# ANTENATAL CARE SERVICE DELIVERY IN RAJASTHAN: EVALUATING UTILIZATION AND COVERAGE USING PCTS DATA ( 2024- 2025)

Internship Report submitted to


The IIHMR University, Jaipur

For the partial fulfilment for the award of the degree of

**Master of Business Administration (MBA)**

**Hospital and Health Management**

By

Dr. Nidhi Sharma

Under the Supervision and Guidance of

Dr. Sandesh kumar Sharma

## INTRODUCTION

Antenatal care (ANC) is a component of the continuum of reproductive health care to monitor and safeguard the well-being of the mother and fetus through early detection of high-risk pregnancies and complications through screening, with improved access to care, health education, vaccination, and medical therapy as required that promote positive health outcomes for both the mother and her fetus. Antenatal care (ANC) services are a prime focus of the Government of India's National Health Mission (NHM), of which a key pillar is the promotion of maternal and child health. To ensure uninterrupted service delivery at the last mile, a cadre of Frontline Health Workers (FLHWs) has been appointed and health centres established at the village level.

The WHO recommends a minimum of four sufficiently high quality ANC visits to achieve optimal health outcomes that should be completed before delivery. According to the World Health Organization (WHO), ANC should encompass 4 key components: risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion

**ANC Services**

Prior to Registration

When a pregnant woman is suspected of being pregnant, she should have her first ANC visit or registration. Prior to or at the 12th week of pregnancy, the first visit should ideally occur during the first trimester.

**Number and timing of visits**

A minimum of four ANC visits should be made by every pregnant woman, including the initial registration visit and any home visits by the ANM. When a pregnancy is detected, the initial appointment should be scheduled as soon as possible, and the second visit should be scheduled between four and six months (around 26 weeks).
The fourth one should be scheduled for the ninth month (36–40 weeks), and the third for the eighth month (around 32 weeks).

**ANC Schedule**

- At least 4 antenatal check-ups of every pregnant woman as per following schedule:
- 1st check-up: Within 12 weeks - preferably as soon as pregnancy is suspected & for
- registration of pregnancy and first antenatal check-up.
- 2nd check-up: Between 14 and 26 weeks
- 3rd check-up: Between 28 and 34 weeks
- 4th check-up: Between 36 weeks and term
- 100% Registration/Follow up of all HRPKey

## OBJECTIVE OF INTERNSHIP

internship at the National Health Mission (NHM) in Rajasthan was designed to provide a multifaceted understanding of healthcare delivery systems. The primary objectives of this internship were as follows

The primary focus is to evaluate both the utilization and coverage of essential antenatal care services provided to pregnant women across the state. The study examines key ANC indicators such as:

1. Early ANC Registration: Percentage of pregnant women registered within the first trimester of pregnancy.

2. Minimum ANC Visits: Percentage of pregnant women who received four or more antenatal care check-ups.

3. Td Booster Coverage: Percentage of pregnant women who were administered the Td (Tetanus-Diphtheria) booster dose.

4. Iron and Folic Acid (IFA) Supplementation: Percentage of women provided with the full course of 180 IFA tablets.

5. Calcium Supplementation: Percentage of women who received the full course of 360 calcium tablets.

Through comparative analysis across districts and health zones, the thesis aims to identify regional variations, service delivery gaps, and possible bottlenecks in the public health system. By leveraging large-scale programmatic data from PCTS, the study offers an evidence-based understanding of where improvements are needed to enhance maternal health outcomes.

The findings are intended to support policy planners, program managers, and health administrators in strengthening ANC services through targeted interventions and improved resource allocation.

## ORGANIZATIONAL PROFILE

The National Health Mission (NHM) was launched nationwide on 1 May 2013, by the Government of India. It comprises two sub-missions: the National Rural Health Mission (NRHM), initiated in 2005, and the National Urban Health Mission (NUHM), launched in

2013. The primary objective of the NHM is to enhance the accessibility, affordability, and quality of healthcare services for populations in both urban and rural areas, with a particular focus on women, children, and the economically disadvantaged.

The NHM encompasses various initiatives aimed at improving public health and reducing health disparities. Key areas of focus include maternal and child healthcare, immunization programs, and the provision of essential health services. The mission operates through local health organizations at the state level and collaborates with state governments. It receives funding from the central government as well as international organizations. The NHM strives to achieve the health-related goals set by the United Nations, ensuring that essential healthcare services are accessible to all individuals, regardless of their socioeconomic status or geographical location

Components of NHM:

1. RMNCH+N

2. Health System Strengthening

3. Non Communicable Disease Control Programmes

4. Communicable Disease Control Programme

5. Infrastructure Maintenance

**SERVICES PROVIDED BY THE ORGANIZATION**

1. Maternal and Child Health

2. Immunization

3. Family Planning

4. Communicable Disease Control

5. Healthcare Infrastructure Development

6. Human Resources for Health

7. Health Systems Strengthening

8. Information, Education, and Communication

9. Community Participation

10. Non-Communicable Disease Control

* **Maternal and Child Health:** The NHM works to improve the health and well-being of mothers and children. It provides essential healthcare services during pregnancy, childbirth, and postnatal care to ensure safe pregnancies and healthy child development.

* **Immunization:** NHM plays a crucial role in implementing immunization programs. It focuses on increasing vaccination coverage and ensuring that individuals receive necessary vaccines to protect against diseases such as polio, measles, hepatitis, and others.

* **Family Planning:** NHM promotes family planning services, which include providing information and access to contraception methods. It empowers individuals and couples to make informed choices about their reproductive health and helps them plan their families based on their preferences and needs.

* **Communicable Disease Control:** NHM works to prevent and control communicable diseases such as tuberculosis, malaria, HIV/AIDS, and other infectious diseases. It emphasizes early

detection, timely treatment, and preventive measures to reduce the spread of these diseases within the population.

* **Healthcare Infrastructure Development:** NHM focuses on improving healthcare infrastructure by constructing and upgrading healthcare facilities such as hospitals, health centers, and clinics. This ensures better access to healthcare services, especially in remote or underserved areas.Capacity Building: NHM aims to enhance the skills and capabilities of healthcare providers. It offers training programs and workshops to improve their knowledge and expertise, enabling them to deliver high-quality healthcare services.

*** Health Systems Strengthening:** NHM works on strengthening the overall healthcare system. It focuses on improving healthcare governance, management, and quality assurance. This helps ensure efficient and effective delivery of healthare services to the population

## KEY ACTIVITIES

Key Activities Undertaken

1. Maternal Death Review (MDR) Data Analysis

- Extracted and cleaned maternal death data using Pregnancy, Child Tracking & Health Services Management System (PCTS) software.
- Identified key causes, timing, and place of maternal deaths.
- Prepared summaries and visualizations to support policy-level review discussions.

2. Participation in Dissemination Workshop

- Contributed data insights during the Dissemination of Exemplars in Maternal and Newborn Health – India Study (Rajasthan Chapter) meeting.
- Shared analysis of maternal death trends and programmatic gaps to stakeholders.

3. Antenatal Care (ANC) Services Data Analysis

- Collected and analyzed ANC data for FY 2024–25 from PCTS.

- Computed average coverage indicators across Rajasthan, including:
- Early ANC Registration (within 12 weeks)
- 4+ ANC Checkups
- Td Booster Coverage
- 180 IFA Tablet Distribution
- Full Calcium Tablet Coverage
- District-wise comparison and visualization of ANC performance indicators.

4. Documentation and Reporting

- Prepared internal summary reports and presentation slides for department use.

## KEY LEARNING FROM INTERNSHIP

**Key Learnings from the Internship**

1. Hands-on Experience with Health Data Systems:

Gained in-depth knowledge of PCTS software for maternal and child health data management, extraction, and interpretation.

2. Understanding of Maternal Health Programs:

Acquired real-world insight into the structure and implementation of the maternal health program under NHM, including maternal death review protocols.

3. Application of Analytical Skills in Public Health:

Developed proficiency in conducting zonal and district-wise data analysis, trend identification, and health indicator monitoring.

4. Communication and Presentation Skills:

Participated in high-level dissemination meetings and contributed to policy discussions, improving skills in data-driven storytelling and stakeholder engagement.

5. Exposure to Inter-Departmental Coordination:

Understood the collaborative process between data units, program officers, and state-level review committees in maternal and newborn health.