

Dissertation Synopsis

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Introduction

The Urban Ayushman Arogya Mandir (U-AAM) programme is a major development in India's urban primary healthcare strategy. The genesis of U-AAM is traced back to the identified differences between rural and urban healthcare access in India. Although the National Rural Health Mission (NRHM) initiated in 2005 greatly enhanced rural healthcare infrastructure, urban slum and underserved populations still encountered difficulties in availing primary healthcare. Despite of having a larger number of health facilities, the urban poor sections experienced major difficulties in accessing economical primary healthcare facilities, with a high level of out-of-pocket spending.

The ground for U-AAM was prepared with the National Urban Health Mission (NUHM), which was sanctioned in 2013 as a sub-mission of the National Health Mission. NUHM was established to meet the healthcare demands of the urban and poor urban population through the strengthening of the primary health system. NUHM brought with it Urban Primary Health Centres (UPHCs) to establish comprehensive primary care facilities for providing services to city dwellers.

Ayushman Bharat initiative, started in 2018, was the turning point for India's health policy with twin pillars:

1. Pradhan Mantri Jan Arogya Yojana (PM-JAY): Health insurance plan for secondary and tertiary care.
2. Health and Wellness Centres (HWCs): For Integrated Primary Care Services

Between 2018-2021, Urban Health and Wellness Centres (U-HWCs) came up as the urban equivalent of rural HWCs. At initial implementation of U-HWCs in pilot cities, adjustments necessary for the urban environment, such as round-the-clock operation, miniaturized infrastructure, and merging with other urban health infrastructure were observed.

The shift from Urban Health and Wellness Centres to Urban Ayushman Arogya Mandir (U-AAM) commenced in late 2021 and was legalized in 2022 as part of the government initiative to establish a uniform brand image for these canter across the nation.

As per the operational guidelines released by the National Health Authority (2022), the rebranding was intended to establish a unique identity for these canter while ensuring continuity in service delivery and increasing their scope.

Rajasthan introduced U-AAMs in 2022 as part of the urban health policy of the state. The state made the efforts towards the implementation of U-AAMs in urban cities, such as Jaipur, with a focus on localities with high density of vulnerable populations.

The Rajasthan State Health Systems Resource Centre (2022) documented that the state followed a phased strategy, beginning with upgrading existing UPHCs to U-AAMs and then opening new canter on population density and need assessment.

Literature review

S. No.	Author name & Year	Study Location	Sample size (S.S.) and sample technique (S.T.)	Salient Features
1.	Shilpa Karvande, S. S. Gopalakrishnan, Vidula Purohit, B. Subha Sri, Nerges Mistry & Matthews Mathai Year: 2020	Pune District, Maharashtra, India	S.S.-Directed learning: 348 ANMs Self-directed: 125 ANMs S.T.- Program-based inclusion	- Evaluated effectiveness of directed + self-directed learning in skill-building - Significant improvement in maternal/newborn care skills - Better skill improvement in less-experienced ANMs - Kirkpatrick model used for evaluation - Self-directed methods enhanced confidence, experience sharing
2.	Thidar Pyone, Shilpa Karvande, S. S. Gopalakrishnan, Vidula Purohit, Sarah Nelson, S. Balakrishnan, Matthews Mathai, Nerges Mistry. Year 2019	Pune District, Maharashtra, India	S.S.-13 key informants, 41 ANMs (FGDs), 25 community members, 8 observations S.T- Purposive Sampling	- Identified mechanisms (training, supervision, accountability) affecting ANM performance. - Weak regulation and inadequate supervision hindered ANM effectiveness. - Gender norms and hierarchical structures impacted accountability - Realist lens used for analysis
3.	Samiksha Singh, Sanjeev Upadhyaya, Pradeep Deshmukh, Amol Dongre, Neha Dwivedi, Deepak Dey, Vijay Kumar	South India (tribal and non-tribal areas)	S.S.- 114 frontline workers (43 female & 6 male MPHWS, 12 AWWs, 53 ASHAs) S.T.- not specified in the study	- Mixed methods time-motion study Median work hours: ANMs – 7:04 hrs FLHWs in tribal areas spent less time on tasks. - MCH prioritized by ANMs/AWWs; MPHWS focused on seasonal illnesses.

				• Systemic and personal factors influenced efficiency
4.	Mahesh Chendake, V. R. Mohite, Manisha C Gholap, P. Hiremath, Prakash Naregal. Year: 2015	Satara District, Maharashtra, India	S.S.- 36 ANMs S.T.- Cross-sectional survey	• Assessed knowledge & attitude towards HIV/AIDS 50% had good knowledge; 62.82% average knowledge score 73.66% showed positive attitude • No significant statistical correlation found • Structured questionnaire was used
5.	Bajpai, N., & Wadhwa, M. (2021)	Uttar Pradesh & Tamil Nadu	S.S.- 1000 ANMs across two states S.T.- Multi-stage random sampling	• Found large gaps in clinical knowledge and limited use of training modules among ANMs • Highlighted need for continuous professional development.

Research gap

Despite the increasing policy focus on strengthening urban primary healthcare by the Urban Ayushman Arogya Mandir (U-AAM) scheme under the Ayushman Bharat initiative, there exists an evident research gap with regard to investigating the ground realities of its implementation at the frontline level. Although certain research works have stressed the need for skill development and capacity building of healthcare providers, especially Auxiliary Nurse Midwives (ANMs), such studies have been mostly focused on rural areas and maternal and child health services with very little insight into the peculiar challenges of healthcare provision in the urban context.

Critically, the literature is deficient with respect to holistic reviews of the Knowledge, Attitude, and Practice (KAP) of frontline healthcare workers—ANMs and Medical Officers (MOs)—towards U-AAM's vast array of preventive methods, promotive efforts, curative care, rehabilitative and palliative services. Additionally, urban-specific issues like plural disease burdens, population mobility, and coordination in service delivery in densely populated urban settings are under-researched.

There is also a strong methodological gap: there are hardly any studies using a mixed-methods approach that ties together quantitative KAP analysis with qualitative findings to get at the whole richness of implementation impediments on the

ground. Further, district-level studies in Rajasthan—particularly in the urban areas like Jaipur—are surprisingly limited, even though the program was rolled out statewide.

This research addresses these gaps in a direct way by examining knowledge gaps, attitude barriers, and practice issues of ANMs and MOs in providing U-AAM services in Jaipur District. Through using a mixed-methods design, the research offers context-specific, evidence-based findings required to inform focused training, policy improvement, and health system strengthening in line with the Ayushman Bharat scheme.

Research question

What are the knowledge gaps, attitudinal barriers, and practice challenges faced by Auxiliary Nurse Midwives and Medical Officers in implementing Urban Ayushman Arogya Mandir services in Jaipur District, Rajasthan?

Primary Objective

To identify and analyse the knowledge gaps, attitudinal barriers, and practice challenges faced by ANMs and MOs in implementing U-AAM services in Jaipur District.

Secondary Objectives

1. To assess the current level of knowledge among ANMs and MOs regarding U-AAM protocols, guidelines, and services provided.
2. To identify attitudinal factors that facilitate or hinder the implementation of U-AAM services.
3. To document practice patterns, deviations from recommended U-AAM implementation guidelines .
4. To compare KAP differences of ANMs and MOs and their correlation with demographic and professional characteristics.
5. To develop evidence-based recommendations for improving U-AAM implementation through targeted interventions.

Methodology

Study design – Cross-sectional mixed-methods study

- Quantitative component: KAP survey questionnaire
- Qualitative component: In-depth interviews and focus group discussions

Study Setting

- Urban Arogya Mandir centres across different zones of the Jaipur District

Study Population

- ANMs and MOs currently involved in U-AAM implementation in Jaipur District
- Inclusion criteria: Minimum 3 months experience in U-AAM services
- Exclusion criteria: Other administrative staff not directly involved in service delivery

Sample Size Calculation

- For quantitative component – KAP questionnaire for Mos and ANMs

- For qualitative component:
12-15 in-depth interviews (6-8 ANMs, 6-7 MOs)
Continue until data saturation is reached

Sampling Technique

Stratified random sampling based on professional role (ANMs, MOs)

Data Collection Tools

- Structured KAP questionnaire
- Interview guide for in-depth interviews
- Observation checklist for service delivery processes

Structure and Components of the Questionnaire

The tool was divided into the following key sections:

1. Respondent Profile

This section collected demographic and professional background information to contextualize KAP responses.

- Name (optional)
- Designation (ANM or MO)
- Age and Gender
- Years of Experience
- Facility Type and Urban Ward Location

2. Knowledge Domain

Assessed awareness of U-AAM services, service components, screening protocols, and documentation.

- Awareness of U-AAM services and operational guidelines
- Knowledge of services provided under U-AAM
- Understanding of eligibility criteria, frequency, and target populations
- Familiarity with documentation and reporting procedures

Question Type: Multiple-choice and dichotomous (Yes/No)

3. Attitude Domain

Explored healthcare providers' perceptions and beliefs about the importance, feasibility, and value of implementing U-AAM services.

- Perceived importance of preventive services
- Willingness to implement screening and follow-up
- Views on workload, community engagement, and training needs

Question Type: 5-point Likert Scale (1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

4. Practice Domain

Captured the real-world practices and challenges experienced by providers in delivering U-AAM services.

- Frequency of service delivery (screenings, health education, follow-up)
- Availability of infrastructure and logistics
- Participation in U-AAM-related trainings and IEC activities
- Adherence to protocols and referral systems

Question Type: Frequency scale (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always)

5. General Questions regarding the common challenges and available services

It helped to understand better the challenges that might have been missed during the In-depth Interviews.

Question Type: Multiple-choice questions

Scoring and interpretation

The scoring of the data was done keeping in mind certain criteria

1. Knowledge Score

Scoring Method:

Each question = 1 point for a correct answer, 0 for incorrect

Total questions = 12

Final Score = (Number of correct answers ÷ 12) × 100

Table 3.1: Interpretation criteria for knowledge score

Score (%)	Interpretation
≥ 75%	Good Knowledge
50–74%	Moderate Knowledge
< 50%	Poor Knowledge

2. Attitude Score

Scoring Method:

5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Multiple attitude statements scored

Final Score = Mean of all attitude responses

Table 3.2: Interpretation criteria for attitude score

Mean Score	Interpretation
≥ 4.0	Positive Attitude
3.0 – 3.9	Neutral Attitude
< 3.0	Negative Attitude

3. Practice Score

Scoring Method:

5-point Likert scale (1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Always)

Each recommended practice scored

Final Score = Mean of all practice-related responses

Table 3.3: Interpretation criteria for practice score

Mean Score	Interpretation
≥ 4.0	Positive Practice
3.0 – 3.9	Moderate Practice
< 3.0	Negative Practice

Data analysis plan

The data collected through the KAP questionnaire were downloaded from Google Forms in Excel format and analysed using **Microsoft Excel and SPSS (Version XX)**.

Steps in Analysis:

1. **Data Cleaning:** Checked for completeness, removed duplicate or inconsistent entries.
2. **Descriptive Statistics:**
 - Frequency, percentage, mean, and standard deviation were calculated for demographic and KAP responses.
3. **Scoring and Categorization:**
 - Knowledge, attitude, and practice scores were computed as per the criteria described above.