

**INTERNSHIP DONE AT DIRECTORATE OF MEDICAL &  
HEALTH SERVICES, JAIPUR**

**Internship report Submitted to**



**The IIHMR University, Jaipur**

**for the partial fulfilment for the award of the degree of**

**Master of Business Administration (MBA)**

**In**

**Hospital and Health Management**

**by**

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**Under the Supervision and Guidance of**

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## Introduction

As part of the MBA (Hospital and Health Management) curriculum at IIHMR University, the internship provides students with an opportunity to apply theoretical knowledge to field-level public health or hospital settings. My internship was undertaken at the **Directorate of Medical and Health Services (DMHS) Jaipur, Rajasthan**, under the mentorship of **Dr. Praveen Aswal** and **Dr. Deepa Meena**, from March to May 2025.

During this period, I undertook a research-based dissertation project focused on evaluating the **Antimicrobial Resistance (AMR) Surveillance Systems** across selected public and private hospitals in Jaipur, Rajasthan. The internship experience provided me deep insight into operational public health systems, microbiology lab surveillance practices, and data-driven quality improvement.

## Objectives of the Internship

- To understand AMR surveillance practices in tertiary care hospitals.
- To identify gaps in microbiology infrastructure, reporting, and data utilization.
- To assess barriers and facilitators in implementing AMR surveillance systems.
- To provide evidence-based recommendations for strengthening AMR data reporting and utilization.

## Organizational Profile: Directorate of Medical and Health Services (DMHS), Rajasthan

DMHS is the principal public health authority in Rajasthan, responsible for planning, implementing, and monitoring all state-level health programs. It acts as the nodal agency for coordinating disease surveillance, immunization, AMR programs, and epidemic preparedness across districts and hospitals.

## Department: Epidemiology and AMR Surveillance

The Epidemiology Division under DMHS oversees the Integrated Disease Surveillance Programme (IDSP) and AMR Surveillance activities, including coordination with RAJSAR (Rajasthan AMR Surveillance Network). It works closely with public and private labs, medical colleges, and national agencies like ICMR and NCDC to standardize reporting, ensure data quality, and guide interventions.

## Dissertation Project Overview

**Title:**

*“A Study on Antimicrobial Resistance Surveillance Systems in Selected Public and Private Hospitals in Jaipur, Rajasthan.”*

**Methodology**

- Mixed-methods study using a **cross-sectional survey** and **qualitative interviews**.
- Covered 3–5 tertiary care hospitals (both public and private) in Jaipur.
- Respondents included **microbiologists, lab technicians, and nodal officers**.
- Tools included structured questionnaires and semi-structured interview guides.

**Key Activities Undertaken****1. Field Engagement and Data Collection**

- Conducted structured surveys in selected hospitals.
- Coordinated with microbiology labs to evaluate infrastructure, staff, LIS-EHR integration, and data flow.
- Conducted 15 in-depth interviews with microbiologists, nodal officers, and lab technicians.

**2. Qualitative Data Analysis**

- Transcribed interviews verbatim and analyzed using **thematic analysis**.
- Identified key challenges: inadequate staffing, weak feedback mechanisms, poor integration with clinician workflows.

**3. Quantitative Data Analysis**

- Analysed hospital profiles, lab capacity, data completeness, and turnaround time.
- Identified that EHR-LIS integrated systems had better data reporting efficiency (within 2 days).

**4. Triangulation and Interpretation**

- Cross-validated quantitative findings with qualitative insights.
- Developed practical recommendations for strengthening AMR surveillance in Rajasthan.

**5. Policy Recommendation Drafting**

- Contributed to a set of recommendations presented to the DMHS and the State Nodal Centre, emphasizing:
  - Need for dedicated manpower
  - Facility-specific antibiogram training
  - Integration of EHR-LIS
  - Regular feedback loops between labs and clinicians

## Key Learnings

- **Field-based Public Health Insight:** Gained exposure to the practical challenges of implementing national surveillance programs at the state level.
- **Research and Analytical Skills:** Developed skills in qualitative coding, SPSS analysis, and health systems evaluation.
- **Interdepartmental Coordination:** Learned to engage with microbiology teams, hospital administrators, and policy advisors.
- **Policy Framing:** Understood how evidence translates into practice through data-backed recommendations.
- **Systems Thinking:** Recognized the importance of integrated systems, consistent training, and feedback channels in surveillance.

## Conclusion

The internship at DMHS Rajasthan was a transformative experience, allowing me to bridge classroom learning with ground-level public health systems. Working on the evaluation of AMR Surveillance Systems provided me a multi-layered understanding of laboratory systems, data bottlenecks, and strategic improvement areas. This experience has enriched my perspective on health policy implementation and prepared me to contribute effectively to healthcare quality and surveillance systems in the future.