

Internship Training

At

International Institute of Health Management Research, New Delhi

**'Assessment of Awareness and Utilization of Antenatal Care Services among Urban
Slum Population in Delhi'**

by

Manish Prajapat

PG/23/054

Under the guidance of

Dr. Vinay Tripathi

PGDM (Hospital & Health Management) 2023-25



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**International Institute of Health Management Research
New Delhi**

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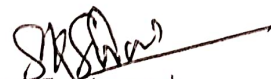
**'Assessment of Awareness and Utilization of Antenatal Care Services among Urban
Slum Population in Delhi'**

Date 16/06/2025

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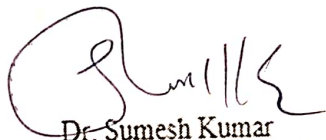
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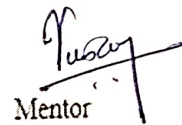
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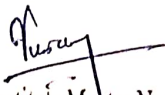
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A handwritten signature in blue ink, appearing to read "Manish", with a horizontal line drawn through it.

Signature

FEEDBACK FORM

Name of the Student: Manish Poojapat

Name of the Organization in Which Dissertation Has Been Completed: IIMR Delhi

Area of Dissertation: Maternal & child health

Attendance: Satisfactory

Objectives achieved: Dissertation submitted

Deliverables: Yes, project related deliverables were submitted by the student

Strengths: Very strong learning zeal and adaptability to work in different roles.

Suggestions for Improvement: —

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

Signature of the Officer-in-Charge/ Organization Mentor (Dissertation)

Date: 7/8/25

Place: Delhi

Abstract

Antenatal care (ANC) is globally recognized as a cornerstone for improving maternal and neonatal health outcomes, yet urban slum populations often face significant barriers to its access and utilization. This cross-sectional study aimed to assess the awareness and utilization of ANC services among women in urban slum populations of Delhi, and to identify influencing factors. A total of 384 women of reproductive age (15-49 years), who were either currently pregnant or had delivered within the preceding 12 months, were surveyed using a semi-structured questionnaire. Data were analysed using descriptive statistics, Chi-square tests, and T-tests.

The study revealed remarkably high levels of general awareness (97.12%) and utilization (95.52%) of ANC services among the surveyed population, significantly exceeding national averages for urban slums. Education level was found to be statistically significantly associated with ANC awareness ($p=0.0076$), highlighting its crucial role in health literacy. Conversely, neither family monthly income ($p=0.0727$) nor age ($p=0.852$) showed a statistically significant association with overall ANC utilization, suggesting that existing government schemes and community-level support may be effectively mitigating traditional financial and age-related barriers. Despite high utilization, qualitative findings indicated persistent systemic and operational challenges, including long queues, delays in tests, shortages of essential medicines, inadequate testing facilities, issues with Mother and Child Protection (MCP) card provision and recording, and concerns regarding healthcare provider behaviour.

These findings suggest that while broad outreach efforts have successfully fostered high awareness and initial uptake of ANC in Delhi's urban slums, a critical shift is needed towards improving the *quality, efficiency, and continuity* of care. Recommendations include strengthening targeted health literacy programs, enhancing operational efficiency and infrastructure within health facilities, ensuring consistent supply of essential resources, improving MCP card management, and addressing provider-patient interaction issues to ensure a positive and comprehensive ANC experience.

Acknowledgements

This dissertation, "**Assessment of Awareness and Utilization of Antenatal Care Services among Urban Slum Population in Delhi**," represents the culmination of significant effort and collaboration. I wish to express my profound gratitude to all those who contributed to its successful completion.

First and foremost, I extend my deepest appreciation to my esteemed supervisor,

Dr. Vinay Tripathi, for his invaluable guidance, unwavering support, insightful critiques, and constant encouragement throughout every stage of this research. His expertise and dedication were instrumental in shaping this study and bringing it to fruition.

I am sincerely grateful to the **Institutional Ethics Committee of the International Institute of Health Management Research (IIHMR), Delhi**, for granting the necessary ethical approval for this study. Their commitment to ethical research practices ensured the integrity and responsible conduct of this work.

My heartfelt thanks go to the **women from the urban slum populations of Delhi** who graciously participated in this study. Their willingness to share their experiences and insights was fundamental to the success of this research, providing the rich data that underpins our findings. Their voices are central to this work.

I also wish to acknowledge **Dr. Sumant Swain** who tirelessly supported me in the challenging conditions. Their guidance and meticulous work were crucial for this study.

Finally, I am grateful to my family and friends for their continuous support, understanding, and patience throughout this academic journey.

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LIST OF ABBRIVIATION

Abbreviation	Full Form
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
IFA	Iron and Folic Acid
JSY	Janani Suraksha Yojana
NHM	National Health Mission
NFHS	National Family Health Survey
PMSMA	Pradhan Mantri Surakshit Matritva Abhiyan
RMNCH+A	Reproductive, Maternal, Newborn, Child, and Adolescent Health
SPSS	Statistical Package for the Social Sciences
TT	Tetanus Toxoid
WHO	World Health Organization

INTRODUCTION

Background

Maternal health continues to be a significant public health issue across the globe, and antenatal care (ANC) has a key role to play in facilitating safe pregnancy and delivery outcomes and reducing both maternal and neonatal mortality. The World Health Organization (WHO) recommends at least four ANC visits, with timely follow-up, age-based supplementation of nutritional requirements, counselling and education on reproductive health and healthy behaviours to mitigate maternal and fetal health and well-being in pregnancy (WHO, 2016). In India, while there have been some improvements in maternal health indicators, there is still major variation across socio-demographic populations and urban slum residents continue to be socio-economically disadvantaged.

Antenatal care (ANC) is a globally recognized basic element of healthcare in ensuring positive pregnancy outcomes and plays an important role in dramatically improving maternal and neonatal mortality rates. ANC is a key element in achieving global health objectives and improving public health indicators. Despite various national schemes and policies aimed at improving maternal health, persons living in urban slums, particularly in cities like Delhi, face immense and layered socio-economic and system-level challenges to accessing or fully engaging with maternal health services, including ANC.

Delhi, the National Capital Territory of India, is making a progress towards 1.8 million individuals living in slums (Census of India, 2011) and as with much of the country's rural and urban population, poor healthcare infrastructure, low levels of literacy, and severe economic hardships that contribute to poor usage of maternal health services. For instance, the National Family Health Survey (NFHS-5, 2019–21) presented a mere 58% of women living in urban slums across India completing four ANC consultations. Overall under-utilization of ANC services is due, in part, fragmented healthcare services, low health literacy, cultural beliefs and poverty (Awasthi et al., 2020; Gupta et al., 2019).

The Government of India has launched several maternal health initiatives, including the **Janani Suraksha Yojana (JSY)**, **Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)**, and the **Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A)** strategy under the National Health Mission (NHM). However, their effectiveness in urban slums is inconsistent due to challenges in service delivery, a lack of community awareness, and inadequate social support systems.

Problem Statement

Although the crucial importance of antenatal care (ANC) is widely recognized and various government initiatives, such as the Janani Suraksha Yojana (JSY), Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), and the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) strategy under the National Health Mission (NHM) have been implemented, the success of these programs is often limited in urban slum settings. This diminished effectiveness is primarily due to ongoing socio-economic, cultural, and systemic barriers that disproportionately impact women in these marginalized communities.

The primary challenges encountered by women in urban slums encompass low literacy rates, insufficient understanding regarding ANC schedules and their associated benefits, considerable financial constraints, pervasive gender inequality, and inadequate health infrastructure. Furthermore, a discernible disconnect frequently exists between healthcare providers and the community, which contributes to the underutilization of available services. This study directly addresses the pressing need for context-specific data within Delhi's urban slums, where maternal health indicators consistently fall below national averages. By systematically evaluating awareness and utilization patterns, the research aims to precisely identify specific barriers and enabling factors, thereby providing evidence-based insights crucial for enhancing service delivery and access in these critical areas.

Significance of the Study

The results of this study are set to make a significant contribution to the existing knowledge base by offering detailed, Delhi-specific data on awareness and utilization of antenatal care (ANC) among urban slum populations. This group is frequently overlooked in broader health research, making these localized insights particularly important. The research will provide essential information for policymakers and public health officials, enabling the development and implementation of more effective, context-specific interventions and health programs tailored to the unique needs and challenges faced by urban slum communities. By identifying key obstacles and facilitators, the study will support the creation of targeted outreach strategies, improve the effectiveness of health literacy initiatives, and ultimately enhance the healthcare infrastructure in these vulnerable urban areas, resulting in better maternal and child health outcomes.

Rationale of the Study

Urban slums in Delhi illustrate a compelling paradox. Although these areas are situated close to advanced public and private healthcare facilities, they continue to report poor maternal health outcomes. Contributing factors such as limited health-seeking behavior, low levels of female literacy, gender inequality, and widespread mistrust of formal healthcare systems significantly hinder the utilization of antenatal care (ANC) services (Jain & Agrawal, 2019).

Understanding the levels of awareness and patterns of ANC service utilization among women in these underserved communities is essential for formulating targeted interventions, refining outreach strategies, and strengthening connections between healthcare providers and slum populations.

Accordingly, this study aims to evaluate the **awareness and utilization of ANC services among women living in Delhi's urban slums** and to identify the socio-demographic factors that influence these outcomes.

Objectives of the Study

1. To evaluate the level of awareness regarding antenatal care (ANC) services among women living in urban slums of Delhi.
2. To evaluate the usage of ANC services by these women.
3. To identify socio-demographic factors that impact awareness and usage of ANC services.

REVIEW OF LITERATURE

The Antenatal Care Conceptual Framework

A full range of medical services offered to expectant mothers from conception until the start of labor is known as antenatal care, or ANC. Ensuring the best possible health outcomes for the mother and the fetus is its main goal. Risk assessment, which entails identifying possible complications; health promotion initiatives, such as nutritional counseling and hygiene education; disease prevention strategies, such as immunizations and iron-folic acid supplements; and the early identification and treatment of pregnancy-related complications, such as pre-eclampsia or gestational diabetes, are usually considered essential components of ANC. With a minimum of eight contacts recommended for a positive pregnancy experience, the World Health Organization (WHO) highlights the globally acknowledged importance of antenatal care (ANC) in the continuum of maternal and child health.

Global and National Context of Maternal Health in Slums

People living in urban slums around the world, especially in India, deal with a special combination of issues that have a significant influence on their health-seeking behaviors and results. Severe overcrowding, poor sanitary facilities, restricted access to clean drinking water, and ingrained socioeconomic inequalities are frequently characteristics of these settings. The delivery and uptake of critical health services, such as maternal care, are made more difficult by these circumstances. Slum communities usually have health indicators that are much worse than urban averages, even though they are close to metropolitan health infrastructure. This emphasizes the need for focused interventions that take these particular contextual factors into consideration.

Importance of Antenatal Care

Antenatal care is fundamental to maternal and child health, focusing on minimizing pregnancy-related complications and ensuring positive outcomes for both mothers and newborns. The World Health Organization (2016) suggests at least four ANC visits, with an emphasis on early registration, regular health check-ups (such as monitoring blood pressure and weight), iron-folic acid supplementation, tetanus toxoid vaccinations, and guidance on nutrition and warning signs. Research worldwide indicates that effective use of ANC can significantly lower maternal mortality rates and enhance birth outcomes (WHO, 2016).

Existing Research on ANC Awareness and Utilization

Previous research has consistently identified notable disparities in maternal health services between urban and rural communities. Urban slum residents frequently encounter challenges that are comparable to—or even more severe than—those faced by their rural counterparts, due to specific dynamics of urban poverty. Data from the National Family Health Survey (NFHS-5) offers an extensive overview of ANC coverage in urban India, highlighting ongoing gaps in the completion of recommended visits, especially among vulnerable populations.

Significant differences in maternal health services between urban and rural communities have been repeatedly found in prior research. Because of certain dynamics of urban poverty, people living in urban slums often face difficulties that are on par with, or even worse than, those experienced by their rural counterparts. The National Family Health Survey (NFHS-5) data provides a comprehensive picture of ANC coverage in urban India, pointing out persistent gaps in the completion of recommended visits, particularly for vulnerable groups.

ANC Coverage in India and Urban Slums

Disparities still exist among vulnerable groups even after India's maternal health services were strengthened under the **National Health Mission (NHM)** and **Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A)** strategies. Only 58% of urban slum women completed the recommended four ANC visits, compared to 89% of pregnant women in India who received at least one visit, according to **NFHS-5 (2019–21)**. Despite the availability of both public and private healthcare facilities, maternal health indicators in Delhi's slum populations continue to be below optimal levels (IIPS & ICF, 2021).

According to Awasthi et al. (2020), poor health literacy and financial limitations were the main reasons why only 63% of women in Uttar Pradesh's urban slums completed four ANC visits. In a similar vein, Gupta et al. (2019) discovered that although 70% of women registered their pregnancies, only 52% of them followed the advised ANC schedule in their study conducted in urban slums in North India.

Determinants of ANC Awareness and Utilization

ANC awareness and use are influenced by a number of sociodemographic factors:

1. **Education:** Research continuously demonstrates that ANC awareness and service use are positively correlated with maternal education. Higher educated women are more likely to demand high-quality care, finish planned visits, and register early (Awasthi et al., 2020).
2. **Income and Occupation:** Although underutilization is frequently linked to low income, Jain and Agrawal (2019) discovered that in certain slum settings, income was not always a statistically significant determinant, suggesting that cultural factors and health beliefs also play a part.
3. **Health Infrastructure:** Fragmented health services, long waiting times, and distance to health facilities can prevent women to seek ANC services, even if they know it is important (Kumar et al., 2018).
4. **Role of Community Health Workers:** There has been some evidence that Accredited Social Health Activists (ASHA) and Auxiliary Nurse Midwives (ANM) can facilitate better ANC registration and utilization by doing home visits, counselling and offering support (Singh et al., 2021).
5. **Cultural Beliefs and Gender Norms:** In many urban slum contexts, aspects of decision-making regarding maternal health would come from family members,

particularly elders and males in the household. Normative gender roles also limited women's autonomy to seek care (Jain & Agrawal, 2019).

Government Initiatives and their Impact

There are a number of government schemes aimed at improving maternal health outcomes:

- **Janani Suraksha Yojana (JSY):** Conditional cash transfer programme for institutional delivery and ANC.
- **Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA):** Offers free ANC check-ups by specialists on pre-designated days.
- **RMNCH+A Strategy:** Part of the National Health Mission (NHM), this encompasses a comprehensive approach to improving reproductive, maternal and child health services.

While these schemes have increased the availability of services, their impact in urban slum contexts is limited due to awareness, outreach, and socio-economic barriers (Gupta et al., 2019).

Research Gaps

There is a substantial body of research on maternal health and ANC utilization in the Indian context; however, there remains a significant gap around specific, contextual data that documents the needs of urban slums in Delhi. Existing, nationally representative surveys have established some broad level statistics, however, the socio-economic, contextual and infrastructure characteristics of Delhi makes it important to obtain specific and contextual data. The literature has not adequately captured the level of detail needed to inform the barriers and utilization in the specific urban context. By offering a context-driven analysis that can guide more targeted and efficient interventions, this study seeks to close this crucial gap and advance a more sophisticated understanding of the opportunities and challenges related to maternal health in Delhi's urban slum populations.

Little research has been done expressly on **Delhi's urban slum** populations; the majority of studies on ANC awareness and use have been carried out in rural areas. Contextual factors like cultural beliefs, community-level health interventions, and reliance on informal healthcare are also not well studied in Delhi, despite the fact that prior research has identified barriers like education, income, and healthcare accessibility. This emphasizes how policy and interventions in these underprivileged areas require **context-specific research**.

METHODOLOGY

Study Design

A **community-based cross-sectional study** was undertaken to evaluate the awareness and utilization of antenatal care (ANC) services among women residing in the urban slums of Delhi. This study design was selected as it is well-suited for estimating the

prevalence of health-related behaviours and identifying associated socio-demographic factors at a single point in time.

The cross-sectional approach enabled the researchers to capture a comprehensive snapshot of ANC awareness and utilization within the target population, allowing for simultaneous data collection from a diverse group of participants. This methodology was appropriate for understanding the current patterns and determinants of ANC service use in the urban slum context of Delhi.

Study Area

The study was conducted in a few Delhi urban slum clusters that were chosen because of their socioeconomic vulnerabilities, overcrowding, poor sanitation, and restricted access to medical care. To represent regions with a high population density and reliance on public health services, slum clusters were purposefully chosen.

In order to make sure that the study's conclusions are directly applicable to the distinct socioeconomic circumstances and infrastructure difficulties that are typical of these particular settings, a specific geographic focus was chosen.

Study Population

Study Population Women of reproductive age (15–49 years) who:

- Were currently pregnant OR had delivered within the past 12 months.
- Were permanent residents of the selected slum clusters.

In order to provide relevant data for the study's goals, this inclusion criterion made sure that every participant had recent and relevant experiences with ANC services.

After two follow-up visits, women who refused to participate or did not show up for data collection were not included.

Sample Size Determination

The study included about 384 women in total. For cross-sectional studies, this sample size is typically regarded as robust, with the goal of obtaining adequate statistical power for insightful analysis. Although the information supplied did not specifically address the sampling technique, the data structure indicates a comprehensive survey across multiple urban slum areas, suggesting a method intended to capture a representative range of experiences within the defined study population.

The sample size was calculated using the standard formula for cross-sectional studies:

- Estimated prevalence (p) of full ANC utilization among women in Delhi's urban slums is approximately 48.1% .
- Confidence level: 95% – Z = 1.96
- Precision (d): 5% – 0.05

Plugging these values into the formula:

$$n = \frac{(1.96)^2 \cdot 0.481 \cdot (1 - 0.481)}{(0.05)^2}$$

$$n = \frac{3.8416 \cdot 0.481 \cdot 0.519}{0.0025}$$

$$n = \frac{3.8416 \cdot 0.249639}{0.0025}$$

$$n = \frac{0.9591}{0.0025}$$

$$n = 383.64$$

The final sample size was rounded to **384 women**, taking into account a **5% non-response rate**.

Sampling Technique

Based on population density and accessibility, the urban slum clusters were chosen using a **purposive sampling technique**. To find eligible women, **house-to-house** visits were made within each chosen slum until the necessary sample size was reached.

Data Collection Tool

A **semi-structured questionnaire** based on **WHO ANC** guidelines and the **National Family Health Survey (NFHS-5)** was used to gather data. To ensure validity and clarity, a small group of women from outside the study area pretested the questionnaire. It was divided into five parts:

1. **Socio-demographic profile** (which includes family income, family type, occupation, education, age, and marital status.).
2. **Pregnancy history** (parity, recent pregnancy outcome).
3. **Awareness of ANC services** (information sources, suggested visits, government programs, and knowledge of ANC).
4. **Utilization of ANC services** (registration, visits, services obtained, difficulties encountered).
5. **Suggestions and feedback** for improving ANC services.

Data Collection Procedure

- Trained field investigators conducted in-person interviews to gather data.
- To guarantee participant comprehension, interviews were held in Hindi or the regional tongue.
- The duration of each interview was roughly **20 to 30 minutes**.
- Prior to participation, **informed consent** was acquired verbally or in writing

Ethical Considerations

- This study had received ethical clearance from the Institutional Ethics Committee of the **International Institute of Health Management Research (IIHMR), Delhi**.
- The purpose and confidentiality of the study was explained and all participants gave their written informed consent.
- Joining the survey was voluntary, and respondents could withdraw at any time without any penalty.
- Data confidentiality and anonymity were strictly maintained.

Data Entry and Analysis

- The collected data were entered in **Microsoft Excel** and analyzed using **Statistical Package for the Social Sciences (SPSS) version 26**.
- Socio-demographic characteristics, awareness and utilization patterns were reported using **descriptive statistics** in terms of frequencies, percentages, means and standard deviation
- Associations were examined using **inferential statistics**:
 - Value of p Value was applied to test the association between socio-demographic variables and ANC awareness/utilization using **Chi-square test**.
 - **p-value <0.05** was considered statistically significant.

RESULTS

Socio-Demographic Characteristics of Respondents

A total of **384 women** were approached, of which **382 women** completed the survey (response rate: 99.4%). The socio-demographic details are summarized below:

Variable	Categories	Frequency (n=382)	Percentage (%)
Age (years)	≤25	143	37.4
	26–30	157	41.1
	>30	82	21.5

Variable	Categories	Frequency (n=382)	Percentage (%)
Marital Status	Married	382	100
Education	No formal education	67	17.5
	Primary	101	26.4
	Secondary	154	40.3
	Higher Secondary & above	60	15.8
Occupation	Housewife	295	77.2
	Daily wage/Employed	87	22.8
Monthly Family Income (₹)	≤10,000	209	54.7
	10,001–20,000	121	31.7
	>20,000	52	13.6
Type of Family	Nuclear	268	70.2
	Joint	114	29.8
Number of Children	1	164	42.9
	2	153	40.1
	≥3	65	17.0

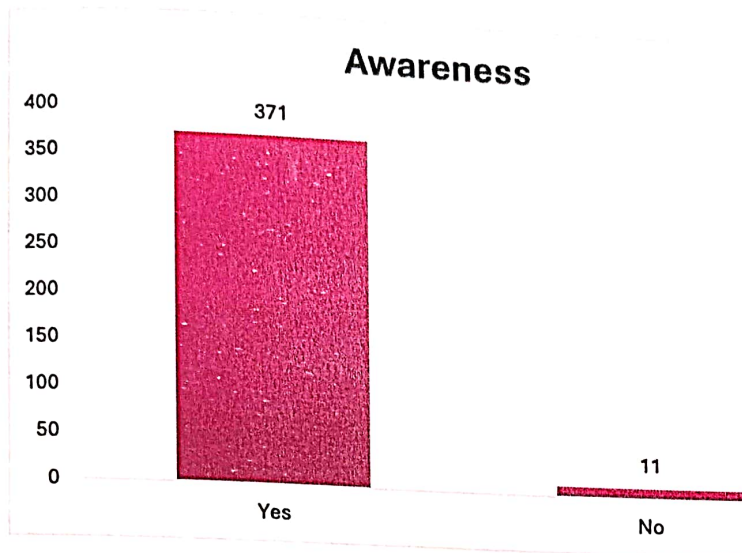
Awareness of ANC Services

Of the 382 response checks **97.1% (n=371)** had heard about antenatal services and the rest (**n=11, 2.9%**) did not hear about antenatal services.

This study showed a very high level of awareness related to ANC among the selected urban slum during Delhi. Most of the women, i.e., **371(97.12%)** out of total 382 respondents heard about ANC. On the other hand, only **11 (2.88%)** women reported that they had no knowledge of ANC at all. This is further evidence that mass health communication interventions are reaching this particular population, and provide indication of readiness to assert health seeking behaviors. But it's worth pointing out that, even if there is a strong rate of awareness in the general population, the number doesn't really tell us all that much about the depth or quality of understanding. For example, it doesn't specify whether women understand the benefits of services, the recommended number of visits, or the precise goal of ANC. The best use of services may still be impacted by a superficial understanding that is concealed by high reported awareness.

Awareness of ANC

	Frequency (n=382)	Percentage (%)
Heard of ANC	371	97.1
Not Heard of ANC	11	2.9



Source of Information about ANC:

- ASHA/ANM workers: **58.7%**
- Government/Private Hospitals: **21.3%**
- Family/Friends: **15.1%**
- Media (TV/Radio): **4.9%**

Awareness by Education Level

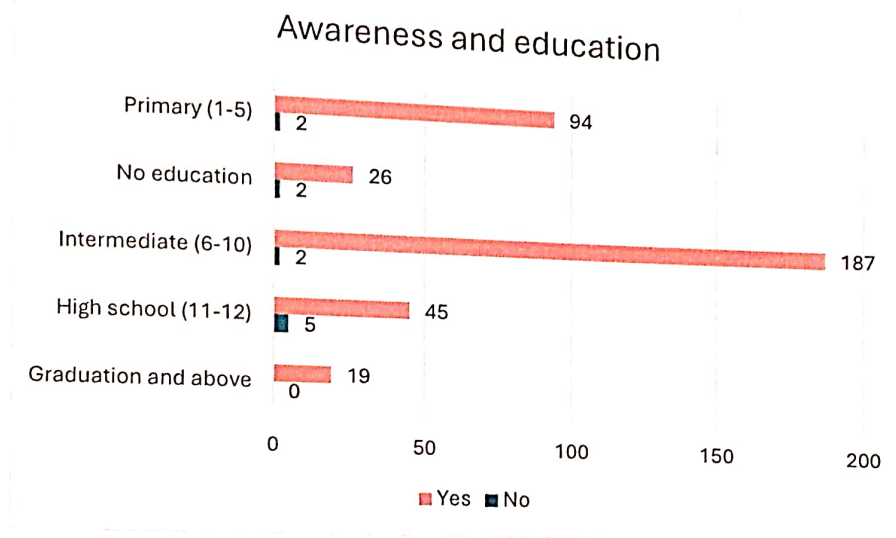
An analysis of ANC awareness stratified by education level generally revealed a positive correlation: as the level of education increased, the number of individuals reporting ANC awareness tended to rise. For example, among women with "Graduation and above" education, 100% (19 out of 19) reported awareness, and none reported no awareness. In contrast, the "No education" group had 26 women aware and 2 unaware. The "Intermediate (6-10)" education level recorded the highest absolute number of women with ANC awareness, with 187 individuals.

Nonetheless, a fascinating divergence from the overall trend was noted in the "High school (11-12)" segment. This group exhibited a significant decline in awareness, with 45 women being aware and 5 unaware, which is lower than the awareness levels recorded in the "Intermediate" category. Additionally, the "High school (11-12)" cohort had the highest count of individuals lacking ANC awareness (5 individuals) compared to other educational groups. This surprising trend indicates that education level alone might not

serve as a reliable predictor of awareness, or that other influencing factors specific to this demographic, such as certain socio-economic conditions, particular exposure to information, or the age distribution within this category, could be involved. This irregularity calls for additional qualitative or quantitative research to comprehend the reasons behind this deviation from the anticipated relationship. Nonetheless, the generally favorable link between education and awareness highlights the significance of educational attainment in enhancing health literacy.

Table 1: Awareness of ANC Services by Education Level

Education Level	No Awareness (Count)	Yes Awareness (Count)
Graduation and above	0	19
High school (11-12)	5	45
Intermediate (6-10)	2	187
No education	2	26
Primary (1-5)	2	94



Utilization of ANC Services

95.5% (n=341) of the 357 respondents who were either pregnant or had given birth within the previous 12 months reported using ANC services, while **4.5% (n=16)** did not.

The study discovered that the population of Delhi's urban slums used ANC services at a very high rate overall. **341 out of 357** respondents, or **95.52%** of the women surveyed, stated that they had received ANC for their most recent pregnancy. Just 16 women (4.48%) reported not using ANC, which is a very small percentage. An encouraging sign for public health initiatives to support maternal care is this high overall utilization rate. It is crucial to understand that this metric by itself does not offer a thorough understanding of the calibre or completeness of the ANC that was received. For example, it doesn't specify whether women started care in the first trimester, finished the recommended four visits, or got all the services they needed. As a result, even though access seems to be high, this high utilization may conceal shortcomings in the quality of care given.

Utilization of ANC Frequency (n=357) Percentage (%)

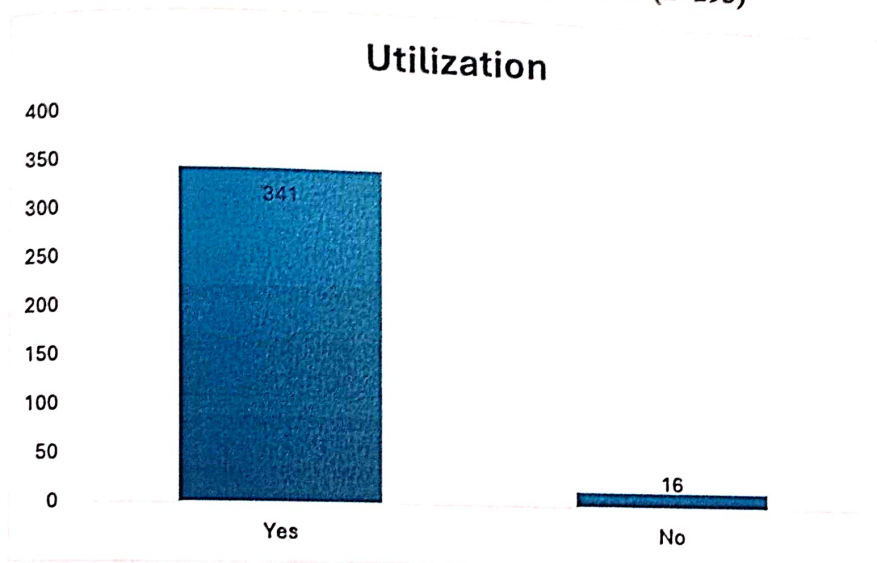
Received ANC 341 95.5

Did not receive ANC 16 4.5

Number of ANC Visits:

Among those who received ANC services (n=341):

- <4 visits: 14.1% (n=48)
- ≥4 visits (recommended as per WHO): 85.9% (n=293)



Services Received During ANC Visits

The most available services were:

- Weight and blood pressure monitoring (98.5%)
- Iron and Folic Acid (IFA) supplementation (93.7%)
- Tetanus toxoid injection (88.6%)
- Blood and urine testing (84.3%)
- Ultrasound examination (79.1%)

Utilization by Family Monthly Income

Consistently high levels of uptake were found when ANC utilization rates were analysed across various family monthly income categories. The "Low" income group's utilization rate was roughly 95.2%, the "Lower-Mid" income groups was 96.1%, the "Upper-Mid" income groups was 77.8%, and the "High" income groups was 100%.

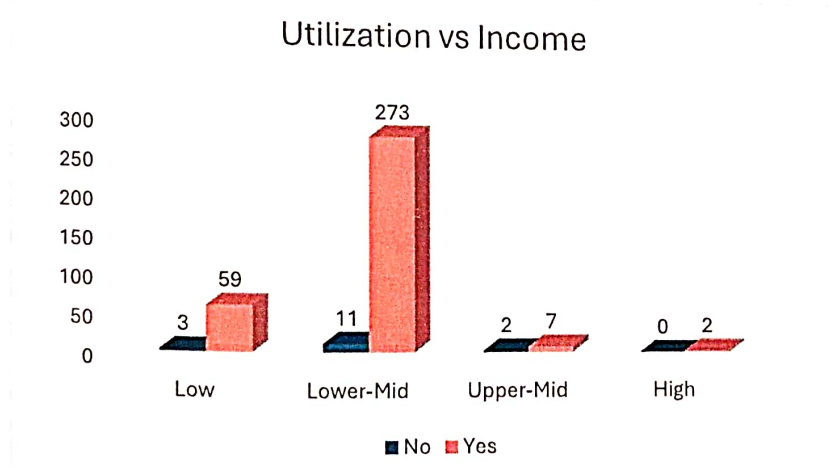
With 273 women, the "Lower-Mid Income Category" had the largest absolute number of ANC users. It's interesting to note that, out of 16 non-utilizers in all income groups, this

category also reported the greatest number of non-utilizers—11 of whom were women. A crucial trend is highlighted by this finding, which shows that the largest group of non-utilizers is concentrated in a particular income bracket. This particular subgroup within the lower-mid income bracket represents a crucial area for focused qualitative investigation to understand the specific, non-financial barriers they might face, such as time constraints, a lack of social support, or particular geographic accessibility issues, even though income may not be statistically significant as an overall barrier (as discussed in the next section).

The "High Income Category" showed 100% utilization, but this finding is based on a very small sample size of only 2 families. This small sample size limits the generalizability of this specific observation to the broader high-income population within urban slums. The non-significant statistical association (discussed below) and the generally high utilization across all income categories strongly imply that current government programs or strong community-level support (such as ASHA/ANM workers) may be successfully reducing direct financial barriers to ANC access in these urban slum settings. This suggests that current public health policies are helping to lower financial barriers, and it points to a possible success story in making ANC financially accessible.

Table 2: Utilization of ANC Services by Family Monthly Income

Income Category	No Utilization (Count)	Yes Utilization (Count)
High	0	2
Low	3	59
Lower-Mid	11	273
Upper-Mid	2	7



Association between Socio-Demographic Variables and ANC Awareness/Utilization

1. Education vs. Awareness of ANC

- Education and awareness were found to be statistically significantly correlated ($\chi^2 = 13.91$, $p = 0.0076$). Compared to women without formal

education, those with secondary or higher education had a greater awareness of ANC services.

2. Income vs. Utilization of ANC Services

- A p-value of 0.0727 and a Chi2 value of 6.9745, with three degrees of freedom, were obtained from the Chi-square test used to evaluate the relationship between family monthly income and the use of ANC services. Given that this p-value exceeds the traditional significance level of 0.05,
- no statistically significant correlation between income levels and ANC utilization ($p = 0.0727$); however, middle-income groups had slightly higher utilization descriptively.

3. Age vs. ANC Utilization

- The T-test performed to compare the age of the women with their utilization of ANC services resulted in a t-statistic of 0.189 and a p-value of 0.852. Given that this p-value is significantly greater than 0.05.
- The mean age of women who used ANC and those who did not did not differ significantly, according to the independent t-test ($p = 0.852$).

Key Findings

- There was a high degree of ANC service awareness (97.1%) and use (95.5%).
- While age and income did not significantly influence ANC utilization, education was a key factor in determining awareness levels.
- Although a small percentage of women are still underserved, the majority of women used essential ANC services, indicating that public health programs are being implemented effectively.

Types of Healthcare Providers and Facilities

In the population surveyed, doctors, ASHA employees, and nurses/ANMs were the main providers of ANC services. "Doctor, ASHA," "Doctor, Nurse/ANM," and "Doctor, Nurse/ANM, ASHA" were the most commonly seen provider combinations, suggesting a multifaceted and cooperative approach to care delivery. Physicians, either by themselves or in combination with other medical professionals, were commonly mentioned as providers. ASHA employees and nurses/ANMs, who are frequently cited as independent providers or in conjunction with physicians, also contributed significantly. The fact that ASHA/ANM workers are frequently mentioned as primary providers—often alongside physicians and nurses—highlights their critical role in facilitating high awareness and utilization among urban slum populations. By bridging the gap between vulnerable communities and formal healthcare systems, their community-based approach probably makes access and trust easier.

Primary Health Centres (PHCs), government hospitals, and private clinics were the main places where women sought ANC services. ASHA/ANM home visits and Community Health Centres (CHCs) were also used, suggesting a variety of access

points. The use of both public and private facilities points to a heterogeneous healthcare environment. Even though government facilities are essential for easily accessible and frequently free care, using private clinics suggests that some services may be preferred, that the services are of higher quality, or that certain diagnostics (like ultrasound) are required. Although income is not a statistically significant barrier to overall utilization, this suggests that some women may seek or require private care even with government provisions, which could have cost implications.

Services Received During ANC Visits

Weight check, blood test, ultrasound, IFA tablets, and tetanus injection were the most frequently reported services obtained during ANC visits. This suggests that ANC services are typically offered in a standard package. Participants' reported duration of IFA tablet intake varied, falling into categories such as "<30 days," "30-59 days," "60-89 days," and "90+ days." This variation raises the possibility of issues with consistent supply, counselling, or adherence, indicating the need for better patient education and supply chain dependability to guarantee the best possible nutritional supplementation.

Mother and Child Protection (MCP) cards were reported by a sizable portion of women. But a sizable percentage also reported that their MCP card either did not contain any health information or only a photocopy was given. A serious systemic flaw in the way ANC is delivered is the frequent reference to problems with MCP card provision and health information recording. Accessing future services, monitoring health progress across visits and facilities, and maintaining continuity of care all depend on an MCP card. Regardless of the number of visits made, its absence or inadequate recording compromises the efficacy of ANC and may result in fragmented care, missed interventions, and worse long-term health outcomes for both mother and child. This highlights that simply attending visits is not sufficient if the fundamental tools for integrated care are missing or improperly utilized.

Challenges in Accessing ANC Services

Even with high usage rates, women in the urban slum population surveyed faced several notable difficulties in accessing and receiving optimal ANC services. These difficulties encompass multiple aspects of service delivery:

- **Operational Bottlenecks:** Numerous complaints about "Waiting time, delays in testing" and recommendations to "Reduce long wait times" point to significant infrastructural and administrative challenges within healthcare facilities. These problems result in inefficient service delivery, taking up valuable time for women who frequently have other domestic or work duties to attend to.
- **Supply Chain and Resource Gaps:** Critical deficits were noted, including "No medications," "Calcium supplements not available," and "IFA tablets out of stock."
- These observations highlight significant problems with the supply chain or inventory management of crucial medications that are essential for maternal health. Furthermore, remarks such as "No testing facility" and "No testing, no tablet" indicate a lack of adequate diagnostic infrastructure, which restricts the

overall quality of care. These are not trivial issues but serious deficiencies that undermine the effectiveness and thoroughness of ANC, even when women attend appointments.

- **Programmatic Implementation Failures:** The persistent issues of "No MCP card," "MCP card only available in photographs," and "MCP card not issued" suggest a critical shortcoming in the program's capacity to provide this necessary document consistently. The MCP card is vital for ensuring continuity of care, enabling healthcare professionals to monitor a woman's health across various visits and facilities. Its absence or insufficient documentation can weaken the effectiveness of ANC, potentially resulting in disjointed care, overlooked interventions, and adverse long-term health repercussions for both mothers and children.
- **Transport and Accessibility Issues:** Although respondents mostly indicated walking and auto rickshaws as prevalent modes of travel to health facilities, some mentioned "Transport" as an overarching challenge, and "No ambulance service" was a specific concern. This points to ongoing gaps in emergency or facilitated access, especially for women with mobility challenges or those in need of urgent medical care.
- **Provider-Patient Interaction Issues:** Comments such as "Bad behaviour" and "Misbehave" from healthcare providers point to significant qualitative issues regarding patient experience and professional demeanour. Such negative encounters can create psychological obstacles that discourage women from seeking or continuing care, even if services are readily accessible and free of charge. This underscores that the human aspects of care delivery are just as important as physical access.
- **Service Delivery Gaps/Suggestions:** Recommendations like "Include ultrasound in government facilities," "Availability of USG tests in the same location," and concerns over "Report receiving" (indicating delays or challenges in obtaining test results) point to areas where services are lacking or inefficiently provided.

DISCUSSION

The findings from this study illustrate a complex yet promising landscape of awareness and utilization of antenatal care among urban slum populations in Delhi. The impressively high reported awareness (97.12%) and utilization (95.52%) rates of ANC services are notable achievements in these challenging circumstances. These figures likely represent the success of ongoing outreach by community health workers, particularly ASHA and ANM workers, who are frequently mentioned as primary caregivers. Their steady engagement at the community level seems to have played a critical role in spreading health information and facilitating initial access to healthcare. This indicates that extensive public health initiatives, combined with dedicated frontline health workers, have successfully reached this vulnerable demographic, enhancing general awareness and uptake of ANC.

The current study found that **97.1%** of women living in urban slums in Delhi are aware of ANC services. This figure is substantially higher than the **NFHS-5 (2019–21)** estimates, which stated that only about 58% of urban slum women completed the advised ANC visits, reflecting limited awareness in many areas. The elevated awareness level documented in this study may showcase the effectiveness of community-based outreach initiatives, particularly through **ASHA workers and ANMs**, identified as the main source of information (**58.7%**).

Similar results were observed by **Gupta et al. (2019)** in urban slums across North India, where **95%** of women were aware of ANC services, predominantly through frontline health workers. However, **Awasthi et al. (2020)** reported lower awareness rates (approximately 72%) in urban slums in Uttar Pradesh, attributing the discrepancy to low literacy rates and insufficient community engagement.

The strong correlation between education and awareness ($\chi^2 = 13.91$, $p = 0.0076$) observed in this study is consistent with prior research, which show that women with secondary education or higher have a greater likelihood of being aware of ANC services and their significance (**Awasthi et al., 2020; Jain & Agrawal, 2019**).

The statistically significant relationship between education level and ANC awareness ($p=0.0076$) highlights the essential function of education in developing health literacy. This discovery supports broader public health concepts that consider education as a key factor in empowering individuals to make informed health choices. However, the unexpected observation in the "High school (11-12)" category, which displayed a relatively higher number of individuals lacking awareness compared to the "Intermediate" group, merits particular consideration. This divergence from the anticipated linear trend suggests that education level alone may not be an ideal indicator of health awareness or that other confounding elements, such as gaps in specific curricula, socio-economic pressures unique to this subgroup, or differences in exposure to information, might be impacting this trend. A more detailed exploration of the unique circumstances surrounding this group could provide valuable insights for targeted health education efforts.

An especially significant finding is the lack of a meaningful association between family monthly income ($p=0.0727$) and age ($p=0.852$) with the overall uptake of ANC services. This result contradicts the prevalent belief that lower income and age serve as extensive barriers to healthcare access within urban slum environments. It suggests that existing government initiatives, such as Janani Suraksha Yojana (JSY) and Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), along with other mitigating influences, are effectively alleviating direct financial and age-related obstacles, thereby facilitating access across various socio-economic levels and age demographics. This presents a potential success story in making ANC both financially accessible and widely available. However, it is essential to recognize that the "Lower-Mid" income group represented the highest absolute number of non-utilizers (11 out of 16 total non-utilizers). While not statistically significant overall, this particular subgroup within the lower-mid income category embodies the largest group not engaging with services, suggesting that while

direct financial burdens may be reduced, other specific, non-financial challenges (such as opportunity costs related to time, absence of social support for travel, or specific geographic accessibility concerns) could still be affecting this segment. This underscores a need for more tailored, targeted interventions aimed at this vulnerable subgroup.

The rate of ANC service utilization in this study stood at **95.5%**, with **85.9%** of women fulfilling the recommended four or more visits. This figure significantly surpasses national and state-level estimates for urban slum populations (NFHS-5: 58%) and is also higher than the findings of **Kumar et al. (2018)**, who noted only 60% ANC completion in Mumbai slums.

The elevated utilization in Delhi may be due to:

1. Improved health infrastructure in comparison to other states.
2. Proximity of slum clusters to both public and private healthcare facilities.
3. The proactive engagement of community health workers under government projects such as JSY and PMSMA.

The widespread implementation of essential ANC services, including weight and blood pressure monitoring (98.5%), IFA supplementation (93.7%), and tetanus toxoid vaccinations (88.6%), demonstrates the effective execution of maternal health programs in the study region.

Despite high overall usage rates, the qualitative insights regarding the challenges encountered by women highlight significant systemic and operational shortcomings. Problems such as "long wait times," "delays in testing," "lack of medication," "absence of testing facilities," and "poor conduct" from healthcare professionals illustrate that the quality, efficiency, and comprehensiveness of services continue to pose considerable obstacles to achieving ideal care. The repeated mention of "No MCP card" or improper documentation on these cards is a key observation, revealing a systemic flaw in continuity of care that severely compromises the overall efficacy of antenatal care (ANC). The MCP card serves as a critical resource for monitoring a woman's healthcare journey and facilitating smooth transitions across various healthcare points. Its absence or misuse can result in fragmented care even when women attend their appointments, potentially leading to overlooked opportunities for timely interventions and worse long-term health outcomes for both mothers and their children. This highlights an important difference between mere access to services and the actual quality of care received.

It's interesting to note that there was no significant correlation between income level and ANC utilization ($p = 0.0727$). This is in line with research by **Jain & Agrawal (2019)**, who hypothesized that behavioural and cultural factors might be more important in determining healthcare utilization in slum settings than economic status.

Additionally, there was no significant correlation between age and ANC utilization ($p = 0.852$), indicating that outreach initiatives are reaching women of all ages equally.

But some obstacles still exist. Due to factors like perceived lack of pregnancy complications, fear of medical procedures, or lack of family support, about 4.5% of women did not use ANC services. These results are in line with those of Awasthi et al. (2020), who pointed out that underutilization is frequently caused by a perception of low risk of pregnancy complications.

Comparison with Other Studies

Study	Awareness (%)	ANC Utilization (%)	Key Determinants
Present Study	97.1	95.5	Education significant; income not significant
NFHS-5 (Urban Slums)	~70	58	Education, income, and proximity to facilities
Gupta et al. (2019)	95	70	Education, ASHA role significant
Awasthi et al. (2020)	72	63	Literacy, financial constraints
Kumar et al. (2018, Mumbai)	80	60	Distance to facilities, cost barriers

When comparing these results with existing studies, the high levels of awareness and usage rates observed in Delhi's urban slums seem to surpass the national average for urban slums (58% for four ANC visits according to NFHS-5). This may be due to a strong presence of ASHA/ANM workers and effective implementation of local programs in Delhi, possibly resulting in greater health literacy than in other areas. The lack of significance of income and age as major obstacles to overall utilization differs from some research that highlights these as significant barriers, indicating that Delhi's specific government initiatives or particular demographics might be successfully addressing these issues. Nevertheless, the qualitative challenges noted, such as lengthy wait times, staff interactions, and insufficient supplies, reflect common barriers encountered in healthcare access and quality in under-resourced environments, emphasizing that certain operational challenges are widespread and not limited to specific locales..

The implications of this research are important. The results provide vital evidence that basic awareness and initial engagement with ANC services are largely accomplished in the urban slums of Delhi. This indicates a need to shift public health efforts from just initiating care to improving the *quality, comprehensiveness, and continuity* of care actively. The important role of education in fostering awareness suggests that ongoing investments in female education and targeted health literacy initiatives can result in significant advantages for empowering women to make informed health choices. Although the insignificant impact of income and age as barriers to overall utilization points to the effectiveness of existing government programs in alleviating these challenges, the qualitative findings highlight that systemic and operational issues remain, considerably affecting patient *experiences* and the *completeness* of care. This draws attention to areas that require immediate enhancements in programming. The ongoing

issues with MCP cards specifically emphasize the pressing need for improved record-keeping and patient-managed health records to guarantee smooth continuity and enhance care quality throughout pregnancy and afterward and beyond.

Public Health Impact: The high levels of awareness and usage indicate that ongoing government initiatives (JSY, PMSMA, RMNCH+A) are having a positive effect on slum communities in Delhi.

Role of Education: The significant link between education and awareness underscores the importance of **long-term investments in female literacy** to maintain advancements in maternal health.

Targeting Remaining Gaps: The small yet notable percentage of women who are either unaware of or do not utilize ANC services should be the focus of enhanced community-based efforts.

The study does have limitations. Its cross-sectional nature limits the ability to conclusively determine causal relationships between influencing factors and ANC results. There is a possibility of recall bias since some questions were related to past pregnancies within the last year, which could impact the accuracy of self-reported information. The reliance on self-reported data might also be influenced by social desirability bias, which could lead to an overreporting of awareness and usage. Additionally, the limited sample size for specific demographic groups, such as those with "Graduation and above" education and "High" income, may restrict the generalizability of certain findings within those categories. Finally, although the study gathered extensive data on different aspects of ANC, the statistical analyses primarily focused on overall utilization. A more detailed examination of ANC adequacy, including the timeliness of initiation and the completion of visits, could offer deeper insights into the quality of care provided.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study assessed the **awareness and utilization of antenatal care (ANC) services** among women residing in urban slums of Delhi. The findings revealed **encouragingly high levels of awareness (97.1%) and utilization (95.5%)** of ANC services, significantly exceeding the national estimates reported by NFHS-5 for urban slum populations. This study provides a comprehensive assessment of antenatal care (ANC) awareness and utilization among urban slum populations in Delhi. The findings indicate a remarkably high level of general awareness (97.12%) and utilization (95.52%) of ANC services, suggesting successful broad outreach efforts in these communities. Education emerged as a statistically significant factor influencing ANC awareness ($p=0.0076$), underscoring its crucial role in promoting health literacy. Conversely, neither family monthly income ($p=0.0727$) nor age ($p=0.852$) demonstrated a statistically significant association with overall ANC utilization, suggesting that existing government schemes

and community-level support may be effectively mitigating traditional financial and age-related barriers to access.

Despite these high rates of awareness and utilization, the study identified several critical operational and systemic challenges through qualitative data. These include persistent issues such as long queues, delays in tests, shortages of essential medicines (e.g., IFA tablets, calcium supplements), inadequate testing facilities, and significant problems with the consistent provision and accurate recording of Mother and Child Protection (MCP) cards. Furthermore, concerns regarding the "bad behaviour" or "misbehaviour" of healthcare providers were noted, indicating qualitative deficiencies in patient experience that can deter continued engagement with services. These challenges collectively compromise the quality and completeness of ANC, even when women are accessing services.

A statistically significant association between education and ANC awareness underscores the role of female literacy in promoting maternal health. However, no significant association was found between income levels and ANC utilization, suggesting that public health programs may have reduced financial barriers to some extent.

The widespread use of essential ANC services such as weight monitoring, IFA supplementation, and tetanus toxoid injections reflects the **positive impact of government programs** like the Janani Suraksha Yojana (JSY) and Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), as well as the proactive role of community health workers (ASHA/ANM).

Despite these encouraging findings, a small proportion (4.5%) of women still did not access ANC services, citing barriers such as lack of family support, perceived absence of complications, or cultural beliefs.

Overall, the study highlights that while **structural and financial barriers are gradually being addressed, behavioral and cultural factors remain critical challenges** that need to be tackled to achieve universal ANC coverage in slum populations.

Recommendations

Strengthening Health Education and Awareness

- **Targeted IEC (Information, Education, and Communication) campaigns** should be conducted focusing on illiterate and semi-literate women to emphasize the importance of completing four or more ANC visits.
- **Community meetings and women's self-help groups** should be involved to enhance peer-to-peer learning and influence family decision-making.

Enhancing the Role of Community Health Workers

- **ASHA and ANM workers** should be trained to provide **culturally sensitive counselling**, particularly targeting families that discourage ANC utilization due to traditional beliefs.

- **Home-based ANC counselling** should be strengthened to reach women who are reluctant to visit health facilities.

Improving Accessibility and Service Quality

- Mobile health units and **special ANC outreach camps** should be organized in densely populated slum clusters to reach underserved women.
- Efforts should be made to ensure **timely availability of essential ANC services** (IFA tablets, TT injections, ultrasound) at primary health centers.

Focus on Education and Empowerment

- Long-term strategies to improve **female literacy** should be integrated with maternal health programs, as education is a proven determinant of ANC awareness.
- Community-based vocational training and income-generation activities for women could indirectly empower them to make independent health decisions.

Strengthen Targeted Health Literacy Programs:

While general awareness is high, efforts should focus on deepening understanding of ANC's purpose, recommended schedules, and specific benefits. Tailored health education programs are particularly needed for women with lower educational attainment and the "High school (11-12)" group, where an anomaly in awareness was observed. These programs should emphasize the importance of comprehensive ANC, the recommended schedule of visits, and the significance of specific services like IFA tablets, ultrasound, and tetanus injections.

Enhance Operational Efficiency and Infrastructure:

To address issues of long queues and delays in tests, health facilities should increase staff, optimize patient flow, and implement efficient appointment systems. Improving diagnostic infrastructure is crucial, with a specific focus on ensuring that ultrasound (USG) tests are readily available at primary care facilities to reduce the need for multiple visits or external referrals.

Ensure Consistent Supply of Essential Resources:

Implement robust supply chain management systems to guarantee the continuous availability of essential medicines, including IFA tablets and calcium supplements, and other necessary medical supplies at all ANC centers. This will prevent stock-outs and ensure women receive the complete package of care.

Improve Mother and Child Protection (MCP) Card Management:

It is imperative to mandate and rigorously monitor the consistent provision of complete and accurately recorded Mother and Child Protection (MCP) cards to every pregnant

woman. Exploring and implementing digital solutions for health record-keeping could further ensure seamless continuity of care and effective health information management across different healthcare touchpoints, mitigating the issues of lost cards or incomplete records.

Address Provider Behavior and Patient Experience:

Implement mandatory sensitivity training and continuous professional development programs for all healthcare providers, including Doctors, Nurses/ANMs, and ASHA workers. These programs should foster respectful, empathetic, and patient-centered care. Furthermore, establishing clear and accessible grievance redressal mechanisms for patients to report instances of "bad behaviour" is essential to build trust and encourage continued service utilization.

Sustain and Strengthen Community-Level Outreach:

Given their demonstrated effectiveness in promoting awareness and utilization within urban slum communities, the crucial role of ASHA/ANM workers must be sustained and strengthened. This includes providing them with adequate training, resources, and ongoing supervision to maximize their impact.

Targeted Interventions for Specific Subgroups:

While income was not an overall barrier to utilization, further qualitative studies should be conducted to investigate specific, non-financial barriers faced by the "Lower-Mid income" group, as they represent the largest number of non-utilizers. Tailored interventions should then be developed to address the unique challenges of this vulnerable segment.

APPENDIX

INSTRUMENTATION

Informed consent

Title of the Study:

Assessment of Awareness and Utilization of Antenatal Care Services among Urban Slum Population in Delhi

Investigator Details:

Name:

Designation:

Institution:

Contact No.:

Participant Information Sheet

Dear Participant,

You are being invited to participate in a research study. Please read the following information carefully. Feel free to ask questions before deciding whether to participate.

Purpose of the Study:

This study aims to understand the use and quality of antenatal care services received by women during pregnancy in your area. The information will help improve maternal and child health services.

Procedures:

If you agree, interviewer will ask you questions about your pregnancy history, antenatal check-ups, and services you received. The interview will take approximately 20–30 minutes.

Voluntary Participation:

Your participation is completely voluntary. You can choose to withdraw from the interview at any point without giving any reason, and without any consequences to you.

Confidentiality:

All the information you provide will be kept strictly confidential. Your identity will not be revealed in any report or publication resulting from this study.

Risks and Benefits:

There are no physical risks. Some questions may feel personal, but you may skip any question you're uncomfortable with. Although you may not benefit directly, your participation will contribute to improving public health services.

Compensation:

You will not be paid for participating in this study, but your contribution is greatly appreciated.

Consent Statement:

"I have read/heard the information about the study. I had the opportunity to ask questions, and all my queries have been answered. I understand that participation is voluntary and I can withdraw at any time. I give my consent to participate in this survey."

Signature of Interviewer:

I confirm that I have explained the study to the participant in a language they understand, and they have voluntarily agreed to participate.

Name:

Signature:

Date: _____

सूचित सहमति

अध्ययन का शीर्षक:

दिल्ली में शहरी स्लम आबादी के बीच प्रसवपूर्व देखभाल सेवाओं की जागरूकता और उपयोग का मूल्यांकन

अन्वेषक विवरण:

नाम- _____

पदनाम: _____

संस्थान: _____

संपर्क नं. : _____

प्रतिभागी सूचना पत्रक

प्रिय प्रतिभागी,
आपको एक शोध अध्ययन में भाग लेने के लिए आमंत्रित किया जा रहा है। कृपया निम्नलिखित जानकारी को ध्यान से पढ़ें। भाग लेने का निर्णय लेने से पहले सवाल पूछने के लिए स्वतंत्र महसूस करें।

अध्ययन का उद्देश्य:

इस अध्ययन का उद्देश्य आपके क्षेत्र में गर्भावस्था के दौरान महिलाओं द्वारा प्राप्त प्रसवपूर्व देखभाल सेवाओं के उपयोग और गुणवत्ता को समझना है। यह जानकारी मातृ और बाल स्वास्थ्य सेवाओं को बेहतर बनाने में मदद करेगी।

प्रक्रियाएं:

यदि आप सहमत हैं, तो साक्षात्कारकर्ता आपसे आपकी गर्भावस्था के इतिहास, प्रसवपूर्व जांच और आपको प्राप्त सेवाओं के बारे में सवाल पूछेगा। साक्षात्कार में लगभग 20-30 मिनट लगेंगे।

स्वैच्छिक भागीदारी:

आपकी भागीदारी पूरी तरह से स्वैच्छिक है। आप बिना कोई कारण बताए और बिना किसी परिणाम के किसी भी समय साक्षात्कार से हटने का विकल्प चुन सकते हैं।

गोपनीयता:

आपके द्वारा दी हुई सभी जानकारी गुप्त रखी जाएगी। इस अध्ययन के परिणामस्वरूप किसी भी रिपोर्ट या प्रकाशन में आपकी पहचान का खुलासा नहीं किया जाएगा।

जोखिम और लाभ:

इसमें कोई शारीरिक जोखिम नहीं है। कुछ प्रश्न व्यक्तिगत लग सकते हैं, लेकिन आप किसी भी प्रश्न को छोड़ सकते हैं जिससे आप असहज महसूस करते हैं। हालाँकि आपको प्रत्यक्ष रूप से लाभ नहीं हो सकता है, लेकिन आपकी भागीदारी सार्वजनिक स्वास्थ्य सेवाओं में सुधार करने में योगदान देगी।

क्षतिपूर्ति:

इस अध्ययन में भाग लेने के लिए आपको भुगतान नहीं किया जाएगा, लेकिन आपके योगदान की बहुत सराहना की जाती है।

सहमति वक्तव्य:

"मैंने अध्ययन के बारे में जानकारी पढ़ी/सुनी है। मुझे सवाल पूछने का मौका मिला और मेरे सभी सवालों के जवाब दिए गए हैं। मैं समझता हूँ कि भागीदारी स्वैच्छिक है और मैं किसी भी समय

वापस ले सकता हूँ। मैं इस सर्वेक्षण में भाग लेने के लिए अपनी सहमति देता हूँ।

साक्षात्कारकर्ता के हस्ताक्षर:

मैं पुष्टि करता हूँ कि मैंने प्रतिभागी को उस भाषा में अध्ययन के बारे में समझाया है जिसे वे समझते हैं, और वे स्वेच्छा से भाग लेने के लिए सहमत हुए हैं।

नाम- _____

हस्ताक्षर: _____

तिथि: _____

QUESTIONNAIRE

Study Title: Assessment of Awareness and Utilization of Antenatal Care Services among Urban Slum Population in Delhi

Date of Interview: _____

Interviewer Name: _____

Ward/Area Name: _____

Household Code: _____

1. Introduction

This toolkit is designed for data collection in the research study titled 'Assessment of Awareness and Utilization of Antenatal Care Services among Urban Slum Population in Delhi'. The questionnaire is intended for women who are currently pregnant or have delivered within the last 12 months.

2. Questionnaire

Section A: Socio-demographic Profile

1. Name (optional): _____

2. Age: _____ years

3. Marital Status:

☐ Married ☐ Unmarried ☐ Widow ☐ Divorced

4. Education Level:

☐ No formal education ☐ Primary ☐ Secondary ☐ Higher

5. Occupation:

- ☐ Housewife ☐ Daily wage ☐ Employed ☐ Other: _____
6. Family Monthly Income: ₹ _____
7. Type of Family:
☐ Nuclear ☐ Joint
8. Number of Children: _____

Section B: Pregnancy History

7. Have you ever been pregnant?
☐ Yes ☐ No
8. How many times have you been pregnant? _____
9. What is the outcome of your most recent pregnancy?
☐ Live birth ☐ Stillbirth ☐ Miscarriage ☐ Abortion

Section C: Awareness of Antenatal Care Services

9. Have you heard about antenatal care (ANC)?
☐ Yes ☐ No
10. What do you think is the purpose of ANC? _____
11. From where did you hear about ANC?
☐ ASHA/ANM ☐ TV/Radio ☐ Hospital ☐ Family/Friends ☐ Others: _____
12. Do you know how many ANC visits are recommended during pregnancy?
☐ Yes ☐ No. If yes, how many? _____
13. Are you aware of any government schemes for pregnant women?
☐ Yes ☐ No. If yes, mention: _____

Section D: Utilization of ANC Services

14. Did you register your pregnancy at a health facility?
☐ Yes ☐ No
15. Did you receive antenatal care (ANC) for your last pregnancy?
☐ Yes ☐ No
16. In which month of pregnancy did you first receive ANC?
 _____ month
17. How many ANC visits have you completed? _____

18. Who provided the ANC? (tick all that apply)

- ☐ Doctor
☐ ANM/Nurse
☐ ASHA worker
☐ Dai/traditional birth attendant
☐ Other: _____

19. Where did you go for ANC? (tick all that apply)

- ☐ Government hospital
☐ Primary Health Centre (PHC)
☐ Community Health Centre (CHC)
☐ Private hospital/clinic
☐ Home visit by ASHA/ANM
☐ Other (please specify): _____

20. What services did you receive during ANC visits?

- ☐ Weight Check ☐ Blood Test ☐ Ultrasound ☐ IFA Tablets ☐ Tetanus Injection

21. For how many days did you take IFA tablets/syrup?

- ☐ <30 days ☐ 30–59 days ☐ 60–89 days ☐ 90+ days

22. Did you receive a Mother and Child Protection (MCP) card?

- ☐ Yes ☐ No

23. Was health information recorded in your MCP card?

- ☐ Yes ☐ No

24. Did you face any challenges in accessing ANC services?

- ☐ Yes ☐ No. If yes, specify: _____

25. What mode of transport did you use to reach the health facility?

- ☐ Walking ☐ Bus ☐ Auto ☐ Others: _____

26. Were you accompanied by anyone?

- ☐ Yes ☐ No. If yes, who? _____

Section E: Suggestions and Feedback

27. What can be improved in the ANC services in your area?

28. Any other comments or suggestions:

Thank you for your time and cooperation.

(Signature of Interviewer) _____

प्रश्नवाचक

अध्ययन का शीर्षक: दिल्ली में शहरी स्लम आबादी के बीच प्रसवपूर्व देखभाल सेवाओं की जागरूकता और उपयोग का मूल्यांकन

साक्षात्कार की तिथि: _____

साक्षात्कारकर्ता का नाम: _____

वार्ड/क्षेत्र का नाम: _____

घरेलू कोड: _____

1. परिचय

इस टूलकिट को 'दिल्ली में शहरी स्लम आबादी के बीच जागरूकता का आकलन और प्रसवपूर्व देखभाल सेवाओं का उपयोग' शीर्षक वाले शोध अध्ययन में डेटा संग्रह के लिए डिज़ाइन किया गया है। प्रश्नावली उन महिलाओं के लिए है जो वर्तमान में गर्भवती हैं या पिछले 12 महीनों के भीतर पैदा हुई हैं।

2. प्रश्नावली

खंड A: सामाजिक-जनसांख्यिकीय प्रोफाइल

1. नाम (वैकल्पिक) _____

2. आयु: _____ वर्ष

3. वैवाहिक स्थिति:

विवाहित ☐ अविवाहित ☐ विधवा ☐ तलाकशुदा ☐

4. शिक्षा का स्तर:

कोई औपचारिक शिक्षा नहीं ☐ प्राथमिक ☐ माध्यमिक ☐ उच्चतर ☐

5. पेशा:

गृहणी ☐ दैनिक ☐ वेतन ☐ नियोजित ☐ अन्य _____

6. पारिवारिक मासिक आय: ₹ _____

7. परिवार का प्रकार:

परमाणु ☐ संयुक्त ☐

8. बच्चों की संख्या: _ _ _ _

खंड B: गर्भावस्था का इतिहास

7. क्या आप कभी गर्भवती हुई हैं?

हाँ ☐ नहीं ☐

8. आप कितनी बार गर्भवती हुई हैं? _ _ _ _ _

9. आपकी सबसे हाल की गर्भावस्था का परिणाम क्या है?

जीवित ☐ जन्म ☐ मृत ☐ जन्म ☐ गर्भपात ☐

खंड C: प्रसवपूर्व देखभाल सेवाओं के बारे में जागरूकता

9. क्या आपने प्रसवपूर्व देखभाल (एएनसी) के बारे में सुना है?

हाँ ☐ नहीं ☐

10. आपको क्या लगता है कि एएनसी का उद्देश्य क्या है? _ _ _ _ _

11. आपने एएनसी के बारे में कहाँ से सुना?

आशा/एएनएम ☐ टीवी/रेडियो ☐ अस्पताल ☐ परिवार/दोस्त ☐ अन्य: _ _ _ _ _

12. क्या आप जानते हैं कि गर्भावस्था के दौरान कितने एएनसी दौर की सिफारिश की जाती है?

हाँ ☐ नहीं ☐ यदि हाँ, तो कितने? _ _ _ _ _

13. क्या आप गर्भवती महिलाओं के लिए किसी सरकारी योजना के बारे में जानते हैं?

हाँ ☐ नहीं ☐ यदि हाँ, तो उल्लेख करें: _ _ _ _ _

खंड D: एएनसी सेवाओं का उपयोग

14. क्या आपने किसी स्वास्थ्य केंद्र में अपनी गर्भावस्था का पंजीकरण कराया था?

हाँ ☐ नहीं ☐

15. क्या आपको अपनी पिछली गर्भावस्था के लिए प्रसवपूर्व देखभाल (ए. एन. सी.) मिली थी?

हाँ ☐ नहीं ☐

16. गर्भावस्था के किस महीने में आपको पहली बार ए. एन. सी. हुई थी?

_ _ _ _ _ महीना

17. आपने एएनसी के कितने दौरे पूरे किए हैं? _ _ _ _ _

18. ए. एन. सी. किसने प्रदान की? (उन सभी पर टिक करें जो लागू होते हैं)

डॉक्टर ☐

एएनएम/नर्स ☐

आशा कार्यकर्ता ☐

दाई/पारंपरिक जन्म परिचारक ☐

अन्य: _____

19. आप एएनसी के लिए कहाँ गए थे? (उन सभी पर टिक करें जो लागू होते हैं)

सरकारी अस्पताल ☐

प्राथमिक स्वास्थ्य केंद्र (पीएचसी) ☐

सामुदायिक स्वास्थ्य केंद्र (सीएचसी) ☐

निजी अस्पताल/क्लिनिक ☐

आशा/ए. एन. एम. द्वारा घर का दौरा ☐

अन्य (कृपया निर्दिष्ट करें) _____

20. एएनसी की यात्राओं के दौरान आपको कौन सी सेवाएं मिलीं?

वजन जाँच ☐ रक्त परीक्षण ☐ अल्ट्रासाउंड ☐ IFA टैबलेट ☐ टेटनस इंजेक्शन ☐

21. आपने कितने दिनों तक आई. एफ. ए. की गोलियां/सिरप ली?

30 दिन ☐ 30-59 दिन ☐ 60-89 दिन ☐ 90 + दिन ☐

22. क्या आपको माता और बाल संरक्षण (एम. सी. पी.) कार्ड मिला है?

हाँ ☐ नहीं ☐

23. क्या आपके एमसीपी कार्ड में स्वास्थ्य संबंधी जानकारी दर्ज थी?

हाँ ☐ नहीं ☐

24. क्या आपको एएनसी सेवाओं तक पहुँचने में किसी चुनौती का सामना करना पड़ा?

हाँ ☐ नहीं ☐ यदि हाँ, तो निर्दिष्ट करें: _____

25. स्वास्थ्य सुविधा तक पहुँचने के लिए आपने परिवहन के किस साधन का उपयोग किया?

पैदल ☐ बस ☐ ऑटो ☐ अन्य: _____

26. क्या आपके साथ कोई था?

हाँ ☐ नहीं ☐ यदि हाँ, तो कौन? _____

खंड E: सुझाव और प्रतिक्रिया

27. आपके क्षेत्र में एएनसी सेवाओं में क्या सुधार किया जा सकता है? _____

—

28. कोई अन्य सुझाव हो तो अवश्य दें: _____

आपके समय और सहयोग के लिए धन्यवाद।

(साक्षात्कारकर्ता के हस्ताक्षर)_____

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Manish Prajapat D

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