SUMMER INTERNSHIP PROGRAM

at

National Health Mission, Gujarat

From 6 May 2024 to 5 July 2024

A REPORT BY

Ishita Gupta

Master of Business Administration

Hospital and Health Management

2023-25

under the Mentorship of

Dr. Anupam Mehrotra

Assistant Professor

IIHMR UNIVERSITY

Ministry of Health & Family Welfare
Government of India

NATIONAL HEALTH MISSION

Certificate of Internship

This is to certify that ~~Mr.~~/Miss. Ishita Gupta student of IIHMR University, Jaipur has successfully completed the Internship of MBA (Hospital and Health Management) from 06.05.2024 to 05.07.2024 at NVBDCP, CoH, Gandhinagar.

During the period of ~~his~~/her internship programme with us, ~~He~~/She has been exposed to different processes and was found diligent, hardworking & inquisitive.

We wish ~~him~~/her every success in life & career.

Mrs. K.M. Sheth, GAS
Programme Officer(Admin)
National Health Mission,Gujarat

Remya Mohan, IAS
Mission Director,
National Health Mission,Gujarat

IIHMR University Faculty Mentor Approval

This is to certify that **Dr. Ishita Gupta** of academic year **2023-25** of **INSTITUTE OF HEALTH MANAGEMENT RESEARCH** has prepared a poster with respect to her summer internship held during May-June 2024.

She has carried out work as per the guidelines. Her poster is approved for presentation.

Date: 22nd July, 2024

(Signature of Faculty Mentor)

Dr. Anupam Mehrotra
Assistant Professor
IIHMR UNIVERSITY JAIPUR

A study on awareness and attitudes of malaria-treated patients, and the practices of MPWs and ASHA workers.

Name – Ishita Gupta (1720)| MBA HM-28 | Faculty Mentor – Dr Anupam Mehrotra | Organisation Mentor – Dr. T. K Soni sir

HISTORY

The National Health Mission (NHM) was launched nationwide on May 1, 2013, by the Indian government. It comprises two sub-missions: the National Urban Health Mission (NUHM) and the National Rural Health Mission (NRHM). The National Malaria Control Program was initiated in 1953 as the state's first effort to combat malaria. The National Vector Borne Disease Control Program (NVBDCP) was established in 2003 to prevent and control six vector-borne diseases in India: Malaria, Dengue, Lymphatic Filariasis, Kala-azar, Japanese Encephalitis, and Chikungunya.

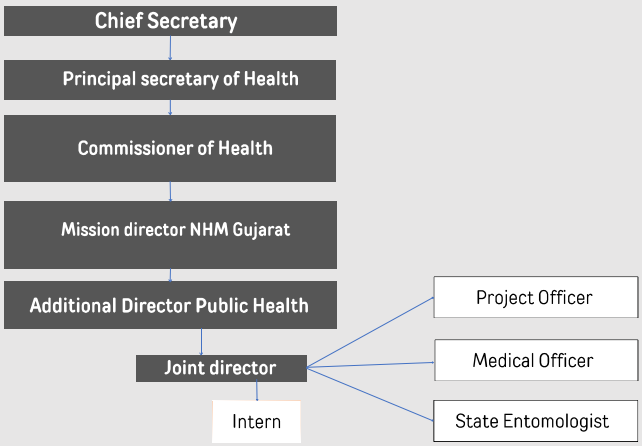
VISION

The NHM aims to attain universal access to fair, accessible, and high-quality health care services that are accountable and responsive to people's needs.

MISSION

The goal is to guarantee community accountability and full operation of the public health delivery system. This involves managing human resources, encouraging community participation, decentralizing operations, rigorously monitoring and evaluating performance against standards, integrating health and related programs starting at the village level, promoting innovations and flexible financing, and implementing measures to improve health indicators.

ORGANISATION STRUCTURE



SWOT ANALYSIS

Strengths

1. Strong case monitoring system.
2. The IHIP system is used exclusively for monitoring cases of vector-borne diseases.
3. Effective antilarval activities were conducted.

Weaknesses

1. Reporting needs to be cross-checked and corrected before finalizing.
2. The IHIP system currently only has data about malaria.
3. There is a lack of awareness among the population.
4. Data quality issues in terms of completeness and correctness.
5. Inadequate data validation and analysis of received data.

Opportunities

1. Got good learning platform , as I interacted with NHM Authorities and ground level field workers
2. IHIP usage for all vector borne diseases.
3. Developing validation tool

Threats

1. Noncorporation in slum areas

LEARNING

1. Functioning and staffing of NVBDCP
2. Working of HMIS and IHIP
3. Conducting primary research
4. Field visits
5. Data collection and analytic skills
6. Enhanced my report writing skills

USEFULNESS OF INTERNSHIP

1. Understanding the working of NVBDCP department
2. Exposure to Real –Life Situation which enable me to understand the challenges & dynamics of working in an ambulance setting.
3. Great learning of communication skills, Networking & insights of department.

THEORY UNDERSTANDING VS PRACTICAL KNOWLEDGE

1. Practically exposure in cross-sectional study : Planning study design , Collecting data , managing data quality and performing statistical analysis.
2. Involved addressing logistical issues, ensuring to meet ethical considerations & adapting unforeseen circumstances.
3. Theory included knowledge of the sampling techniques , how to use facts or information already available, and analyze these to make a critical evaluation of the material

RESEARCH OBJECTIVE

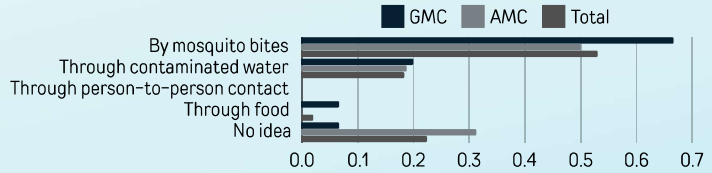
1. To Determine Factors Contributing to Positive Outcomes in Ahmedabad Municipal Corporation and Gandhinagar Municipal Corporation.
2. To check the knowledge and attitude of malaria patients towards the disease.
3. To Assess the Effectiveness of Existing Interventions done by NVBDCP.

RESEARCH METHODOLOGY

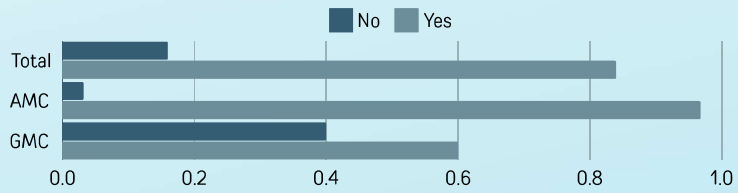
- **Source of data:** Primary data collection through field visits at Gandhinagar Municipal Corporation and Ahmedabad Municipal Corporation.
- **Study Design**: Cross-sectional observational study
- **Sampling-** Study Duration: 2 Months
  Sample size: 50
  Central Selected Respondent: Malaria-treated patients
  Tool: Structured questionnaire

FINDINDS & ANALYSIS

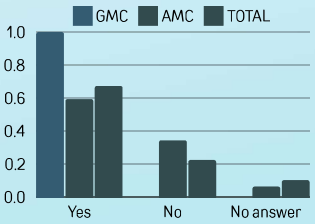
HOW DOES MALARIA SPREAD?



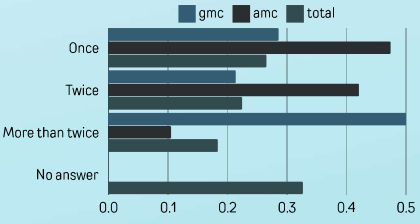
ASHA VISITS FOR MALARIA MEDICINES.



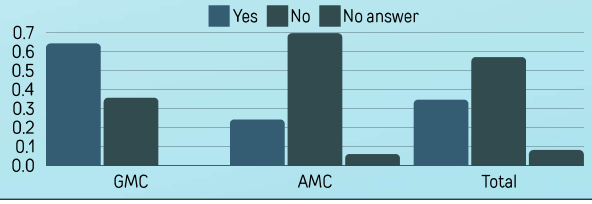
MPW VISITS FOR FOLLOWUPS AND BLOOD COLLECTION

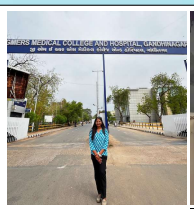


FREQUENCY OF MPWS VISITS



ANTILARVAL ACTIVITIES DONE BY MPWs





CHALLENGES

1. Field visits in extreme weather conditions
2. Faced language barrier while conducting interviews
3. the study was not conducted during the most prevalent season.

SUGGESTIONS

1. Ensuring data quality in terms of completeness, correctness and validation.
2. Increase IEC activities to increase awareness about the disease
3. Followups of patient after completing treatment and increasing awareness by ASHAs and MPWs.

WEEK 1 REPORT

Name of the Organisation: NHM Gandhinagar COH

Area/ Department/ Project of Summer Internship Program: NVBDCP

Name of the Student: Ishita Gupta

Roll no: 1720 **Stream**: MBA HM 28

Week no: 1st week **From**: 6th May,2024 to 11th May,2024

Activity Done	• Reported at NHM Bhawan, Gandhinagar and met Mission Director on 6th of May. • Reported to NVBDCP department at NHM Gandhinagar COH and met with medical officer and state entomologist. • Reported to Project Manager of NVBDCP on 7th , got brief introduction about the department. • Read reading material on NVBDCP, malaria and filariasis. • Understood about the working of HMIS and IHIP. • Started researching on field of interest for the research.
Linking theory (Classroom learning) with practice at your organisation	. Subjects taught to us in the first year, such as epidemiology, health policy, health and development, demography, and national health programmes, significantly enhanced my understanding of the workings of the NVBDCP department and improved my ability to interpret data. Additionally, subjects like BCC (Behavior Change Communication) helped me understand IEC (Information, Education, and Communication) materials better.
Gaps identified on the working area.	• Low awareness and understanding about diseases targeted by MDA, • low participation rate of MDA • Community resistance or misconception about participation in MDA • Inadequate infrastructure and resources • High prevalence of dengue and chikungunya in Gujrat
Suggestions for improvement	• Comprehensive communication and education to raise awareness about filariasis. • Community engagement and participation by involving local leaders. • Strengthening healthcare infrastructure

	• Proper registration of active dengue, chikungunya and malaria cases • Spreading awareness about prevention methods of vector borne diseases.
Plan for the next week	• I will do more research on my research topic selection and consult with project officer for any help regarding it. • I will also go on field visits for better understanding of ground reality and to collect data to support my research.

WEEK 2 REPORT

From: 13TH MAY,2024 to 18TH MAY,2024

Activity Done	• Read about training module for multipurpose workers. • Read about recording and reporting system – M1, M2, M3 and M4 reports • informed about working of HMIS and IHIP portal. • taught about how to analyse and interpret data. • Started literature review for the topic. • joint director of NVBDCP and state entomologist approved topic for internship project i.e. "Knowledge and Attitudes Towards Malaria and Dengue Prevention Among Affected Patients in Gandhinagar municipal corporation and Ahmedabad municipal corporation, Gujarat". • made a synopsis report for the research topic. • Started working on questionnaire.
Linking theory (Classroom learning) with practice at your organisation	• Concepts taught in research methodology helped me to prepare synopsis report and preparation of questionnaire. • Concepts taught in digital health help e understand proper functioning of HMIS.
Gaps identified on the working area.	• HMIS portal is very slow. • Data reported at HMIS portal from the ground level may consist of some error that has to be checked. • IHIP portal is at infant stage and consist of bugs in the software • IHIP portal only consist of data for malaria • Data in HMIS and IHIP do not match sometimes
Suggestions for improvement	• user friendly interface that could be assessed easily by health workers. • cloud based system. • proper monitoring and reporting at the portal. • Updates to improve system
Plan for the next week	• Work on report. • Work on questionnaire. • Field visit for data collection

WEEK 3 REPORT

From: 20th MAY,2024 to 24th MAY,2024

Activity Done	• Did some literature review relating to my report topic • Prepared questionnaire • Did some changes in questionnaire suggested by state entomologist and joint director of NVBDCP • Questionnaire got approved by joint director of NVBDCP • Gandhinagar municipal corporation and Ahmedabad municipal corporation were selected for data collection from patient treated with malaria • reported at Gandhinagar municipal corporation to biologist Dashrat Bhalia sir • with the help of mpw and assistant entomologist of north and west zone conducted interviews of 7 malaria treated patients with the help of questionnaire. • Visited Arogya mandir and understood various functions of mpw working for malaria treatment.
Linking theory (Classroom learning) with practice at your organisation	research methodology and epidemiology helped in preparation of questionnaire. Guidelines of mpw helped me understand the functioning of different multipurpose workers in testing malaria, monitoring of malaria patients, drug distribution, taking blood samples etc
Gaps identified on the working area.	• Language barrier while conducting interviews • People has less information about preventive measure of malaria • Some patients are reluctant to follow their treatment. • Lack of manpower • Overburden of work on multipurpose workers • Has to travel from Gandhinagar and Ahmedabad for data collection in 40- 45 degrees • Gaps identified at Arogya mandir – - Insufficient space in waiting areas. - High patient-to-doctor ratio. - Long waiting times for patients.in 40 -45 degrees. - Limited distribution of IEC materials.
Suggestions for improvement	• Increasing iec activities, rallies, campaigns at school during pre-monsoon period. • Increasing manpower

	• Increasing knowledge regarding malaria among population • Suggestions for Arogya mandir. - Regular maintenance and upgrading of medical equipment. - Optimize patient flow through better coordination and process management. - Develop and distribute more comprehensive and accessible IEC materials.
Plan for the next week	I will continue my data collection for report in Gandhinagar municipal corporation and Ahmedabad municipal corporation.

WEEK 4 REPORT

From: 27th May,2024 to 1st June,2024

Activity Done	• Ended data collection in Gandhinagar • Reported at AMC Arogya Bhawan • Ahmedabad to biologist Rajesh Sharma sir and medical officer of health Ahmedabad. • Started data collection at central and west zone of Ahmedabad.
Linking theory (Classroom learning) with practice at your organisation	Research Methodology helped in conducting the interviews with the help of questionnaire
Gaps identified on the working area.	• Knowledge about malaria among patients is very less. • Patients were non-responsive. • Language barrier • Patients are not taking any preventive measures to prevent malaria. • Lack of manpower • Must travel from Gandhinagar and Ahmedabad for data collection in 40- 45 degrees
Suggestions for improvement	• Increasing IEC activities, rallies, campaigns at school during pre-monsoon period. • Increasing manpower • Increasing knowledge regarding malaria among population
Plan for the next week	Complete data collection in Ahmedabad in 5th week of internship.

WEEK 5 REPORT

From: 3rd June,2024 to 7TH June,2024

Activity Done	• Covered different zones of Ahmedabad for data collection. • Met with technical officer, supervisor and sub inspector of malaria at different zones of Ahmedabad. • Understood the working of technical officer, sub inspector of malaria of different wards. • Visited Arogya Bhawan and reported to Rajesh Sharma sir state entomologist about my findings. • Data collection at Ahmedabad completed. Total 35 malaria treated patient were interviewed.
Linking theory (Classroom learning) with practice at your organisation	Concepts taught in research methodology helped in asking questions to the patient. Concepts taught in communication helped me to ask relevant questions to technical officer, sub inspector of malaria of different wards.
Gaps identified on the working area.	• 25 % patients do not have follow-up • Asha visits to patients are less in some areas. • Non corporation in some areas. • Attitude of patients toward malaria and completion of treatment is less. • Misreporting of cases • Migrant workers sometimes give wrong contact details and address to contact. • Less knowledge towards malaria prevention in patients.
Suggestions for improvement	• Asha visits should be more frequent. • People have less knowledge towards proper usage of bed nets for prevention of malaria should be educated. • 4 visits are compulsory for blood collection so mpws should complete their visits and report them properly. • Interventions to increase the knowledge about malaria and its preventive activities should be done mostly in slum areas.
Plan for the next week	• Report to COH Gandhinagar • Report about completion of data collection • Analyse and interpret data.

Week 6 report

From: 10TH June ,2024 to 15TH June ,2024

Activity Done	• Reported to Commissionerate of health, Gandhinagar after data collection • I have initiated the process of analysing the report data with a focus on understanding the efficacy of health worker activities and surveillance in two distinct areas: Gandhinagar and Ahmedabad. By dividing the data into these two regions, we aim to compare the effectiveness of health worker interventions and the efficiency of malaria surveillance efforts. • This comparative analysis will help identify which area demonstrates more robust health worker engagement and superior surveillance practices. By evaluating key metrics such as treatment adherence, the frequency of health worker visits, and community engagement in preventive measures, we can pinpoint specific strengths and weaknesses in each region's approach to malaria control. This detailed examination will ultimately provide valuable insights that can inform targeted improvements and enhance overall health outcomes in both Gandhinagar and Ahmedabad.
Linking theory (Classroom learning) with practice at your organisation	Concepts of demography and biostats helped in data analysis.
Gaps identified on the working area.	• **Inadequate ASHA Visits:** ASHA workers' visits are insufficient, leading to gaps in follow-up and medication adherence. • **Disparities in Responsiveness and Surveillance:** Gandhinagar shows better patient responsiveness and surveillance compared to Ahmedabad, highlighting regional disparities. • **Lack of Awareness:** Many patients lack knowledge about malaria transmission, prevention, and the importance of using bed nets and completing treatment courses.

Suggestions for improvement	• **Enhance ASHA Worker Engagement:** - Increase the frequency and consistency of ASHA worker visits to ensure better follow-up and medication adherence. Implement regular training programs for ASHA workers to improve their outreach and effectiveness. • **Strengthen Community Awareness Programs:** To increase awareness about malaria spread, prevention techniques and importance of completing treatment targeted programs should be done. • **Improve Surveillance Systems** - Implement more robust surveillance systems in Ahmedabad to match the efficacy observed in Gandhinagar. Ensure regular health worker visits and follow-ups to monitor patient progress and adherence to treatment protocols. • **Promote Use of Rapid Diagnostic Tests (RDT):** - Increase the availability and use of RDTs in Ahmedabad to facilitate early and accurate diagnosis of malaria. Train health workers and community members on the importance of timely testing and diagnosis. • **Facilitate Access to Preventive Tools:** - Distribute insecticide-treated bed nets and educate communities on their proper use. Promote environmental management practices to reduce mosquito breeding sites

WEEK 7 REPORT

From: 17th MAY,2024 to 21th MAY,2024

Activity Done	• Completed report and discussed the findings with program officer and state entomologist • Some suggestions were given by them for improvement in the report. • Stated working on poster for the college • Started working on compiled weekly report
Linking theory (Classroom learning) with practice at your organisation	Research methodology, biostatistics and demography helped in data analysis for the report.
Gaps identified on the working area.	- **Inadequate ASHA Visits**- ASHA workers' visits are insufficient, leading to gaps in follow-up and medication adherence. - **Disparities in Responsiveness and Surveillance**: Gandhinagar shows better patient responsiveness and surveillance compared to Ahmedabad, highlighting regional disparities. - **Lack of Awareness**: Many patients lack knowledge about malaria transmission, prevention, and the importance of using bed nets and completing treatment courses.
Suggestions for improvement	- **Enhance ASHA Worker Engagement:** - Increase the frequency and consistency of ASHA worker visits to ensure better follow-up and medication adherence. - Implement regular training programs for ASHA workers to improve their outreach and effectiveness. • **Strengthen Community Awareness Programs:** To increase awareness about malaria spread, prevention techniques and importance of completing treatment targeted programs should be done • **Improve Surveillance Systems:**

	- Implement more robust surveillance systems in Ahmedabad to match the efficacy observed in Gandhinagar. - Ensure regular health worker visits and follow-ups to monitor patient progress and adherence to treatment protocols. **- Promote Use of Rapid Diagnostic Tests (RDT):** - Increase the availability and use of RDTs in Ahmedabad to facilitate early and accurate diagnosis of malaria. - Train health workers and community members on the importance of timely testing and diagnosis. **- Facilitate Access to Preventive Tools:** - Distribute insecticide-treated bed nets and educate communities on their proper use. - Promote environmental management practices to reduce mosquito breeding sites
Plan for the next week	- Submit final report to joint director sir - Visit a Mamta session - Work on poster - Work on compiled weekly reports

Week 8 Report

From: 24/06/2024 to 29/06/2024

Activity Done	• Made report of the study done • Went to field visit to Kudasan, Gandhinagar to observe Mamta Divas, to observe the storage of vaccines and interact with ASHA and ANM about the IFA supplements • Preparation of SIP poster and the compiled report
Linking theory (Classroom learning) with practice at your organisation	Subjects taught in 1st year like Research Methodology, helped in a better understanding of the report formation and appropriate literature review Value-added courses on designing strong PowerPoint presentations helped me a lot in creating the poster.
Gaps identified on the working area.	• Lack in the knowledge of ASHA and ANM about IFA supplements • Ice packs were completely frozen, no conditioning was done • Lack in the knowledge of ASHA about the immunization schedule • Poor positioning of the session site without any waiting area for the beneficiaries • The AEFI register was maintained but not brought to the session site. • Sanitizer was not used between vaccinations.
Suggestions for improvement	• ASHA and ANM both need to be educated about the immunization schedule and storage of vaccines to immunize the children appropriately • They also need to be educated about the programs to provide the beneficiaries with appropriate knowledge and the correct supplements with adherence to the regimen • Session sites should be spacious enough to keep them hygienic during the session along with a waiting area for the beneficiaries • Proper storage of vaccines needs to be taken care of • Ensure the AEFI register, and other necessary documentation are brought to the session site.

	• Conduct a checklist review before the session to ensure all essential supplies and equipment are available and in good condition • Properly condition ice packs before use to maintain the required temperature. • Verify all necessary items, such as Ziplock bags, are included in the vaccine carrier before leaving for the session site. • Ensure all vaccines are brought to the session site at the beginning to avoid delays.
Plan for the next week	Completion of the SIP poster and compiled report

COMPILED REPORT

Name of the Organization: NHM GUJARAT- COH
Area/ Department/ Project of Summer Internship Program: NVBDCP
Name of the Student: Ishita Gupta
Roll no: 1720 **Stream:** MBA HM 28

Activity Done	➢ **Research Preparation:** Firstly, I familiarized myself with the NVBDCP department at COH , Gandhinagar and identified the research area. In the first week, I discussed the selected topic with my mentor, Dr. TK Soni sir, and the state entomologist. Following their approval, I finalized the research topic. ➢ **Literature Review:** • Read about the guidelines of NVBDCP, training module for multipurpose workers, etc • Read various article related to my research. ➢ **Research Design:** • Prepared and refined a questionnaire with inputs from state entomologist and joint director of NVBDCP. • Sample size and area of research were finalised by Joint director sir. • Developed a synopsis report for the research topic "Knowledge and Attitudes Towards Malaria and Dengue Prevention Among Affected Patients in Gandhinagar municipal corporation and Ahmedabad municipal corporation, Gujarat." ➢ **Field Visits:** • Conducted interviews with malaria-treated patients in Gandhinagar and Ahmedabad. • Area covered during internship are – • Observed the functions of multipurpose workers at Arogya Mandir at Gandhinagar Municipal Corporation and Ahmedabad Municipal Corporation • Visited different zones in Ahmedabad for data collection and understanding the work of technical officers and sub-inspectors of malaria. • Observed Mamta Divas in Kudasan, Gandhinagar, to understand vaccine storage and ASHA/ANM roles.

	➢ **Data Collection:** • Completed interview of 35 patients in Ahmedabad Municipal Corporation. • Recorded insights and challenges faced during data collection. • Completed interviews of 15 patients in Gandhinagar Municipal Corporation. ➢ **Data Analysis:** • Analysed data to compare health worker activities and surveillance efficacy in Gandhinagar and Ahmedabad. • Focused on treatment adherence, frequency of health worker visits, and community engagement in preventive measures. • Data was analysed with the help of MS Excel. ➢ **Report Creation:** • Completed the report and discussed findings with program officer and state entomologist. • Incorporated suggestions for improvement into the report. • Prepared SIP poster and compiled weekly reports. ➢ **Additional Learning:** • Learned about the functioning of HMIS, learned about various indicators of HMIS • Learned about IHIP. • Learned data analysis and interpretation techniques. • Preparation of SIP poster and compiled report.
Linking theory (Classroom learning) with practice at your organisation	• Subjects like epidemiology, health policy, health and development, demography, and national health programs enhanced understanding of NVBDCP operations and data interpretation. • BCC (Behaviour Change Communication) provided insights into understanding IEC materials. • Research methodology concepts were crucial in preparing the synopsis report and questionnaire. • Digital health concepts helped in understanding HMIS functionalities. • Demography and biostatistics concepts assisted in data analysis for the report. • Communication theories facilitated effective questioning during patient interviews and discussions with health officials.

Gaps identified on the working area.	➢ **Low Awareness and Understanding About Diseases** Knowledge about the disease was very less among patients in Gandhinagar and Ahmedabad. The practices followed for prevention were also not so satisfactory. This was the main issue which was noticed in slum areas. Some educated patients were also not able to answer questions about malaria ➢ **Low participation in Mass Drug Administration was found** Many community members have limited knowledge about diseases such as lymphatic filariasis, leading to low participation rates in MDA campaigns. The low participation rate can be attributed to mistrust, lack of awareness, and misconceptions about the medication and its side effects. ➢ **Inadequate Infrastructure and Resources:** The healthcare infrastructure is inadequate, with insufficient resources such as medical supplies, trained personnel, and functional health facilities. ➢ **High Prevalence of Dengue and Chikungunya in Gujarat:** The prevalence of vector-borne diseases like dengue and chikungunya remains high, indicating gaps in preventive and control measures. ➢ **HMIS Portal Issues:** The HMIS portal is very slow and prone to errors, leading to inefficient data management and reporting delays. ➢ **IHIP Portal Challenges:** The IHIP portal is in its early stages and has several bugs. It currently only includes data for malaria, limiting its usefulness for comprehensive disease surveillance. ➢ **Data Discrepancies Between HMIS and IHIP:**

	There are inconsistencies between the data reported in HMIS and IHIP, which can lead to inaccurate disease monitoring and control efforts. ➢ **Language Barriers During Interviews:** Language barriers were encountered during interviews with patients, making it difficult to gather accurate information and understand their needs. ➢ **Patient Reluctance and Lack of Information:** Many patients lack information about preventive measures and are reluctant to follow through with their treatment regimens. ➢ **Overburdened Multipurpose Workers (MPWs):** MPWs are overburdened with work due to a lack of manpower, which affects their ability to provide adequate care and follow-up. ➢ **Misreporting and Incorrect Contact Details** Misreporting of cases and incorrect contact details from migrant workers make it challenging to track and manage malaria cases effectively. ➢ **Inadequate ASHA Visits:** ASHA workers' visits are insufficient, leading to gaps in follow-up and medication adherence. Gandhinagar municipal corporation have more frequent ASHA visits as compared to Ahmedabad municipal corporation. ➢ **Gap between patients practices and attitude towards malaria** Most patients have completed their treatment. However, when asked if they would prefer to stop treatment once their symptoms subside, they agreed. ➢ **Lack of Knowledge About IFA Supplements and Immunization Schedule:** ASHA and ANM workers have limited knowledge about IFA supplements and the immunization schedule, affecting the quality of care provided. ➢ **Poor Session Site Conditions:**

	Session sites often lack adequate space, hygiene, and waiting areas for beneficiaries.
Suggestions for improvement	➢ **Enhance Community Education Campaigns:** • Implement extensive community education campaigns using various media channels to raise awareness about diseases and the benefits of participating in MDA programs. • Engage community health workers to conduct door-to-door visits and discussions, offering personalized explanations and addressing individual concerns. ➢ **Improve Healthcare Infrastructure:** • Strengthen healthcare infrastructure by increasing funding and resource allocation. • Upgrade health facilities, ensure a steady supply of necessary medical equipment and medications, and hire and train additional healthcare workers. ➢ **Intensify Vector Control Programs:** • Intensify vector control programs by health workers. • Conduct public education campaigns to emphasize the importance of preventing mosquito bites and maintaining clean surroundings. ➢ **Upgrade HMIS Portal:** • Upgrade the HMIS portal to a cloud-based system with a user-friendly interface that can be easily accessed by health workers. • Conduct regular system updates and maintenance to ensure smooth functionality. ➢ **Expand IHIP Portal:** • Expand the IHIP portal to include data on other vector-borne diseases such as dengue and chikungunya. • Regularly update and debug the software to enhance its reliability and functionality. ➢ **Implement Robust Data Verification Process:** • Implement a robust data verification process to ensure consistency and accuracy between HMIS and IHIP.

	• Conduct training programs for data entry personnel to reduce errors and improve data quality. ➢ **Conduct Continuous Education Programs:** • Conduct continuous education programs to inform patients about the importance of preventive measures and adhering to treatment protocols. • Provide easy-to-understand informational materials and support from community health workers. ➢ **Increase Workforce and Training:** • Increase the workforce by hiring more MPWs and providing them with regular training and support. • Streamline their duties to reduce workload and improve efficiency. ➢ **Promote Use of Rapid Diagnostic Tests (RDT):** - Increase the availability and use of RDTs in Ahmedabad to facilitate early and accurate diagnosis of malaria. - Train health workers and community members on the importance of timely testing and diagnosis. ➢ **Improve Surveillance Systems** - Implement more robust surveillance systems in Ahmedabad to match the efficacy observed in Gandhinagar. Ensure regular health worker visits and follow-ups to monitor patient progress and adherence to treatment protocols. ➢ **Enhance ASHA Worker Engagement:** • Increase the frequency and consistency of ASHA worker visits. • Implement regular training programs to enhance their outreach and effectiveness. ➢ **Conduct Regular Training Sessions for ASHA and ANM Workers:**

	• Conduct regular training sessions for ASHA and ANM workers on IFA supplementation, immunization schedules, and proper vaccine storage. • Provide updated guidelines and reference materials. ➢ **Improve Session Site Infrastructure:**

	• Ensure session sites are spacious, hygienic, and have adequate waiting areas for beneficiaries. • Conduct regular maintenance and upgrades to session sites to ensure they meet health and safety standards.

Signature of the Student

22/7/24

Approved by the IIHMR University's Mentor