SUMMER INTERNSHIP PROGRAM

at

National Health Mission (NHM), Rajasthan

Duration - From 06.05.2024 to 05.07.2024

A REPORT BY

Arnab Basak

Master of Business Administration

Hospital and Health Management

2023-25

under the Mentorship of

Susmit Jain, Associate Professor

IIHMR UNIVERSITY

Government of Rajasthan
National Health Mission, Rajasthan
Department of Medical, Health & FW, Swasthya Bhawan, Jaipur
Tel.No.0141-2229108, Email ID: spm_raj.nrhm@yahoo.com

No. F 2 (153) NHM/SPM/2024/ 848 Dated: 5/7/24

CERTIFICATE

This is to certify that **Mr Arnab Basak**, student of MBA, Indian Institute of Health Management Research (IIHMR University, Jaipur) has successfully completed his Summer Training at National Health Mission, Rajasthan from 06/05/2024 to 05/07/2024. He has worked on the project-

ASSESSMENT AND SUBSEQUENT ANALYSIS OF COLD CHAIN POINTS WITH RESPECT TO TEMPERATURE MONITORING AND MAINTENANCE, AND ALSO AEFI (ADVERSE EFFECTS FOLLOWING IMMUNIZATION) RECORDS

His performance was found satisfactory. We extend him good wishes for a bright and successful career ahead.

(Dr Jitendra Kumar Soni)
Mission Director, NHM
Special Secretary
Medical Health & Family Welfare

Completion Certification from the Organization

CERTIFICATE

This is to certify that **Mr. Arnab Basak** of **HM-28** Batch of Institute of Health Management Research, **IIHMR University** has worked with our organization for his summer internship from 6th May '2024 to 5th July '24. The overall performance shown by him during the period was excellent/good/average. This certificate is being issued to meet the requirements of the IIHMR University.

Date: 05th July '2024.

(Signature of organization Mentor)

Name: डॉ. देवेन्द्र सोधा
राज्य नोडल अधिकारी (टीकाकरण)
एन.एच.एम.

Designation:

Seal/Stamp of the Organization

IIHMR UNIVERSITY

IIHMR University Faculty Mentor Approval

This is to certify that **Mr. Arnab Basak** of academic year 2023-25 of Institute of Health Management Research has prepared a poster with respect to his summer internship held during May-June 2024.

He has carried out work as per the guidelines. His poster is approved for presentation.

Date: 18/07/2024

18.7.2024

(Signature of Faculty Mentor)
Name: **Dr. Susmit Jain**
Designation: Associate Professor

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

Assessment and Analysis of Cold Chain Points (CCPs) regarding Temperature Monitoring and Maintenance, and Adverse Events Following Immunization (AEFI) Records

PRESENTED BY : ARNAB BASAK
ROLL NO : 1687 (MBA HM28)

ORGANIZATION MENTOR – DR. RAGHURAJ SINGH (PROJECT DIRECTOR), ROUTINE IMMUNIZATION (RI), NHM RAJASTHAN
FACULTY MENTOR – DR. SUSMIT JAIN, IIHMR UNIVERSITY

BRIEF HISTORY AND DESCRIPTION ABOUT ORGANIZATION

The two Sub-Missions that make up the National Health Mission (NHM) are National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM). It includes strengthening of healthcare with respect to reproductive, maternal, neonatal, child, and adolescent health (RMNCH+A), as well as communicable and non-communicable diseases. **The NRHM was** launched on **12 April 2005** and **NUHM** was launched **on 1 May 2013.**

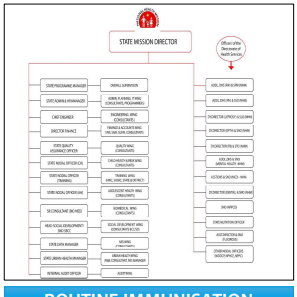
ORGANIZATION VISION

The NHM envisages achievement of universal access to equitable, affordable & quality health care services that are accountable and responsive to people's needs.

ORGANIZATION MISSION

With a focus on marginalized communities, a reduction in newborn and maternal mortality rate, the promotion of illness prevention and management, the building of healthcare systems, and the prioritization of vulnerable groups, NHM's mission is to provide everyone with inexpensive, high-quality healthcare services.

ORGANISATION STRUCTURE



ROUTINE IMMUNISATION

- In 1978, the Expanded Program on Immunization was started. Universal Immunization Program has been a key component of the National Rural Health Mission since its inception in 2005.
- Universal Immunization Programme (UIP) is one of the largest public health programmes targeting close of 2.67 crore newborns and 2.9 crore pregnant women annually.
- Nationally against 9 diseases - Diphtheria, Pertussis, Tetanus, Polio, Measles, Rubella, severe form of Childhood Tuberculosis, Hepatitis B and Meningitis & Pneumonia caused by Hemophilus Influenza type B
- Sub-nationally against 3 diseases - Rotavirus diarrhea, Pneumococcal Pneumonia and Japanese Encephalitis.

RESEARCH QUESTIONS

- What are the various managerial aspects related to temperature monitoring, maintenance and record keeping of the vaccine supply chain?
- What is the status of AEFI (Adverse Effects Following Immunization) data maintenance in the CCPs.
- What are the gaps at the CCPs related to the record keeping and maintenance of cold supply chain and AEFI?

OBJECTIVES

Primary - To learn and understand the details regarding managerial aspects of physical logistics part as well as temperature monitoring, maintenance and record keeping of the vaccine supply chain.

Secondary -

- To assess the AEFI data record maintenance at the CCPs.
- To identify certain gaps at the CCPs related to the record keeping and maintenance of cold supply chain and AEFI; and if possible, then suggesting few measures to enhance the workings at the CCPs.

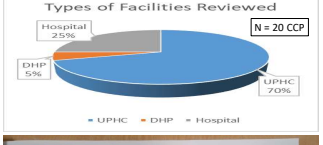
METHODOLOGY

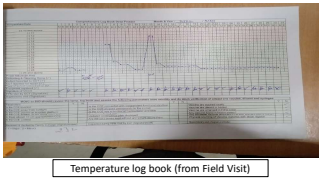
Study Design - It was a cross-sectional observational study and also included un-structured interviews of the Cold Chain Handlers (CCHs) to understand the qualitative gaps in the overall functioning at the CCPs. The study design involved obtaining primary data through a self-prepared questionnaire.

Sample Size - The list of the Cold Chain Points was obtained from NHM. From the list 20 CCPs were randomly selected across 2 districts (Jaipur 1 and Jaipur 2), keeping in consideration the ease to travel and obtain the required primary data. They include – 14 UPHCs (Urban Primary Heath Centre), 1 DHP and 5 government hospitals.

Source of data - The data used for analysis and reviewing of the facilities was collected from physical visits to the CCPs and interacting with the vaccinators, who were the Cold Chain Handlers (CCHs). The vaccinators were either ANMs or GNMs or Nursing Officers.

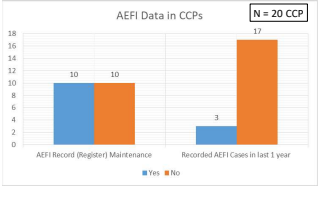
Duration - Primary data was collected from CCPs between 29.05.2024 to 19.06.2024, follow up was done in case certain relevant data was to be reiterated.

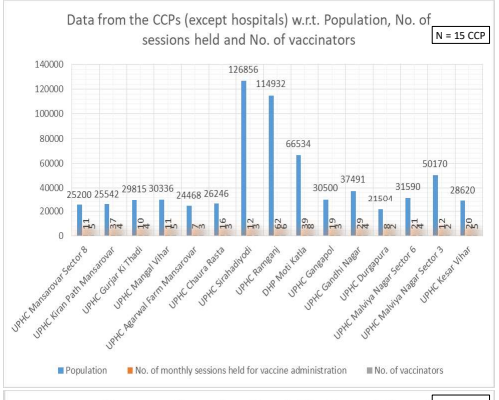


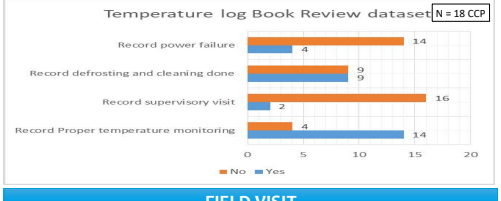


Temperature log book (from Field Visit)

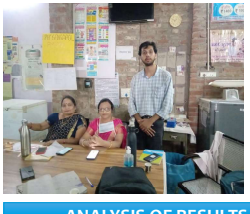
RESULTS







FIELD VISIT



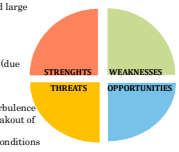
ANALYSIS OF RESULTS (GAP IDENTIFICATION)

- Existence of substantial irregularities between the various CCPs regarding the population falling within their purview, the number of vaccinators and the number of sessions held on a monthly basis.
- The unequal distribution of services to some extent; the lack of supervisory visits in CCPs and its adverse effects on quality of maintenance of the CCPs.
- Confusion among the CCHs regarding AEFI data and its record maintenance.

CONCLUSION

The study assessing the facilities was conducted by collecting primary data from CCPs and then analyzing the same and trying to give suggestions for the overall improvement of the facilities. Both qualitative and quantitative data was recorded. It can be concluded that although Rajasthan has a commendable healthcare system, there is still the scope for improvement.

SWOT ANALYSIS OF THE RI DEPARTMENT



- Well defined structure and large infrastructure
- Reaching the grassroots
- Skilled workforce.
- Smooth flow of funds as compared to other sectors (due to the importance)

- Infrastructure challenges and rigid mind-set
- Non-uniformity among the departmental functioning
- Reluctance and stagnancy in the workforce
- Misinterpretation of directions among the workers in the grassroots

- Political and economic turbulence
- Medical emergencies (breakout of pandemics)
- Extreme environmental conditions
- Legal hurdles related to organization

- Digitization and related technological advancements
- Public private partnership (PPP) model
- Promotion of personalized care model
- Education and empowerment

DIFFERENCE BETWEEN PRACTICAL EXPOSURE AT ORGANIZATION AND THEORETICAL UNDERSTANDING

- Meeting and interviewing various professionals provides an elaborate understanding of various contemporary issues, which is difficult to contemplate in theoretical lectures.
- Theoretical learning of National Health Policies provided a basic understanding, while the practicality of the implementation of schemes and their functioning was quite distinct.
- Digital health may be a great augmentation and can make people's life easier but its application in public health sector in totality still requires a great amount of time.
- Organizational structure, hierarchy and efficient functioning are much easier in theory as compared to the practical essence of it.

CHALLENGES FACED DURING INTERNSHIP

- Complex organizational framework and hierarchy along with enormous volume of data.
- Shortage of time to comprehend extensively the working of the entire department and observe the functioning.
- Language barrier as official circular and notices were only in regional language.
- Public transport usage during visits along with certain financial constraints w.r.t. travel.
- Absence and non-cooperation of certain vaccinators.
- Lack of formal training and certain level of proper guidance relating to primary data collection and observation of facilities.

LEARNINGS DURING INTERNSHIP

- Management of the cold supply chain with respect to the vaccine logistics, starting from GMSD (Government Medical Store Depot) to SVS (State Vaccine Store) to RVS (Regional Vaccine Store) to DVS (District Vaccine Store) to CCPs (CHCs (Community Health Centres))/PHCs (Primary Health Centres)), and finally to the session sites for administration.
- Qualitative issues w.r.t. to qualitative interviews of the vaccinators (ANMs/Nursing Officer (NO)) or other staffs (working as part of healthcare workforce).
- Various equipment related to RI and their maintenance along with certain insights on vaccine storage and transportation (temperature monitoring and maintenance).
- Different registers (RI (Routine Immunization), Stock, Distribution, AEFI, Temperature log books, Due list) maintained by the CCHs at the CCPs for proper monitoring and record keeping.

USEFULNESS OF INTERNSHIP

- Helped to get acquainted with real life work environment in health sector.
- Facilitated in the practical understanding of the healthcare system from the basic level.
- Witnessed the holistic functioning of the different departments, coordinating inter-departmentally along with intra-departmental work efficiency.
- Helped to analyse certain gaps in the system associated with immunization program.
- Enabled to get insights into the operations and management of the immunization department of NHM.

SUGGESTIONS

- The monitoring and maintenance along with record keeping could be enhanced in case of more number of supervisory visits at the CCPs.
- Also there could be additional training of the staffs for effective management of the CCP with whatever resource they had.
- The record maintenance regarding the AEFI should be conveyed clearly to the vaccinators, as there was a certain degree of confusion regarding the registration of the mild cases.
- There could be established a channel for relatively quick grievance redressal for the vaccinators of the CCPs regarding managerial and related issues.

Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Yet to be decided

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 01 **From: 06.05.2024 to 09.05.2024**

Activity Done	Attended the orientation of various departments of NHM to get acquainted about their workings. On 6th May, Family welfare (FW), Ambulatory care (ISC), Medical Mobile Unit (MMU), Aayushman Aarogya Mandir (AAM) and PCPNDT department's orientation were conducted. On 7th May, Child Health (CH), Quality assurance (QA), Routine Immunization (RI) and MNDY orientation took place. On 8th May, orientation on Maternal Health (MH), National programmes (NPNCD and NVBDCP) were conducted. On 9th May, orientation of Integrated Disease Surveillance Programme (IDSP) was conducted.
Linking theory (Classroom learning) with practice at your organisation	The understanding regarding the working of various departments is facilitated by the prior theoretical knowledge. Basic public health structure which the officials briefed could be correlated to our classroom learning.
Gaps identified on the working area.	Yet to be identified.
Suggestions for improvement	Still getting acclimatized to the organizational working, so unable to give suggestions in the present moment.
Plan for the next week	Attending the remaining orientation sessions by various departments and then selecting a department to work in by reviewing and sorting my interest, along with considering the outreach of activities done by various departments and their diversified working areas.

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

On the last day of every week report in the above format should be submitted to the faculty mentor. Submission of total 8 reports in 8 weeks is compulsory. Each report should not be more than 2 pages.

Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 02 **From: 13.05.2024 to 17.05.2024**

Activity Done	Attended the remaining orientation sessions by various departments. On 13th May, National Tobacco Control Program (NTCP), National Program for Prevention and Control of Fluorosis (NPPCF), National Viral Hepatitis Control Program (NVHCP), Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Bal Swasthya Karyakram (RKSK) department's orientation was given. On 14th May, several national programs like NUHM, NLEP, NTEP, NMHP, NOHP and NRCP department's orientation was given. On 15th May, information was given on NPHCE and NPPCD and then department was allotted based on our interest. Routine Immunization (RI) department was allotted and the Program Director (PD) briefed me on the managerial aspects of immunization in public health along with a senior consultant. I got several insights from the NHM government's portal and also the files uploaded in it. From the literature available, focusing on managerial aspects was essential as there are multiple aspects of RI. I was briefed about the cold supply chain and logistic aspect and also read several topics from the handbook of vaccine and cold chain handlers. I reviewed several research and review papers from online databases as I am interested to study in detail into a particular managerial aspect related to RI.
Linking theory (Classroom learning) with practice at your organisation	The briefing by various departments was to a greater extent relatable to our classroom theoretical learning. The RI department's functioning could be related to the learning of the technical as well as non-technical aspects of the program studied in the class.
Gaps identified on the working area.	It is too early, as department was only allotted this week and I am currently studying about the working of the department and its various aspects, particularly focusing more on managerial aspects.
Suggestions for improvement	Still getting acclimatized to the departmental working within the organization, so I am unable to give suggestions at the present moment.
Plan for the next week	Understanding various technical and non-technical aspects of the RI department. Observing the RI department's program implementation, vaccine logistics and cold chain, data recording and reporting system, program communication and other managerial aspects. Studying various government modules, IEC materials, several research and review papers, in order to focus on a particular aspect of RI.

Signature of the Student – Arnab Basak

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Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 03 **From: 20.05.2024 to 24.05.2024**

Activity Done	I was briefed about the cold chain and supply logistics part and then read about the cold chain and other managerial aspects of supply chain and related processes. I had discussed with few people in the department regarding the feasibility of studying the managerial aspects of supply chain and about effective monitoring and managing the same. I was also shown the intricacies and working on the eVIN (Electronic Vaccine Intelligence Network) website. On Thursday, I visited the State Vaccine Store (SVS) along with the Regional Vaccine Store (RVS). The various equipment, functioning, supply chain management, vaccine management, handling of data and other details related to vaccine transportation and physical stock management was explained. On Friday, I visited the both the District Vaccine Stores (DVS) of Jaipur-1 and Jaipur-2. The logistics and cold chain maintenance and management was shown to me. I was also given a list of all the Cold Chain Points (CCP) covered under Jaipur-2.
Linking theory (Classroom learning) with practice at your organisation	Linking the organizational working knowledge assisted me in understanding the functioning of the department. Interacting with many people in various posts and gathering distinctive information was assisted by our theoretical knowledge of organizational behaviour.
Gaps identified on the working area.	The organizational hierarchy is a bit complex in nature and requires quite some time to understand. Moreover, there is distinction between the cold chain management and the Routine Immunization (RI) department which is a bit confusing as both are integral in nature.
Suggestions for improvement	Still getting acclimatized to the departmental working within the organization, so I am unable to give suggestions at the present moment.
Plan for the next week	Observing and understanding various managerial aspects of the RI department, particularly the physical aspects of vaccine and cold chain monitoring and management. Developing a rough study design to access and review the supply chain related to vaccine logistics. Also to develop a questionnaire with the consultation of the Program Director along with various technicians and consultants of the Directorate. The questionnaire will be to get primary data related to managerial aspects of vaccine and supply chain management, for monitoring and analysis purposes.

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

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Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 04 **From: 27.05.2024 to 31.05.2024**

Activity Done	On Monday and Tuesday, I had consulted with Programme Director of RI Department regarding the study design and the types of observation to be done at the Cold Chain Points (CCPs). I had also taken the help of other consultants from RI Department regarding the framing of the questionnaire about the managerial aspect, handling of data, physical stock management and logistics intricacies of supply chain of vaccines. Certain aspects of vaccine management and AEFI (Adverse Event Following Immunization) was also made clear by the consultants. On Wednesday, I visited UPHCs (Urban Primary Health Centre) in Pratap Nagar Sector 6 and 11, which were CCPs. I collected various data from the questionnaire and also observed the facilities for the purpose of review. On Thursday, I visited Sardar Patel UPHC and also Hawa Sadak UPHC as part of field study. Observations were done along with reviewing of the centres. On Friday, I visited Adarsh Nagar UPHC along with Tilak Nagar UPHC with the objective of data collection and reviewing.
Linking theory (Classroom learning) with practice at your organisation	Came across various National level Programmes directly or indirectly related to Immunization which we could link to classroom learning. The health care delivery system and also the public health institutions hierarchy was familiar to a great extent and I could correlate the same with the classroom teaching.
Gaps identified on the working area.	The government systemic hierarchy is still complex to understand. Due to the enormous volume of data and also a humungous work force, there is non-uniformity among the working of the health facilities. There is lack of directional guidance which is required to reach a particular health facility. Inability to authenticate the qualitative answers given by the CCH (Cold Chain Handler) in the health facilities.
Suggestions for improvement	It will be helpful if official government documents are made available in both English and Hindi language and also the presence of clear signboards with both the language. Further suggestions can only be made by further observing and analysing the primary data which I will be collecting in the upcoming week.

Plan for the next week	Further collection of data from the target of 20 CCPs for the purpose of analysing and reviewing. Exploring certain gaps in the health facilities, which I will visit in the upcoming week. Observing and maintaining the data of the various facilities. Studying further about the managerial aspects of vaccine and supply chain management along with AEFI from the primary data which I will be collecting. Will also work towards improving the study design.

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

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Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 05 **From: 03.06.2024 to 08.06.2024**

Activity Done	The entire week was utilized for the collection of primary data and thorough observation of the facility for the purpose of review and followed by analysis. On Monday, I had visited UPHC Kiran Path Mansarovar, UPHC Gurjar Ki Thadi and UPHC Mangal Vihar. On Tuesday, I had visited UPHC Durgapura, UPHC Sector 6 Malviya Nagar and UPHC Sector 3 Malviya Nagar. On Wednesday, I had visited UPHC Agarwal Farm Mansarovar, UPHC Sector 8 Mansarovar and Satellite Hospital Sanganer. On Thursday, I had visited Zanana Hospital, Satellite Hospital Bani Park and Haribux Kanwatia Government Hospital. On Friday, I had visited UPHC Ramganj, DHP Moti Katla, UPHC Sirahadiyodi and UPHC Gangapol. On Saturday, I had visited 2 Anganwadi centers, namely Sheopur 2 and Sheopur 4 in which vaccination sessions are held, for observing the facility.
Linking theory (Classroom learning) with practice at your organisation	The functioning of the health care delivery system and also the public health institutions were familiar to a great extent and I could correlate the same with the classroom teaching. While collecting primary data on the field by interacting with numerous people and communicating our points effectively could be related to our learning from the classroom. Organizational behaviour theory could be linked to the on-ground workings within the facilities.
Gaps identified on the working area.	The extensive networking of individuals and enormous volume of data along with certain misinterpretation of directions among the staffs of the health facilities was a major challenge while reviewing the facilities. The absence of staffs in certain health facilities, created major problems with the primary data collection process. Managing transportation on our own during the field visits took a significant amount of time and effort, and moreover the facilities were not precisely directed on Google Maps. Apart from the above, I was unable to validate or authenticate the primary qualitative data which was given by the ANMs, this may be indicative to my lack of potential technical training in this respect.
Suggestions for improvement	It will be helpful if official government documents are made available in both English and Hindi language and also the presence of clear signboards with both the language.

	It would be helpful if we got a chance to work in other departments as well by coordinating the work. This would enhance our knowledge as well as our work experience would be diversified. Further suggestions can only be made by further observing and analysing the primary data which I will be collecting in the upcoming week. The health facilities could be reviewed more often by the government or non-governmental entities to substantially minimize the shortcomings and improve upon the services.
Plan for the next week	Further collection of primary data, with increased focus on the qualitative aspects, from the list of CCPs which we have been provided by the department, for the purpose of analysing and reviewing of the facilities. Exploring certain gaps in the health facilities and overall functioning. Observing and maintaining the data of the various facilities. Studying further about the managerial aspects of vaccine and supply chain management along with AEFI from the primary data which I will be collecting. Will also work towards improving the study design and semi-structured questionnaire and also the effectiveness of qualitative interviews of the ANM (CCHs).

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

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Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 06 **From: 10.06.2024 to 14.06.2024**

Activity Done	Certain other details regarding the logistical aspect as well as the monitoring and record keeping aspects of immunization was observed at various Cold Chain Points. Some new UPHCs were visited along with follow-up visits of the previously visited UPHCs. Data regarding the temperature maintenance at the facilities was recorded for analysis. On Monday, I had visited UPHC Gandhi Nagar. On Tuesday, I has visited the CCP at J K Lone Hospital. On Wednesday, I had visited UPHC Kesar Vihar and UPHC Jagatpura. On Thursday, I had re-visited UPHC Agarwal Farm, UPHC Mansarovar Sector 8, UPHC Kiran Path Mansarovar, UPHC Gurjar Ki Thadi and UPHC Mangal Vihar. On Friday, I visited UPHC Raghu Vihar and re-visited UPHC Durgapura, UPHC Malviya Nagar Sector 6 and UPHC Malviya Nagar Sector 3.
Linking theory (Classroom learning) with practice at your organisation	While collecting primary data on the field by interacting with numerous people and communicating our concerns effectively could be related to our learning from the classroom. Organizational behaviour theory along with effective communication theory could be linked to the on-ground workings within the facilities. The functioning of the health care delivery system and also the public health institutions were familiar to a great extent and I could correlate the same with the classroom teaching from various lectures. Certain aspects from theoretical digital health could be correlated with the practical working within the department with respect to technology, particularly the stock maintenance in eVIN (electronic Vaccine Intelligence Network) and beneficiary information in PCTS (Pregnancy, Child Tracking & Health Services Management System).
Gaps identified on the working area.	The extensive networking of individuals and enormous volume of data along with certain misinterpretation of directions among the staffs of the health facilities was a major challenge while reviewing the facilities. Few of the vaccinators (ANMs) were not supportive to assist us in our study. Managing transportation on our own during the visits took a significant amount of time and effort, and moreover the facilities were not precisely pointed on Google Maps. There was no formal technical training provided and due to this I had certain difficulties in understanding the qualitative and quantitative data provided at the facilities quickly.

	I felt there was a certain lack of guidance from the department in our study and also shortage of time to understand the micro-details regarding the vaccine and supply chain management.
Suggestions for improvement	It would be helpful if we got a chance to work in other departments as well by coordinating the work in the present department. This would enhance our knowledge, as well as our work experience would be diversified. It will be extremely helpful if along with orientation we got a little formal training in certain technical as well as managerial aspects of the department. It will be helpful if official government documents are made available in both English and Hindi language and also the presence of clear signboards with both the language in the Directorate. Further suggestions can only be made by further observing and analysing the primary data which I will be collecting in the upcoming week and then compiling the same. The health facilities could be reviewed more often by the government or non-governmental entities to substantially minimize the shortcomings and improve upon the services.
Plan for the next week	The last phase of data collection will be done in the upcoming week which will also include the follow-up visits in certain facilities. Observing, analysing and reviewing the data so obtained and then trying to identify certain shortcomings or comparing some variables within the health facilities and their overall functioning. Consulting with the experts in the RI department for analysing the primary data.

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

On the last day of every week report in the above format should be submitted to the faculty mentor. Submission of total 8 reports in 8 weeks is compulsory. Each report should not be more than 2 pages.

Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 07 **From: 18.06.2024 to 21.06.2024**

Activity Done	The unfinished work of last week, regarding the observation of logistical aspects as well as the monitoring and record keeping aspects at various Cold Chain Points (CCPs) by the Cold Chain Handler (CCH), was continued in this week too. I had finished my data collection by physical visits of various PHCs and hospitals. This week, I got the remaining data from revisiting Zanana Hospital, Satellite Hospital Bani Park and Haribax Kanwatia Hospital; and also by visiting Mahila Chikitsalaya and UPHC Chaura Rasta. I had consulted and clarified with my organization regarding the report, which is required to be submitted in the upcoming week regarding the work which was done by me in the internship period. I had also compiled the data (whatever information) was obtained and started analyzing and interpreting the same. I had also read certain papers from various databases (PubMed, Google Scholar) for the purpose of interpreting the data so obtained.
Linking theory (Classroom learning) with practice at your organisation	While dealing with the technology on the field related to stock management and beneficiary information, the theoretical aspects of digital health could be linked. The scattered theoretical learning of Microsoft excel along with other applications from different lectures was helpful in compilation and organizing the data obtained. The immunization department's functioning and working was even clearer in the aspects of health management. This could be contributed to the classroom knowledge regarding Health Policy, Health care delivery system and also certain aspects of demography lectures. While collecting primary data and observing in the field, by interacting with numerous people and communicating our concerns effectively, could be related to our learning from the classroom. Organizational behaviour theory along with effective communication theory could be linked to the on-ground workings within the facilities and coordinating with diverse people.
Gaps identified on the working area.	The gaps identified were similar to the last week, regarding the unsupportiveness of some CCHs, the non-uniformity in function of various CCPs attributed to extensive and humungous system, locating the facilities quickly, lack of formal training and proper guidance and also limited time to understand the micro-management of immunization department. The people being reluctant to act at a faster pace and address the issue of the ground staff in the facility.

Suggestions for improvement	The suggestions would be similar to the previous week. It would be helpful if we got a chance to work in other departments as well by coordinating the work in the present department. This would enhance our knowledge, as well as our work experience would be diversified. It will be helpful if official government documents are made available in both English and Hindi language and also the presence of clear signboards with both the language in the Directorate. The health facilities could be reviewed more often by the government or non-governmental entities to substantially minimize the shortcomings and improve upon the services. Further suggestions could be made after I the analysis and interpretation of the observed and collected data form the health facilities. Apart from the above, I felt that there should be enhanced communication between various departments.
Plan for the next week	With the completion of data collection from the health facilities, I will be attempting to analyse and make interpretations from the data. I will also work towards making the report about my workings and also its submission in the organization. The appropriate review and gap identification is expected from the data obtained. Consulting with the experts in the RI department for analysing the primary data.

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

On the last day of every week report in the above format should be submitted to the faculty mentor. Submission of total 8 reports in 8 weeks is compulsory. Each report should not be more than 2 pages.

Annexure-E

Reporting Format

(Weekly)

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Week no: 08 **From: 24.06.2024 to 28.06.2024**

Activity Done	The data collected from the CCPs based on the self-structured questionnaire was compiled in Excel. I had also analyzed the dataset with respect to my study topic. My study, which was titled "Observation and subsequent analysis of the Cold Chain Points (CCPs) regarding the supply chain management at the CCPs, temperature and vaccine maintenance and record keeping, along with subsequent evaluation of AEFI data record maintenance in the facilities.", was concluded and submitted to my organization mentor post interpretation and report preparation, along with stating the background knowledge and certain suggestions for the department to improve their functioning subsequently. I had recorded the methodology used for the study, the questionnaire prepared, my observations and subsequent results with certain limitations of the study.
Linking theory (Classroom learning) with practice at your organisation	Certain aspects of biostatistics theory was helpful in analysing the data and interpreting the findings (especially while constructing charts and graphs). While dealing with the technology on the field related to stock management and beneficiary information, the theoretical aspects of digital health could be linked. The scattered theoretical learning of Microsoft excel along with other applications from different lectures was helpful in compilation and organizing the data obtained. The immunization department's functioning and working was even clearer in the aspects of health management. This could be contributed to the classroom knowledge regarding Health Policy, Health care delivery system and also certain aspects of demography lectures. This helped in interpreting the data and analysing the same.
Gaps identified on the working area.	From my working with the organization and during the physical visits, the gaps identified with respect to data collection were regarding the unsupportiveness of some CCHs, the non-uniformity in function of various CCPs attributed to extensive and humungous system, locating the facilities quickly, lack of formal training and proper guidance and also limited time to understand the micro-management of immunization department. The gaps identified from the study include existence of substantial irregularities between the various CCPs regarding the population falling within their purview, the number of vaccinators and the number of sessions

	held on a monthly basis, the unequal distribution of services to some extent, the lack of supervisory visits in CCPs and its adverse effects on quality of maintenance of the CCPs, confusion among the CCHs regarding AEFI data and its record maintenance. The people being reluctant to act at a faster pace and address the issue of the ground staff in the facility.
Suggestions for improvement	The suggestions would be similar to the previous week regarding my internship in the organization. It would be helpful if we got a chance to work in other departments as well by coordinating the work in the present department. This would enhance our knowledge, as well as our work experience would be diversified. It will be helpful if official government documents are made available in both English and Hindi language and also the presence of clear signboards with both the language in the Directorate. Apart from the above, I felt that there should be enhanced communication between various departments. From the study which was undertaken, the points are noteworthy as suggestions given to the department. • The monitoring and maintenance along with record keeping could be enhanced in case of more number of supervisory visits at the CCPs. • Also there could be additional training of the staffs for effective management of the CCP with whatever resource they had. • The record maintenance regarding the AEFI should be conveyed clearly to the vaccinators (ANMs, nursing officers), as there was great confusion regarding the same. • There could be established a channel for relatively quick grievance redressal for the vaccinators of the CCPs regarding managerial and related issues.
Plan for the next week	With the compilation of the study undertaken and result reported along with the suggestions given to the department, I had concluded the internship period. In the next week, I only plan to take my certificate of completion from the organization (NHM).

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

On the last day of every week report in the above format should be submitted to the faculty mentor. Submission of total 8 reports in 8 weeks is compulsory. Each report should not be more than 2 pages.

Compiled Report

Name of the Organisation: National Health Mission (NHM), Rajasthan

Area/ Department/ Project of Summer Internship Program: Routine Immunization (RI)

Name of the Student: Arnab Basak

Roll no: 1687 **Stream: MBA (Hospital and Health Management)**

Activity Done	**Week1** Attended the orientation of various departments of NHM to get acquainted about their workings. On 6th May, Family welfare (FW), Ambulatory care (ISC), Medical Mobile Unit (MMU), Aayushman Aarogya Mandir (AAM) and PCPNDT department's orientation were conducted and I had attended the same. On 7th May, Child Health (CH), Quality assurance (QA), Routine Immunization (RI) and MNDY orientation took place and I had attend them. On 8th May, orientation on Maternal Health (MH), National programmes (NPNCD and NVBDCP) were conducted and was attended by me. On 9th May, orientation of Integrated Disease Surveillance Programme (IDSP) was conducted and I had attended. **Week2** I had attended the orientations which were conducted. On 13th May, National Tobacco Control Program (NTCP), National Program for Prevention and Control of Fluorosis (NPPCF), National Viral Hepatitis Control Program (NVHCP), Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Bal Swasthya Karyakram (RKSK) department's orientation was given. On 14th May, several national programs like NUHM (National urban Health Mission), NLEP (National Leprosy Eradication Programme), NTEP (National Tuberculosis Elimination Program), NMHP (National Mental Health Program), NOHP (National Oral Health Programme) and NRCP (National Rabies Control Programme) department's orientation was given. On 15th May, information was given on NPHCE (National Programme for Health Care of the Elderly) and NPPCD (National Programme for Prevention and Control of Deafness) and then department was allotted based on our interest. Routine Immunization (RI) department was allotted and the Program Director (PD) briefed me on the managerial aspects of immunization in public health along with a senior consultant. I got several insights from the NHM government's portal and also the files uploaded in it. From the literature available, focusing on managerial aspects was essential as there are multiple aspects of RI. I was briefed about the cold supply chain and logistic aspect and also read several topics from the handbook of vaccine and cold chain handlers. I reviewed several research and review papers from online databases as I am interested to study in detail into a particular managerial aspect related to RI.

	Week3 I was briefed about the cold chain and supply logistics part and then read about the cold chain and other managerial aspects of supply chain and related processes. I had discussed with few people in the department regarding the feasibility of studying the managerial aspects of supply chain and about effective monitoring and managing the same. I was also shown the intricacies and working on the eVIN (Electronic Vaccine Intelligence Network) website. On Thursday, I visited the State Vaccine Store (SVS) along with the Regional Vaccine Store (RVS). The various equipment, functioning, supply chain management, vaccine management, handling of data and other details related to vaccine transportation and physical stock management was explained. On Friday, I visited the both the District Vaccine Stores (DVS) of Jaipur-1 and Jaipur-2. The logistics and cold chain maintenance and management was shown to me. **Week4** On Monday and Tuesday, I had consulted with Programme Director of RI Department regarding the study design and the types of observation to be done at the Cold Chain Points (CCPs). I had also taken the help of other consultants from RI Department regarding the framing of the questionnaire about the managerial aspect, handling of data, physical stock management and logistics intricacies of supply chain of vaccines. Certain aspects of vaccine management and AEFI (Adverse Event Following Immunization) was also made clear by the consultants. On Wednesday, I visited UPHCs (Urban Primary Health Centre) in Pratap Nagar Sector 6 and 11, which were CCPs. I collected various data from the questionnaire and also observed the facilities for the purpose of review. On Thursday, I visited Sardar Patel UPHC and also Hawa Sadak UPHC as part of field study. Observations were done along with reviewing of the centres. On Friday, I visited Adarsh Nagar UPHC along with Tilak Nagar UPHC with the objective of data collection and reviewing. **Week5** The entire week was utilized for the collection of primary data and thorough observation of the facility for the purpose of review and followed by analysis. On Monday, I had visited UPHC Kiran Path Mansarovar, UPHC Gurjar Ki Thadi and UPHC Mangal Vihar. On Tuesday, I had visited UPHC Durgapura, UPHC Sector 6 Malviya Nagar and UPHC Sector 3 Malviya Nagar. On Wednesday, I had visited UPHC Agarwal Farm Mansarovar, UPHC Sector 8 Mansarovar and Satellite Hospital Sanganer. On Thursday, I had visited Zanana Hospital, Satellite Hospital Bani Park and Haribux Kanwatia Government Hospital. On Friday, I had visited UPHC Ramganj, DHP Moti Katla, UPHC Sirahadiyodi and UPHC Gangapol.

	On Saturday, I had visited 2 Anganwadi centers, namely Sheopur 2 and Sheopur 4 in which vaccination sessions are held, for observing the facility. **Week6** Certain other details regarding the logistical aspect as well as the monitoring and record keeping aspects of immunization was observed at various Cold Chain Points. Data regarding the temperature maintenance at the facilities was recorded for analysis. On Monday, I had visited UPHC Gandhi Nagar. On Tuesday, I has visited the CCP at J K Lone Hospital. On Wednesday, I had visited UPHC Kesar Vihar and UPHC Jagatpura. On Thursday, I had re-visited UPHC Agarwal Farm, UPHC Mansarovar Sector 8, UPHC Kiran Path Mansarovar, UPHC Gurjar Ki Thadi and UPHC Mangal Vihar. On Friday, I visited UPHC Raghu Vihar and re-visited UPHC Durgapura, UPHC Malviya Nagar Sector 6 and UPHC Malviya Nagar Sector 3. **Week7** This week, I got the remaining data from revisiting Zanana Hospital, Satellite Hospital Bani Park and Haribax Kanwatia Hospital; and also by visiting Mahila Chikitsalaya and UPHC Chaura Rasta. I had consulted and clarified with my organization regarding the report, which was required to be submitted regarding the work which was done by me in the internship period. I had also compiled the data (whatever information), which was obtained and started analyzing and interpreting the same. I had also read certain papers from various databases (PubMed, Google Scholar) for the purpose of interpreting the data so obtained. **Week8** The data collected from the CCPs based on the self-structured questionnaire was compiled in Excel. I had also analyzed the dataset with respect to my study topic. My study, which was titled “Observation and subsequent analysis of the Cold Chain Points (CCPs) regarding the supply chain management at the CCPs, temperature and vaccine maintenance and record keeping, along with subsequent evaluation of AEFI data record maintenance in the facilities.”, was concluded and submitted to my organization mentor post interpretation and report preparation, along with stating the background knowledge and certain suggestions for the department to improve their functioning subsequently. I had recorded the methodology used for the study, the questionnaire prepared, my observations and subsequent results with certain limitations of the study.

Details of the study undertaken by me under the guidance of Routine Immunization (RI) department's Project Director and State Nodal Officer, along with other officials of the department.

Title – Assessment and subsequent analysis of Cold Chain Points with respect to temperature monitoring and maintenance, and also AEFI (Adverse Effects Following Immunization) records.

Objective – Observation and subsequent analysis of the Cold Chain Points (CCPs) regarding the supply chain management at the CCPs, temperature and vaccine maintenance and record keeping, along with subsequent evaluation of AEFI data record maintenance in the facilities.

The primary objective of the study was to learn and understand the details regarding managerial aspects of physical logistics part as well as temperature monitoring, maintenance and record keeping of the vaccine supply chain. There were various secondary objectives, which includes –

1. Assess the CCPs and review whether the theoretical and practical aspect of the supply chain at the CCPs go hand-in-hand.
2. To study the implementation hurdles of effective management of the supply chain management and temperature maintenance.
3. To assess the AEFI data record maintenance at the CCPs.
4. To identify certain gaps at the CCPs related to the record keeping and maintenance of cold supply chain and AEFI; and if possible, then suggesting few measures to enhance the workings at the CCPs.

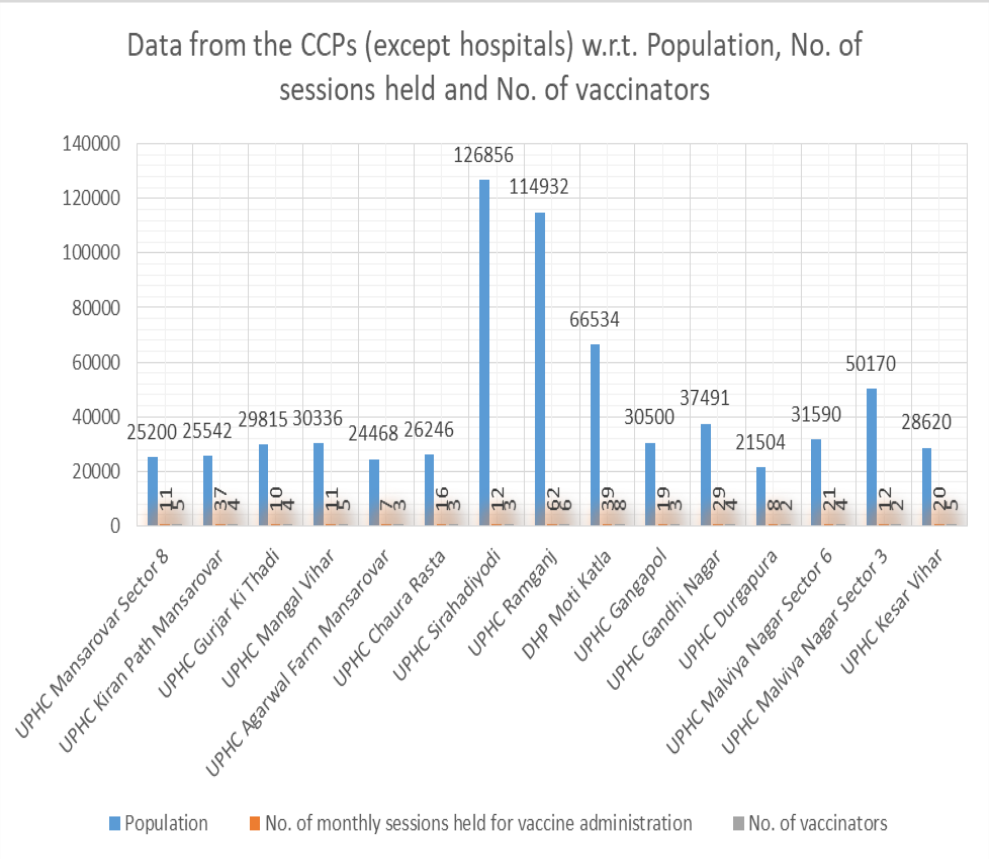
Methodology –

The list of the Cold Chain Points was obtained from the organization (National Health Mission). From the list 25 CCPs were selected across 2 districts (Jaipur 1 and Jaipur 2), keeping in consideration the ease to travel and obtain the required primary data.

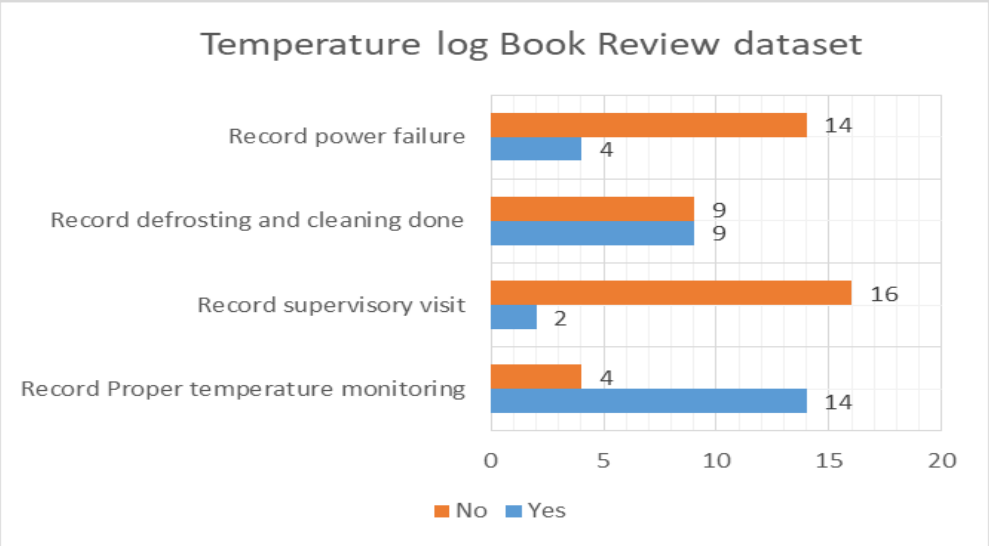
The study design involved obtaining primary data through a self-prepared questionnaire. The questionnaire was prepared after understanding the background of logistical aspect to cold chain related to the Immunization department and then by consulting or mentor from the organization. Few review papers were referred to from online databases (PubMed and Google Scholar) and also an online app (ODK Collect) was considered. The government module, named as "Handbook for Vaccine and Cold Chain Handlers" was also referred to understand the core concepts and background. But due to difficulty in obtaining relatable data and also not finding substantial data, I had considered 20 CCPs data for the purpose of review and subsequent analysis. They include – 14 UPHCs (Urban Primary Heath Centre), 1 DHP and 5 government hospitals.

	Study Design – It was an observational study and also included unstructured-interviews of the Cold Chain Handlers (CCHs) to understand the qualitative gaps in the overall functioning at the CCPs. Cross sectional study was done with simple random sampling of the 25 health facilities. Source of data – The data used for analysis and reviewing of the facilities was collected from physical visits to the CCPs and interacting with the vaccinators, who were the Cold Chain Handlers (CCHs). The vaccinators were either ANMs (Auxiliary Nurse Midwives) or GNMs (General Nurse Midwives) or Nursing Officers. Questionnaire (had the following questions) – Q1. What is the name of the CCP and the person who are interviewing? (Quantitative) Q2. What is the total population coverage which is within the ambit of the health facility? (Quantitative) Q3. How many vaccinators are there in the CCP? (Quantitative) Q4. How many sessions are conducted on a monthly basis by the CCP? (Quantitative) Q5. If at all there has been an instance where a session was planned and cancelled in past 6 months? If there were any, then what were the reasons? (Qualitative) Q6. What is the status of AEFI record maintenance in the CCP? (Qualitative) Q7. What is the status of the maintenance of vaccination records in the various registers and major managerial hurdles in maintaining the same? (Qualitative) Q8. What is the total number of ice packs and vaccine carriers available with the CCP? (Quantitative) Q9. What were the qualitative management related problems faced in managing the ILR and DF within the CCPs? (Qualitative) Q10. Are there any other management related issues being faced by the vaccinators and beneficiaries as such? (Qualitative)

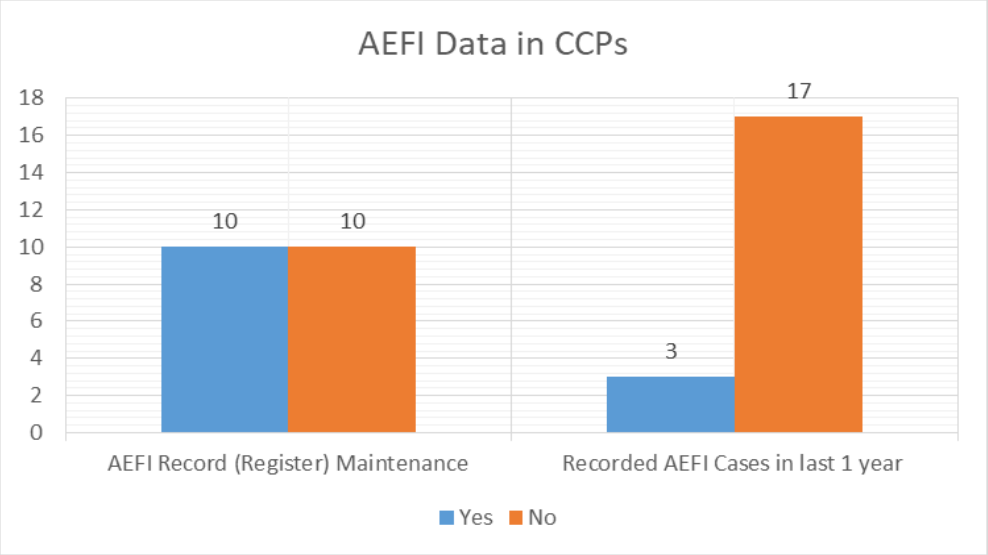
Results and Observations (with graphical representations of the analysis from the data collected) –



Graph 1 (which is a 2D Clustered Column graph), depicts the 3 parameters of the 20 CCPs. The 5 government hospitals data was not included in Graph 1, as the beneficiaries were diverse and came from far away regions. The government hospitals did not have outreach sessions, as well as no fixed vaccination session day was assigned at the facility, unlike the other facilities (UPHCs) I reviewed.



Due to unavoidable circumstances, data from 2 CCPs out of the 20 could not be included and observed.
The parameters of Proper Temperature Graph included the twice a day noting of temperature and then drawing the graph. The graph couldn't be straight line as there is expected to be variation in the temperature and hence readings would be affected.
In the temperature log book there are areas to be filled along with the temperature records and those were observed and recorded in each facility.
The Graph 2 contains the pictorial depiction (2D Clustered Bar) of qualitative record maintenance within the temperature log book.



The AEFI record maintenance system is compiled in the chart (Graph 3), for the various health facilities which I have visited. Recorded cases data (if any) were also qualitatively taken and the Clustered Column Chart was plotted accordingly.

Qualitative Unstructured Interview Substantial Observation –
When inquired about the any session which was planned but unfortunately cancelled in the last 6 months from the vaccinators and the reasons for the cancellation, I was provided with 3 reasons for the same. The reasons being the day being a Government Holiday or in case of absence of vaccinator (ANM) or presence of less number of beneficiaries.
Some of the facilities were facing the problem of shortage of staff and also of the poor infrastructure.

Discussion – The robust and large health system is complicated to understand and comprehend. With such a huge number of CCP, the state of Rajasthan had an enormous Immunization system. The physical aspects of the supply chain required the involvement of heavy workforce. In the ground level, there was the coordination and cooperation of the 3As (Asha-Anganwadi-ANM).

From the Graph 1, it can be analyzed that there exists substantial irregularities between the various CCPs regarding the population falling within their purview, the number of vaccinators and the number of sessions held on a monthly basis. This affected the vaccinator's workload and also indirectly affecting the recording of essential information (additional time and effort) in the CCPs due to large amount of beneficiaries in certain CCPs at a particular date (session). The irregularity also denoted the fact that the distribution of services was not equal to a certain extent.
From Graph 2, the recording of temperature of ILR and DF within the facility was highly irregular. It can be inferred that there was a requirement of orientation or supervision required to the CCPs to maintain the records, as the cold supply chain was dependent would be ineffective even if there is a breakdown at a single point.
From Graph 3, we can point out to the fact that AEFI cases were very low. There still needs to be apt record maintenance in order to tackle any emergency. There was also confusion among the vaccinators regarding whether to record even the mild cases (as every beneficiary had certain symptoms). This confusion was thus evident from the graph.

Conclusion –

The study assessing the facilities was conducted by collecting primary data from CCPs and then analyzing the same and trying to give suggestions for the overall improvement of the facilities. Both qualitative and quantitative data was recorded. It can be concluded that although Rajasthan has a commendable healthcare system, there is still the scope for improvement.

Suggestion – It would be too early to give suggestions as still there are many aspects of immunization which I am not well aware of. Hence, the area which I have studied from the managerial perspective, I would be suggesting few things to be considered, which are mentioned below in another section.

Limitation – No formal training received was a major limitation and due to this I had to restructure my study many a times. The limited time of 2 months was also a limiting factor. The transportation was difficult in the case of physical visits as no financial assistance was provided. There was certain language barriers sometimes as every order and information in certain places was in Hindi.

Linking theory (Classroom learning) with practice at your organisation	The understanding regarding the working of various departments is facilitated by the prior theoretical knowledge. Basic public health structure which the officials briefed in the initial weeks, could be correlated to our classroom learning. Came across various National level Programmes directly or indirectly related to Immunization which we could link to classroom learning. The functioning of the health care delivery system and also the public health institutions during the field visits were familiar to a great extent and I could correlate the same with the classroom teaching from various lectures. Certain aspects from theoretical digital health could be correlated with the practical working within the department with respect to technology, particularly the stock maintenance in eVIN (electronic Vaccine Intelligence Network) and beneficiary information in PCTS (Pregnancy, Child Tracking & Health Services Management System).While dealing with the technology on the field related to stock management and beneficiary information, the theoretical aspects of digital health could be linked. While collecting primary data and observing on the field, by interacting with numerous people and communicating our concerns effectively and gathering distinctive information, could be related to our learning from the classroom. Organizational behaviour theory along with effective communication theory could be linked to the on-ground workings within the facilities and coordinating with diverse people. Certain aspects of biostatistics theory was helpful in analysing the data and interpreting the findings (especially while constructing charts and graphs). The scattered theoretical learning of Microsoft Excel along with other applications from different lectures was helpful in compilation and organizing the data obtained. The immunization department's functioning and working was even clearer in the aspects of health management. This could be contributed to the classroom knowledge regarding Health Policy, Health care delivery system and also certain aspects of demography lectures. This helped in interpreting the data and analysing the same.

Gaps identified on the working area	Within National Health Mission (NHM), there is distinction between the cold chain management and the Routine Immunization (RI) department which is a bit confusing as both are integral in nature. The organizational hierarchy is a bit complex in nature and requires quite some time to understand. Due to the enormous volume of data and also a humungous work force, there is non-uniformity among the working of the health facilities. The extensive networking of individuals and enormous volume of data along with certain misinterpretation of directions among the staffs of the health facilities was a major challenge while observing the facilities. I felt there was a certain lack of guidance from the department in our study and also shortage of time to understand the micro-details regarding the vaccine and supply chain management. **Gaps observed during the field visits** – From my working with the organization and during the physical visits, the gaps identified with respect to data collection were regarding the unsupportiveness of some CCHs (Cold Chain Handlers), absence of staffs in the CCPs (Cold Chain Points), the non-uniformity in function of various CCPs attributed to extensive and humungous system, locating the facilities quickly, lack of formal training (on our part) and proper guidance and also limited time to understand the micro-management of immunization department. The people being reluctant to act at a faster pace and address the issue of the ground staff in the facility. Apart from the above, I was unable to validate or authenticate the primary qualitative data which was given by the CCH (Cold Chain Handler), this may be indicative to my lack of potential technical training in this respect. Managing transportation on our own during the visits took a significant amount of time and effort, and moreover the facilities were not precisely pointed on Google Maps. **Gaps identified after analysis of primary data from the study and interpreting the results** – The gaps identified from the study include existence of substantial irregularities between the various CCPs regarding the population falling within their purview, the number of vaccinators and the number of sessions held on a monthly basis; the unequal distribution of services to some extent; the lack of supervisory visits in CCPs and its adverse effects on quality of maintenance of the CCPs; and confusion among the CCHs regarding AEFI data and its record maintenance.

Suggestions for improvement	It would be extremely helpful if along with orientation we got a little formal training in certain technical as well as managerial aspects of the department. The health facilities could be reviewed more often by the government or non-governmental entities to substantially minimize the shortcomings and improve upon the services. It would be helpful if we got a chance to work in other departments as well by coordinating the work in the present department. This would enhance our knowledge, as well as our work experience would be diversified. It would also be helpful if official government documents are made available in both English and Hindi language and also the presence of clear signboards with both the language in the Directorate. Apart from the above, I felt that there should be enhanced communication between various departments. **Suggestions from the study** – From the study which was undertaken, the points are noteworthy as suggestions given to the department. • The monitoring and maintenance along with record keeping could be enhanced in case of more number of supervisory visits at the CCPs. • Also there could be additional training of the staffs for effective management of the CCP with whatever resource they had. • The record maintenance regarding the AEFI should be conveyed clearly to the vaccinators (ANMs, nursing officers), as there was great confusion regarding the same. • There could be established a channel for relatively quick grievance redressal for the vaccinators of the CCPs regarding managerial and related issues.

Signature of the Student – Arnab Basak

Approved by the IIHMR University's Mentor

Report should be maximum of 10-12 pages