

## Experiences of urban slum dwelling women with maternal and child health services: A study of urban slums of Guwahati city

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### ABSTRACT

**Background:** Health is always an important aspect of human life and to achieve success in all spheres of life a person must stay healthy. Maternal health problems can be minimized only through more access to health care services among pregnant women. Maternal mortality is especially prevalent in urban areas due to rapid urbanization and the growing population in slum regions. Women and children face greater challenges, especially when it comes to maternal health. **Objectives:** The study aims to give an in-depth analysis of current maternal health status. Additionally, to explore the maternal health care awareness and practices of women residing in two slum areas of Guwahati City, Assam, Hafeez Nagar and Gandhi Basti. **Method and Materials:** This descriptive study examined maternal health challenges and service delivery in two slum areas of Guwahati, Assam: Hafeez Nagar and Gandhi Basti. The study involved in-depth interviews with 30 pregnant women aged 21–40, alongside 10 health professionals and frontline workers aged 25–45 who had served in these areas for at least one year. The interviews were audio-recorded, transcribed, and analysed thematically to capture women's experiences and perceptions. **Result:** Anaemia is a common problem among women and poverty is a major cause of deaths of many women living in urban slums. The lack of awareness is a crucial reason for the high rate of maternal and child mortality in slum areas. **Conclusion:** There is still a gap in the healthcare system, particularly in maternal healthcare. This is primarily due to a lack of information in the community, which must be addressed. It also proposes improving maternal health awareness among mothers regarding government programs to improve maternal health status.


**Keywords:** Development, health, maternal mortality, slum, women

### INTRODUCTION

#### Women's Health and Development

Maintaining good health is crucial for success in all aspects of life, and it has always been a fundamental aspect of human life. Maternal health is a major public health issue that requires urgent attention, and expanding access to healthcare services for pregnant women is vital to reducing India's maternal mortality rate. In India, most women do not want to go to health centres seeking medical services. The factors that play a pivotal role are the cost of medical treatments and the lack of female health professionals.<sup>[1]</sup> Similarly, in another study, high-cost medical treatment and ill-treatment by healthcare providers in slum

communities act as a hindrance for urban slum women in seeking maternal healthcare services.<sup>[2]</sup> Pregnant women living in urban slums prefer giving birth at home instead of hospitals. This can be attributed to the high cost of treatment, long waiting hours, and unfriendly hospital staff, which make it difficult for slum-dwellers to access maternal healthcare services.<sup>[3]</sup> Moreover, despite the government programs on maternal health care, India is still lagging, with most women preferring home deliveries. Further the study emphasised on training the doctors on Emergency obstetric care (EmOC) to manage complications related to delivery.<sup>[4]</sup> National schemes such as Janani Suraksha Yojana (JSY) provides financial incentives to encourage delivery at health

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facility but many are yet to receive the benefit. Women prefer home deliveries over institutional deliveries due to out-of-pocket costs, and concern about the treatment they get from the hospital staff because their social status act as a major drawback among the urban slum population.<sup>[5]</sup> Maternal mortality is a common problem in urban areas, caused by the fast pace of urbanization and the increasing population in slums. Poor living conditions, lack of fresh air, poor sanitation, and lack of hygiene are factors making slum residents susceptible to diseases. Women and children are at a higher risk in slum areas, particularly in terms of maternal health. Unfortunately, due to a lack of knowledge and awareness, mothers living in slums often abstain from taking advantage of maternal healthcare facilities. Taking care of both physical and mental health is crucial for overall well-being. Prioritizing personal health can improve focus and performance in the workplace. Throughout history, women have faced discrimination in various fields, as a result, it is crucial to provide them with specialized care to enhance their health and eliminate gender inequalities. It is imperative to note that women; by prioritizing their health, individuals can lead more active, joyful, and productive lives.<sup>[6]</sup> Furthermore the study highlighted on working status of urban slum women there is advantage of delayed marriage, birth spacing between the two Children, while drawback is due to lack of awareness there is an underutilization of antenatal health care healthcare services.<sup>[7]</sup> Education plays a significant role in the overall development of women. Women's literacy is related to the status of women in society, their decision-making power, time of conceiving a child and increases the chances of better health care practices.<sup>[8]</sup> Educated women can make significant social contributions, beyond their contributions to their families, and towards the growth of society. Education plays a crucial role in reducing inequality within families and society. Public health also emphasizes providing reproductive and children's health care. Expecting mothers require proper care and support throughout their pregnancy to ensure a healthy and successful delivery.<sup>[9]</sup> The study also suggested that improving the education levels and socioeconomic status of both husbands and wives in the slum region can increase access to maternal health services.<sup>[10]</sup> The Indian constitution, guarantees equal rights

for women and equal treatment for all citizens without discrimination. This concept of gender equality is enshrined in fundamental rights and governmental policy directives.<sup>[11]</sup> Women who live in patrilocal extended families have better health than those who live in nuclear households in a study using the National Family Health Survey. According to the study, women in extended families use more antenatal care and safe delivery practices, and they eat better meals during their pregnancy than women in nuclear households.<sup>[12]</sup> Workplace exposure to toxic metals, pesticides, strong drugs, excessive workloads, and irregular schedules can have a significant impact on women's reproductive health. Other women's health constraints, such as early foetal loss, menstrual function, menopause, and pregnancy-associated hypertension, require more meticulous research.<sup>[13]</sup> Healthcare practice utilization among two urban slum women in Chhattisgarh is based on their awareness, availability, accessibility, and level of satisfaction with the role of healthcare provider.<sup>[14]</sup> National Health Mission (NHM) has helped to significantly reduce maternal deaths. In the year 2022-2023, there were only 448 cases of maternal death compared to 680 in the previous year, marking a decrease of 232 deaths. Additionally, the child mortality rate has improved, with 5805 deaths in 2022-2023 compared to 6721 in 2021-2022, resulting in a reduction of 916 deaths.<sup>[15]</sup> Still India remains extremely high in maternal and child mortality rates. Assam recorded the highest maternal mortality rate in the county despite government initiatives. Unfortunately, Assam is still struggling with high maternal death rates, which is attributed to poor performance. A smaller number of deliveries took place at the health facility and most deliveries were assisted by traditional birth attendants.<sup>[16]</sup> To address this issue, a research study was conducted in collaboration with healthcare professionals and mothers living in two slum areas in Guwahati City, Assam Hafeez Nagar, and Gandhi Basti in Guwahati City. To gain a better understanding of the situation, researchers conducted detailed interviews with pregnant women, children below the age of five, and healthcare staff.

### **Women in Indian Slums: A Contextual Picture**

Women in urban slums are the marginalised group, uneducated and they are not engaged in

any formal employment instead they are only engaged in child rearing and in household activities.<sup>[17]</sup> Those who working as sweeper or cleaning of roads, drainage they must stand and bend for prolonged hours and while cleaning public toilets the stink of toilet and dustbin directly affects their health. The urban slum dwelling they suffer more complications because of constant sickness, unfavourable working condition, unhygienic food as a result it affects their reproductive and child health.<sup>[18]</sup>

Table 1: Demography of urban slum of Guwahati, Assam, and India

Guwahati		Assam	India
Total Slum Population	25739	197266	65,494,604
Male population	13,356	101,424	33,968,203
Female population	12,383	95,842	31,526,401
Children 0-6 years	2873	22,229	8,082,743

Source: Census of 2011.<sup>[19]</sup>

## METHOD AND MATERIALS

This descriptive study was conducted in two slum areas of Guwahati City, Assam: Hafeez Nagar and Gandhi Basti. The participants included health professionals, frontline workers, and pregnant women with children under five years of age. A total of 30 pregnant women aged 21–40 years were recruited from the two slums. Additionally, 10 health professionals and frontline workers aged 25–45 years, who had been working in these slums for at least one year, were selected from nearby primary health centres (PHCs).

Data were collected through in-depth interviews using a structured interview guide. Participants were informed about the study's purpose, and oral consent was obtained prior to their participation. Interviews were audio-recorded and continued until data saturation was achieved. The audio recordings were transcribed verbatim.

A narrative approach was employed to capture detailed responses, and the narratives provided by participants were subsequently analysed thematically.

## RESULTS

### Reproductive Health and Plight of Urban Slum Women

This study categorizes women into three groups based on their reproductive age: pregnant women in need of antenatal care, and those with neonatal children. All women fall between the ages of 20-40 years and come from disadvantaged backgrounds, such as those with low incomes, living in urban slums, or working in the informal sector.

#### Awareness of Maternal Health Care

Urban slum-dwelling women still face challenges in seeking maternal health care services, long distances to health centres, long waiting hours, household work, and lack of education which were the barriers related to lack of access to regular maternal care services. They had limited knowledge of antenatal (ANC) and postnatal (PNC) care services. In this regard, study participants have highlighted,

*"I don't know much about maternal health care services and access to ANC and PNC visits. This is my third pregnancy hardly I have visited health centres for health check-ups, and even my family members do not consider it necessary to seek health care services"* (Participant-1, Hafeez Nagar).

*"I am not aware of ANC and PNC visits but have heard from ASHA workers when they visit our community, they informed us to visit health centre regularly during pregnancy and after childbirth".* (Participant-4, Gandhi Basti).

*"ASHAs and ANM during their home visit distribute iron tablets. They also advise us to visit the primary health centre (PHC) for regular check-ups. However, visiting the health centre has become challenging for me as my husband is a daily wage labourer, and after he leaves for work, I have to take care of household chores and my children. However, there is no one from our family to accompany me to the health centre".* (Participants -2 and 3, Gandhi Basti).

Moreover, some of the participants stated despite facing complications during pregnancy could not visit health centres regularly,

*"I had complications during pregnancy, I lost my baby and I think the major reason for this*

*was due to lack of education I was unaware of the pregnancy-related complications, which was a major reason for miscarriages". (Participant 5 of Hafeez Nagar).*

Many slum-dwelling women's access to healthcare services is poor due to lack of education and other socioeconomic determinants were the major drawbacks in low access to maternal healthcare services.

### ***Perception of Institutional Delivery***

Skilled birth attendants play a pivotal role in reducing maternal death during pregnancy, delivery, and after the delivery of a child. Skilled birth care practices increase institutional delivery, regardless of these many women prefer to give delivery at home because of financial constraints and lack of transportation they hardly prefer to have institutional delivery. However, the participants have reported,

*"I find home delivery to be more convenient for me rather than going to hospitals. Several times I have accompanied my friends to health facilities who were pregnant and in the ANC phase, but unfortunately, the healthcare providers did not always treat us well. Their behaviour is rude at times, that is why I hardly visited health centres during my ANC and PNC phase." (Participant- 6, Hafeez Nagar).*

Moreover,

*"ASHAs during home visits advised us to visit the health centre regularly and suggested delivering our child at the hospital. I visited the health centre during my first delivery but waited long hours for my check-up. Moreover, due to high-cost delivery charges, I prefer home deliveries over institutional deliveries". (Participants -8, Gandhi Basti).*

*"I prefer institutional delivery because it is better than delivering a child at home. In the hospital doctors and nurses were there to carry out the delivery process. Whereas, inexperienced birth attendants performed home deliveries with no safety precautions" (Participant - 7, Gandhi Basti).*

Furthermore,

*"I went for three postnatal checkups and ensured my baby received all the necessary immunizations. However, I could not complete the immunization process of my child because it was difficult for me to visit health centres as I have other household work and, I must go*

*outside for work" (Participant- 11, Hafeez Nagar).*

### ***Awareness of Tetanus Toxoid/ Iron Folic Acid/Janani Suraksha Yojana***

Slum-dwelling women of both area Hafeez Nagar and Gandhi Basti slums know about the importance of TT injection and iron folic acid. Even many of them have taken TT injections and iron folic acid tablets but some respondents were unaware of the exact number of TT injections and iron folic acid tablets that should be taken during pregnancy. It has been observed that anaemia is a significant factor in the high maternal mortality rate, caused by excessive blood loss after delivery and stress during pregnancy. To combat this, the National Health Mission (NHM) has implemented various measures to decrease the mortality rate. Slum-dwelling women had awareness of the JSY scheme, if anyone is registered under the JSY scheme they get cash assistance, especially the mothers who give birth at health facilities especially focusing on rural poor women to reduce the maternal and newborn death rate. Several women reported they were aware of JSY schemes,

*"I came to know about the JSY scheme from ASHA Didi, who informed me about the financial benefit received under the JSY scheme in institutional delivery. However, many women in my area could not avail benefits under these schemes because of documentation problems, they could not submit their proper identity proof, and many opted out of the JSY benefit as the cost of hospital deliveries was too high for them so mostly, they preferred for home deliveries" (Participants - 13, Hafeez Nagar).*

*"My name was registered under JSY schemes, unfortunately, I could not access cash benefits under JSY and opted for home delivery, because of the inaccessibility, and uncooperative attitude of the healthcare providers".*

From the study, it is evident that financial incentives provided by the government encourage them to opt for institutional and safe delivery but certain barriers such as lack of producing relevant documents and unawareness of benefits under the JSY schemes slum slum-dwelling women unable to access incentives under JSY scheme.

### ***Service Delivery of Health Professionals in Maternal and Child Health Care***

Healthcare providers provide maternal healthcare services to slum-dwelling women through various healthcare activities on antenatal and postnatal care services. They organise awareness programs in the community and visit door to door to motivate community people to visit health centres for their regular check-ups, especially slum-dwelling women in urban slums who are the most vulnerable group. Maternal mortality is a significant issue in Assam and the rest of India. The districts of Cachar, Hailakandi, Karimganj, Kokrajhar, Golaghat, and Nagaon in Assam have the highest maternal mortality rates. Most of the health professionals highlighted,

*“Anaemia is a prevalent factor found among the slum dwelling women, and most of them were particularly affected by iron deficiency due to insufficient diet. Poverty is also a considerable factor in the deaths of many women in rural areas and urban slums, as well as the unhygienic conditions of food preparation and consumption (Coordinators of the National Health Mission (NHM), Guwahati, Assam)*

Healthcare providers face challenges despite providing door-to-door services and encouraging slum-dwelling women to access maternal healthcare services they are not visiting health centres regularly. Moreover, due to migration among these slum communities, it becomes difficult to keep track of the health records of pregnant women.

*“Among the slum women despite complications faced by them during pregnancy, there is a lack of ANC and PNC care services accessed by them” (ANM, at GMCH hospital, Guwahati).*

Maternal deaths are mainly caused by anaemia, hypertension, excessive bleeding during pregnancy, infection, and Disseminated Intravascular Coagulation (DIC), especially in slum areas. DIC is a hazardous condition where proteins that control blood clotting become overactive. When someone gets injured, blood clotting proteins move to the injury site to aid in stopping the bleeding. These proteins become unusually active throughout the body in persons who have DIC. As a result of inflammation, infection, or cancer, small blood clots grow in the blood vessels, and some of these clots might block the vessel, cutting off blood supply to organs such as the liver, brain, or kidney. A lack of blood flow can harm the organ and cause it to malfunction. Women living in slum areas

face a lot of vulnerabilities, especially during pregnancy. Additionally, strenuous physical labour can sometimes lead to maternal and child mortality. Other factors like family violence and a lack of awareness about maternal healthcare facilities further contribute to their vulnerability towards disseminated intravascular coagulation. The leading causes of infant mortality are premature birth, hypertension, infection, and so on,

A child health care specialist of Marwari Maternity Hospital stated,

*“I have observed many infants die within one month of birth due to cardiovascular issues. There is a lack of understanding of babies’ health in urban slums, which leads to a high infant mortality rate”.*

*“Maternal and child health has improved since the implementation of the National Health Mission (NHM), but much more work needs to be done, particularly in raising awareness among the vulnerable. There is also a misperception on immunizations found among the slum dwelling mothers due to various socio-economic factors” (Gynaecologist of Marwari Maternity Hospital, Guwahati).*

Moreover, health coordinators at the North Eastern Diocesan Social Service Society (NEDSSS) have reported,

*“The slum areas have a high rate of child mortality, mainly due to the lack of awareness among the residents. Despite the efforts of the National Health Mission (NHM) to promote institutional deliveries and reduce maternal and child mortality rates, home deliveries are still more common among urban slum-dwelling women.”*

Furthermore, an ASHA worker of Gandhi Basti slum revealed,

*“I along with an Auxiliary Nursing Midwife (ANM) and Health and Wellness Officer (H&WO) provide services to pregnant women. We distribute Iron Folic tablets, organize Vaccination for expectant mothers, and encourage pregnant mothers to visit hospitals for institutional deliveries”*

*“I also visit slums to raise awareness about ANC and PNC care services among pregnant women. However, I have noticed that they seem reluctant to access maternal healthcare services. This may be due to illiteracy and lack*

*of support from their families, resulting in a lack of awareness about maternal health care services". (ASHA, Hafeez Nagar).*

It is important to highlight the significant role of healthcare providers and frontline workers in bringing about rapid and transformative changes in the public health sector, leading to a paradigm shift. Especially in rural areas and slums, frontline workers play a crucial role as they have direct contact with the community people. They serve as the link between healthcare services and the community.

## DISCUSSION

The focus on maternal health in India has been a priority, yet maternal mortality remains a critical issue. The causes of maternal deaths are generally categorized into two main types: direct and indirect. Direct maternal deaths stem from complications during pregnancy, childbirth, or the postpartum period, whereas indirect maternal deaths result from pre-existing health conditions exacerbated by pregnancy. In examining maternal health within urban slums, particularly among women in Guwahati City, Assam, this study highlights considerable barriers to adequate antenatal care (ANC) and postnatal care (PNC) services. Key obstacles include limited healthcare access, preference for home deliveries, lack of awareness, and socioeconomic barriers, all of which contribute to elevated risks for both mothers and infants.

Several studies support the finding that distance from healthcare facilities, financial limitations, long waiting hours, and low levels of education among slum residents significantly hinder access to maternal healthcare. A study by Bhandari and Srinivasan.<sup>[20]</sup> indicates that long waiting times at health facilities discourage women from seeking care regularly. Furthermore, unprofessionalism and lack of commitment among healthcare practitioners contribute to a lack of trust in public health services.<sup>[21]</sup> Additionally, financial constraints and low levels of education among women serve as barriers to accessing maternal healthcare services.<sup>[22]</sup> A study by Bhandari et al.

revealed that transportation costs and facility distance are critical barriers to institutional deliveries in rural and underserved areas, leading to a reliance on home deliveries despite the availability of government schemes like the Janani Suraksha Yojana (JSY).<sup>[20]</sup> This preference for home deliveries, despite the known risks, further underscores the pressing need for accessible maternal healthcare within such communities.

The current study also observed that health workers, including Accredited Social Health Activists (ASHA) and auxiliary nursing midwives (ANMs), play vital roles in promoting maternal healthcare in these slums. These frontline workers conduct door-to-door services, offer ANC and PNC guidance, and encourage institutional deliveries. Similar findings have been reported in other studies, which show that ASHA workers and ANMs significantly increase vaccination rates, distribute medications, and promote safe childbirth practices in underserved areas.<sup>[21]</sup> However, these efforts are often met with reluctance from the community due to illiteracy, traditional beliefs, and lack of familial support. Such barriers highlight the need for targeted educational programs and culturally sensitive approaches to overcome resistance to institutional healthcare.

This study also identified common health complications contributing to maternal mortality in slums, such as anemia, hypertension, infection, and Disseminated Intravascular Coagulation (DIC). According to the WHO, these conditions are among the leading causes of maternal deaths globally and can be effectively managed through timely ANC and PNC interventions.<sup>[22]</sup> However, awareness about these risks and access to preventive care remain limited in urban slum populations, exacerbating the health challenges faced by these women.

Despite the increase in health infrastructure since the launch of the National Health Mission (NHM) in 2005, maternal mortality

remains a significant concern. Efforts by organizations like UNICEF and WHO aim to improve maternal health, yet a knowledge gap persists. Research indicates that educational interventions are critical in preventing disease and reducing mortality rates. For instance, a review highlighted that community health workers effectively delivered health promotion, education, and preventive interventions for maternal healthcare services in rural India.<sup>[23]</sup> To further reduce maternal and infant mortality, the government needs to implement more targeted policies that address these knowledge gaps, particularly within vulnerable populations.

The study's findings underscore the multifaceted challenges faced by women in urban slums. Socioeconomic barriers, a lack of awareness, unfriendly hospital environments, and poor documentation further hinder the utilization of available healthcare services. A collaborative approach involving healthcare professionals, policymakers, and community members is essential for advancing maternal healthcare. Targeted interventions that increase awareness, address socioeconomic obstacles, and improve the role of healthcare providers can significantly reduce maternal and infant mortality rates in urban slum settings.

## CONCLUSION

This study highlighted the complex challenges faced by urban slum-dwelling women in accessing maternal healthcare services, including gaps in awareness, financial constraints, unwelcoming hospital environments, and inadequate documentation. Efforts to improve awareness, address socioeconomic barriers, and strengthen the role of healthcare providers are crucial to reducing maternal and infant mortality rates in urban slum settings. Collaboration among healthcare professionals, policymakers, and the community is essential to promote maternal health and ensure safe deliveries for vulnerable populations in these areas.

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**Ethical consideration:** This study adopted comprehensive privacy and ethics protocols to win the trust of the participants (both health professionals and pregnant mothers) the participants received an information brochure explaining the aim of the study and were informed that privacy was maintained and assured. Oral consent was obtained from the participants to ensure their approval.

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