Impact of Antenatal Check-ups on Institutional Deliveries in Delhi

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सत्यमेव परमो धर्मः IEG Working Paper No. 365 2016

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ACKNOWLEDGEMENTS

This is the revised version of the paper presented at the seminar at the Institute of Economic Growth, Delhi on 24 February 2015. We would like to thank the Ministry of Health and Family Welfare (MoHFW) for providing financial assistance. We would like to extend our gratitude to the participants for their valuable comments.

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ABSTRACT

This paper focuses on the scenario of antenatal care (ANC) check-ups and institutional deliveries of beneficiaries across five districts of Delhi. The study analyses the socio-economic parameters and other major factors affecting the decisions of beneficiaries regarding maternal health during pregnancy. The primary survey conducted across five districts of Delhi reveals that a greater number of beneficiaries are not going for institutional deliveries despite completing all three ANC check-ups at government institutions. This paper will examine the reasons behind this lag, the various infrastructural and other bottlenecks, and suggest ways to check it.

Keywords: ANC check-ups, HMIS, Delhi, ASHAs, Institutional Deliveries

1 INTRODUCTION

According to the estimates of the World Health Organization (WHO), around 536,000 maternal deaths occur globally, out of which 136,000 deaths happen in India (Vohra et al. 2009). Most of these maternal deaths are as a result of unattended pregnancies leading to complications at the time of delivery.

Regular antenatal care (ANC) check-ups help in monitoring and timely detection of possible complications in pregnancy, therefore leading to a healthy pregnancy. Not only does it help in saving lives of so many pregnant women, it can also increase the number of institutional deliveries. An expectant mother visiting an institution for regular check-ups, develops a comfort zone and trust, thus increasing her willingness to deliver at the institution. A direct correlation has been observed between women who do not avail the ANC service and later develop complications during their pregnancy.

In marginalised areas, people are often not aware or are reluctant about pregnancy related health check-ups. Further age-old customs and traditions do not allow women to take decisions regarding their health freely, which directly impact their health. For example, 3 ANC check-ups are compulsory for any pregnant women to keep a tab on the mother's health and yet-to-be-born child. However, most of them do not even register for their first trimester check-ups. According to the National Family Health Survey (NFHS-3),

- 50.7 per cent mothers had 3 ANC check-ups all over India. This number is comparatively lower in rural areas (42.8 per cent) and higher in urban areas (73.8 per cent). This indicates less number of people in rural areas are aware of the importance of ANC check-ups (NFHS-3, India Fact Sheet);
- the percentage of mothers who consumed Iron/Folic Acid (IFA) tablets during pregnancy is low all over India at 22.3 per cent, which further dipped to 18 per cent in rural areas;
- 40 per cent of pregnant women opted for institutional deliveries. The number is higher in urban areas (69.4 per cent) and lower in rural areas (31.1 per cent) (NFHS-3, India Fact Sheet); and
- in Delhi, about 74.4 per cent of pregnant women took three ANC check-ups, and about 60.7 per cent of the women opted for institutional deliveries (NFHS-3, Delhi State Report).

Overall, it is evident that fewer institutional deliveries were recorded where a low proportion of women opted for ANC services.

2 POST NATIONAL RURAL HEALTH MISSION (NRHM) SCENARIO

The National Rural Health Mission (NRHM) , now National Health Mission (NHM), lays especial emphasis on ANC check-ups. The aim is to impact the number of institutional deliveries and the number of safe deliveries conducted by a skilled birth attendant (SBA) attendant. It appointed Accredited Social Health Activists (ASHAs) and Auxiliary Nurse Midwifery (ANMs) to keep a check on the number of pregnant women in their areas and find out if they went for ANC check-ups. ASHAs have proven to be a catalyst in spreading awareness about the importance of ANC check-ups and in assisting beneficiaries to access healthcare facilities. According to the Health Management Information System (HMIS) report, about 77.4 per cent went for three ANC check-ups out of all the registered ANCs.[1]

In Delhi, however, the scenario of ANC check-ups and institutional deliveries is a little different from other states, as there are different health agencies. Healthcare services are provided by both government and non-government agencies. This includes multiple agencies such as Municipal Corporation of Delhi (MCD), Delhi government dispensaries, NDMC, ESI hospitals, other facilities and programmes sponsored by the Central government. According to the NFHS-3, 90 per cent of the non-slum areas in Delhi received ANC from healthcare professionals for their last birth, compared to 78 per cent of women in slum areas.[2] Institutional deliveries were found to be more common among first-time mothers, urban women, women residing in non-slum areas, women having more than 10 years of education, and women belonging to the highest quintile group.[3]

With the introduction of schemes like Janani Suraksha Yojana (JSY) and Janani Shishu Suraksha Karyakaram (JSSK) under the NRHM, the situation has improved. Beneficiaries are encouraged to undergo ANC check-ups and institutional deliveries by community health workers such as ASHAs and ANMs. As a result, in 2013-14, in Delhi, of all the ANC registrations 34.7 per cent of pregnant women went for 1st trimester ANC check-ups, while 59.7 per cent of pregnant women went for all three ANC check-ups.[4] However, only 25.9 per cent of these pregnant women turned up for deliveries at public institutions. Two major reasons could be that they have the means and are, therefore, opting for delivery at private nursing homes or private hospitals and they are going in for home deliveries due to overloaded hospitals and dispensaries.

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[1] HMIS standard report, RCH Reports, Indicator Wise , Maternal Health 2014-15 up to March

[2] NHFS-3 (2005-06), Delhi February 2009

[3] Ibid

[4] Performance of Key HMIS indicators (Up to District Level) 2014-15 up to March

3 LITERATURE REVIEW

According to World Bank estimates, the MMR can be brought down by 74 per cent just through timely intervention that provide access to skilled delivery and obstetric care (Paruzzalo and Mehra et al.). In this study, important maternal health parameters have been highlighted, which includes factors such as distance from facility to home and other socio-economic factors. They have further tried to link gender equality with the ability to access healthcare services, especially in developing countries. Population council of India published a report on providing maternal and newborn services. The report analyses the trends and services affecting services of ANC checkups and Institutional Deliveries. It also highlights the role of ANMs in providing ANC services and the extent to which they are able to meet their goals (Santhya and Jeejeebhoy 2011). Another report by the India Institute of Population Studies (IIPS) also highlights the role of ANC check-ups in promoting institutional deliveries. The report further suggests the possibility of promoting institutional delivery through ANC check-ups and associated counselling. This study has further tried to analyse the impact of ANC check-ups on institutional deliveries in rural areas with the help of NFHS data. The NFHS data indicates that even after statistically controlling other factors, mothers who received ANC check-ups are two to five times more likely to give birth in public institutions (Sugathan, Mishra, and Retherford 2001). Overall, the existing literature highlights the contributing factors in encouraging institutional deliveries and ANC check-ups. Factors such as gender empowerment, accessibility towards healthcare centres, and the role of community health workers encourage the beneficiaries to undergo ANC check-ups.

4 MATERIAL AND METHODS

This study focuses on the ANC check-ups and institutional deliveries across five districts of Delhi. The main objective of the study is to identify the impact of ANC check-ups on institutional deliveries. There are two components of this study one lays emphasis on ANC check-ups and the other ascertains the impact of ANC check-ups on institutional deliveries. The data used in the study has been taken from the JSSK evaluation survey conducted in 2014 by the Population Research Centre, Delhi.

Primary data for the study was collected from the five districts of Delhi. From each district, we selected four facilities. A sample size of 22 beneficiaries from each facility was taken. Each of these beneficiaries had availed services from district hospitals or Community Health Centres (CHC). The total population size considered for the study was 374 beneficiaries who delivered a child in the preceding year.

A cross-sectional study was also conducted to analyse the socioeconomic and other major factors influencing the choices of beneficiaries in accessing healthcare facilities. Women were asked questions related to the number of ANC check-ups they underwent, the

place of ANC check-up, and place of delivery. Reports from NFHS-3 and HMIS were consulted to compare the prevailing scenarios of ANC check-ups and institutional deliveries in Delhi

5 FINDINGS OF THE STUDY

During the study, we found that 99 per cent of beneficiaries surveyed took ANC services from district hospitals or maternity homes. Thus, there is a general awareness regarding the importance of ANC check-ups. One major issue that came to light is the heavy load of patients at district hospitals. Since maternity homes are better equipped to deal with normal deliveries only (second gravida cases), it left district hospitals as the only choice for ANC check-ups.

Table 1 Place of ANC registration in different districts of Delhi

District	District hospital	CHC /Maternity Home
North	58	42
South	100	0
East	77.9	22.1
West	11.4	88.6
South-East	84.1	15.9

Source: Evaluation of JSSK, Suresh Sharma (et.al) 2015

During our primary field survey for JSSK evaluation, we made the following observations.

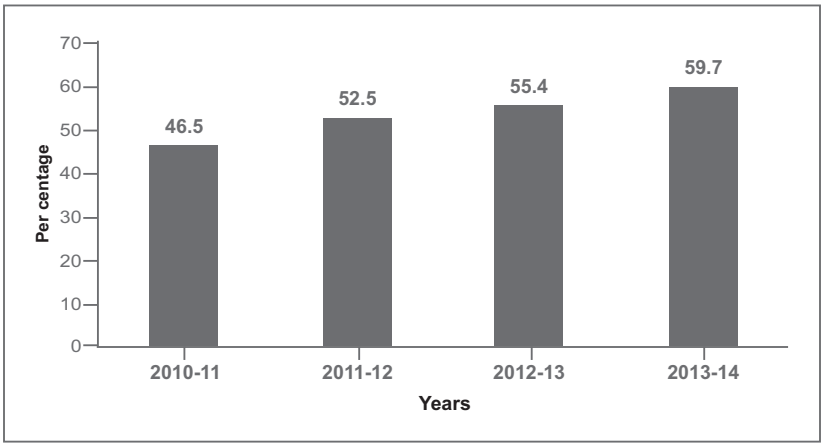
- In the North district, a slightly higher number of beneficiaries opted for district hospitals when compared to maternity homes.
- In the South district, there is only one public healthcare facility (a district hospital) capable of obstetric care. All beneficiaries, therefore, went to district hospitals for ANC check-ups.
- In the East district, most beneficiaries preferred district hospitals over maternity homes. District hospitals provided better ANC check-up and institutional delivery facilities than the others.
- In the West district, 88.6 per cent of beneficiaries preferred CHCs over district hospitals. Only 11.4 per cent of beneficiaries availed the services of district hospitals for ANC check-ups. This indicates that maternity homes and CHCs in this district are more accessible and reliable than in other districts. This also implies that if the required facilities are provided, maternity homes / CHCs can share the load of district hospitals.
- In the South-East district, there were four maternity homes but not one district hospital. Therefore, most beneficiaries took ANC services from maternity homes and district

hospitals in nearby districts (such as the All India Institute of Medical Sciences and Safdarjung Hospital.

Overall, 59.9 per cent of beneficiaries availed services from district hospitals and 39.6 per cent from CHCs / maternity homes.

Figure 1 shows an annual comparison of pregnant women who registered for third ANC check-ups. Though there is an increase in the percentage of beneficiaries every year, on average only 53.5 per cent of beneficiaries underwent the third ANC check-ups. The reasons could be the lack of support from the healthcare facility staff and high out-of-pocket expenditure.

Figure 1 Pregnant women who received three ANC check-ups to total ANC registrations (Delhi, 2010-14)



Source: HMIS Standard Reports (2010-2014)

Table 2 Place of ANC service and number of iron folic tablets and taken by beneficiaries

Place of ANC Services		**No. Of Iron Folic Tablets Taken**		
<100 tablets	100 Tablets	>100	No response	
District hospital	4.9	64.3	23.7	7.2
CHC/Maternity Home	6.1	52	37.8	4.1

Source: Field Survey JSSK 2014

Table 2 shows the relation between the places of ANC availed and the number of IFA tablets taken by the beneficiaries. Most beneficiaries took 100 tablets irrespective of the place of ANC service; however, 37.8 per cent of beneficiaries who underwent ANC in CHCs /

maternity homes took more than 100 IFA tablets, but only 23.7 per cent of beneficiaries who went to district hospitals did do. This indicates that when beneficiaries received more medicine at CHCs / maternity homes than at government dispensaries.

Two important factors that affect the distribution of IFA tablets in different healthcare facilities are the involvement of ASHAs at the facility level and the awareness of beneficiaries of the benefits of IFA tablets (most beneficiaries registered with CHCs are second gravida cases; therefore, they are already aware of the benefits of IFA tablets).

6 SOCIOECONOMIC FACTORS AND PLACE OF ANC REGISTRATION

For our study, we have considered the following socioeconomic factors: age, education and occupation of husband, income of family, and caste and religion of beneficiary. Most beneficiaries in the lower income group found it difficult to switch from the place where they went for regular ANC check-ups to any other institution for delivery.

Table 3 Socio-Economic factors of beneficiaries and their place of ANC registration

Socio-Economic Factors	District hospitals	CHC/Maternity Homes
Age		
19-24	59.5	40.5
24-29	63.1	36.9
29-34	47.4	52.6
34-39	72.7	27.3
Education		
Illiterate	64.6	35.4
Primary	54.4	45.6
Matriculation	61.9	38.1
Higher Secondary	55.6	44.4
Graduation	63.6	36.7
Occupation of Husband		
Skilled	50.3	49.7
Unskilled	61.2	38.8
Unemployment	50	50
Others	97.4	2.6
Income of the Family		
<2000	66.7	33.3
2000-5000	60	40

Table 3 Socioeconomic factors of beneficiaries and their place of ANC registration (contd.)

Socioeconomic Factors	District hospitals	CHC/Maternity Homes
5000-10000	59.6	40.4
>10000	61.2	38.8
Caste		
General	61.8	38.2
OBC	63.3	36.7
SC	56.9	43.1
ST	50	50
Religion		
Hindu	60.8	39.2
Muslim	64.1	35.9
Other	33.3	66.7

Source: Field Survey JSSK 2014

Table 3 shows beneficiary preference for the place of ANC check-up by socio-economic characteristics. Beneficiaries in the 19-24, 24-29, and 34-39 age groups preferred district hospitals to maternity homes, but those in the 29-34 age group preferred maternity homes to district hospitals. This indicates that young pregnant women (i.e., first gravida and women at older age) need specialised obstetric care, which is available only at district hospitals. Education-wise, all the categories preferred district hospitals over maternity homes. Similarly, there was little variation across all caste and religion categories in the choice of place for ANC check-ups. Across occupations of husband, the skilled category displayed an almost equal split in preference between district hospitals and CHCs. However, beneficiaries of unskilled husbands prefer district hospitals for ANC check-ups. Beneficiaries across all income groups showed stronger preference for district hospitals. These findings indicate that all beneficiaries, in general, found district hospitals to be well-equipped and, therefore, more affordable than maternity homes that often lacked basic amenities such as diagnostics.

Table 4 shows beneficiary awareness of ANC check-ups by background characteristics. Most beneficiaries up to the age of 34 received information on ANC check-ups from ASHAs. Beneficiaries in the 34-39 age group received their information on ANC check-ups from others. This indicates that they perhaps already knew about its importance. Beneficiaries in the Rs 2000-5000 and Rs 5000-10000 income groups availed ANC services on advice from ASHAs. Overall, ASHAs have proven to be the prime source of information regarding ANC check-ups among beneficiaries. All beneficiaries except graduates got information from ASHAs. This also indicates that in the case of information on ANC check-ups, education plays an important role, as beneficiaries who were graduates were already aware of its importance. Interestingly, among both skilled and unskilled categories, ASHAs were the primary source of

information but, among beneficiaries whose husband was unemployed, relatives constituted the primary source of information. When it comes to caste, more OBC and SC beneficiaries than others received information on ANC check-ups from ASHAs. In the religion category, more Muslims than Hindus and other categories received information on ANC check-ups from ASHAs.

In other categories, most beneficiaries received information on ANC checkups through ASHAs and relatives. Overall, ASHAs play an important role in providing information on health check-ups, especially where healthcare facilities are not easily accessible.

Table 4 Awareness of ANC check-ups, by their background characteristics (2014)

Socioeconomic Indicators	Newspaper	Doctor	ASHA	Health Workers	Relatives	Other
Age						
19-24	2.5	4.3	44.8	6.7	28.8	12.9
24-29	3.1	10.5	50.6	3.1	13.6	17.9
29-34	0	2.6	47.4	2.6	18.4	28.9
34-39	0	9.1	9.1	18.2	9.1	54.5
Education						
Illiterate	5.5	8.6	50	5.5	16.4	14.1
Primary	1.3	7.6	46.8	6.3	20.3	15.2
Matriculation	0	5.2	46.4	6.2	23.7	18.6
Higher Secondary	0	5.6	50	0	25	19.4
Graduation	3.2	6.5	32.3	0	22.6	35.5
Occupation of Husband						
Skilled	2.6	9.2	47.4	2.6	22.4	15.1
Unskilled	2.8	6.1	47.5	7.8	19	16.8
Unemployment	0	0	25	0	50	25
Income of the Family						
<2000	33.3	0	33.3	0	0	0
2000-5000	2	8	42	10	26	12
5000-10000	3	6.5	52.3	3.5	19.6	14.6
>10000	0.8	7.4	40.2	4.9	20.5	26.2
Caste						
General	3.5	6.9	36.8	6.3	22.2	23.6
OBC	2.5	3.7	61.7	4.9	14.8	12.3
SC	1.5	8	51.1	3.6	19	16.1
ST	0	25	25	0	50	0
Religion						
Hindu	1.7	7.6	45.8	4.2	20.5	19.4
Muslim	6.3	6.3	54.7	6.3	15.6	10.9
Other	0	0	33.3	11.1	38.9	16.7

Source: Field Survey JSSK 2014

Table 5 shows the place of ANC services and its impact on the place of delivery among beneficiaries. Beneficiaries who have taken ANC services from district hospitals were more likely to opt for delivery at the hospital than at any another government facility. A similar tendency was noticed among beneficiaries who took ANC services from maternity homes or CHCs. It shows that most beneficiaries preferred the same place for ANC check-ups and delivery.

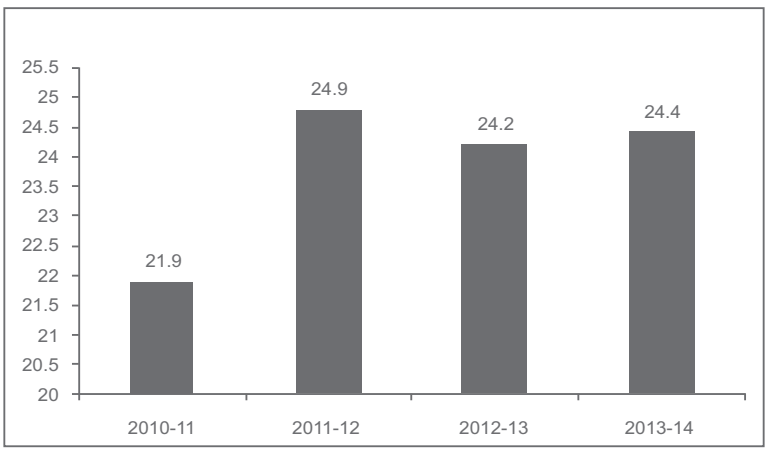
Table 5 Place of ANC services and place of delivery

Place of ANC Services	Same Place Where ANC was Taken	District hospital / Dispensary	CHC or maternity Home
District hospital	53.6	46	0.4
CHC/Maternity Home	60.1	39.9	0
Private Hospital	0	1	0

Source: Field Survey JSSK 2014

In Delhi, a lack of coordination between different authorities was found to lead to complexities for patients. Most CHCs are underutilised, and are meant only for ANC check-ups and second normal deliveries. This adds to the delivery load of district hospitals. Some pregnant women also complained of being sent back from the hospital and delivering on the way. Such incidents lead to patients preferring public institutions for ANC check-ups and private nursing homes for delivery. According to the HMIS report, for the financial year 2014-15, of the total ANC registration, only 28.4 per cent beneficiaries went for institutional deliveries in public institution. This shows that in Delhi, there is an urgent need for distributing the delivery load among different public institutions so that more people can avail public institutions and get quality service.

Figure 2 Percentage of institutional deliveries to antenatal care check-ups in Delhi



Source: HMIS Reports (2010-14)

Figure 2 indicates a rise in the percentage of institutional deliveries to ANC check-ups in Delhi. But the performance of ANC check-ups going for institutional deliveries in public health institutions has not been satisfactory over the years.

Most district hospitals faced a manpower and infrastructure crunch that reflected in their performance. On a visit to a well-known district hospital, we found a long queue for ANC check-ups. Similar conditions were found in most of the higher referral centres, especially at district hospitals. This created a negative impression on beneficiaries about the quality of services of ANC check-ups provided at public facilities. Proper coordination is required in terms of allocation of funds for infrastructure and human resources among different public authorities for providing healthcare services.

Table 6 Showing place of delivery by healthcare facilities in different districts

Name of the Facility	Place of Delivery Same Place Where ANC Took Place	District hospital/dispensary	CHC or Maternity Home
Bhai Parmanand (MH)	86.4	13.6	0
Daulatpur (MH)	59.1	40.9	0
Maharishi Valmiki (DH)	81.8	18.2	0
Babu Jagjivan Ram (DH)	86.4	13.6	0
Malviya Hospital (DH)	54.5	45.4	0
Geeta Colony (MH)	31.8	68.2	0
Patparganj (MH)	59.1	40.9	0
Lal Bahadur Shashtri (DH)	45.5	54.5	0
Kichripur (MH)	22.7	72.7	4.5
Vishnu Garden (MH)	50	50	0
Gurugobind Hospital (DH)	45.5	54.5	0
Madipur (MH)	81.8	18.2	0
Jawalapuri (MH)	40.9	59.1	0
Defence Colony (MH)	45.5	54.5	0
Shrinivaspuri (MH)	63.6	36.4	0
Badarpur (MH)	31.8	68.2	0
Jungpura (MH)	63.6	36.4	0

*MH- Maternity Home, *DH- District Hospital
Source: Field Survey JSSK 2014

Table 6 represents the general trend in Delhi between beneficiaries who opted for ANC service at a facility and then delivered at an institution. In the North district, 86.4 per cent

beneficiaries who delivered at Bhai Paramanand maternity home also availed the ANC service at the facility. However, 13.6 per cent of beneficiaries were referred to other district hospitals for delivery. At Daulatpur maternity home, 40.9 per cent beneficiaries with ANC check-ups performed at the facility were referred to district hospitals for delivery. In Maharishi Valmiki and Babu Jagjivan hospitals, the percentage of referred cases were 18.2 and 13.6 per cent, respectively, which is high for a district hospital.

In the South district, there was only one district hospital from which 45.4 per cent benficiaries were referred to other district hospitals due to a shortage of human resource. As far as complicated cases are concerned, Malviya Hospital was not able to handle most of them due to lack of human resources. In Geeta ColonyMmaternity Home, more than 60 per cent of beneficiaries were sent to district hospitals. However, at Patparganj maternity home, fewer cases were referred to district hospitals, either because the maternity home handled cases efficiently or because they referred cases to the district hospital at an initial stage. In the West district, Madipur Maternity Home recorded the lowest number of cases referred to district hospitals.

In the South-East district, Badarpur Maternity Home referred the highest number of cases to district hospitals. The facility was able to take only 30 per cent of beneficiaries who took ANC service there for delivery. The Badarpur maternity home also indicated a shortage of funds affecting its performance.

Table 7 shows the performance of different facilities across five districts of Delhi as measured by different maternal health indicators. At district hospitals, higher number of beneficiaries registered for ANC check-ups as compared to the actual number of deliveries done at these hospitals. The ratio of institutional deliveries and ANC check-ups is almost double among the healthcare facilities.

Fewer beneficiaries opt for delivery at public institutions because

- few public healthcare facilities are equipped with the infrastructure and resources to deal with all types of pregnancy cases;
- the heavy load of patients at district hospitals affects performance;
- CHCs/maternity homes are underutilised because they lack human resources and infrastructure;
- these institutions often send patients back home, where they deliver with the help of ASHAs or local *dayees*.

Table 7 Performance of healthcare facilities by maternal health indicators (2013-14)

District	Facilities	Normal Deliveries	C-Section	Women Who Received 3 ANC Checkups	Women Who Received PNC Checkups	No. of Maternal Death	No. of Infant Deaths	No. Women Benefitted from JSSK
North	Maternity Home Dakkha	414	-	397	736	-	-	350
	M.H Daulatpur	425	-	621	-	-	-	415
	Babu Jagjivan	1882	348	17325	-	02	64	1882
	Marishi Valmiki	3623	64	9186	2069	02	42	23454
West	Guru Gobind Singh	2851	944	11243	3791	02	09	5800
	M.H. Vishnu Garden	262	-	392	257	-	-	251
	M.H. Jawalapuri	621	-	1131	1333	-	-	833
	M.H. Madipur	260	-	582	260	-	-	260
East	Lal Bahadhur Shahstri	3824	907	2219	-	-	-	3824
	M.H. Geeta Colony	178	-	239	178	-	-	178
	M.H. Patparganj	474	-	603	474	-	02	474
	M.H Kichripur	523	-	1463	523	-	-	523
South	Malviya Hospital	3445	354	4186	3566	-	16	4134
South-East	M.H. Srinivaspuri	1158	-	3761	1158	-	-	1158
	M.H. Defence Colony	354	-	665	354	-	-	504
	MH Jangpura	198	-	483	852	-	-	198
	MH Badarpur	466	-	200	752	-	-	466

Source: Field Survey JSSK 2014

In metropolitan cities like Delhi, more people prefer private nursing homes to public healthcare facilities. This leads us to question the effectiveness of the NRHM in achieving maternal health goals. It calls for a mechanism that can track the performance of healthcare facilities and ensure that more ANC registrations are converted to institutional deliveries.

Table 8 Place of ANC check-ups and place of delivery whether referred or direct case

Place of ANC check-ups	**Referred Case of Delivery**	
	Yes	No
District hospital/Dispensary	31.7	68.3
CHC/Maternity Home	37.2	62.8

Source: Field Survey JSSK 2014

Table 8 shows where a beneficiary went for ANC check-ups and where she delivered, and whether the place of delivery was a referred case or a direct one. Beneficiaries who went for ANC check-ups to district hospitals / dispensaries were less likely to be referred than those who went to CHCs / maternity homes for their ANC check-ups; 37 per cent of beneficiaries who went to CHCs / maternity homes for ANC check-ups were referred to other healthcare

facilities for delivery because they lack manpower, blood bank facility, and the ability to handle complicated and first gravida cases.

Table 9 Provision of free medicines and diagnostics by Place of ANC services

Place of ANC Service	Free Medicine			Free Diagnostics		
	Yes	No	Partly	Yes	No	Partly
District hospital	66.5	5.4	27.7	31.3	42.9	23.7
CHC/Maternity Home	73.6	2.7	23	33.8	12.8	52

Source: Field Survey JSSK 2014

Table 9 shows the provision of free medicines and diagnostics at the place of ANC service; CHCs / maternity homes proved better than district hospitals when it came to provisioning free medicines. One of the key reasons could be the lighter load on CHCs, which allowed them to serve people better. However, in the case of free diagnostics, more beneficiaries who availed ANC service at CHCs / maternity homes got partial diagnostic services than at district hospitals. This is due mainly to the lack of diagnostic facilities at the CHC level, which made beneficiaries go either to district hospitals or private institutions. This is also one of the reasons for the increasing out-of-pocket expenditure of beneficiaries.

9 DISCUSSION

In our study, we have found that for ANC check-ups, the preference ratio between district hospitals and maternity homes across different districts of Delhi is 60:40. An exception to this is the West district where large number of beneficiaries opted for CHCs / maternity homes.

District hospitals are the beneficiary's first choice for ANC check-ups as CHCs / maternity homes do not have the infrastructure to deal with complicated and first gravida cases. In Delhi, ANC check-ups were found to be highly affected by administrative issues prevailing in maternity homes. Unlike other states, in Delhi there is an urgent need for well-equipped CHCs that can cater to complicated cases as well. Currently, about 40 per cent cases at maternity homes are referred to higher referral centres. All complicated cases are detected at an early stage and referred to district hospitals. This increases the load on district hospitals and ultimately affects their quality of services. It is also cumbersome for beneficiaries as they have to wait for long hours at out-patient departments (OPD).

Apparently, beneficiaries prefer one place for their ANC check-ups and delivery; however, in Delhi, on average, only 23 per cent beneficiaries who availed ANC check-ups at a public healthcare facility also went in for delivery there. In short, more beneficiaries are undergoing ANC check-ups at government facilities but avoiding institutional deliveries.

When it comes to provisioning free diagnostics and medicines, CHCs or maternity homes provide free medicines more effectively than district hospitals, but the latter provide better diagnostic services. Overall, because multiple agencies work in the healthcare sector, there is an obvious lack of communication between facilities and districts. Most first gravida beneficiaries who went to maternity homes for ANC check-ups were to district hospitals for delivery. The system can run smoothly if more well-equipped CHCs are set up that can deal with first gravida and complicated cases. They can reduce the load on district hospitals and ultimately improve service quality.

There should be greater clarity when it comes to administration, as most MCD maternity homes are facing crisis due to dual work, and thus burdening their capabilities.

ASHAs have proven to be an important component in creating awareness about ANC check-ups and motivating patients for institutional deliveries. They should be further encouraged through more performance-based incentives. Monthly meetings should be organised among district-level officials regarding the number of ANCs converted into institutional deliveries, and if the delivery was done at home or other private facility. The reasons should be discussed and appropriate course of action be suggested.

Most important of all, health is a state subject; therefore, every citizen up to the most marginalised community should have access to good health. It is the duty of the state to ensure they are provided with the right services.

10 CONCLUSIONS

ANC check-ups have improved in Delhi, but most of them are not being converted into institutional deliveries in public health institutions. The major reason behind this is lack of infrastructure and human resources and underutilisation of CHCs and PHCs in different districts of Delhi. During our field survey, it was noticed that most district hospitals were overloaded, which was affecting their quality of performance. For instance, in many cases fully dilated deliveries were sent back due to the lack of infrastructure which resulted in home deliveries.

The need of the hour is to develop a decentralised approach towards public health mechanisms. More CHCs and PHCs should be developed, to handle primary and complicated cases of pregnancies. Further, the number of referrals should be reduced, and beneficiaries should be provided same place for ANC services and institutional deliveries. With the increasing rate of migration in Delhi, effective public health infrastructure is pivotal for the development of the national capital region.

REFERENCES

Bhatia Jagdish.C and John Clevand (1995), Determinants of maternal care in a region of South India, Health Transition Review, Vol. 5, No.2, 127-142

Chandhiok Nomita, Balwan S. Dhillon, Indra Kambo, Nirakar C Saxena (2006), Determinants of antenatal care utilisation in rural areas of India; A Cross Sectional study from 28 district, J Obstet Gynecol India Vol.56, 47-52

Factsheet India and Delhi (2005-06), National Family and Health Survey-3, (NFHS-3), International Institute of Population Sciences, Mumbai.

Guidelines for Antenatal Care and Skilled Attendance at Birth by ANM/LHV/SN, April, 2010, Maternal Health Division, Ministry of Health & Family Welfare, Govt. of India.

Health Management Information System, Govt. Of India, Ministry of Health & Family Welfare, Standard Reports, (2010-2015).

Jejeebhoy Shireen J. (1999), Reproductive Health Information in India: What are the gaps? Economic and Political weekly, pp.3075-3080

Kranti S. Vora, Dileep V. Mavalankar, K.V. Ramani, Mudita Upadhyaya, Bharati Sharma, Sharad Iyengar, Vikram Gupta and Kirti Iyengar (2009), Maternal Health Situation in India: A Case Study, Journal of Health, Population and Nutrition, Vol. 27, No. 2, Special Issue: Case Studies on Safe Motherhood, pp. 184-201

Pandey Arvind, Nandini Roy, D.Sahu and Rajib Acharaya (2004), Maternal Health Care Services: Observations from Chattisgarh, Jharkhand and Uttaranchal, Economic and Political Weekly, Vol.39 No.7. 713-720

Paruzzolo Silvia, Mehra Rekha et al (2010), Targeting Poverty and Gender Inequality to improve Maternal Health, International Centre for Research on Women (ICRW), Delhi.

Radkar Anjali and Parusaraman Sulaba (2007), Maternal Deaths in India: An exploration, Economic and Political Weekly, Vol 42 pp 3259-3263

Rani Sandhya, Saswata Ghosh and Mona Sharan(2007), Maternal Healthcare Seeking among Tribal Adolescent Girls in Jharkhand, Economic and Political Weekly, Vol.42, No.48, 56-61

Santhya K.S., Jejeebhoy Shireen J (2011), Providing maternal and newborn health services: Experiences of Auxiliary Nurse Midwives in Rajasthan, Population Council of India

Singh Abhishek, Chalasani Satvika et al (2012), The Consequences of unattended births for maternal and child birth in India, Population Studies, Vol 66, pp. 223-239

Singh Padam, R.J. Yadav (2000), Antenatal Care of Pregnant Women in India, Indian Journal of Community medicine Vol.XXV, No.3, 112-117

Sharma Suresh (et.al) (2014), Evaluation of Janani Shishu Suraksha Karyakaram in Delhi , Population Research Centre, Institute of Economic Growth, Delhi.

Sugathan K.S, Mishra Vinod & Retherford Robert D. (2001), Promoting Institutional Deliveries in Rural Area: The Role of Antenatal Care Services, NFHS Subject Reports (IIPS).

Vohra Kranti S. et.al. (2009), Maternal Health Situation in India : A Case Study, Journal of Health, Population and Nutrition Vol 27, No.2, pp(184-201)

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