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Factors shaping decisions to utilize maternal health services among the urban poor of south Delhi: A longitudinal case study

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ABSTRACT

Background: Ending preventable maternal mortality remains one of the most critical challenges despite significant progress over past decades. Maternal mortality remains high and the burden of death is disproportionately higher among the marginalized population. Contrary to the view that those residing in urban areas have better access to quality health services, the health outcomes of the urban poor are not better than rural communities. Data on urban poor are concealed within urban averages, and few studies provide disaggregated data on spatial dimensions of population in urban areas.

Aims: The study was conducted to understand variations and factors responsible for decisions to seek healthcare services for maternal healthcare.

Materials and Methods: The study was conducted using qualitative case study design and qualitative data were collected from fifty pregnant women enrolled from two slums of south Delhi after informed consent. The slums were revisited twice after a gap of two/three years to understand changes in maternal health seeking behaviour of the communities. Data were analyzed using grounded theory methodology.

Results: The maternal health seeking behaviour among urban poor is determined by structural inequalities, predisposing factors of individuals including age, income, education, and parity. Other factors that had a bearing on their decision to seek care included legal status of the slums, and its inhabitants. Incremental changes in health seeking behaviour overtime was observed due to government policies/programs implemented to benefit the poor.

Conclusions: It is essential to build a sensitive and responsive health system that is acceptable to the most marginalized to enhance access to health services.

Key Messages: Understanding factors contributing to urban poor seek maternal health care services is necessary to build a sensitive and responsible heath system that is acceptable to the most marginalized and will ensure its use.

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1. Introduction

Over the last few decades there has been significant progress in the maternal mortality ratio globally, however, the decline is not as sharp as expected. According to WHO, 810 women die every day from preventable causes related to pregnancy and childbirth. More than two-thirds of these deaths are happening in sub- Saharan Africa, and Southern Asia. India has made tremendous stride towards improving its maternal health indicators and recent national estimates from the

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Sample Registration Survey for the period 2015-17 show that the decline in maternal mortality ratio (MMR) has continued and stands at 122, an 8-point decrease from 130. Nevertheless in order to achieve the sustainable development goal of reducing the MMR to 70 per 100,000 live births by 2030, it is necessary that the pace of reduction in MMR should continue and emphasis should be placed on reaching out to the vulnerable and marginalized section of the population with quality maternal health services. Maternal mortality remains a challenge and the burden of

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¹ MMR the special bulletin on maternal mortality in India 2015-16

death is disproportionately higher among the disadvantaged and marginalized population and pregnant women do not have access to quality maternal health services. Also, most of the home deliveries take place among this section of the population. Data on urban poor are concealed within urban averages, and few studies provide disaggregated data on spatial dimensions of population in urban areas.

The urban poor were found to be disadvantaged in terms of utilization of maternal health services even though they are assumed to have access to better quality and functional health services. It is important to understand factors which act as a barrier towards low use of health services despite presence of health facilities in their vicinity.

The National Urban Health Mission (NUHM) under the National Health Mission (NHM) was launched by the Government of India (GoI) in 2013 with an aim to improve access to quality health care services for the urban poor. Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) approach was also launched in 2013 with an aim to address the major causes of mortality among women and children and reduce delays in accessing and utilizing health care services. There has been an overall improvement in the maternal health indicators and institutional delivery among the urban women has increased from 69 percent in 2005-06 (National Family Health Survey (NFHS 3) to 89 percent in 2015-16 (NFHS 4). However, this improvement did not translate for those belonging to the lowest quintile and the institutional delivery among this section of the population stood at 60 per cent, 34.7 per cent had no antenatal care (ANC) as compared to overall India average of 16 percent and 47 percent did not avail any postnatal check-up.²

Literature shows that complications during delivery and poor perinatal outcome is mostly associated with nonutilization of antenatal, ^{1,2} and intrapartum services. ^{3,4} Also, utilization of ANC services is associated with increase in the probability of institutional delivery. A lot of research has been undertaken to understand the factors affecting the utilization of maternal health services in the rural areas but few exploring the urban poor.⁵ Several studies have been undertaken to study the accessibility of reproductive health services and have shown socio-cultural and economic causes as reasons for not accessing reproductive health services. 6-8 Another recent study on maternal deaths in Assam concluded that social determinants exist as important factors of maternal mortality. 9 A few studies that exist for urban poor explore the variation between slum and non-slum population. However, these studies do not factor in the disparities existing among the urban poor. Most of the studies available on maternal health have looked at utilization of maternal health services during antenatal care, 10-13 and are contrary to the approach of continuum of care encompassing antenatal, intrapartum, and postnatal

care.

Also, most of the studies on maternal healthcare have concentrated on the factors affecting utilization of care in rural areas. 14-16 The urban areas have received less attention and within urban areas there are fewer studies of health seeking behaviour for maternal health. 17,18 A few comparative studies exists among different slum communities exhibiting structural differences in the form of socio-economic status. 19,20 and has tried to analyze the differentials in maternal health seeking behaviour. However, there have been few in depth qualitative studies which have tried to understand the maternal health seeking behaviour of the urban poor in the backdrop of availability of plurality of providers both formal and informal available that are being used by the urban poor at different stages of pregnancy and provide insights into the complex decision making process involved in the "choices" that women make for seeking maternal health services.

To gain a better understanding of the pattern of usage by the women it is necessary to understand the barriers and enablers which shape their decisions to seek health services for maternal health. To achieve cent percent institutional delivery, it is essential to understand these challenges and concerns of the population so that appropriate measures can be taken to address these and achieve patient centric quality of care.

This paper presents the findings from a series of fifty case studies of the care seeking experiences of pregnant women from two slums of south Delhi stratified on the lines of legal status and understand the barriers and enablers to utilization of maternal health services. Also, it captures the changes in health seeking behaviour overtime with changes in government policies and programs.

2. Materials and Methods

Qualitative case study methodology was employed for the study since it involved understanding the barriers and enablers of utilization of maternal health services, the socio-economic, cultural and demographic characteristics of women, changes in government policies and programs shaped their decision to access health services. A total of 50 in-depth case studies of pregnant women was conducted using "Care Seeking Narrative" and observation to understand the health-seeking behavior, barriers to accessing maternal health services. The pregnant women enrolled in the study were purposively selected to ensure maximum variability from two slums, a notified and nonnotified slum of south Delhi. The inclusion of participants was dependent on their consent for voluntary participation. The enrollment of pregnant women was done after recording their consent. They were in different stages of pregnancy and the cases were followed-up till six weeks after birthing with an aim to capture the entire duration of the pregnancy. Thereafter, the study areas were revisited twice

² NFHS 4 2015

to understand the change in utilization pattern over the years. The data collection was undertaken between 2011-12 in the first round, followed by another round in 2015, and last round in 2018.

Data were collected using guidelines tools and observation schedule. The qualitative data was thematically analyzed using grounded theory methodology and a codebook created using deductive and inductive methods.

3. Results

Three main categories of results covered here were (1) variation in health were seeking behaviour (2) changes in health seeking patterns overtime (3) barriers and challenges in seeking care.

3.1. Variation in health seeking behaviour

The variation in the socio-economic status had a bearing on the health seeking behaviour of the pregnant women enrolled. Those from the notified slum were economically better off and were more educated than those in the nonnotified slum. The average earning varied from Rs 12,000-15,000, and between Rs 9,000-12,000 for those in the notified slum and non-notified slum respectively. Most of the pregnant women were educated above high school in the notified slums while in the non-notified slum most were either illiterate or had completed primary school. The study showed that most of the pregnant women in the non-notified slum came to know of their pregnancy status late by 12 weeks thus losing the opportunity to register in the first trimester. As a result, even the decision to abort in case of unwanted pregnancy got delayed.

"They only come to me to get tested when they have missed their periods for two to three months. Most of the women do not remember their LMP³ date" (unqualified practitioner-JJ⁴)

The preference for ANC registration at formal health facility varied with education, income, age, and parity. The registration rate was higher in the notified slum and two thirds of the pregnant women registered at a public health facility or private facility for ANC. Legal status of the population residing in the non-notified slum influenced the health seeking behaviour of the pregnant women. There were speculations that most of those residing in the non-notified slum were illegal Bangladeshi migrants and were wary of seeking care at public health facilities. They preferred visiting the unqualified practitioners and traditional birth attendants (TBAs) operating in the area. Less than half of those pregnant from the non-notified slum registered for ANC at the nearby public dispensary.

One third of the pregnant women in the non-notified slum were adolescents and did not register for ANC. The study found a relationship between ANC and parity, education, and income as those with higher parity, low education, less income in both the slums did not register for ANC. However, in a few cases where the women had a miscarriage/still birth in the previous pregnancy also registered for ANC even though were less educated or higher parity.

"I have had two miscarriages and there is some problem why it is happening, my husband said that this time we will show to a doctor". (R-21-JJ)

Most of the women did not consume the complete dosage of IFA and calcium tablets fearing that the child will grow too big for normal delivery. Many did not like the taste or did not feel good after consuming it. Also, the knowledge of method of consumption of calcium tablet was poor.

"I did not eat any tablet as my mother-in-law told me not to as the child will grow too large for normal delivery". (R-1-JJ)

"I started consuming both the black and the white tablet, I started feeling dizzy and had constipation, after which I left it" (R3-NS)

Among those who registered for ANC, more than two third completed four ANC check-up in the notified slum as compared to a few in the non-notified slum. However, almost all the pregnant women in the slums got at least one shot of tetanus toxoid as it was perceived to be important.

Except a few of those who registered, none were aware about anemia. Consuming tonics procured from the unqualified practitioners or getting IV⁵ drips is a common practice when feeling weak and was true for both the slums. Most of the pregnant women in both the slums, registered or not registered, were not aware of any of the danger signs of pregnancy and symptoms like "edema" which were considered to be normal. Also, preparedness for emergencies was poor.

Almost all the women in the non-notified slum and most in the notified slum wanted to deliver at home. Only those who had experienced problems in their previous delivery wanted to deliver in a health facility.

"There is no complication and hence no need to go to a doctor. She is not the first pregnant woman. We have all gone through this process. I have six children and all were born at home". (Mother-in law of R-3-JJ)

Birth preparedness for those who wanted to deliver at home included identifying a TBA who would deliver their baby, saving for the occasion and ensuring the availability of a close female relative to help in the process.

Most of the babies were delivered at home with two thirds in the case of notified slum and almost, all except a very few, in the non-notified slum. Institutional deliveries were few and took place in public maternity centres /hospitals and private nursing homes.

³ Last menstrual period

⁴ JJ here is the code used for non-notified slum

⁵ Intravenous fluid

Table 1:

Predisposing factors Notified slum: The study participants were Hindus belonging to the schedule castes; age varied between 20-26 years, mostly educated up to high school; highest parity being three; few had complications during previous pregnancy Non-notified slum: Almost all study participants were Muslims; one third in the age group of 17-19 years, mostly either illiterate or educated till primary school; one fifth had experienced complication during their previous pregnancy; and majority of them were pregnant for the third, fourth or fifth time. **Enabling factors** Notified Slum: No fear of eviction; legal status of inhabitants; average household earnings of study participants varied between 12,000-15,000. Non-notified Slum: Constant fear of eviction due to illegal status of the slum; illegal status of; average earnings of participants varied between 9,000-12,000. Higher registration for ANC in the notified slum; two thirds of the pregnant women registered. Low registration for ANC in the non-notified slum; less than half of the Variation in health seeking behaviour pregnant; the adolescents and did not register for ANC. Those with higher parity, low education, less income in both the slums did not register for ANC. Knowledge of danger signs and emergency preparedness was poor among the pregnant women of both the slums Home deliveries was common in both the slums; two thirds in the case of notified slum and except a very few, all in the non-notified slum. Home deliveries assisted by traditional birth attendants (TBAs) Only women delivering at a health facility received postnatal care. Changes in health seeking patterns overtime Registration for ANC, institutional deliveries and PNC improved in both slums but the pace of change was greater in notified slum. Assigning of ASHAs to both slums in 2018, change in the legal status of the slum population of the non-notified slum after 2014, and coverage of the slum through the outreach program of the nearest public health dispensary could have contributed to this change. Illegal status of the migrants in the non-notified slum, language, time bound nature of Barriers and challenges in seeking care employment, inconvenient timings of public health facilities, perception of the public health system to be of low quality, insensitive, high out of pocket expenditure, belief that motherhood is a natural process and not a disease that require medical support were the common barriers to seeking care at a health facility.

"I delivered my first child at home without any hassle and don't need to go to a public or private hospital". (R27-JJ)

"I delivered very conveniently at home and who has the time to go to a hospital. My husband's will be laid off, as there is no provision of leave". (R9-NS)

In almost all the cases of home deliveries, TBAs or elders in the family helped deliver the baby. However, there were cases when the pregnant women had to seek emergency care (breech presentation of baby and obstructed labour). During the course of the study, there were three cases of still birth and two babies died immediately after birth.

Since most of the mothers delivered at home, postnatal care was almost absent. Only in the cases where the women had delivered at a health facility did she receive postnatal care. The unqualified practitioners and the TBAs who helped deliver the baby would often visit the family to check-on the health of the mother and baby. Almost half of the women had experienced some danger signs but only a few visited any doctor to seek care. Most of them consulted the unqualified practitioners if the discomfort persisted.

3.2. Changes in health seeking patterns overtime and understand the causes for the shift

Overtime increment changes were seen in the health seeking behaviour of pregnant women in both the slums. Significant improvements in ANC registration and receiving postnatal care, and reduction in home deliveries was found within the first and last round of data collection. In the notified slum, registration for ANC had improved from three fourth of the samples registering for ANC to almost all except one tenth not registering. Similarly, among the non-notified slum samples less than half registered for ANC in the first round and this improved to more than 3 out of 5 registering for ANC. The number of home deliveries in both the notified and the non-notified slum had reduced from three fourth to one third in the notified slum and from one out of ten to more than half of the pregnant women delivering at a hospital in the non-notified slum. Some of the proximal contributing factors included the non-notified slum being covered through the outreach program of the nearest public health dispensary, and assigning of ASHAs to both the slums in 2018. In the case of the non-notified slum, which was ravaged by a massive fire in 2014 and which attracted wide media attention, resulting in positive steps by the government to improve the situation of the slum.

The slum got free water, toilets, metered electricity, cash benefits, support to open bank accounts and identity proofs for its inhabitants. This ensured legitimacy to the occupants resulting in greater confidence to access social protection schemes and health services. Distal factors included greater understanding of the vulnerabilities of the urban poor and the launching of NUHM emphasizing better quality of services taking into account patient feedback.

"I have got a bank account now and the Asha is helping me get the benefits of the JSY⁶ as I have delivered at a public hospital." (R10-JJ-3)

"I have received Rs 600 in my bank account after I delivered at a public hospital." (R21-NS-3)

More importantly for the slum residents, the prevalent practice of illegal rent to local thekedars for the jhuggis came to an end, resulting in more disposable income in hand.

"A lot of our assets got destroyed in the fire, government helped us and now we have rebuilt our Jhuggi with the help of the money we got from the government. Now we don't have to pay rent to the thekedar" (R2-JJ-3)

The appointment of ASHAs in the slums has resulted in better reach of services as they motivate the pregnant women to register for ANC and kept a check on their health status, counseled on danger signs, and conducted home based newborn care (HBNC) to monitor the growth of babies.

"ASHA visits me and weighs my baby which was born low birth weight to see that my child is growing fine." (R7-NS-3)

Better services at public hospitals and free transport resulted in positive motherhood experience adding to their confidence to access public health services.

"We had no difficulty in accessing services at the government health facility as the doctor's behaviour was good and the ambulance reached on time" (R2-NS-3)

"During our last ANC visit we came to know the foetus was in breech position and the doctors did a C-section free of cost. After four days of C-section I came back home." (R11-JJ-3)

3.3. Barriers and challenges in seeking care

The most common barrier to seek care in the case of the nonnotified slum was the fear of being tagged as illegal migrant in the absence of legal papers to prove Indian identity even though most claimed to be Indian and indicated others in the slum to be illegal.

"Our neighbours have come from Assam and are not Indians but illegal migrants from Bangladesh." (R11-JJ-3)

This coupled with discomfort in communicating in Hindi, the local language, translated into the lack of

confidence among the communities of non-notified slum to negotiate with the health system.

Low family income, higher parity, and education was found to be the most common barrier in both the slums for ANC registration. Seeking maternal health services at a health facility was considered to be time-consuming and expensive. Since most of the women or their husbands were involved in occupations⁷ with time bound work, few holidays and low salaries they found it difficult to seek services at public health facilities due to inconvenient timings. Women with three or more live births did not consider it necessary to register themselves for ANC.

Consulting the unqualified practitioners, operating within the slums is a common practice in both the slums for minor ailments. And only for serious conditions they consulted a qualified practitioner. The services offered by the unqualified practitioners was considered appropriate, cheap, approachable, no language barrier, being available at suitable timings, and could be availed on credit.

Another common barrier to seeking care was the feeling that motherhood is a natural process which most women experience and is not a disease for which they need to go to a hospital. Decisions related to pregnancy and childbirth, including place of delivery were taken either by the elders in the family or the husband. Less or no involvement of husbands in the maternity care of their pregnant wife led to lower use of maternal health care services.

Also, most of the slum residents perceived the public health system to be of low quality, insensitive with rude behaviour of providers. In the non-notified slum, in most cases where the women had experienced difficulty in previous delivery like still birth or abortion registered for ANC and also gave birth in an institution. Private hospitals were considered to be expensive by most of the community members.

Families with no social support found it difficult to seek care and deliver at either a public health facility or private as they had no one to look after their small children. Many a times such families went back to their village for childbirth.

4. Discussion

These findings help build an understanding about the factors that could be associated with the utilization of maternal health services by the most marginalized. Further, through a comparison between two slums, one notified and non-notified, the study brings out the differentials in health-seeking behaviour among different slum communities exhibiting structural differences in the form of socio-economic status, legal status.

The most important difference which had implications on the health seeking behaviour for maternal care among the pregnant women was the legal status of the slums.

⁶ Janini Suraksha Yojna-A scheme launched for pregnant women where they are given cash incentive for institutional delivery.

⁷ Maids, drivers, security guard, garbage collector, etc.

The residents of the non-notified slum were conscious of the illegal status of their slums and considered their stay in the slum as temporary, and lived in constant fear of displacement. Also, they were apprehensive of being targeted as illegal migrants which further enhanced their social vulnerability due to lack social support, and limited access to health information. ²¹

The study found variation in health seeking behaviour of pregnant women with predisposition factors like age, income, education, religion, and parity. Unlike the notified slum, one fourth of the sampled pregnant women were adolescent in the non-notified slum. Teenage pregnancy is considered to be high-risk and is associated with enormous risks like preterm labour, anemia, urinary tract infection, preeclampsia, high rate of caesarean deliveries, low birth weight infants and even maternal and neonatal mortality. ^{22,23}

The study sample showed a great similarity in their health seeking behaviour with respect to the preference for health care provider as both preferred using the services of the unqualified practitioners in case of minor ailments. Barriers to seeking formal health care included lack of flexibility in timing, distance of the facility, opportunity cost, high expenditure, comfort with the unqualified practitioners most of whom had similar background.

The study showed a relation between education, income, parity and registration for ANC, and number of ANC visits among pregnant women as lower the parity, higher the income and education, higher the number of antenatal visits. ²⁴ Late registration for ANC, and quality of ANC received was lacking as most of the pregnant women did not get all the recommended test, and abdominal examination. Inadequate counseling, non-involvement of husbands, dissuaded some of the pregnant women to consume IFA and calcium supplements, and have adequate nutrition. Studies have shown that lower maternal education, lower wealth quintile(s), lack of husband's participation during antenatal visits, higher birth order, were associated with lower odds of full ANC utilization. ^{25,26}

The other barriers to utilization of antenatal check-up include- lack of conviction for antenatal checkups being necessary rooted in social customs, and lack of knowledge of services. Women's role in decision making regarding their health problems was limited. ²⁷ The patriarchal family structure gives men the responsibility to take key decisions with respect to their wives who was considered to be a possession.

Most of the babies were delivered at home and the barriers to institutional delivery included preconceived notions about public health system being insensitive, poor quality, difficult to approach, language and cultural difference, and high OoP⁸. The decision about the place of delivery of the baby was mostly taken on the basis

of household dynamics, financial resources, and social capital. ²⁹

Except in cases where delivery took place at either government hospital or at private nursing home none received postnatal care. Literature shows that majority of maternal deaths occur during this period.

Thus, it can be concluded, that the maternal health seeking behaviour among the urban poor is determined by structural inequalities, predisposing factors of the individuals including age, income, education, and parity. Other factors include behaviours being rooted in cultural experiences of the individual, perceived health status, personal health practices, legal status, and patient satisfaction.

5. Conclusion

In order to achieve the sustainable goal of reducing maternal mortality for India, it is necessary to build a sensitive and responsive health system that is acceptable to the most marginalized. Also, awareness among the communities regarding the necessity of ANC, danger signs, emergency preparedness, institutional delivery, postnatal care, available health services, and maternal health schemes would facilitate greater utilization of health services

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None.

7. Conflict of Interest

The author(s) declare(s) that there is no conflict of interest.

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⁸ Out of pocket expenditure

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