



CHALLENGES FACED IN IMPLEMENTING THE UNIVERSAL IMMUNIZATION PROGRAM IN IMPHAL-EAST DISTRICT, MANIPUR: A CROSS-SECTIONAL STUDY USING QUALITATIVE APPROACH

Community Medicine

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ABSTRACT

Background: Most of studies conducted so far for the improvement of immunization performance are mainly confined to the coverage and process part of the UIP. But it is equally important to assess the challenges faced at different level of government healthcare facilities in order to get the overall picture of immunization programme as well as for improving the immunization performance. **Methods:** A cross-sectional study using qualitative approach was taken up during the period of May 2017 - April 2020 among 48 stakeholders working at 14 different government healthcare facilities located in Imphal-East district of Manipur. In-depth interview of key stakeholders by using interview guide was used for collection of data. **Results:** Lack of regular training of medical officers, female health supervisors, auxiliary nurse midwives on immunization related activities, not timely release of government fund, irregular supervisory visits by MOs, FHS and ASHAs were the main findings. **Conclusion:** Different problems existed at different levels of healthcare facilities of the study area. If these areas are not properly digested and given due consideration for improvement, the immunization performance will remain low.

KEYWORDS

Chief Medical Officer, District Immunization Officer, Female Health Supervisor, Universal Immunization program

INTRODUCTION:

The Immunization Program is one of the key intervention programs and most cost-effective health investments for protection of children from vaccine preventable diseases. Globally, it saves 2-3 million lives each year and plays a central role in ending preventable child deaths. But nearly one in five infants misses out on the basic vaccine.¹ About 19.5 million children are not receiving the most basic vaccines leaving them vulnerable to dangerous diseases and hence, over 1.5 million children die annually from vaccine preventable diseases.¹

The immunization program in India is one of the largest immunization programs in the world and a major public health intervention program in the country.² It was first introduced in 1978 as Expanded Program of Immunization (EPI) and later changed to Universal Immunization Program (UIP) in 1985 and now it is one of the key areas under National Rural Health Mission (NRHM) since 2005.³

Several initiatives were undertaken by the government of India under NRHM (2005) to strengthen the immunization program. Under UIP, it was targeted to vaccinate nearly 27 million new-born each year with all primary doses and additionally about 100 million children aged 1-5 years with booster doses. To achieve this more than 90 lakh immunization sessions were conducted annually.³

Over the years various strategies have been made to make vaccines universally available, including to the most hard-to-reach and vulnerable population but the change in the coverage level never reached up-to the desired level. For the state of Manipur, the evaluated figures as per NFHS-2, NFHS-3 and NFHS-4 were 42.3%, 46.8% and 65.9% respectively.^{4,5,6} These figures showed an increasing trend, but are still unsatisfactory.

Thus, in spite of giving so much effort by the Government of India and World bodies, the coverage level of immunization never reached the desired level. Therefore, there is the need to look beyond, not only in terms of evaluating the vaccination coverage and process part of UIP which were frequently evaluated by different researchers but also to look and study into the different challenges faced at different level of public healthcare facilities in order to get the overall picture of immunization program that will help in improving the immunization performance.

AIM & OBJECTIVE:

The present study was done to explore the challenges faced in implementing UIP at different levels of public healthcare facilities located in Imphal-East District of Manipur

MATERIALS AND METHODS:

Study Design, Setting And Study Participants

This was a cross-sectional study using qualitative approach conducted during the period of May 2017 - April 2020 among 48 stakeholders working in 14 different government healthcare facilities starting from the district headquarter level down to the Accredited Social Health Activists (ASHAs).

Sample Size And Selection Of Participants

The study population consisted of the District Immunization Officer (DIO), 01 Senior Medical Officer in-charge (SMO i/c) of Community Health Centre (CHC), 12 Medical Officers in-charge (MOs i/c) of Primary Health Centres and Urban Health Centres (PHCs/UPHCs), 11 Female Health supervisors (FHSs) of CHC and PHCs, 10 ANMs in-charge of Sub-Centres (SCs) and 13 ASHAs.

Multi-stage sampling technique was used for the selection of study participants. First the DIO, SMO in-charge of the lone CHC in the district, all MOs in-charge of PHCs and UPHCs of Imphal-East were selected. This was followed by selection of one sub-centre each from the selected CHC/PHCs/UPHCs by lottery method. Then one village/ward from each of the selected SCs was selected by using the same method. Lastly, all ASHAs from the selected villages were included in the study.

Data Collection: Tools And Techniques

Data were collected by performing in-depth interview and audiotape recording of the study-participants using interview guide made by reviewing related articles. Data were filled by investigators for data related to challenges faced in implementing the Universal Immunization Program from the forty-eight (48) selected healthcare providers working at different levels, located at Imphal-East district of Manipur.

Statistical Analysis

Thematic analysis was performed incorporating the explanation of the elements explored in-depth, identifying patterns, systematically coding, deriving themes and creating a narrative

Ethical Issue

Ethical approval was obtained from the Institutional Ethics Committee, JNIMS, Imphal vide the registration No.Ac/06/IEC/JNIMS/2017 (PGT) study Protocol No. 61(17) PGT 2017 dated the 24th August 2017 before beginning of the study. Verbal informed consent was also taken from all the study participants after informing them the purpose of the study.

RESULTS:

Data could be collected from all the intended study-participants. There was no refusal to participate from the study participants.

Table 1. Main Challenges Highlighted During In-depth Interview Of The DIO

Area	Key observations
Authenticity of micro-plan	• Lack of authenticity of the micro-plan for vaccination prepared and submitted by the Sub-centres • Were found to be below standard • Irregular sanction of fund
Knowledge and skill of the ANMs regarding new vaccine	
Fund	
Suggestions To Improve Immunization Performance	
Area	Needs attention
Head counting	• Head counting should be done regularly • Training schedule of MOs, ANMs, and CHO should be increased • Timely release of fund
Training schedule	
Fund	

At the district headquarter level, the main challenges faced were lack of authenticity of the micro-plans for vaccination prepared and submitted by the SCs. Therefore, it was very difficult to arrange the exact number of vaccines required for them at the district level, resulting into oversupply and undersupply of vaccine sometime. Regarding the knowledge and skills of the ANMs about newer vaccines, were felt to be below par. Thus, it was very difficult for them to convince the consumers, resulting into under-vaccination of new vaccine. Most of the time funds were also not released in time in the last one year resulting into lack of sincerity and punctuality of the regular and incentive staffs.

Table 2. Main Challenges Highlighted During In-depth Interview At The Mid-managerial Level

Area	Key observations
Ice-lined refrigerator (ILR) or Deep Freezer (DF) Crossing over from nearby village	• Lack of ILR and DF in some of the centres • Crossing over from nearby village which were not under their jurisdiction • ASHAs are not sincere enough in delivery their duties • Too little space for beneficiaries to wait for vaccination • Some of the ANMs working under its jurisdiction lacked knowledge and skills about newer vaccines • Collection of vaccine from other nearby PHC and vaccination sessions usually starting late. • Timely fund-release was a problem for all the healthcare facilities thus affect the sincerity and punctuality of the regular and incentives staff in delivery their duties.
Sincerity of ASHAs	
Space for beneficiaries	
knowledge and skills of ANMs about new vaccine	
Collection of vaccine	
Fund	
Suggestions to improve immunization performance	
Area	Needs attention
Awareness on immunization	• Awareness on immunization should be conducted regularly by MOs, ANMs and ASHAs at the community level • Regular training for ASHA in order to increase their skill and knowledge on immunization • ILR and DF should be made available at all centres • Regular sanction of fund for ASHAs should be done
Training for ASHA	
ILR and DF	
Fund	

At the mid-managerial level (CHCs, PHCs and UPHCs), out of total thirteen (13) healthcare facilities eleven (11) healthcare facilities were

reported to have different forms of challenges. Two (2) healthcare facilities (18.18%) out of the 11 healthcare facilities either did not have any Ice-lined refrigerator (ILR) or Deep Freezer (DF) or had non-functional ILRs and therefore there was no vaccine storage facility. Hence, they had to collect vaccines and other ancillary logistics from the nearby PHC on every vaccination day. Obviously, a long distance had to be covered for this purpose resulting into late initiation of vaccination session. Another health institution had difficulty in estimating beneficiaries as some people from nearby villages not falling inside its jurisdiction used to attend the facility for vaccination leading to frequent under vaccination of some consumers. Another mid-level manager said that most of the ASHAs were not sincere enough in delivering their duties, not mobilizing the community for immunization properly resulting into less number of person coming for vaccination. Another newly up-graded health institution had too little space for beneficiaries to wait for vaccination resulting into returning back of some consumers and suffocation of staffs and consumers. Another mid-level manager said that, some of the ANMs working under its jurisdiction lack knowledge and skills about newer vaccines. Thus, they faced difficulty to convince the consumers regarding the new vaccine, resulting into under vaccination of that vaccine.

Table 3. Main Challenges Highlighted During In-depth Interview Of The FHSs

Area	Key observations
Distance problem and road condition	- Travel a long distance in the poor road condition for collecting vaccines from another PHC in the morning of every vaccination day - Some FHSs admitted that their last in-service training was years and ago. They needed refresher trainings - knowledge on immunization at the community/village level is very poor. - refusing of achieving MR vaccine at some villages
Service training	
Knowledge on immunization	
MR vaccine	
Suggestions to improve immunization performance	
Area	Needs attention
MR vaccine	- Awareness program on MR vaccine should be increased - Health talk and awareness program regarding importance of immunization should be conducted regularly at the community level by ASHAs, ANMs and MOs - Regular training of staffs on immunization and more specially on newer vaccine is a must - Installation of ILR and DF in all PHC/UPHC - Timely sanction of money for ASHAs
Health talk and awareness program	
Training of staffs	
ILR and DF	
Fund	

Out of total eleven (11) FHS interviewed seven (7) of them have reported some challenges in different forms. One FHS said that she had to travel a long distance in the bad road condition for collecting vaccines from another PHC in the morning of every vaccination day thus leading to late starting of vaccination session and returning back of some consumers due to long waiting period. Some FHSs admitted that their last in-service training was years ago and they needed refresher trainings on newer vaccines and techniques in order to increase their skill and knowledge on immunization. Some FHS also reported about refusal of achieving MR vaccine at some villages. Hence, regular awareness program and health talk on MR vaccine is a must.

Of the thirteen (13) ASHAs interviewed six (6) of them reported to have some difficulties such as lack of awareness and knowledge on immunization at the community level leading to decrease in number of individuals coming for vaccination, some were not willing to have vaccination due to fear of losing their daily wage job, some parents were reported to be not co-operative to vaccination because of lack of awareness and knowledge on vaccination.

Table 4. Main Challenges Highlighted During In-depth Interview Of The ASHAs

Area	Key observation
Awareness and Knowledge	lack of awareness and knowledge on immunization leading to decrease in number of individuals coming out for vaccination
Not willing to vaccinate	Due to fear of losing their daily wage job
Co-operation from the parents	Some parents were not co-operative to vaccination because of lack of awareness and knowledge on vaccination
Not allowing to vaccinate their children	Due to fear that vaccination will disturb their work
Suggestions to improve immunization performance	
Area	Needs attention
Field visit and counselling	Regular field visit and proper counselling of the parents by ANM/doctor should be done
Importance of immunization	Giving proper explanation by doctor/ANM during field visit to those family of not accepting the vaccination.
Awareness and advice	Giving awareness and advice to the parents by ANMs whenever they came for vaccination
Home visit	Regular home visit by ASHA and ANM to track out those drop-out and partially vaccinated population
Timely issue of vaccine for vaccination	Vaccine should be available in time in order to perform the vaccination session in time.

DISCUSSION:

In the present study, the important challenges in implementing UIP were found to be absence of genuine Sub-center level micro-plans, lack of knowledge and skills regarding newer vaccines among the healthcare workers and late-release of funds for program implementation. This was compounded with lack of equipments at PHCs.

Further, a few of the ASHAs were not working hard enough to mobilize the beneficiaries. Parents not realising on the benefits of getting their children vaccinated thus refusing to get their children vaccinated were also some of the challenging factors.

In some studies it was noticed that parents do not vaccinate their children because of the following reasons like feared of any side effects, unsuitable session timing, inappropriate attitude of the health staff, loss of daily earnings, and no incentive or motivation for vaccination.^{7,8,9} Similar findings were also observed in the present study.

Community participation or engagement in an important program like UIP is crucial for making the program successful. Similar recommendations were made by Dutta T et al from their qualitative study with key decision makers of the UIP in India in 2017-18.¹⁰

It was also seen from the present study that, ANMs and ASHAs were not well acquainted with newer vaccines. Simultaneously, it was noted that, the frequency of the supervisory visits by Female Health Supervisors and Medical Officers of PHCs were not up to the mark. These visits need to be made regularly and these could have been used as an avenue for hands-on field-based training of the grassroots workers.

In this study, out of total eleven (11) FHS interviewed, one FHS said that she had to travel a long distance in the bad road condition for collecting vaccines from another PHC in the morning of every vaccination day thus leading to delay in starting of vaccination session and returning back of some consumers due to long waiting period. Algotar PD et al have reported 1 session sites (1.66%) while Sharma DK et al in 34 (68%) sites as having hard-to-reach wards/villages.^{11,12}

The reasons for this could be more hilly areas, bad transportation & communication in the state of Manipur.

Some other FHSs interviewed said that the knowledge on immunization at the community/village level was very poor. Hence, regular awareness program on immunization was necessary specially during field visit by ASHAs, ANMs and MOS.

In a study conducted by Murugesan D et al lack of information was reported by 30%, lack motivation by 10%, some reported obstacles such as place too far by 10%, mother too busy and having family problem by 10%, child was ill by 15% and long waiting time by 5%.¹³ In the present study, of the thirteen (13) ASHAs interviewed six (6) of them reported to have some difficulties such as lack of awareness and knowledge on immunization at the community level leading to decrease in number of individuals coming for vaccination, some were not willing to have vaccination due to fear of losing their daily wage job, some parents were reported to be not co-operative to vaccination because of lack of awareness and knowledge on vaccination.

As per the studies done by Guha et al in 2021 in Maharashtra and Mendha et al in 2022 in Chhattisgarh, it was concluded that quality training and timely release of fund is very important to improve ASHAs performance and increase her efficiency in participation in healthcare delivery system including childhood vaccination.^{14,15} This finding was observed in our study also that delayed release of fund was one barriers related to ASHAs work performance in mobilization of immunization beneficiaries.

Gupta PK et al and Swami HM et al have found the main single reason for partial immunization was inconvenient timing of immunization.^{16,17} Similar finding was also observed in the present study. In most of the places immunization was usually done in the morning when most of the parents went to the field or for work. Hence this timing was possibly inconvenient for immunization for parents as this was their work time and they could not afford to lose their wages.

Other studies conducted by Muhammad A et al, Ray SK et al and Ughade SN et al found that the fear of side effect was the most common reason for partial immunization.^{18,19,20} All these differences could be because of difference in socio-demographic characteristics, knowledge level and study setting as seen in the present study.

The problems or challenges faced by the key stakeholders of the study area will be applicable to the study area and cannot be generalized to other parts. Area-specific challenges and ways to overcome the challenges need to be thought of in implementation of the program. Similar studies need to be done for any district for achieving universal immunization.

Strength:

In-depth interview was used as a tool for collecting data from the study participants in order to acquire in-depth information

Limitation:

Larger study need to be carried-out by looking at both providers and consumers perspective in order to see the broader clear picture of the problems on immunization

CONCLUSION:

From the present study, it's very clear that different challenges do exist at different level of healthcare facilities. Until and unless these areas are properly digested and implemented properly by joining hands with different individuals of the community, stakeholder & concerned department, improvement in the immunization performance will never be possible.

Thus, it is very important that the concerned department give more emphasis on these different lacunae areas and at the same time extending cooperation from the government side on these areas, giving due impetus to community participation in decision making are vital for improving the immunization performance. Any initiative taken up by the government to improve the immunization programme must reflect all these lacunae.

Conflict Of Interest: None

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