mothers were of the view that ASHA counsels them about importance of immunization and it is good for children. There is no loss of daily wages and sessions were conducted near their house so prefer coming.

Stakeholders both ASHA and ANM were of the opinion, there is Increase in number of beneficiaries as beneficiary is not required to go far away to PHC for immunization. Also increase in number of sessions within the village i.e. at anganwadi has increased immunization coverage. ASHA being a member of the village/community is trusted by village people and seems approachable. Adequate supply of vaccines and logistics has facilitated in conducting outreach sessions successfully. ASHA carries out field visit. ASHA gets incentive and recognition for her work which further encourage her to work harder. Less cases of vaccine preventable diseases and awareness among people has increased immunization coverage. Grievances enumerated by both are too much of paper work for session. Less incentive and not paid on time to ASHA. Also, logistics for outreach session have to be arranged by ANM.

Extent of immunization coverage was studied by review of records and registers maintained by ASHA, Anganwadi worker and ANM. It was found that: fully immunised till date in last 2 years were 89%, however it was seen that the interval between the doses of some vaccines was irregular/not as per schedule. Partially immunised were 11%. Reason for missing dose was illness, unwillingness or migration to other areas. Children who missed doses were tracked by ASHA and further immunization carried out accordingly.

**DISCUSSION**

The outreach sessions had adequate vaccine and logistics available. Majority of the due list beneficiaries attended each session. Prior information was given by ASHA and Anganwadi worker about immunization session. As per norms, health workers were working appropriately. However, there were few things which needs to be improved like proper IEC to patients and safe injection practices. No display of RI specific IEC material was found at the immunization site. Supervision of sessions was not done neither by LHV nor by MO. At storage point, vaccine distribution register was maintained. Open vial policy was being followed. Segregation of partially used vials was done. Interviews with stakeholders revealed that immunization coverage has increased significantly with outreach sessions. Interviews of mothers revealed that their knowledge and acceptance raised with the help of ASHA.

Similar findings were found by Nath et al in their study done at Haridwar found low immunization coverage due to inadequate supervision, inadequate training of health workers, poor cold chain, unsafe injection practices.  

Study done by Hu et al, in China among migrant’s children found low immunization coverage. Conducting session near approach of people due to insecure livelihood and education are significant in increasing immunization coverage.

Other study done by Rahman et al have analogous findings that maternal education, attendance for antenatal and postnatal care and parity are associated with full vaccination coverage among children.

**CONCLUSION**

Outreach immunization sessions appeared to be of good quality and extent of coverage was also good. The current study states that acceptability, accessibility, awareness and lack of fear due to proper counselling has led people to believe in immunization. Tracking of dropouts and arranging missed dose of vaccine at nearby centre by ASHA has also helped to increase immunization coverage. There was increase in immunization coverage due to outreach sessions. There is need for adequate supervision on safety injection practices and regular timely incentive to ASHA.

**Recommendations**

Proper IEC and four key messages should be given to all caregivers. Display of RI specific IEC material. Outreach session should be supervised by LHV at least once in a week or by MO once in a month for making it more effective. Training of ANM on safe injection practices. ASHA being a key component of outreach, her incentive should be given on time.

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**Ethical approval: The study was approved by the Institutional Ethics Committee**

**REFERENCES**