

## **Utilization of Maternal Health Care Services in Slums of Lucknow, Capital of Uttar Pradesh**

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### **Abstract**

Maternal mortality is quite high in India despite of the tremendous efforts and extensive range of services provided through various national health programs. Maternal mortality can be brought down by increasing the utilisation of maternal health services. The objective of the present study was to assess the utilization of maternal health care services by recently delivered women in urban slums of Lucknow during their last pregnancy. A community based cross-sectional study was conducted in urban slums of Lucknow city from February 2014 to September 2014. A total of 296 recently delivered women were interviewed through house to house survey with the help of pre-designed, pre-tested and semi-structured questionnaire. Among the 296 recently delivered women interviewed, about 68.2% were registered during their last pregnancy. More than half (63.5%) were registered during first trimester and 28.4% had done four or more antenatal visits. Two doses of tetanus toxoid injection and complete consumption of IFA tablets was seen in 70.9% and 9.8% of the mothers respectively. About 59.8% of the mothers had institutional delivery, whereas only 44.6% had four or more postnatal visits. No felt need was the major reason for non-registration (63.8%) while lack of awareness was found to be the major reason (79.1%) for late registration; while the major reason (45.7%) for incomplete/nil consumption of IFA tablet was the associated side effects. No felt need (62.2%) was the main reason for low number of institutional deliveries. It was concluded that there is a need to educate women regarding the importance of complete utilization of maternal health care services.

**Keywords:** Utilization, maternal health services, recently delivered women.

### **Introduction**

Annually, 5 lakh women die globally as a result of pregnancy and childbirth. [1] Goal 5 of the Millennium Development Goals aims to improve maternal health with the target of reducing maternal mortality ratio (MMR) by 75% between 1990 and 2015. [2] In India MMR has declined from 212 in 2007-2009 to 178 in 2010-12. [3] Apart from deaths, 50 million women suffer from maternal morbidity due to acute complications from pregnancy. [4] Urban poor population constitutes nearly a third of India's urban population. Health status among urban slum dwellers is worst and far from adequate, due to factors like inadequate availability and accessibility to basic health services. Health indicators in urban slums are below urban average. [5] Maternal healthcare services aimed to monitor signs of complications, detect and treat pre-existing and concurrent problems during pregnancy, and provide advice and counselling on preventive care, delivery care, postnatal care, and related issues. [6]

Promotion of maternal and child health has been one of the most important objective of the Family Welfare Programme in India. Maternal health must be addressed as a part of continuum of care as it is a key barometer of

functional health system. [7]Maternal mortality and morbidity continue to be high despite the existence of national programs for improving maternal and child health in India. This could be related to several factors, an important one being non-utilization or under-utilization of maternal health-care services, especially amongst the urban slum population. With this background present study was conducted to assess the utilization of maternal health care services by recently delivered women in urban slums of Lucknow during their last pregnancy.

### **Objective**

To assess the utilization of maternal health care services by recently delivered women in urban slums of Lucknow during their last pregnancy.

### **Materials and methods:**

**Study Setting:** The study was conducted in slums of Lucknow, capital of Uttar Pradesh.

**Study Design:** Community-based cross-sectional study.

**Study population:** Recently delivered women (who delivered during last three months)

**Sampling:**All recently delivered women residing in four slums of Lucknow were approached during the departmental field posting by investigator with the help of local healthcare and anganwadi worker and a total 296 recently delivered women were interviewed using a predesigned, pretested and semi structured schedule after obtaining their verbal consent. Data were collected regarding socio-demographic profile, utilization of maternal health care services and reasons for not utilizing these services.

**Complete utilization of maternal healthcare services:** Under complete utilization of maternal healthcare services we included mothers with early registration (within 1st trimester), minimum four ANC visits (antenatal check-ups), received two doses of tetanus toxoid (or booster), consumed minimum hundred IFA (Fe & folic acid) tablets, delivered by skilled birth attendant/institutional delivery and at least four postnatal check-ups for mother and newborn.

### **Results**

Among the 296 recently delivered women, 174 (58.8%) were in the age group of 20-29 years, 242(81.8%) were Hindu, 168 (56.8%) belonged to backward castes and 197 (66.5%) mothers belonged to upper lower class according to modified Kuppuswamy socioeconomic scale 2013. About 129 (43.6%) mothers were educated up to primary and 202 (68.2%) were non-working mothers. Majority (47.6%) of the husbands were educated up to secondary school. About 44.9 percent of study population got married before the age of 18 years and 187 (63.2%) were above 18 years of age at the time of first conception. 143 (48.3%) post natal mothers had two children [Table 1].

The proportion of ever registered mothers was 68.2%, out of which most of the mothers (93.1%) got registered during the first trimester of pregnancy. About 28.4 percent of RDWs had four or more antenatal visits. Two doses of TT injection and complete consumption of IFA tablets was seen in 210(70.9%) and 29(9.8%) mothers respectively. Near about half (59.8%) of the mothers had institutional delivery, whereas only 132(44.6%) had four or more postnatal visit [Table-2].

Most common cause of lack of early registration was unawareness (79.1%). Side effects including vomiting, diarrhoea, and gastritis (45.7%) were the main reason for incomplete/nil consumption of IFA tablets. Majority (62.2%) of the mothers thought that institutional delivery was not required while 64.1% were not aware about the postnatal services [Table3].

### **Discussion**

The study revealed that out of 296 recently delivered women, 202 (68.2%) were registered during their last pregnancy. Moreover only 188 out of them got registered in the first trimester of pregnancy. The proportion of registered RDW was quite high as compared to other earlier studies [8]; but quite lower to recent studies conducted by Sharma et al and Gupta et al who reported a higher proportion of ANC registration in urban slum as well as rural areas respectively.[7,9]. Majority (63.8%) of RDWs stated they felt no need for registration of pregnancy. Time of registration plays a very crucial role in evaluation of maternal health services. In the present study most of the registration (63.5%) was done in first trimester which is quite inferior to that reported by Sharma et al [7] but much higher than other studies[6, 8, 9, and 10]. Lack of knowledge and unawareness was the main reason for late registration. This might be attributed to the fact that people reside in underprivileged living conditions in these slums which lagged behind the basic sources of information and knowledge as compared to other communities.

In the present study only 28.4% women went for complete ANC visits which were relatively higher than reported in the state Uttar Pradesh among urban poor as per NFHS-3 (20.7%). [6] This might be due to better availability and accessibility of health facilities at the capital as compared to other parts of the state. However the results are quite similar to that reported in other studies in other states regarding the utilization of RCH services [7,10] but lower to that reported about 52% national level as per NFHS-3.

The proportion of women in our country as well as in Uttar Pradesh who consumed at least hundred IFA tablets is quite less as per NFHS-III data i.e. 26% and 8.8% respectively and even much lower about 5.7% among urban poor. Similar findings were also reported in present study (9.8%); however much lower than reported in other studies. [7, 11] Side-effects of IFA tablets were the main reason for non-compliance.

In the present study almost 70.9% of RDWs received either two doses of tetanus toxoid or booster as required. The results are quite higher than reported as per NFHS-III among urban poor in state itself (61.6%). [6] Contradictory to that, studies in other states reported better immunization status among pregnant females. [7, 11, 12, 13] Even eight RDWs who were not registered anywhere reported that they received TT from local unauthorised practitioners.

### **Limitations**

The study cannot be generalized as our study was conducted only in four slums. Another weakness of study is the recall bias of the study subjects.

### **Conclusion**

The utilisation of maternal services among mothers in urban slum was found to be unsatisfactory as compared to the efforts made and services provided under the various national programs in the capital of the state. Lack of awareness about the available MCH services and perceiving it as unnecessary is the major factor leading to this discrepancy.

### **Recommendations**

There is a need to emphasize on improving awareness and knowledge of women in the reproductive age group regarding the availability and importance of maternal and child health services through more intense IEC activities with special focus on underprivileged population residing in urban slums.

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**Table 1: Socio demographic characteristics of postnatal mothers****(n=296)**

Characteristics	Number	Percentage (%)
<b>Age</b>		
<20	62	20.9
20- 29	174	58.8
30- 39	56	18.9
≥40	4	1.4
<b>Religion</b>		
Hindu	242	81.8
Muslim	48	16.2
Others	6	2.0
<b>Caste</b>		
General	34	11.5
OBC	168	56.8
ST/SC	94	31.6

<b>Level of education of RDWs</b>		
Illiterate	63	21.3
Primary	129	43.6
Secondary	77	26.0
Degree	27	9.1
<b>Level of education of Husband</b>		
Illiterate	30	10.1
Primary	79	26.7
Secondary	141	47.6
Degree	46	15.6
<b>Occupation of mother</b>		
Working	94	31.8
Non-working	202	68.2
<b>Socio-economic status *</b>		
Upper middle	12	4.1
Lower Middle	87	29.4
Upper lower	197	66.5
<b>Age at marriage</b>		
<18	133	44.9
≥18	163	55.1
<b>Age at first child birth</b>		
<18	109	36.8
≥18	187	63.2
<b>Total number children</b>		
1	116	39.2
2	143	48.3
3 or more	37	12.5

\*Kuppuswamy socioeconomic scale 2013

**Table 2: Utilization of maternal health care services**

(n=296)

Characteristics	Number	Percentage (%)
Registered antenatal mothers	202	68.2
Early Registration (< 1st trimester)	188	63.5
Minimum four ANC visits	84	28.4
Received two TT doses/booster	210	70.9
Consumption of atleast 100 IFA tablets	29	9.8
Institutional Delivery	177	59.8
Postnatal check-ups (≥4 visits)	132	44.6

**Table 3: Major reasons affecting utilization of maternal services**

Characteristics	Number	Percentage (%)
<b>No registration for pregnancy (n=94)</b>		
No need	60	63.8
Lack of Money	23	24.4
No knowledge	11	11.7
<b>Lack of early registration (n=24)<sup>#</sup></b>		
Did not know	19	79.1
No need	5	20.9
<b>Incomplete/ Nil consumption of IFA tablets (n=267)</b>		
No use	34	12.7
Side effects (vomiting, diarrhoea, gastritis)	133	45.7
Did not get	25	9.4
Provided less	58	21.7
Objection by family members	17	6.5
<b>Non-Institutional Delivery (n=119)</b>		
Not needed	74	62.2
Local beliefs and customs	37	31.1
Financial constrains	8	6.7
<b>Postnatal check-ups (&gt;4 visits)(n=164)</b>		
No need	59	35.9
Did not know	105	64.1

<sup>#</sup> Late registration (> 3 months)