Dissertation at

NUHM, GUJARAT

By

Dr. Deepali Sharma

PGDHM

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International Institute of Health Management Research

DISSERTATION

AT

NUHM, GUJARAT

STUDY/PROJECT TITLE

EVALUATION OF E-MAMTA IN URBAN AREA OF PANCHMAHAL AND MAHISAGAR DISTRICT

BY

DR. DEEPALI SHARMA

UNDER THE GUIDANCE OF

DR. ANANDHI RAMACHANDRAN

POST GRADUATE DIPLOMA IN HOSPITAL AND HEALTH MANAGEMENT

2012-2014

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH

NEW DELHI

Completion Certificate

The certificate is awarded to

Dr. Deepali Sharma (OT)

In recognition of having successfully completed her
Internship in the department of

District Urban Health Unit

and has successfully completed her Project on

Evaluation of E-Mamta in Urban Centers of Panchmahal & Mahisagar District, Gujarat State.

Date: 08 May, 2014

Organisation: NATIONAL URBAN HEALTH MISSION

He/She comes across as a committed, sincere & diligent person who
has a strong drive & zeal for learning

We wish him/her all the best for future endeavors

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TO WHOMSOEVER MAY CONCERN

This is to certify that Dr. Deepali Sharma (OT) student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone dissertation at NUHM, Gujarat. From 6th February to 8th May.

The Candidate has successfully carried out the study designated to her during dissertation and her approach to the study has been sincere, scientific and analytical. The dissertation is in fulfillment of the course requirements. I wish her all success in all her future endeavors.

Dr. A.K. Agarwal
Dean, Academics and Student Affairs
IIHMR, New Delhi

Dr. Anandhi Ramachandran
Asst. Professor
IIHMR, New Delhi

Certificate Of Approval

The following dissertation titled **"Evaluation of E-Mamta in Urban Centers of Panchmahal & Mahisagar District, Gujarat State"** at **National Urban Health Mission,Gujarat State** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name Dr. PANKAJ GUPTA.

DR. ABHIJIT CHAKRABORTY

Dr Anandh Ramadoss

Signature

12/5/

Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Dr. Deepali Sharma (OT)**, a graduate student of the **Post-Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He/ She is submitting this dissertation titled "Evaluation of E-Mamta in Urban Centers of Panchmahal & Mahisagar District, Gujarat State" at **"NATIONAL URBAN HEALTH MISSION (NUHM) GUJARAT"** in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Dr. Anandhi Ramachandran

Assistant Professor

IIHMR, New Delhi

Dr. B.K.Patel

Additional District Health Officer

NUHM, Gujarat

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INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Evaluation of E-Mamta in Urban Areas of Panchmahal and Mahisagar District" and submitted by Dr. Deepali Sharma Enrollment No.PG/12/022 under the supervision of Dr. Anandhi Ramachandran for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 6th Feb 2014 to 8th May 2014 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Deepali

Signature

FEEDBACK FORM

Name of the Student: Dr. Deepali Sharma (OT)

Dissertation Organisation: National Urban Health Mission, Gujarat

Area of Dissertation: District Urban Health Unit

Attendance: 97%

Objectives achieved: Field visit.
Timely reporting of information asked by the State.
Conducted Review Meeting of Urban Staff.

Deliverables: Proposed NUHM PIP, 2014-2015.
Proposed NRHM PIP, 2014-2015.
Prepared ASHA Incentive Annexure.
Presentation for commissioner's meeting.
CPSMS Registration Information.

Strengths: Discipline.
Good Analytical Skills.
Reported on time.
Hardworking.

Suggestions for Improvement: Need to know more about health setup of the State in depth.

Signature of the Officer-In-Charge/ Organisation Mentor (Dissertation)

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Date:
Place:

EVALUATION OF E-MAMTA IN URBAN AREA OF PANCHMAHAL AND MAHISAGAR DISTRICT

BY

DEEPALI SHARMA

PG/12/022

ACKNOWLEDGEMENT

Hard work, guidance and perseverance are the pre requisite for achieving success. Support from an enlightening source helps us to proceed on the path to it. I wish to thank first of all the almighty that provided me energy for the successful completion of Dissertation at NUHM, Gujarat. I am thankful and obliged to my mentor at NUHM, Gujarat. Dr. P.K. Shrivastava, ADHO, NUHM Gujarat for giving me an opportunity to work on this project.

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It has been my good fortune to be benefited by their knowledge, guidance and deep insight without which this project would not have taken the exact shape .To them, I tender my heartfelt regards.

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ABSTRACT

E-Mamta is an IT based management tool to plan, deliver and monitor quality MCH services, track dropouts and ensure complete service delivery through Work Plans, analysis of performance and message alerts, thereby reducing IMR/MMR. This study is in alignment with the District Urban Health Unit of Panchmahal and Mahisagar District's decision to evaluate the overall process of E-Mamta with emphasis on UHO, Operator and FHW/MPHW/ U-ASHA, which will help in identifying the causative factors behind the low achievement of annual target and entry in E- Mamta. This will help in improving the service delivery to the beneficiaries and thus reducing the MMR and IMR. Questionnaires were made for UHOs, Data Entry Operators and FHW/MPHW/ U-ASHA to evaluate their knowledge regarding the software (its application, benefits and use in service delivery) and family health survey. Data was collected on a sample size of 43 including the 3 categories. The study was done during the period of 3 months from 6th February to 6th May. From these questionnaires various issues were analyzed, differently for UHOs, Data Entry Operators and FHW/MPHW/ U-ASHA, like from UHO's questionnaire Aim of E-Mamta, training on E-Mamta, frequency of access, problems using E-Mamta, benefits of E-Mamta issues were analyzed, from Operators' questionnaire Aim of E-Mamta, Training on E-Mamta, Frequency of access, Registers to be entered, action taken for mistake, problems while data entry, reasons for poor reliability of data, reasons of low data entry against work load issues were analyzed, from FHW/MPHW/ U-ASHA questionnaire Aim of E-Mamta, responsible authority for data entry in E-Mamta, purpose of family health survey, dates of family health survey, registered to be entered in E-Mamta issues were analyzed, along with the secondary data which was collected from the monthly RCH report of the district which was gathered for 7 months. After analyzing the different factors which was gathered from primary data sets and also from secondary data sets these results were concluded for the the low achievement of annual target and entry in E- Mamta. There is unawareness about E-Mamta in the stakeholders (UHO, Operator & FHW), which is the main causative factor behind the low data entry and low stakeholders were not provided with any training on E-Mamta, so it causes in low data entry in E-Mamta which the main reason behind the no availability of the work plan to the grass hoot level workers.

REVIEW OF LITERATURE

1. **MHEALTH SERIES: MEASURING MATERNAL NEWBORN AND CHILD HEALTH COVERAGE BY TEXT MESSAGING – A COUNTY–LEVEL MODEL FOR CHINA. (2013)**

Author: Yanfeng Zhang, Li Chen and Wei Wang.

The researchers believed that deaths of children less than five years of age could be preventing by attaining full population coverage. Tracking progress and evidence based decisions can be achieved by quality based maternal, newborn and child health (MNCH). Methodology included fieldworker's interview of preselected households. The result of study showed that text messaging can aid in measuring MNCH interventions. The explanation to this is through text messaging aid in remote data collection and time and money can be saved. Large sample size can easily be targeted for data collection. Survey bias will be reduced to greater extent. Thus text messaging can be an effective tool in data collection for MNCH coverage measurement.

2. **E-MAMTA: NAME BASED MOTHER AND CHILD TRACKING SYSTEM IN GUJARAT. (2011)**

Author: Rajnish M, Anand S and Anju S.

India is dealing with crucial public health challenges and most important of which is reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR). To provide efficient healthcare services to mother and baby tracking of them is considered to be of utmost importance. Through tracking population left out from immunization, anemia and malnutrition can be reached. The objective of e-Mamta is to aid in maternal and child care services, real time reports and efficient analysis and intra-departmental communication. The study result revealed that 80% of population was being registered within software till 2012 and it was being implemented throughout Gujarat state.

3. E-MAMTA- MOTHER AND CHILD TRACKING SYSTEM (MCTS). (2010)

Author: State Rural Health Mission

The study addresses rural health challenges like drop outs, left outs, quality of services and difficulty in tracking pregnant women and children. The organization believes these challenges can be combat with E-Mamta as it made tracking quite smooth by aiding the search with unique ID, family ID, health ID, mobile number, BPL and ration card number. The mentioned strength and weakness of E-Mamta are: the uniqueness is it covers huge population at single time, and the area of improvisation is implementation of real time data collection.

4. EMAMTA: MOTHER AND CHILD INFORMATION TRACKING SYSTEM DOCUMENTATION OF BEST PRACTICE. (2012)

Author: Governance Knowledge Centre (GKC) team.

Gujarat is being known for innovative and progressive e-governance initiatives that enhance citizen based service delivery. E-Mamta is one of such initiative that focuses safe motherhood and child survival. E-Mamta targeted towards integration of information from different sources, decentralization of information, and aggregation of information into database. As a result effective information management and monitoring mechanism has been developed; population can easily be connected to healthcare services including ANC/PNC/Immunization. The conclusion of result is although e-Mamta is successful it need to be integrated with other initiatives like ICDS, primary education and school health.

OBJECTIVES

General Objective

To assess significance of E-Mamta in urban areas along with detailed evaluation of E-Mamta in urban areas of Panchmahal and Mahisagar district.

Specific Objectives

- To assess the effectiveness of E-Mamta on the basis of secondary data available.
- Distribution of questionnaire to MO's, Operator's and ASHA/FHW;s for assessing the working of E-Mamta on urban areas.
- To find out gaps that prevents E-Mamta to be completely functional.
- To recommend strategies that aid in better functioning of E-Mamta.

METHODOLOGY

- The case study was conducted in urban health centers of Panchmahal & Mahisagar District.
- Urban health staff was included in the study.
- In all, 7 Urban Health Officers, 7 Data entry Operators and 29 Female Health workers /Urban ASHA/Multi Purpose Health Workers were selected on a convenience basis.
- There were no exclusion criteria in this study.
- Questionnaire was developed for Urban Health Officers, Data Entry Operators and Female Health Workers/Urban ASHA/Multi Purpose Health Workers to assess their knowledge regarding the software and its use.
- Questionnaire was developed for Urban Health Officers, Data Entry Operators to acknowledge their suggestions for improvement.
- **Study Area:** Panchmahal & Mahisagar District, Gujarat.
- **Study design:** a descriptive cross-sectional study.
- **Time:** 6th February to May 2014.
- **Study population:** Urban Health Officers, Data Entry Operators and Female Health Workers/Urban ASHA/Multi Purpose Health Workers.
- **Sample size and method:**
    - Sampling Technique: Non probability convenience sampling.
    - Sample Size: 43
- **Data Collection**

• Sources

1. Primary Data: Data was collected through structured questionnaire over email responses and direct interview.

2. Secondary Data: Available on Internet and journals.

• Tools and techniques: Questionnaire and observation techniques.

INTRODUCTION

E-MAMTA

Maternal Child tracking System also called as E-Mamta is an online name based tracking system which aims at ensuring service delivery to every individual with special focus on mother and children and provides denominator based Work Plans.

This management tool thus generated works towards realizing priority issues in Health laid in the Millennium development goals, Swarnim Gujarat goals and the goals of NRHM i.e. reducing the Maternal Mortality Ratio (MMR), the Infant Mortality Rate (IMR) and the Total Fertility Rate (TFR).

E-Mamta is software that focuses to render health services details received by an individual, by capturing all the encounters that the same individual has gone through his/her health program.

E-Mamta also aids in monitoring of health services to the individual level that allows tracking of patient information effectively.

Objectives of E-mamta

- To aid in extensive and qualitative service delivery to mother through ensuring:
  - Full Ante Natal Care (ANC) services on time
  - Full Post Natal Care (PNC) services on time.
- To provide comprehensive care to children by ensuring full immunization coverage.
- To aid in authentic reporting and enhanced analysis of data.
- To enhance coordination across departments.
- To improve stock management.
- To target critical healthcare issues, on the basis of MDG, Swarnim Gujarat goals and the goals of NRHM.
- At last, to achieve decline in MMR, IMR and TFR.

How the E-Mamta has transformed the way services were delivered

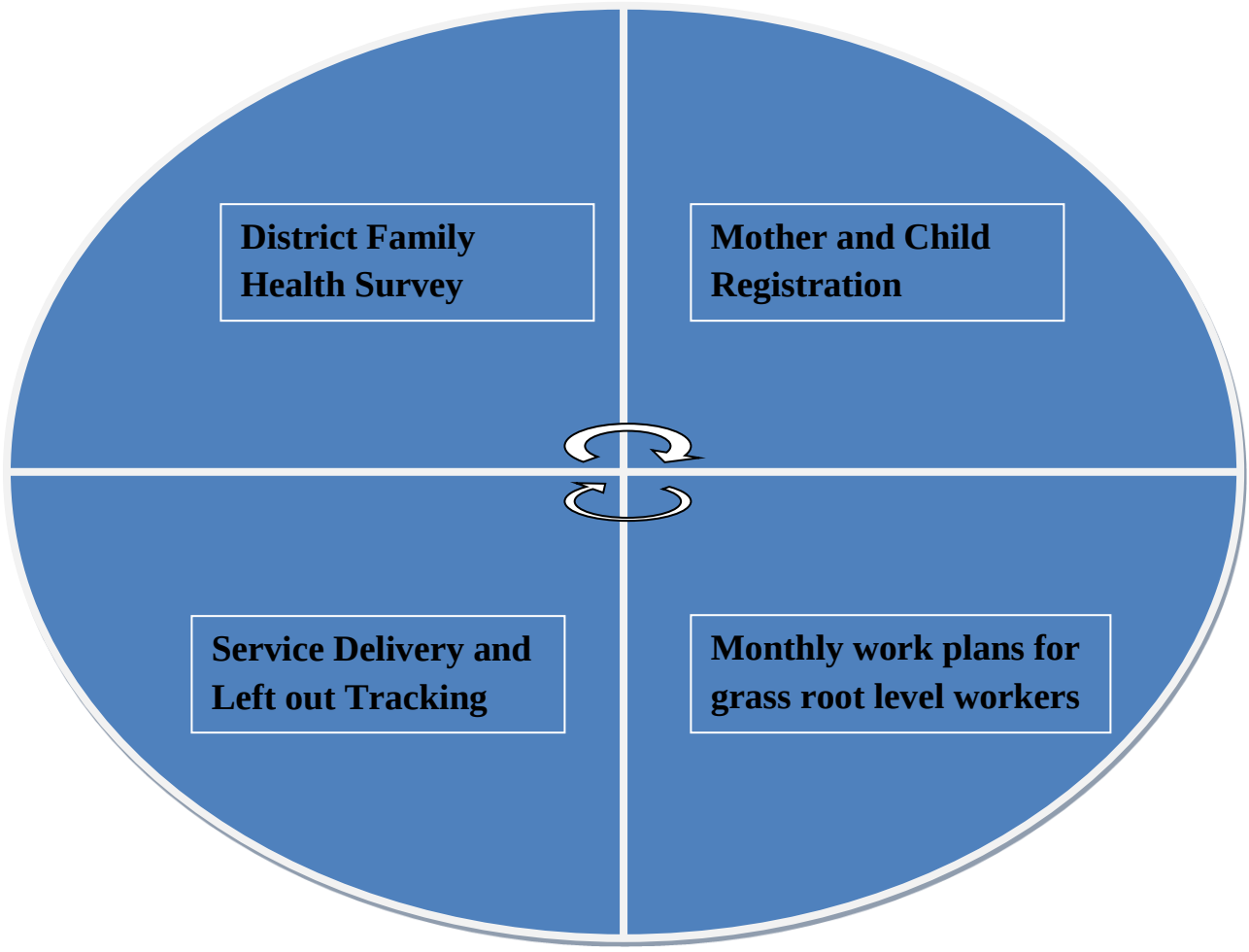
Some of the changes that E-Mamta has brought to service delivery are:

Before E –Mamta	**Now (After E-Mmata)**
Service based numerical information	Individual based service information
Not so reliable Reports	Reliable Reports
Bulky registers	Bulky registers
Month end information	Real time information
Village Health and Nutrition day session planning- Memory dependent unsystematic and incomplete	Systematic Monthly Work Plans
Information : restricted to numbers – less analytical, low use to management	The nature of information being name based and helpful for comprehensive service delivery, analysis and Management.
No Name wise report of services at the State/District level-only numbers	Name- wise Reports can be viewed at the State and District level also.
Inability to retrieve historical data	Historical data and service records can be retrieved Instantaneously.
Impossible to get immunization Record of a child after few years	Immunization Record can be obtained at any age subsequently
No Record of Child Growth	Child Growth Record is stored and can be obtained at any age to analyze early growth.

Phases of Service Delivery Through E-mamta

The service delivery through E-mamta is a cyclic process. The ending of one phase initiates other phase and there by complete a wheel of services delivered to both mother and child.

The roll out of E-mamta is as mention below:



Phase 1: Family Health Survey

The very first step is Family Health Survey covering both urban and rural populations. Approximately 80% of Gujarat population is being covered in E-mamta.

The entries of FHS in E-mamta are being validated first by ASHA/FHW/MOs, then after cross validated by District and Block officials.

The accuracy and reliability of data is assured by comparison of data with BPL list, RSBY list, Voter list and Ration Card. The children registration is also validated with comparison of registration in Aanganwadi and Primary school.

Phase 2: After the registration, a unique family health care ID is being generated and given to beneficiary who in future assist in to conquer migration details and prevent loss of cases due to migration.

Phase 3: Registration of Pregnant Mothers and Children

All women who are pregnant and children upto 6 years of age are being registered and given a unique mother/child ID.

Phase 4: Tracking of Healthcare Services Through Monthly Workplans

E-Mamta covers services given to pregnant mother namely ANC, Delivery, PNC and immunization and nutrition. Thus the services are being delivered in following ways:

- Detailed work plans created by sub-centre further given to ASHA/FHW to provide due services to beneficiary.
- The services rendered to the mother and children for ANC, immunization, PNC, and nutrition are recorded in E-Mamta and use to identify the gaps in service delivery.
- It also sends SMS to beneficiaries/health workers/District and Block level authorities to monitor the services that are due.
- HMIS report can also be generated through E-Mamta by aggregation of services. (Vol. 7 | No. 11 October-November, 2010) e-mamta.pdf

Characteristics of E-Mamta:

E-Mamta is an innovative initiative taken by Gujarat Government to enhance the service delivery to mother and child. The following salient characteristics of E-Mamta aid in achieving those objectives:

- It is a management tool that caters targeted population with comprehensive maternal child health services and assures complete and well timed service delivery with added unique feature of name based tracking.
- It also holds on comprehensive Family health data base of the entire population.
- It focuses on complete life cycle of an individual by proving information from birth to death.
- Targeted beneficiaries are being reached with work plan.
- It provides unique ID to each individual registered in system which aid in dealing migration/transfer issues.
- There is no duplication of entries as once recorded a woman all her pregnancies get updated with in one record.
- Healthcare services that are due are acknowledged to beneficiaries and service provider through sms.
- It is integrated with HMIS and aid in automatic generation of reports and registers through aggregation.
- It aid in extensive search by provide various parameters to search with. For eg, Name, Village name, Ration card number, Mobile number, Health ID, Family ID, RSBY card number, and BPL card number.
- It is compatible with Unique ID i.e. AADHAR card.
- It also records the information of various incentives paid to all health workers records for the benefit of JSY, BSY and CY schemes.
- It saves entire database of service provider.
- It serves as communication platform between service providers and between service provider and beneficiaries.
- Dashboard provides brief overview of Data entry, Deliveries, Immunization services, Maternal and Infant deaths.

Benefits:

• Unique ID based online family health data base covering the entire rural, urban slum and slum like population.
• 100% tracking for complete health services, especially maternal & child health services.
• Reduction in the work of field level health workers as they have not to prepare reports and keep various Records.
• Improved inventory management and financial management of the health programmes.
• Capturing data in case of migration.
• Better data analysis for preparation of Block/District health action plans and State PIPs with realistic/accurate denominators.
• Basis for ICDS, Primary education, ration card, Adolescent health, school health etc.

E-MAMTA ADVANTAGES TO MO's

- Readily available analytical reports
- Better planning for Vaccination Supply & Management
- Group /Individual SMS's to health workers and beneficiaries
- Direct communication with ANMs / ASHAs and beneficiaries
- Facility reporting status
- Actionable reports of registration and service updating status

E-MAMTA ADVANTAGES TO OPERATOR's

- Group /Individual SMS's to health workers and beneficiaries
- Direct communication with ANMs / ASHAs and beneficiaries
- Facility reporting status
- Auto generation of work-plan
- Contact details of the Beneficiaries
- SMS based work plan

E-MAMTA ADVANTAGES TO ANM/ASHA

- Auto generation of work-plan
- Better guidance from senior supervisors
- Contact details of the Beneficiaries
- SMS based work plan
- Micro planning for Filed Visit
- Readily available Services due list

Features of E-mamta:

1. **Work plans: Facility Wise**

- Work plan for new registration
- Work plan for ANC
- Work plan for delivery
- Work plan for PNC mother
- Work plan for Neo-natal (PNC child)
- Work plan for child services
- Work plan for adolescents
- Work plan for anemia
- Work plan for malnutrition
- Work plan for institutional delivery

2. **Reports: Facility Wise**

- Registration Details:
  - Complete information including age, address, services that are to be given (due) and date of services that are received through:

  (a) Family survey data entry status

  (b) Family survey form print

  (c) Registration of adolescents

  (d) Registration of pregnant women report

  (e) Registration of child services

  (f) User log report

- Summary reports for the region:
  - ➢ It unveils the number of beneficiaries getting benefitted from healthcare services within the region

  (a) Pregnant woman summary

  (b) Child immunization record

  (c) Child summary (0-1 years)

  (d) Child summary (1-6 years)

  (e) Mother care (From no 4 report)

  (f) Mother data search

- Cased based reports:
  - ➢ It describes individual child and mother's details by case ID

  (a) Child growth chart (male)

  (b) Child growth chart (female)

  (c) Mother Hb/wt chart

3. <u>HMIS Monitoring</u>

- Details of existing manpower in healthcare domain of the state
  - ➢ ANM
  - ➢ ASHA
  - ➢ MO
  - ➢ CDHO
  - ➢ RCHO
- Generation of Form no. 6,7,8,9

Technology:

The Software:

E Mamta is a management tool for the Health care system to provide quality MCH services, track drop outs and ensure complete service delivery and thereby reduce IMR/MMR was conceptualized by the State Rural Health Mission of the Health and Family Welfare Department of Gujarat, in January 2010 funding support was sought under NRHM and the program was developed through NIC Gujarat. The application is web based accessed by a unique ID through broadband, wifi, data card anywhere in place and time on

(1) http://e-mamta.guj.nic.in/.

(2) http://mcr.guj.nic.in demo version is also prepared for the purpose of training on the web address: http://emamtademo.

guj.nic.in/

Hardware:

The application had minimal requirements for roll out in the Public Rural Health set up. The physical pre requisites, a computer and an internet connection at the Primary Health Centre (PHC), already existed in the set up. Manpower requirements were a data entry operator who is a regular employee at the PHC. Other operational activities like trainings, fields' surveys were carried out by regular staff.

SCREENSHOTS OF E-MAMTA

The E-mamta webpage will be open by entering http://e-mamta.gujarat.gov.in in the browser. The webpage shows Welcome Message and brief information of data entry (Dashboard).

Figure: E-mamta Webpage

After clicking login, another page will pop-up where ID and password need to be entered.

After login, at the startup page user can see all the features that can be used for administrative purpose like data entry, reports, work plan, search, dash board, SMS, facility based data, query module.

Figure: Startup Page of E-mamta

To start with Data Entry, click on Data Entry, page will open up where user has to fill up for District, Taluka, Area i.e Rural or Urban, PHC, Sub-centre, Village and Anganwadi.

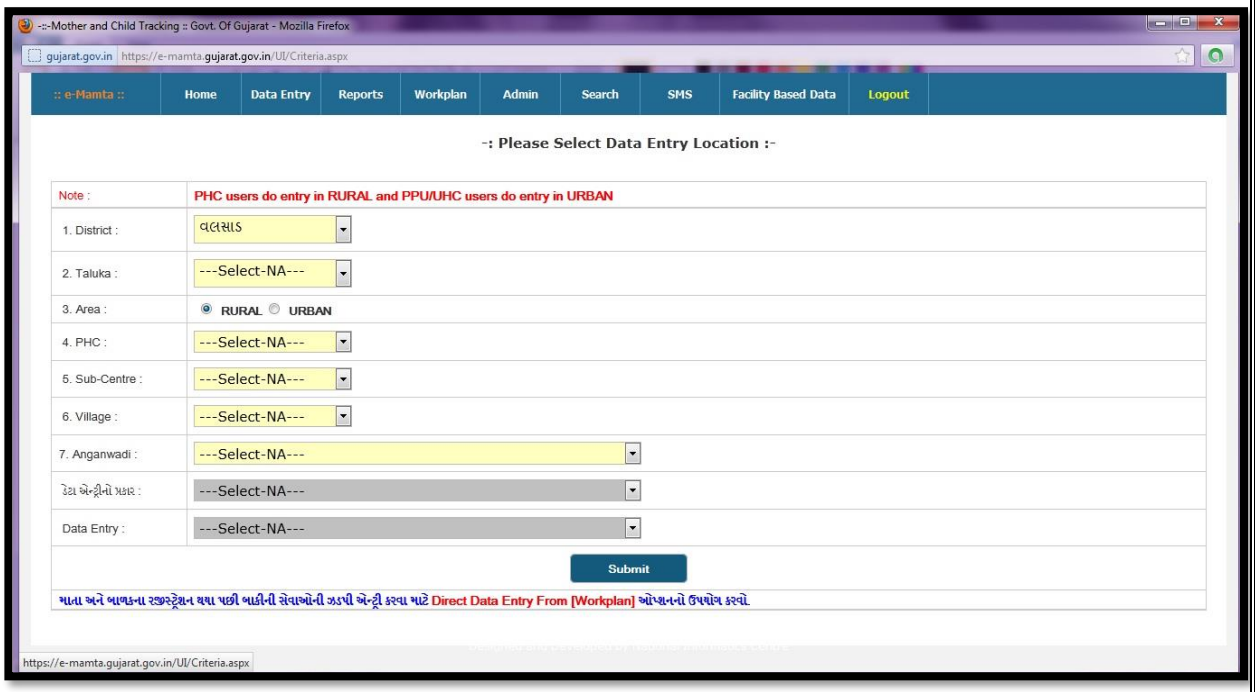


Figure: Data Entry

The next section is of Reports, where list of reports are available. User can choose according to their objective.

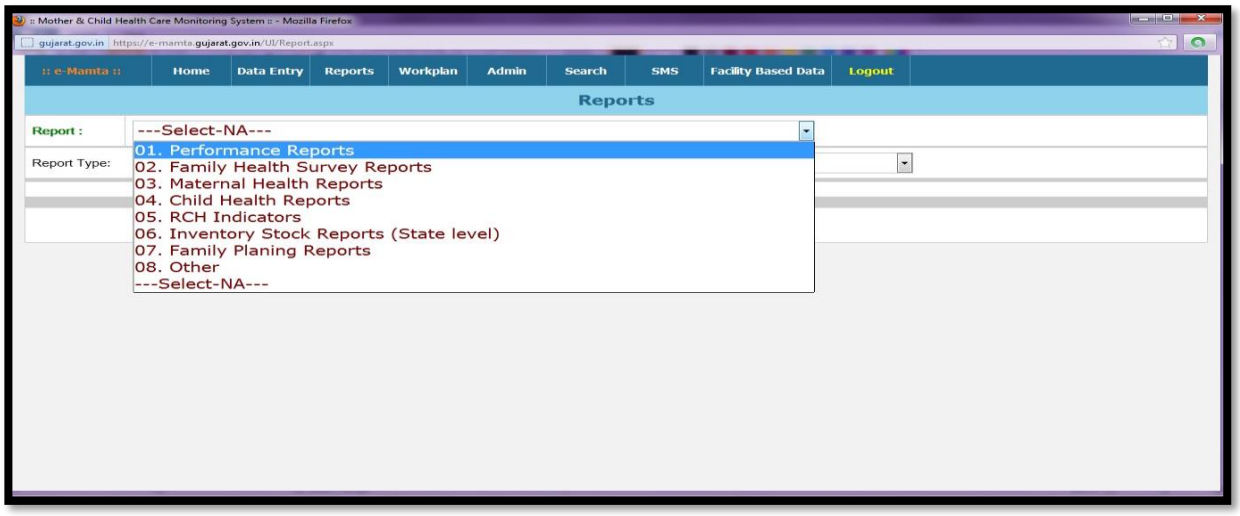


Figure: Report

All the reports can be seen by selecting them and clicking submit, the report will pop-up, which can be saved to computer in desired format.

The next section is Work plan, which is very significant to effective service delivery. There are number of work plans available for mother and child.

After clicking on work plan, page will open up where the desired work plan will be selected.

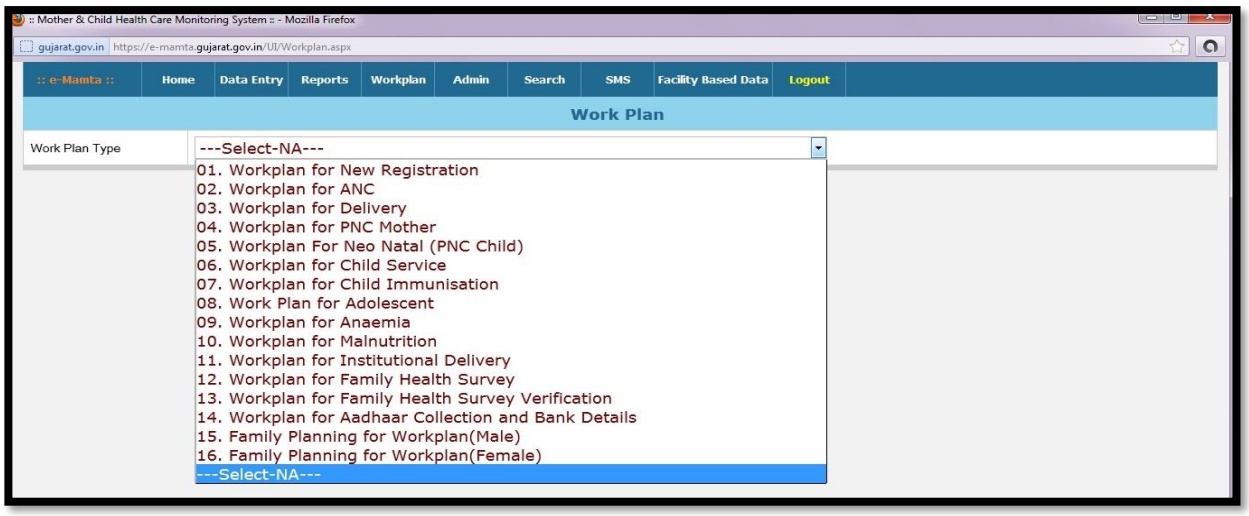


Figure: Work plan

The next feature is Dashboard, where the brief information of indicators is available.

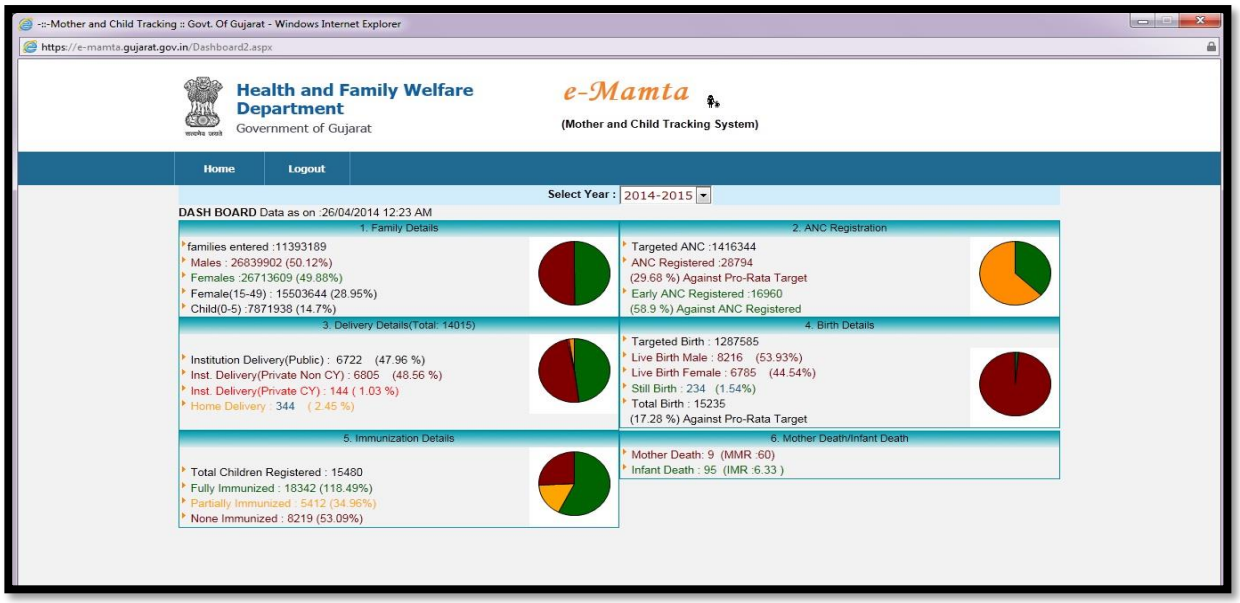


Figure: Dashboard

The next feature is SMS, from where sms can be send to beneficiaries, officials or reports can be send.

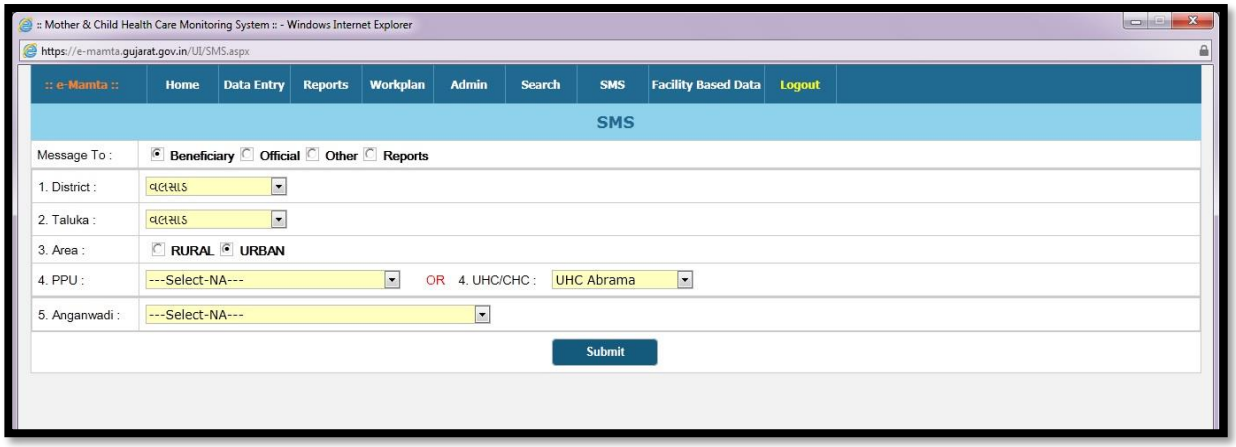


Figure: SMS

The next feature is Facility Based Data, where one can check for verification of HMIS Forms.

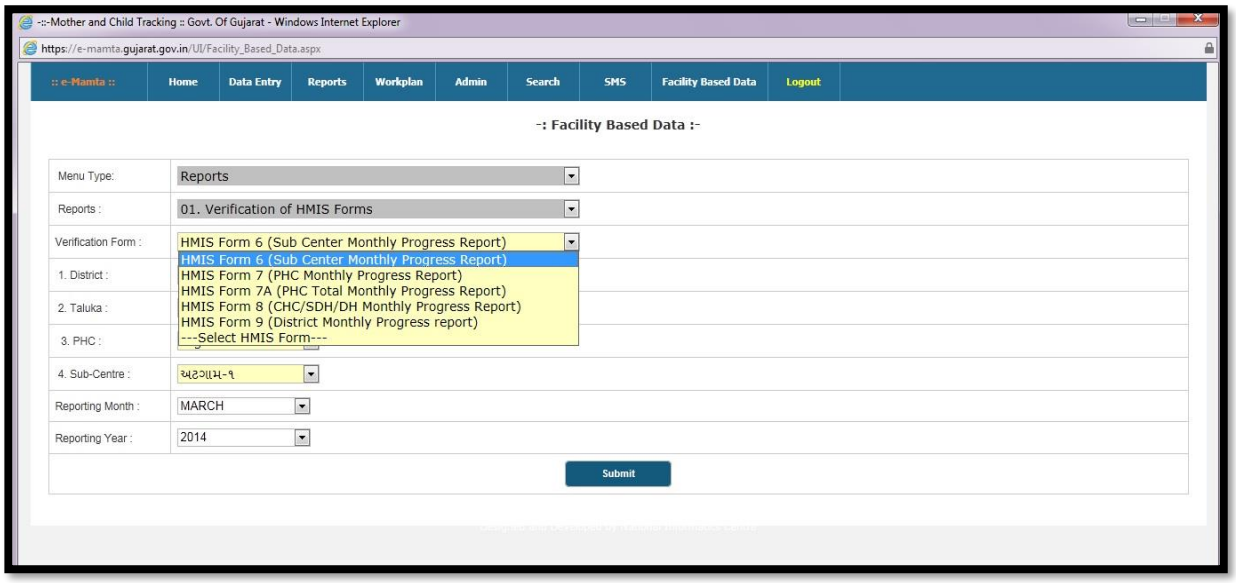


Figure: Facility Based Data Report

RATIONALE OF THE STUDY

Achievement of the annual target given by the state according to NUHM guidelines given by the Government of India and its entry in E-Mamta software is the main problem with the Urban Health Centers of the Panchmahal and Mahisagar Districts of Gujarat State. The Aim of E-Mamta software is: To plan, deliver & monitor an integrated service to pregnant women & children.

To help service provider through case based tracking of all pregnant women and children up to 19 years of age.

The application covers all the services starting from antenatal care to postnatal care, child immunization, nutrition and family planning services.

So the main purpose of E-Mamta is to reduce the MMR and IMR of the district, so as of State as well and improvement in the service delivery to the pregnant mothers, mothers after delivery and neo natal and children.

With the help of E-Mamta the Urban Health Officer can generate the work plan according to service delivery and can give to their grass hoot level workers i.e. FHW, MPHW, SI and U-ASHA, so that they can go on the field and provide services to the beneficiaries which improves the service delivery status to the beneficiaries and helps in improving the MMR and IMR.

But for generation of work plan there should be complete entries of the families and register numbers 2^{nd}, 4^{th} and 5^{th}.

In urban centers the data entry as well as the survey status is very poor as compared to rural centers, which affects the timely generation and delivery of the work plan to the workers and thus affects the delivery of health services to the beneficiaries.

This study is in alignment with the District Urban Health Unit of Panchmahal and Mahisagar District's decision to evaluate the overall process of E-Mamta with emphasis on UHO, Operator and FHW/MPHW/ U-ASHA, which will help in identifying the causative factors behind the low achievement of annual target and

entry in E- Mamta. This will help in improving the service delivery to the beneficiaries and thus reducing the MMR and IMR.

The aim of the study is to provide the District Urban Health Unit with the ample evidence of the factors which are responsible for the low achievement of the target and low entry in E-Mamta with the help of various methods adopted for the study.

. **National Urban Health Mission (NUHM)**

According to Census 2001, urban population was 28.6 crore, which has been increased to 37.7 crore in Census 2011. The urban population comprise of people living in slum and other squatter areas.

Although the health facilities are nearer to urban poor but still their access to those facilities are restrained. The possible reason for this are:

- Inadequacy of urban public health delivery system
- Ineffective outreach and weak referral system
- Social exclusion
- Information and assistance lack from secondary and tertiary hospitals
- Economic resources shortage don't allow them to access private services
- Standards and norms for urban health care delivery system is not very clear and understandable

Urban Poor Health Status

As per NFHS III (2005-06) information, the key health status data for urban poor is as follows:

- Under 5 Mortality Rate (U5MR) is 72.7
- More than 46% of children are underweight
- Approximately 60% children miss total immunization before completing 1 year.
- Even the environmental condition of slum areas makes the population more prone to lung diseases like Asthma and Tuberculosis (TB) and also to vector borne disease and malaria.

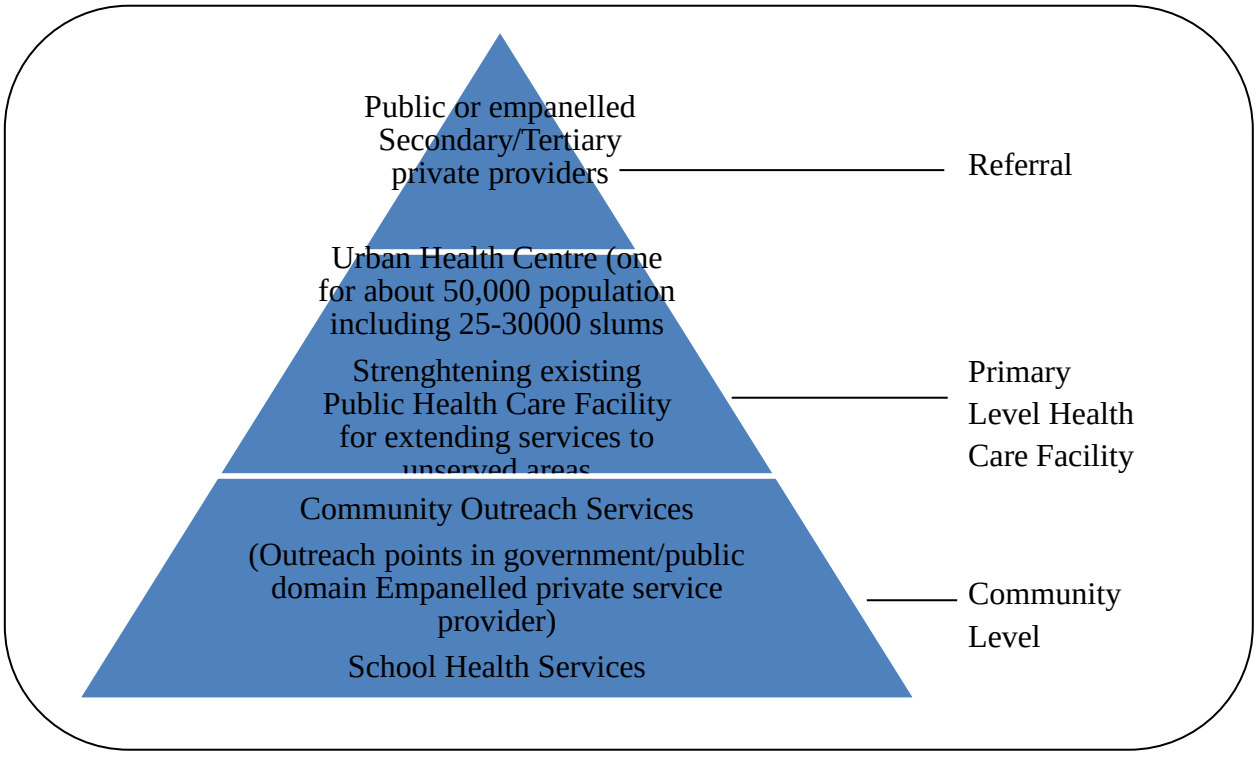
In order to efficiently deal with these health issues of urban slum population, National Urban Health Mission (NUHM).

Focus Areas of NUHM

The NUHM focuses on:

- Urban Poor Population living in listed and unlisted slums
- All other vulnerable population such as homeless, rag-pickers, street children, rickshaw pullers, construction and brick and lime kiln workers, sex workers and other temporary migrants.
- Public health drive on sanitation, clean drinking water, vector control etc.
- Strengthening public health capacity of urban local bodies.

Urban Health Care Delivery Model



GOALS OF NUHM:

The National Urban Health Mission (NUHM) aimed to enhance health status of urban population in general, but peculiarly of the poor and other disadvantaged sections, by facilitating equitable access to quality health care through a revamped public health system, partnerships, community based mechanism with the dynamic involvement of the urban local bodies.

CORE STRATEGIES OF NUHM:

The various strategies implemented by NUHM to improve service delivery to urban poor and vulnerable group are as follows:

- Ameliorating the efficiency of public health system in the cities by strengthening, revamping, and rationalizing existing government primary urban health structure and designated referral facilities.
- Advancement of access to enhanced health care at household level through community based groups: Mahila Arogya Samiti.
- Strengthening of public health with innovative preventive and promotive actions.
- Increased access to health care through creation of revolving fund.
- IT enabled services (ITES) and e-governance has been used to improve access to enhanced surveillance and monitoring.
- Capacity building of stakeholders.
- Identifying and prioritizing the most vulnerable among poor.
- Assuring quality health care services.

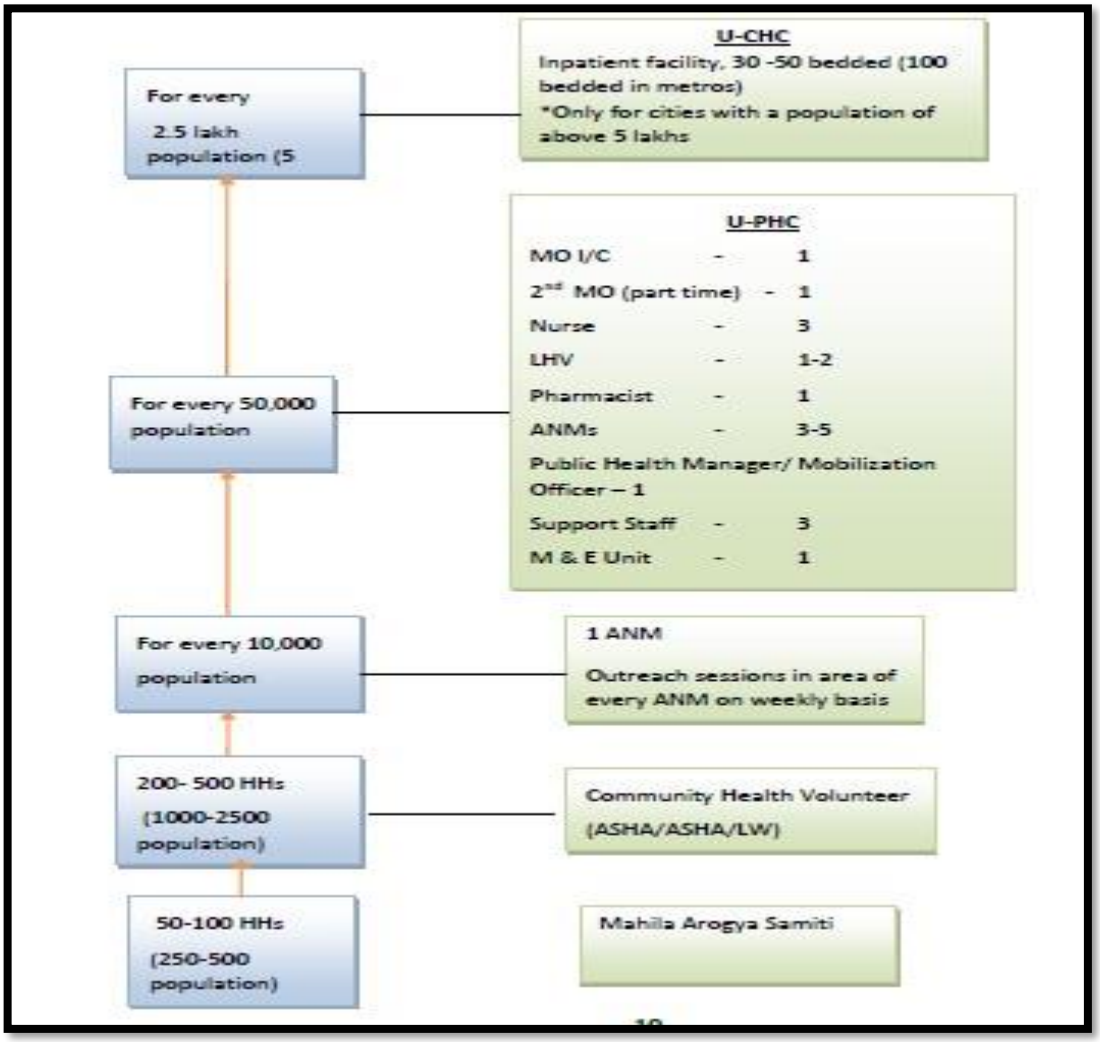


Figure: Urban Health Care Facilities

Panchmahal & Mahisagar Profile

Panchmahal district is located on the Eastern portion of Gujarat State. Panchmahal means 5 sub divisions. There are 7 taluka in the district namely Godhara, Halol, Kalol, Gogamba, Shahera, Jambugoda, Morva (h).

The total population of 4 taluka of Panchmahal is 259616. Out of this, urban slum are 90865 which are 35 % of total population of Panchmahal. This 35% population is covered by Urban Health.

Panchmahal is having 6 functional UHC (Urban Health Centers).

Mahisagar district is a district in the state of Gujarat in India that came into being on 26 January 2013, becoming the 28th district of the state. The district has been carved out of the Panchmahal district and Kheda district. There are 4 Taluka in the district namely Lunawada, Santrampur, Kadana, Khanpur.

The total population of 2 taluka of Mahisagar is 56419. Out of this, urban slum are 19746 which are 35 % of total population of Mahisagar. This 35% population is covered by Urban Health.

Mahisagar is having 2 functional UHC's.

Results

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	3	10.3	10.3	10.3
	c	18	62.1	62.1	72.4
	d	8	27.6	27.6	100.0
	Total	29	100.0	100.0	

Table 1.1

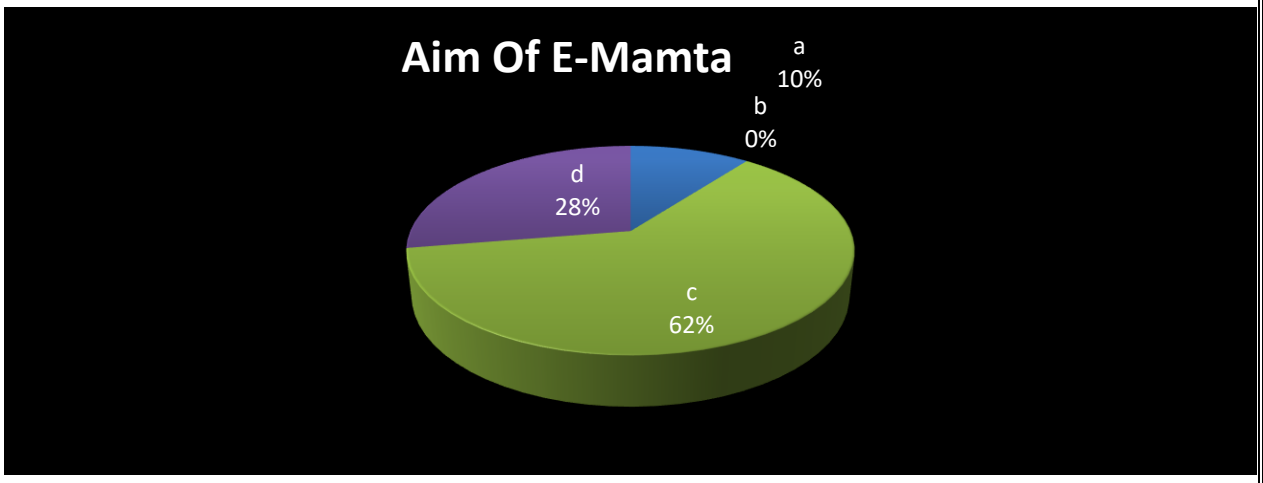


Fig. 1.1

a) Out of 29 FHW 3 FHWs i.e. 10% of the total chooses 'a' option i.e. to plan, deliver & monitor an integrated service to pregnant women & children.
b) Out of 29 FHW 18 FHWs i.e. 62% of the total chooses 'c' option i.e. the application covers all the services starting from antenatal care to postnatal care, child immunization, and nutrition and family planning services.
c) Out of 29 FHW 8 FHWs i.e. 28% of the total choses'' option i.e. All of the above.
d) But none of them selected the option 'b' and 'e' i.e. To help service provider through case based tracking of all pregnant women and children up to 19 years of age and None of the above respectively.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	19	65.5	65.5	65.5
	d	10	34.5	34.5	100.0
	Total	29	100.0	100.0	

Table 1. 2

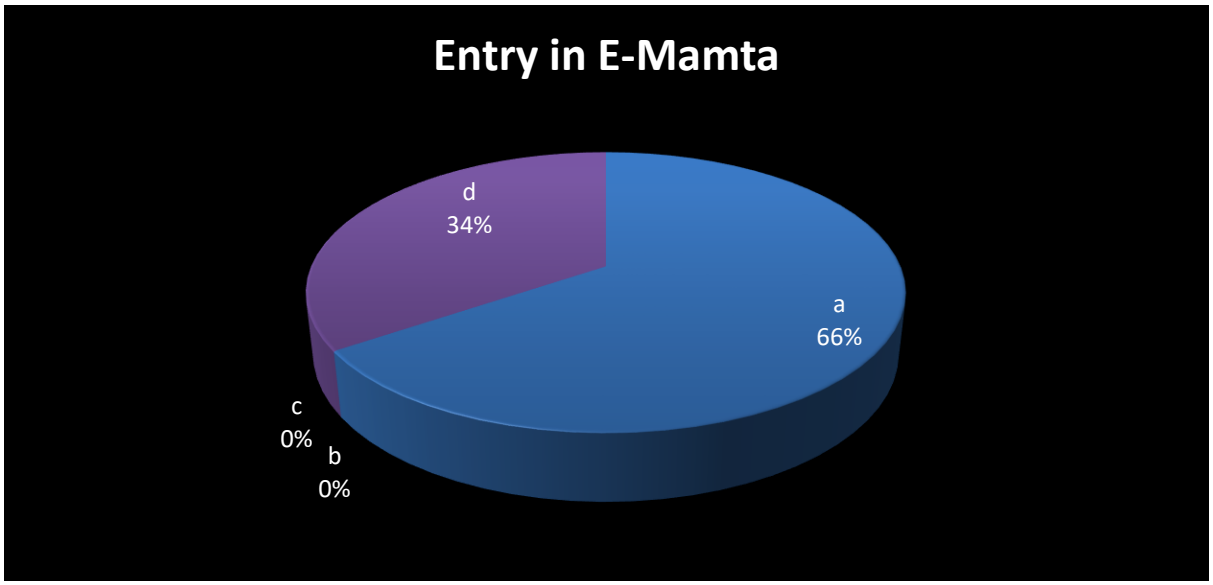


Fig. 1.2

a) Fig. 1.2 shows that out of 29 FHW 19 FHWs i.e. 66% of the total chooses 'a' option i.e. Data entry operator.
b) Out of 29 FHW 10 FHWs i.e. 34% of the total chooses'd' option i.e. All of the above.
c) But none of them selected the option 'b' and 'c' i.e. UHO and District Staff respectively.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	18	62.1	62.1	62.1
	b	11	37.9	37.9	100.0
	Total	29	100.0	100.0	

Table 1.3

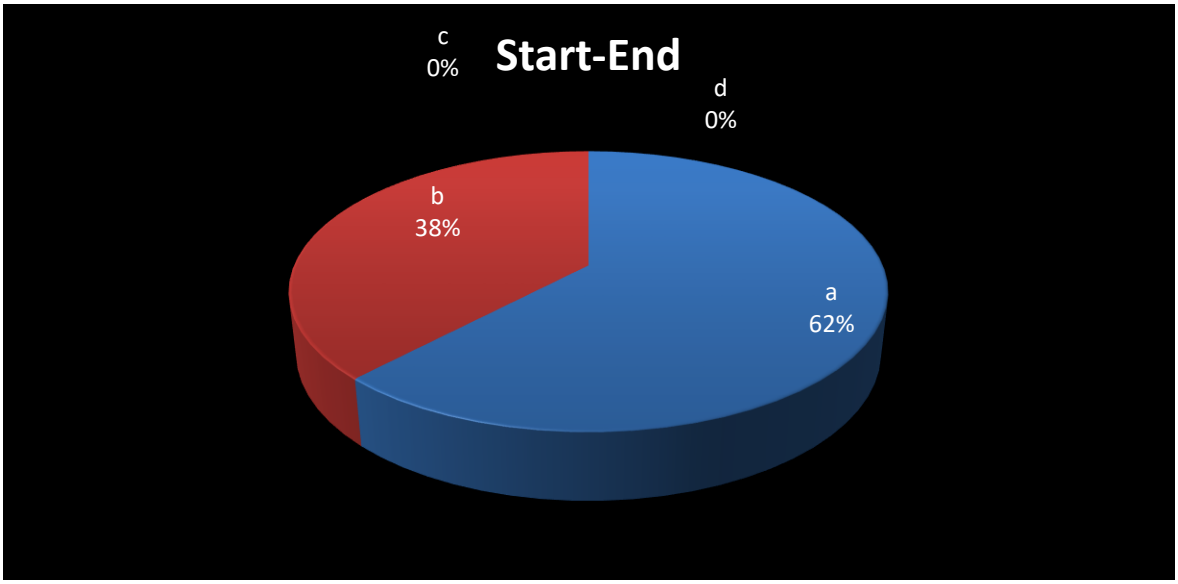


Fig. 1.3

a) Fig. 1.3 shows that out of 29 FHW 18 FHWs i.e. 62% of the total chooses 'a' option i.e. 1st January-31st March of each financial year.
b) Out of 29 FHW 11 FHWs i.e. 38% of the total chooses 'b' option i.e. All of the above.
c) But none of them selected the option 'c' and'd' i.e. 1st July-30th September and 1st October-31st December respectively.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	6	20.7	20.7	20.7
	b	21	72.4	72.4	93.1
	d	2	6.9	6.9	100.0
	Total	29	100.0	100.0	

Table 1.4

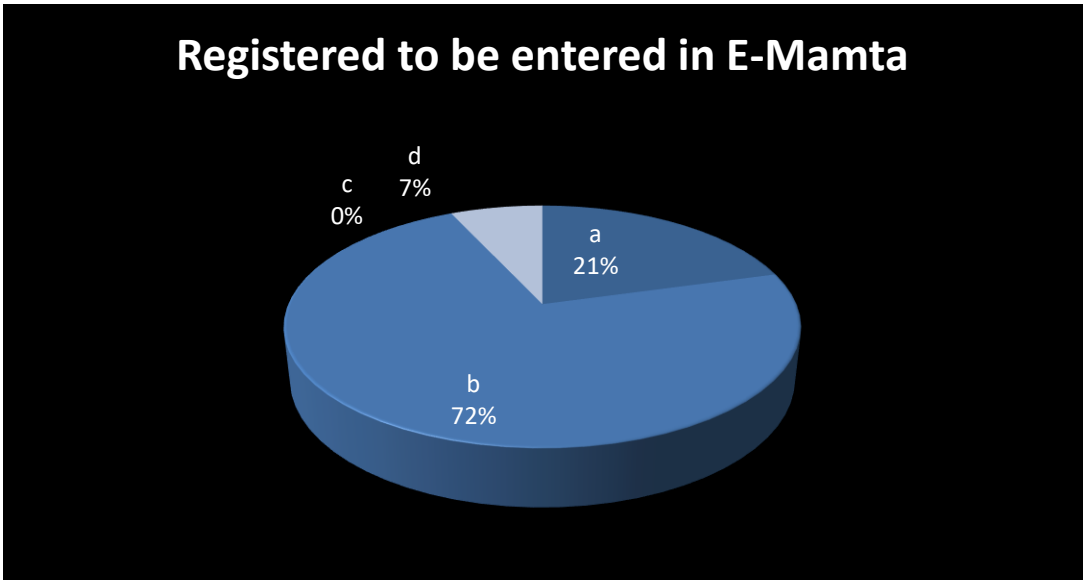


Fig. 1.4

a) Fig. 1.4 shows that out of 29 FHW 6 FHWs i.e. 21% of the total chooses 'a' option i.e. Register No. 2.
b) Out of 29 FHW 21 FHWs i.e. 72% of the total chooses 'b' option i.e. Register No. 4&5.
c) Out of 29 FHW 2 FHWs i.e. 7% of the total chooses'd' option i.e. Both a & b.
d) But none of them selected the option 'c'i.e. None of the above.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	26	89.7	89.7	89.7
	b	2	6.9	6.9	96.6
	c	1	3.4	3.4	100.0
	Total	29	100.0	100.0	

Table 1.5

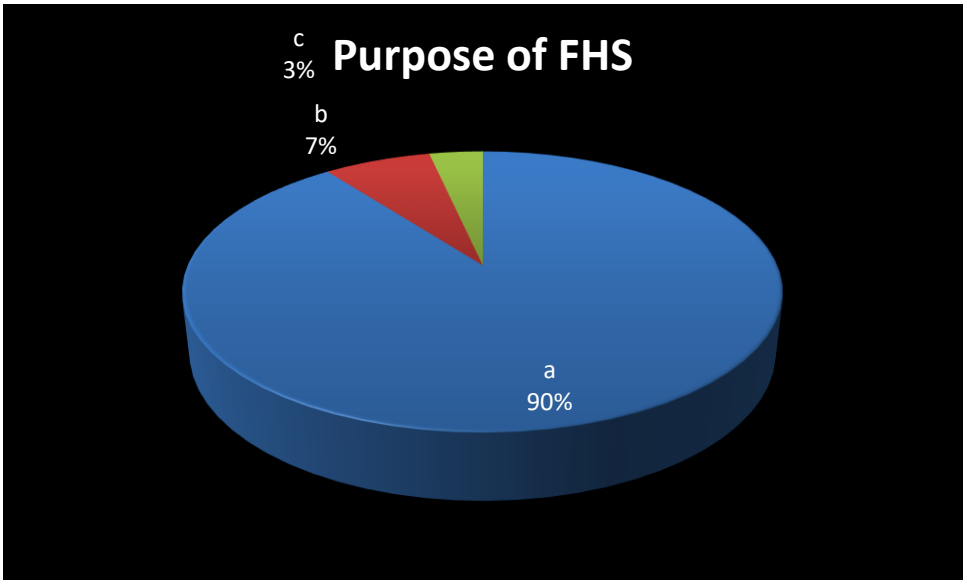
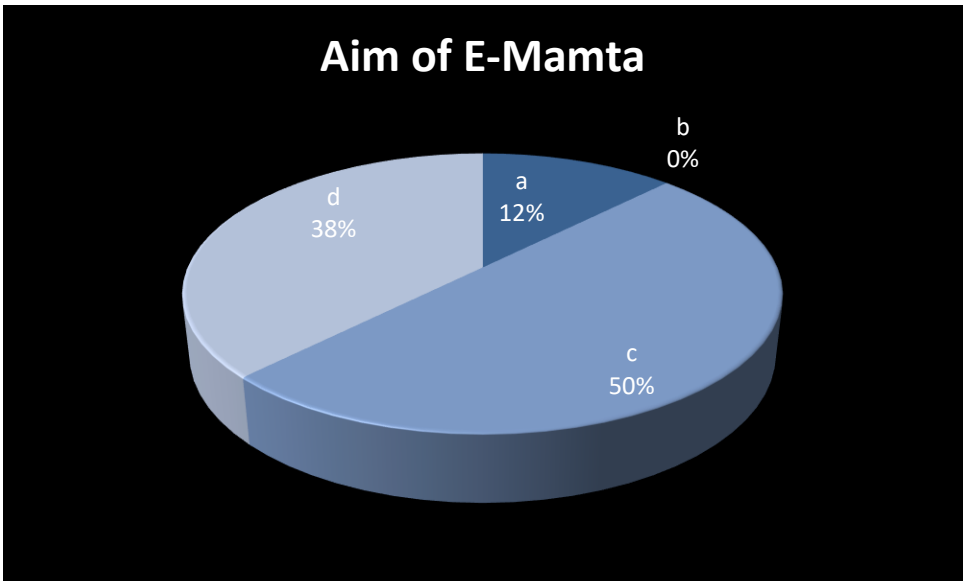


Fig.1. 5

a) Fig. 1.5 shows that out of 29 FHW 26 FHWs i.e. 90% of the total chooses 'a' option i.e. for generating the action plan/work plan for the next financial year.
b) Out of 29 FHW 2 FHWs i.e. 7% of the total chooses 'b' option i.e. for generating the action plan/work plan for the next financial year.
c) Out of 29 FHW 1 FHWs i.e. 3% of the total chooses 'c' option i.e. None of the above.

Results: Operator

Table 2.1



a) Fig. 2.1 shows that out of 7 Operators 12% of the total choose 'a' option i.e. To plan deliver & monitor an integrated service to pregnant women & children.
b) Out of 7 Operators 50% of the total chooses 'c' option i.e. the application covers all the services starting from antenatal care to postnatal care, child immunization, and nutrition and family planning services.
c) Out of 7 Operators 38% of the total chooses'd' option i.e. All of the above.
d) But none of them selected the option 'b' and 'e' i.e. To help service provider through case based tracking of all pregnant women and children up to 19 years of age and None of the above respectively.

Training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	14.3	14.3	14.3
	No	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

Table2.2

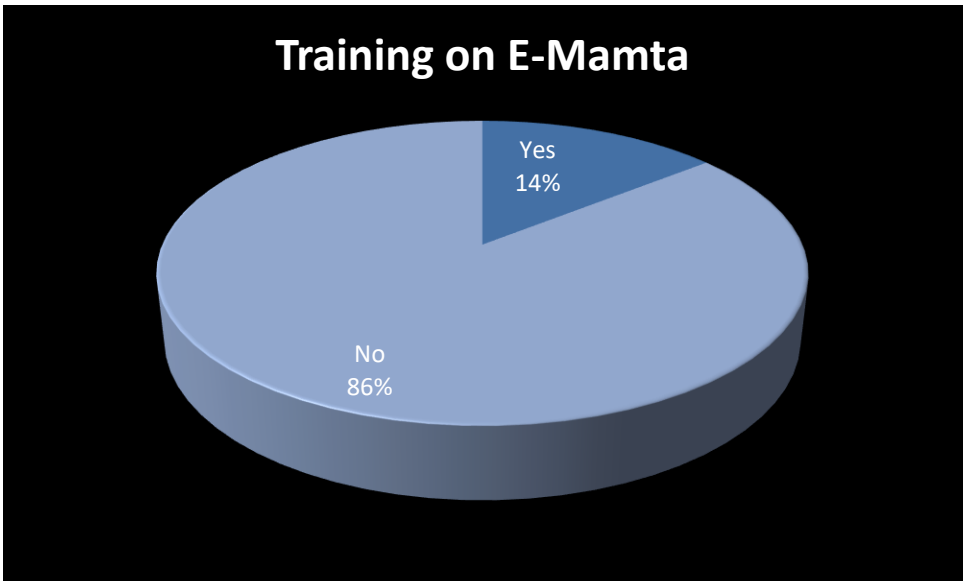


Fig. 2.2

a) Fig. 2.2 shows that out of 7 Operators 1 Operator i.e. 14% of the total chooses 'Yes' option.
b) Out of 7 UHOs 6 Operators i.e. 86% of the total chooses 'No' option.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	4	57.1	57.1	57.1
	b	2	28.6	28.6	85.7
	c	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

Table 2.3

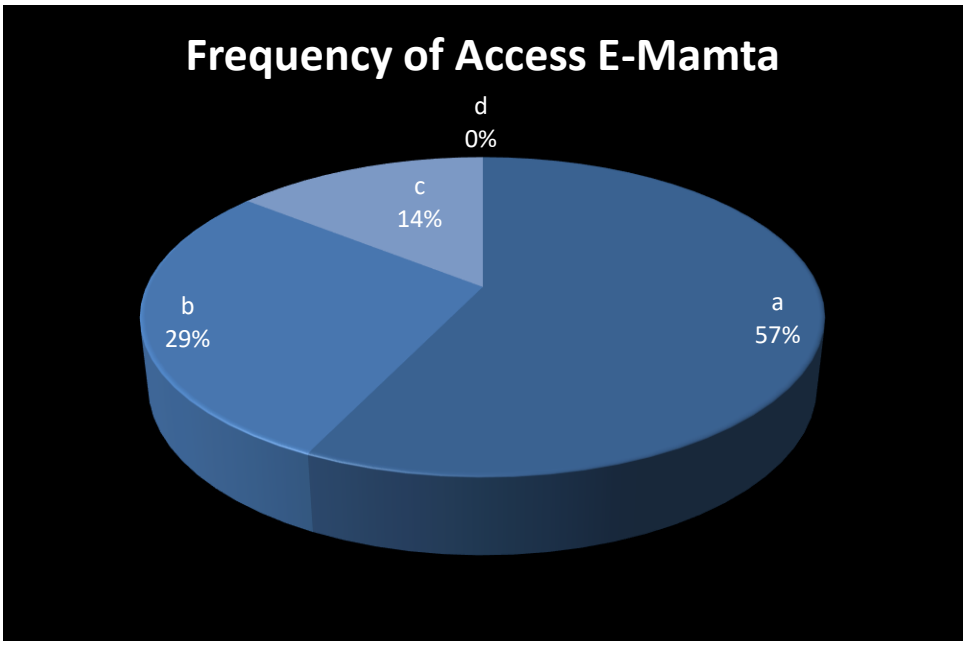


Fig. 2.3

a) Fig. 3 shows that out of 7 Operators 4 Operators i.e. 57% of the total chooses 'a' option i.e.
On regular basis.
b) Out of 7 Operators 2 Operators i.e. 29% of the total chooses 'b' option i.e. Twice a week.
c) Out of 7 Operators 1 Operator i.e. 14% of the total chooses 'c' option i.e. Thrice a week.
d) But none of them selected the option'd' i.e. Once a week.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	b	4	57.1	57.1	57.1
	d	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

Table 2.4

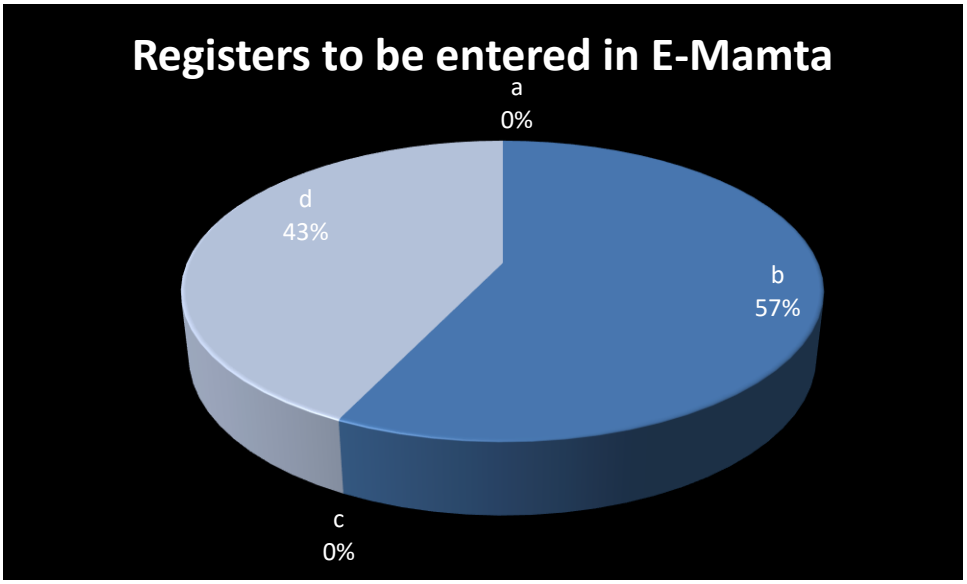


Fig. 2.4

a) Fig. 2.4 shows that out of 7 Operators 4 Operators i.e. 57% of the total choose 'b' option i.e. Register No. 4&5.
b) Out of 29 Operators 3 FHWs i.e. 43% of the total chooses'd' option i.e. Both a & b.
c) But none of them selected the option 'a' and 'c' i.e. Register No. 2 and None of the above respectively.

For uho:

var2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	c	2	28.6	28.6	28.6
	d	5	71.4	71.4	100.0
	Total	7	100.0	100.0	

Table 3.1

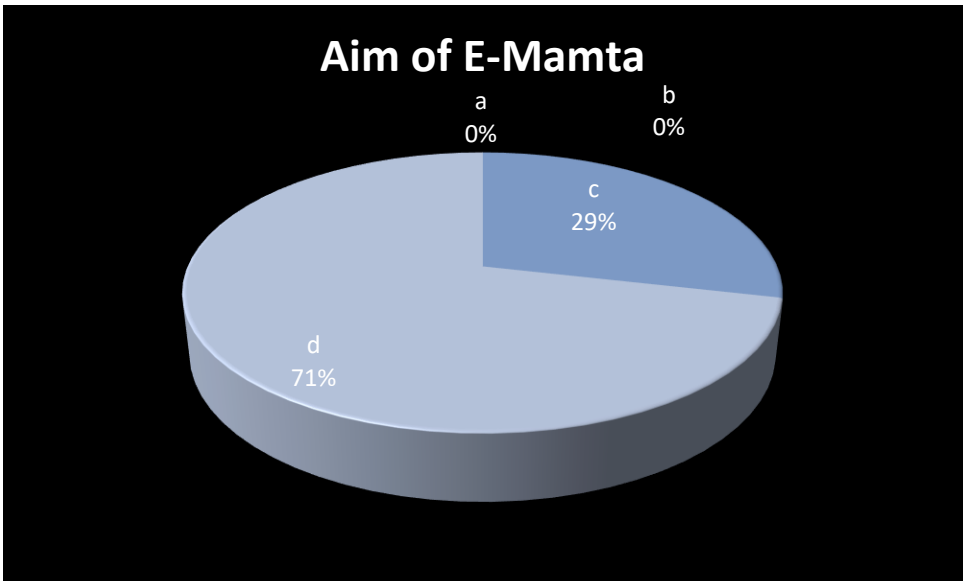


Fig. 3.1

a) Fig. 3.1 shows that out of 7 UHOs 2 UHOs i.e. 29% of the total chooses 'c' option i.e. the application covers all the services starting from antenatal care to postnatal care, child immunization, and nutrition and family planning services.
b) Out of 7 UHOs 5 UHOs i.e. 71% of the total chooses'd' option i.e. All of the above.
c) But none of them selected the option 'a', 'b' and 'e' i.e. To plan, deliver & monitor an integrated service to pregnant women & children, To help service provider through case based tracking of all pregnant women and children up to 19 years of age and None of the above respectively.

var4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	4	57.1	57.1	57.1
	no	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

Table 3.2

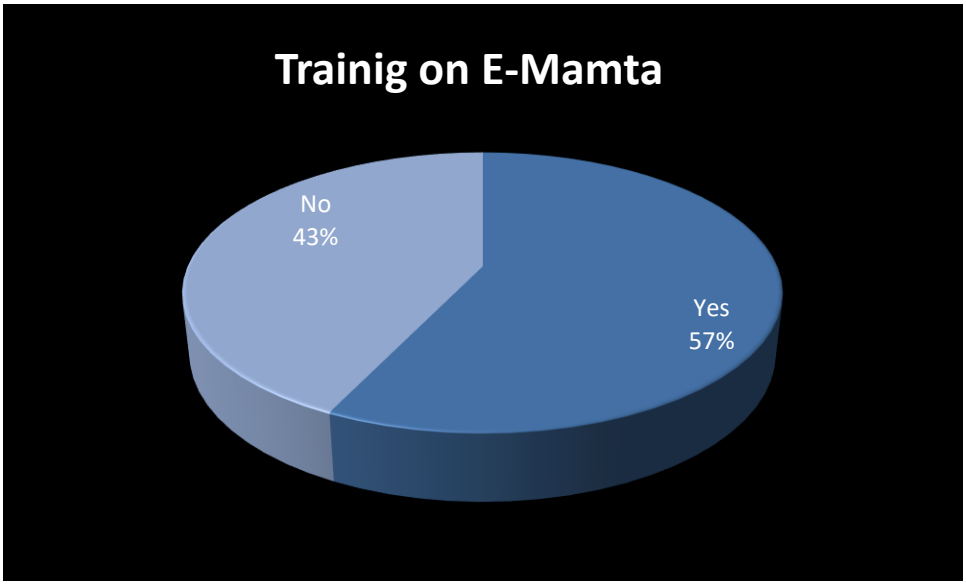


Fig. 3. 2

a) Fig. 3.2 shows that out of 7 UHOs 4 UHOs i.e. 57% of the total chooses 'Yes' option.

b) Out of 7 UHOs 3 UHOs i.e. 43% of the total chooses 'No' option.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a	5	71.4	71.4	71.4
	b	1	14.3	14.3	85.7
	c	1	14.3	14.3	100.0
	Total	7	100.0	100.0	

Table 3.3

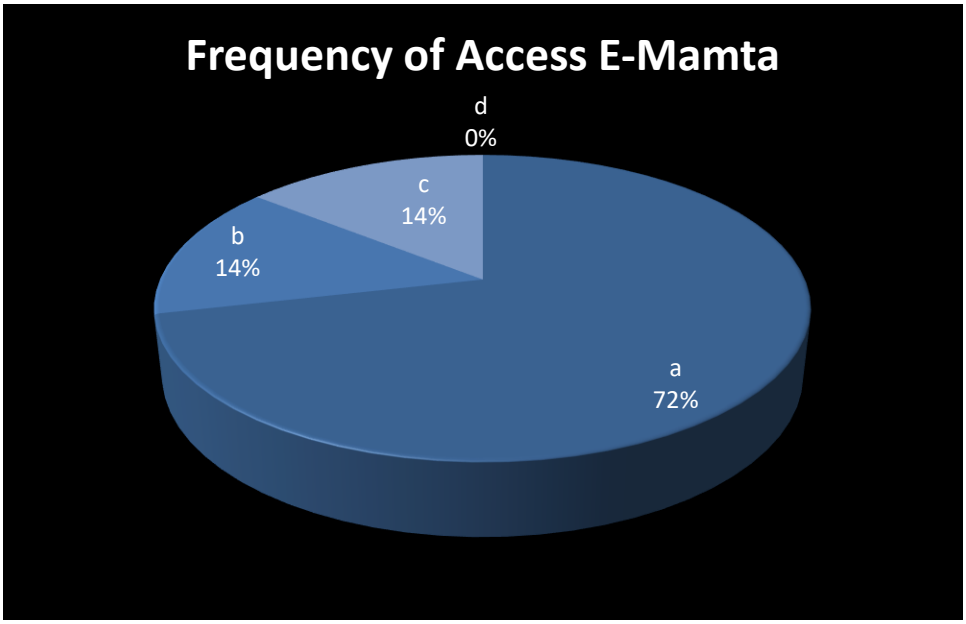


Fig. 3.3

a) Fig. 3.3 shows that out of 7 UHOs 5 UHOs i.e. 72% of the total chooses 'a' option i.e. On regular basis.

b) Out of 7 UHOs 1 UHOs i.e. 14% of the total chooses 'b' option i.e. Twice a week.

c) Out of 7 UHOs 1 UHOs i.e. 14% of the total chooses 'c' option i.e. Thrice a week.

d) But none of them selected the option'd' i.e. Once a week.

var7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	3	42.9	42.9	42.9
	no	4	57.1	57.1	100.0
	Total	7	100.0	100.0	

Table 3.4

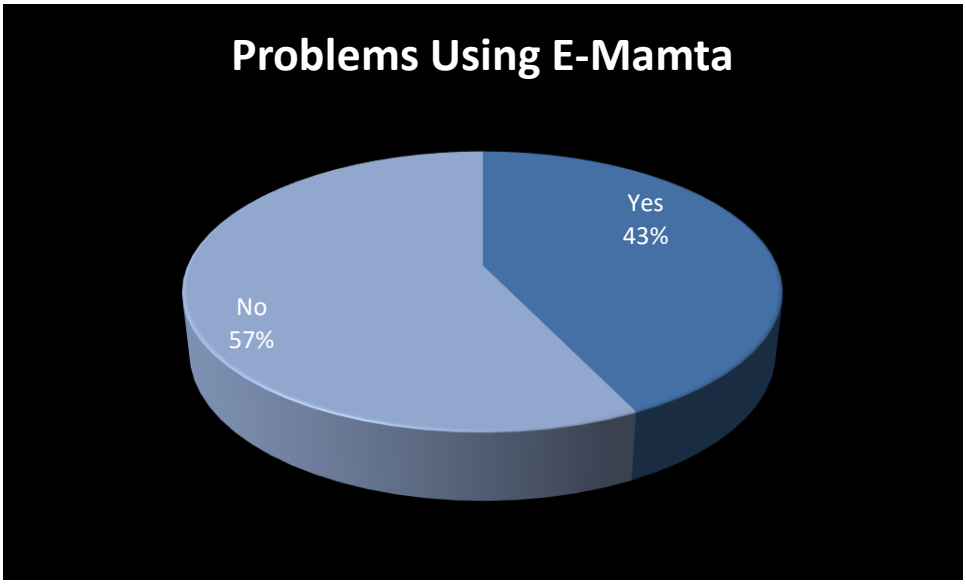


Fig. 3.4

a) Fig. 3.4 shows that out of 7 UHOs 3 UHOs i.e. 43% of the total chooses 'Yes' option.

b) Out of 7 UHOs 4 UHOs i.e. 57% of the total chooses 'No' option.

var8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	c	3	42.9	42.9	42.9
	e	4	57.1	57.1	100.0
	Total	7	100.0	100.0	

Table 3.5

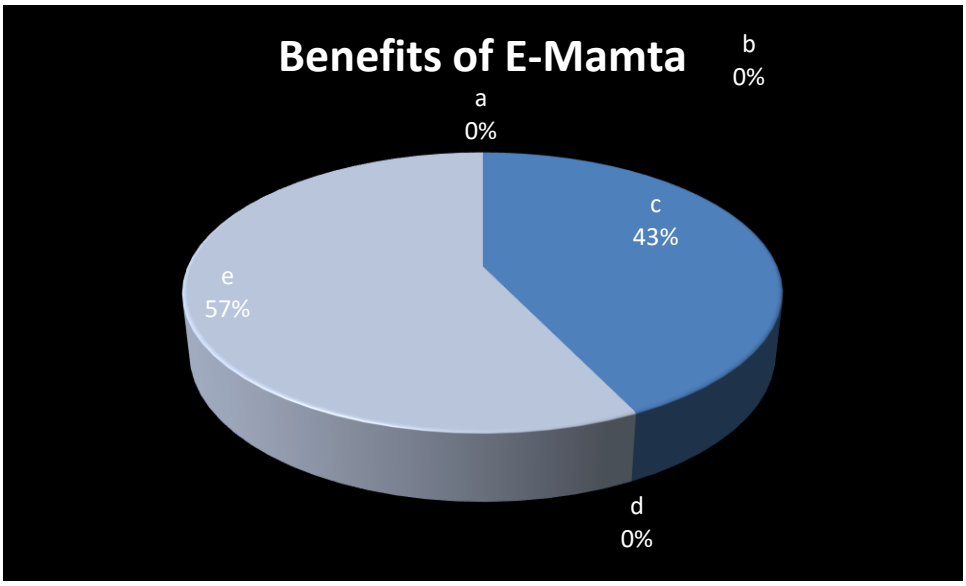


Fig. 3.5

a) Fig. 3.5 shows that out of 7 UHOs 3 UHOs i.e. 43% of the total chooses 'c' option i.e. tracking and maintenance of records of all pregnant women for ANC, PNC etc. checkups is become easy and fully maintained.

b) Out of 7 UHOs 4 UHOs i.e. 57% of the total chooses 'e' option i.e. All of the above.

c) But none of them selected the option 'a', 'b' and 'd' i.e.
Population coverage is increased for providing health services (Mother and Child), MMR and IMR are decreased after e-Mamta and Tracking of immunization status of children is fully maintained and services provided on regular basis respectively.

Analysis of Secondary Data:

	Annual Target	Total ANC Registration
September	10045	2185
October	10045	2850
November	10045	3423
December	10045	3702
January	10045	3975
February	10045	4234
March	10045	4516

Table 1

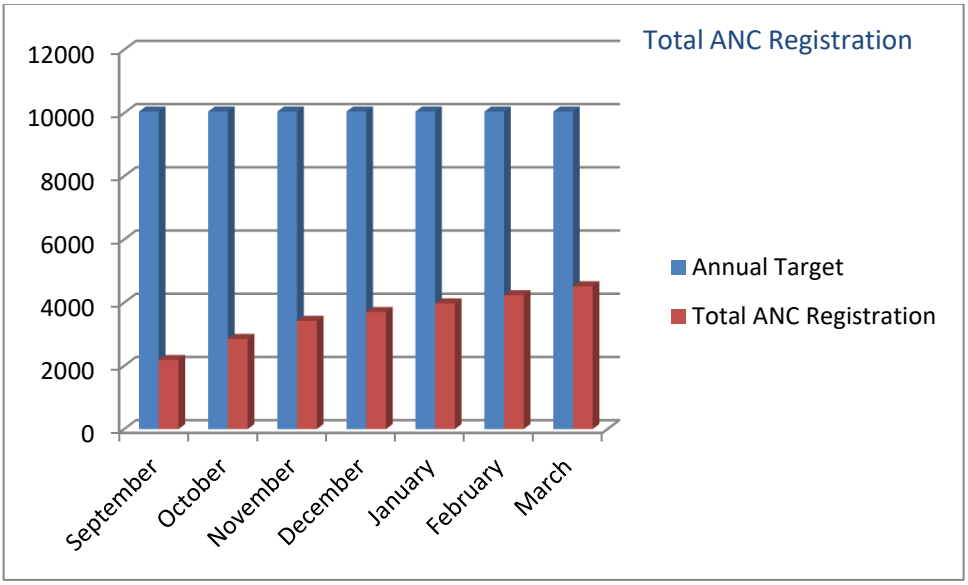


Fig. 1

Fig. 1 shows that there is very small achievement in ANC registration against the Annual Target.

The registration/month is increasing but it is not enough to achieve the annual target given by the State.

	Annual Target	Total Delivery Registration
September	9040	1390
October	9040	1954
November	9040	2415
December	9040	2746
January	9040	3016
February	9040	3364
March	9040	3710

Table 2

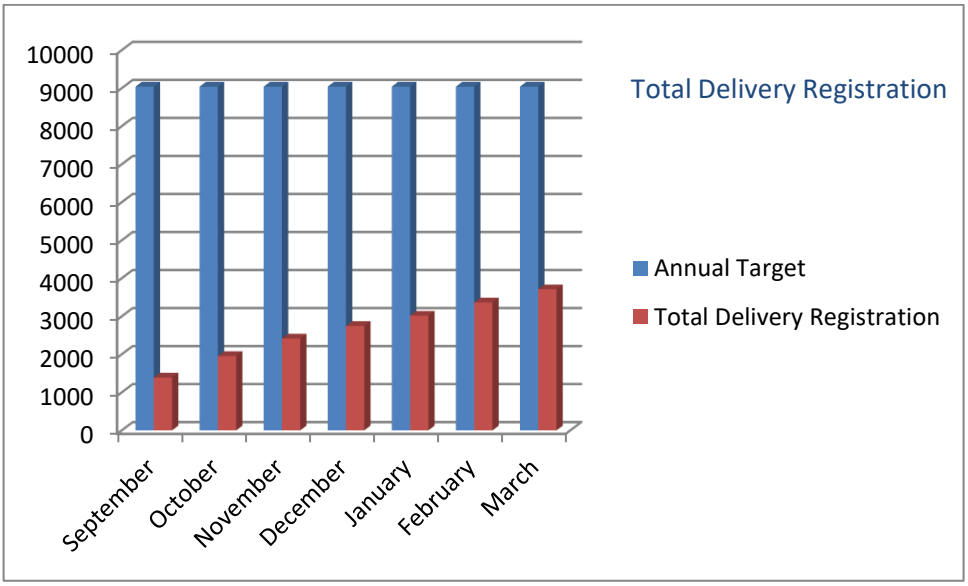


Fig. 2

Fig. 2 shows that there is very small achievement in delivery registration against the annual target. The registration/month is increasing but it is not enough to achieve the annual target given by the State.

	Annual Target	Fully Immunization
September	8227	1511
October	8227	2029
November	8227	2473
December	8227	2693
January	8227	2861
February	8227	3104
March	8227	3382

Table 3

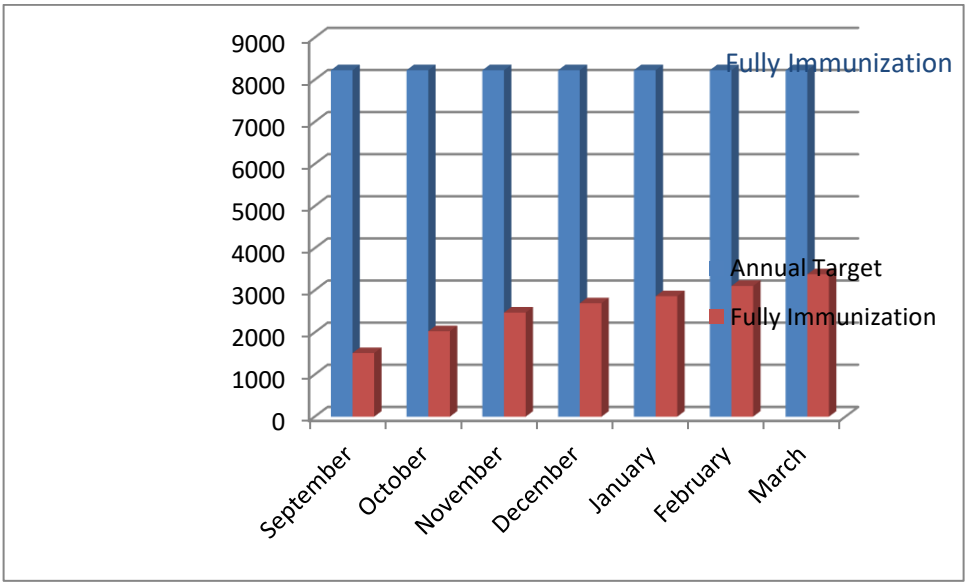


Fig. 3

Fig. 3 shows that there is very small achievement in fully immunization against the annual target. The registration/month is increasing but it is not enough to achieve the annual target given by the State.

	Annual Target	Sterilization
September	2344	85
October	2344	106
November	2344	117
December	2344	139
January	2344	182
February	2344	232
March	2344	263

Table 4

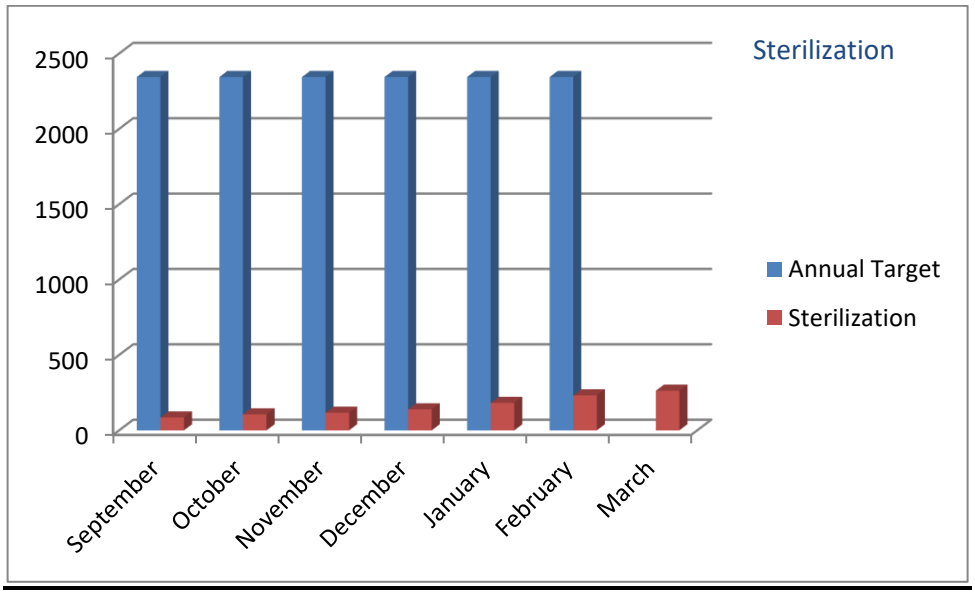


Fig. 4

Fig. 4 shows that there is very small achievement in sterilization against the annual target. The registration/month is increasing but it is not enough to achieve the annual target given by the State.

Discussion

The following results can be drawn from the above study according to the specific objectives set for the study: -

In analysis of Secondary data the Figures 1, 2, 3 and 4 shows that there are very low achievements in ANC registration, delivery registration, fully immunization and sterilization respectively against the annual target given by the state.

It shows the poor delivery of the health facilities to the beneficiaries which in turn affects the health status of the beneficiaries and affects the health status of the state.

Due to poor reach of the health facilities to the beneficiaries the main effect is on women and children, which increases the MMR and IMR because if proper antenatal and postnatal care will not be provided to the pregnant mothers then it will hamper their health status and for high risk mothers it can be life threatening situation as well.

If the proper health facilities will not be given to the newborns like proper health checkups, immunization etc. then it can hamper their life and can increase the IMR.

In analysis of primary data there are different results according to the 3 categories i.e. UHO, Operator and FHW.

FHW:

In analysis of Fig. 1.1, out of 29 FHW only 28% FHWs gave the correct answer for the Aim of E-Mamta i.e. option d which includes all options a, d and c. This says that 72% FHWs even don't know about the aim of the software. So if they do not know about the Aim (the basic information) how they can know more about the software like its usability, reliability etc.

In analysis of Fig. 1.2, out of 29 FHWs only 66% FHWs gave the correct answer about the responsible person regarding entry in E-Mamta i.e. (a) data entry operator. This says that 34% FHWs even don't know about the responsible person. If they do not know about the responsible person, then at the time of any query how they can contact the correct person to solve their query.

In analysis of Fig. 1.3, out of 29 FHWs, only 62% FHWs gave the correct answer about the timing of the Family Health Survey that is (a) 1st January to 31st March of each financial year.

It is important to know about the survey because after the survey, the whole data has to be entered in E-Mamta, from which the different work plans can be generated, which will help in giving the health facilities to the whole population.

In analysis of Fig. 1.4, out of 29 FHWs 72% FHWs gave the correct answer about the registered to be entered in E-Mamta i.e. register no 4 & 5.

It is also important as the knowledge regarding family health survey, which will help in generation of work plans.

In analysis of Fig. 1.5, out of 9 FHWs 90% FHWs knows the purpose of family health survey i.e. for generating the work plan, which is a good percentage, but it should be 100%.

Operator:

In analysis of Fig. 2.1, out of 7 Operators only 38% Operators gave the correct answer for the Aim of E-Mamta i.e. option d which includes all options a, d and c. This says that 62% Operators even don't know about the aim of the software. It is important to know the use and benefit of the software.

In analysis of Fig. 2.2 out of 7 operators only 14% operators are provided the training on E-Mamta, rest 86% Operators did not received any training on E-Mamta which is major cause behind the low data entry in E-Mamta, because if they are not given any training on the software, it will increases the time for data entry and reduces the overall data entry which will hamper the generation of work plan.

In analysis of Fig. 2.3 out of 7 operators only 57% Operators access E-Mamta on regular basis and rest do not access E-Mamta on regular basis. This will also reduce the data entry.

In analysis of Fig. 2.4, out of 7 Operators 57% Operators gave the correct answer about the registered to be entered in E-Mamta i.e. register no 4 & 5. If they do not know about the

registers to be entered then in absence of FHWs they cannot do the data entry in E-Mamta, this reduces the work plan generation.

In analysis of Fig. 2.5 the major problems (43%) faced by the Operators at the time of data entry are Non availability of the internet at the center and sitting arrangement of the urban staff are done at block office, so that they cannot talk to the grass hoot level workers directly regarding the survey or if they have any problem in the registers fill by the FHWs.

UHO:

In analysis of Fig. 3.1, out of 7 UHOs 71% UHOs gave the correct answer for the Aim of E-Mamta i.e. option d which includes all options a, d and c. It is important to know the use and benefit of the software.

In analysis of Fig. 3.2 out of 7 UHOs only 57% UHOs are provided the training on E-Mamta, rest 43% UHOs did not received any training on E-Mamta. If they are not given any training on E-Mamta then they cannot do supervision and give the facilities accordingly.

In analysis of Fig. 3.3 out of 7 UHOs 72% UHOs access E-Mamta on regular basis and rest do not access E-Mamta on regular basis. It will also affect the supervision and the service delivery.

In analysis of Fig. 3.4 out of 7 UHOs 43% said that they are having problems using E-Mamta i.e. the problem in work plan generation and duplicity in data entry of pregnant women.

In analysis of Fig. 3.5 out of 7 UHOs only 57% UHOs knows all the benefits of E-Mamta i.e.

- Population coverage is increased for providing health services (Mother and Child).
- MMR and IMR are decreased after E-Mamta.
- Tracking and maintenance of records of all pregnant women for ANC, PNC etc checkups are become easy and fully maintained.
- Tracking of immunization status of children is fully maintained and services provided on regular basis.

Others do not know about the benefit itself then how can they train their staff regarding the software which is totally based on the service delivery, to improve the health status of the state and if the staff is not properly trained then how can they realize the need of family health survey and E-Mamta.

After the comparison of the results drawn from the primary and secondary data the main reasons behind the low achievement of the data entries against the annual target and low coverage of the beneficiaries for delivering the health services are:

UHO:

- About 29% of the UHOs do not know about the aim of E-Mamta.
- About 43% of them are not given any training on E-Mamta.
- About 28% of them do not access the software on regular basis.
- About 43% of them having problem in using E-Mamta.
- About 43% of them do not know about the benefits of E-Mamta.

Operator:

- About 62% Operators do not know about the aim of E-Mamta.
- About 86% of them are not given any training on E-Mamta.
- About 43% of them do not access E-Mamta on regular basis.
- About 43% of them do not know about the registers to be entered in E-Mamta.
- Most of them having problems while data entry in E-Mamta.

FHW:

- About 72% FHWs do not know about the aim of E-Mamta.
- About 34% of them do not know about the responsible person for data entry.
- About 38% of them do not know about the timing of health survey.
- About 28% of them do not know about the registers to be entered in E-Mamta.
- About 10% of them do not know about the purpose of family health survey.
-

Conclusion

From the study we can conclude that even after installation of E-Mamta 6 months back with the sole aim of improving the reporting level, the level has not improved rather it has decreased. And this decreased level or unimproved status of the registration level can be attributed to various reasons which we found in the study.

Recommendations

1. Need to do detailed analysis of the awareness level of E-Mamta in the stakeholders.
2. Need to conduct workshops to educate all he stakeholders of E-Mamta
3. Solving all the technical and non-technical problems which the stakeholders feel are hindering them from using the E-Mamta software.
4. Effective check mechanism for efficient use of the E-Mamta.

Rewards and penalties based on meaningful use of the E-Mamta.

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ANALYSIS OF E-MAMTA IN URBAN SET UP

QUESTIONNAIRE FOR URBAN HEALTH OFFICER

Name Of Center: - _____ Date:- _____

Name Of UHO: - _____

1. What is E-Mamta?
   a) Mother Tracking System b)Child Tracking System
   c) Mother and Child Tracking System d) None of the above
2. If Yes, Then what is its Aim?
   a) To plan, deliver & monitor an integrated service to pregnant women & children.
   b) To help service provider through case based tracking of all pregnant women and children up to 19 years of age.
   c) The application covers all the services starting from antenatal care to postnatal care, child immunization, nutrition and family planning services.
   d) All of the above.
   e) None of the above.
3. Do you know how to use E-Mamta (software)?
   a) Yes b) No
4. Were you provided with any training on E-Mamta (software)?
   a) Yes b) No
5. How frequently you access E-Mamta?
   a. On regular basis. c) Thrice a Week.
   b. Twice a week. d) Once a week.

6. For what purpose do you access E-Mamta?
   a) For data entry b) For monitoring of the entry status
   c) For generating the work plan d) both b and c

7. Do you find any problems using E Mamta?
   a) Yes
   b) No

8. If yes what are they, write in your own words?

9. What are the benefits of E mamta?
   a) Population coverage is increased for providing health services (Mother and Child).
   b) MMR and IMR are decreased after e-mamta.
   c) Tracking and maintenance of records of all pregnant women for ANC, PNC etc. checkups are become easy and fully maintained.
   d) Tracking of immunization status of children is fully maintained and services provided on regular basis.
   e) All of the above.
   f) None of the above.

10. On the scale of 1 to 5 rate the following features of E-Mamta.
    a) Usability
       1- Highly Usable 2-Usable 3- Neither Usable nor Unusable
       4- Unusable 5- Highly unusable

    b) Reliability
       1- Highly Reliable 2- reliable 3- Neither Reliable nor Unreliable
       4- Unreliable 5- Highly Unreliable.
    c) User friendliness

1- Highly user friendly 2- User friendly 3-Neither User Friendly nor user friendly 4- not user friendly 5- highly unuser friendly

d) Applicability

1- Highly applicable 2- applicable 3- Neither Applicable nor inapplicable

4- Not applicable 5- highly not applicable

11. Any suggestions or recommendations you would like to give on the software?

ANALYSIS OF E-MAMTA IN URBAN SET UP

QUESTIONNAIRE FOR DATA ENTRY OPERATOR

Name Of Centre: - _____ Date:-_____

Name Of Operator: - _____

1. What is E-Mamta?

   a) Mother Tracking System b) Child Tracking System

   c) Mother and Child Tracking System d) None of the above

2. What is the Aim?
   a) To plan, deliver & monitor an integrated service to pregnant women & children.
   b) To help service provider through case based tracking of all pregnant women and children up to 19 years of age.
   c) The application covers all the services starting from antenatal care to postnatal care, child immunization, nutrition and family planning services. All of the above.
   d) None of the above.

3. Did u receive training on E-Mamta (software)?

   a) Yes b) No

4. How often do you access E-Mamta?
   a) On regular basis. c) Thrice a Week.
   b) Twice a week. d) Once a week.

5. Do you find it is useful in service delivery?

   a) Yes b) No

6. Do you know what registers has to be entered in E-Mamta?

   a) Register No. 2 b) Register No. 4&5

   c) None of the above d) Both a & b

7. How do you enter the data?

   a) Direct data entry from the registers into the software (data fields are same in both of the formats).
   b) First convert the data fields from the registers into the online formats (Data fields are different).
   c) None of the above.

8. What will you do if you find any problem with the data (data fields are vacant, data fields are different in both the formats etc.)?

   a) Leave the field blank. (If fields are different in both of the formats).
   b) Fill the fake data from your side (if fields are different in both of the formats).
   c) Ask the field worker to go again on the field and gather the data (if fields are not properly filled).
   d) None of the above.

   (You can tick more than one answer)

9. How reliable is the data? On the scale of 1 to 5?
    a) 1- Highly Reliability.
    b) 2- Reliable.
    c) 3- Neither Reliable nor Unreliable.
    d) 4- Unreliable.
    e) 5- Highly Unreliable.

10. Rate the following problems which come at the time of data entry?
    a) Non availability of internet.
    b) Sitting arrangements are done in Block.
    c) Unavailability of 24/7 power connection.
    d) Both a & b.
    e) None of the above.

11. Tick the most relevant reason behind the poor reliability of the data?
    a) Field workers do not fill the register properly.
    b) Field workers are not available with the data operator on the time of data entry.
    c) Less man power against large population coverage area.
    d) Both a & b.
    e) None of the above.

12.The most relevant reason for low data entry against the workload given by The state at district level for urban centers?

a) Workload is more than the population covered by the urban centers.

b) Approximate half of the data of urban centers is entered in PP unit

And block level.

c) Problem with the working of user ids given to urban centers.

d) No segregation of data for urban centers from PP unit and block level.

e) All of the above.

13. Any suggestions or recommendations you would like to tell on the software?

Ans.

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Analysis of E-Mamta in Urban Set Up

QUESTIONNAIRE FOR FHW/MPHW/U-ASHA

Name Of Centre: - _____ Date:- _____

Name Of FHW/MPHM/U-ASHA:-

1. Are you aware about E-Mamta?
   a) Yes b) No
2. What is E-Mamta?
   a) Mother Tracking System b)Child Tracking System
   c) Mother and Child Tracking System d) None of the above

3. If Yes, Then what is its Aim?
   a) To plan, deliver & monitor an integrated service to pregnant women & children.
   b) To help service provider through case based tracking of all pregnant women and children up to 19 years of age.
   c) The application covers all the services starting from antenatal care to postnatal care, child immunization, nutrition and family planning services.
   d) All of the above.
   e) None of the above.

4. Do you know who is responsible for entry in E-Mamta?

a) Data entry operator b) UHO c) District staff

d) All of the above e) None of the above

5. Do you know in which month Family health survey has to be started and till which month it should be completed?

a) Yes b) No

6. If yes then what is its starting date and ending date?

a) 1st January-31st March of each financial year.
b) 1st April-30th June.
c) 1st July-30th September.
d) 1st October-31st December

7. Do you know what registers has to be entered in E-Mamta?

a) Register No. 2 b) Register No. 4&5

c) None of the above d) Both a & b

8. For what purpose the family health survey is done?

a) For generating the action plan/work plan for the next financial year.

b) Only for survey purpose.

c) None of the above.