

Understanding The Factors Associated With Preferred Place Of Delivery Among Women In Maharashtra (Currently Pregnant And Delivered In Calendar Year 2012)

Report

Submitted by



Prognosis Management & Research Consultants Pvt. Ltd.

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Introduction:

The Millennium Development Goal (MDG) target for India to reduce the Maternal Mortality Ratio (MMR) is 109 by the year 2015. According to the WHO 2012 report and UNFPA's report, the current MMR for India for 2010 is 200. One of the socio demographic goals mentioned in the National Population Policy 2000 of India is to achieve 80% institutional deliveries and 100% deliveries to be assisted by skilled health personnel by 2015. These two interventions have also been identified as important initiatives to reduce the maternal mortality ratio—the fifth Millennium Development Goal.

Institutional deliveries reduce the possibilities of complications during delivery due to availability of timely and appropriate health care services. As per the SRS 2010 data, the MMR for Maharashtra is 104.

In order to reduce MMR, the National Rural Health Mission (NRHM) has launched the Janani Suraksha Yojana (JSY) for promoting institutional deliveries. Based on the NRHM state wise progress report on 30.6.2012 the number of institutional deliveries in Maharashtra have increased from 11,03,000 in 2005-2006 to 16,35,675 in 2011-2012.

As per the latest statistics reported by the MOHFW for the State of Maharashtra in 2010, there are 8.81 lakhs institutional deliveries and 1.27 lakhs home deliveries i.e. percentage of institutional deliveries to total deliveries (institutional plus home) is 90.7% and home deliveries to total deliveries reported (institutional plus home) is 10.2%¹

Looking at previous studies and datasets, the various factors that influence preferred place of delivery are:

1. Level of maternal education²: The data available from a NFHS -3 indicated that the maternal education had a strong and independent effect on choice of delivery location. Higher maternal education is associated with a higher probability of delivery at a public or private facility compared to home.
2. Socio Economic Status²: The socio economic status of the family determines to a large extent the preferred place of delivery for the women. Women who belong to higher level on the wealth index prefer to deliver at a private facility as opposed to a public facility. Women on the lowest level of the socioeconomic strata prefer home based delivery.
3. Awareness³: There is a low level of awareness regarding the JSY Scheme. The level of awareness has not reached 100% beneficiaries. This contributes to a large extent to the higher frequency of home based deliveries.
4. Poor Condition of PHCs⁴: another significant factor affecting the choice of preferred place of delivery is the poor conditions of PHCs and the non availability of female health assistants in the public health facilities. Except the families which can afford the deliveries in the private facilities, most of the families in rural India prefer home deliveries.
5. Lower Expenditure⁴: Home based deliveries involve a lower expenditure. Hence Families with a lower income prefer home based deliveries assisted by the local Dais.

In one of the study conducted in Nainital district of Uttaranchal, India, it was found that about half the deliveries were conducted at home as against hospital deliveries. It was found that hospital deliveries increased sharply with socio-economic status of the family. Results of the study also indicated that mothers belonging to upper socio-economic background preferred hospitals for delivery and those from lower and middle socio-economic group preferred home. Mothers educated up to graduation and above opted for delivering their child at a hospital. Deliveries were conducted at home for mothers who were either illiterate or educated up to fifth standard.⁵

Another study conducted in Bijapur, Karnataka revealed that regarding preferred place of delivery, 86.1% preferred hospital delivery of which 62% preferred Government hospital and 37.6% preferred Private hospital. Safety was the reason given by 41% of pregnant women for preferring hospital delivery followed by “nobody to assist delivery at home” in 13% women.⁶

However the utilization of the services and schemes varies from district to district. In spite of having number of programs, schemes and ample resources to address health needs of people these public facilities are not getting fully utilized.

Therefore it is necessary to understand factors associated with preferred place of delivery among women recently delivered in the state of Maharashtra.

SHSRC, Pune initiated a study to understand the preferences of women who delivered in the year 2011-12. This study was carried out by Prognosis with the following objectives.

Objectives:

- 1) To study factors associated with choice of place for recent delivery
- 2) To understand facilitators and barriers for the institutional deliveries
- 3) To explore socio-cultural aspects for the choice of place of delivery

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1. http://pipnrhm-mohfw.nic.in/index_files/non_high_focus_large/maharashtra/jsy.pdf
 2. <http://www.nmji.in/archives/Volume-24/Issue-6/Original-Article-I.pdf>
 3. <http://ajms.alameenmedical.org/ArticlePDFs%5C18%20AJMS%20V6.N2.2013%20p%20189-192.pdf>
 4. <http://www.isec.ac.in/prc-abs12.pdf>
 5. Pandey S, Shankar R, Rawat CMS, Gupta VM: Socio-Economic Factors and Delivery Practices in an Urban Slum of District Nainital, Uttaranchal.
 6. Angadi M.M. Hiremath B. R. Sorganvi V: A study on factors influencing selection of place of delivery among pregnant women in urban slums of Bijapur city, Karnataka. Please put a bibliography in the correct APA format at the end of the report.

Methodology:

Study Population:

Target group for this study were:

- ✓ Women delivered within a calendar year of 2012
- ✓ Currently Pregnant women

There are many factors in deciding the place of delivery and many stakeholders play role in the process. Hence, their views and opinions were recorded to have other insights.

The major stakeholders are as follows:

- ✓ Health care providers – MS, MOH, MO
- ✓ Decision makers in the family – Husband, Mother-in-law
- ✓ Community influencers
- ✓ Grass-roots level workers – ANMs, ASHAs and AWWs
- ✓ PRI members
- ✓ VHSNC members

Method Used:

Mixed method of quantitative and qualitative data collection was used to elicit required information.

Quantitative Data collection:

A cross sectional quantitative survey was conducted in rural and municipal council areas. A structured tool was developed to collect information from:

- ✓ Women delivered within a period 2011-2012
- ✓ Currently Pregnant women

Qualitative Data Collection:

In-depth interviews of selected women from the quantitative data were collected to have additional insights. From the major stakeholders mentioned above, data was collected either by FGD or by IDIs.

Quantitative Sample:

Sample size:

Percentage of institutional deliveries in Maharashtra is 81.9 as per CES 2009. Considered this in the calculation of sample size, it becomes 588, which is rounded to 600.

Sampling frame:

Multistage sample approach was adopted for the sample selection. The stages of sampling were as follows:

Stage 1 – Selection of districts

Selection of districts in each of the 5 geographical regions was done in a random way. For the region with tribal districts, tribal districts were numbered and one district was selected at random using randomizer.

For other regions, one district (non-tribal) was selected at random using randomizer.

The sample of 600 was divided equally into rural and municipal council areas. The further break up of sample over districts was also equal in all 5 districts. Thus, from each PHC and each municipal council area a sample of 60 women, meeting inclusion criteria was covered; i.e. sample of 120 women meeting inclusion criteria per district.

Stage 2 – Selection of Municipal councils

One municipal council from the selected district was selected at random using randomizer. From this council, one ward was selected at random and 30 deliveries, 30 pregnancies were included in the sample.

Stage 3 – Selection of PHC

One PHC from the district, from the block other than selected council block were selected at random using randomizer.

This selection is based on the percentage of deliveries in public or private health facilities at district level. If the percentage of deliveries in public health facilities is more, then PHC with the same criteria is selected and if the percentage of deliveries in private health facilities is more, then poor performing PHC is selected.

Stage 4 – Selection of Respondent

The birth rate for Maharashtra is 17.3 (rural) as per SRS 2011. Considering this birth rate, the population required to be covered for each district is about 4000. Thus, to reach to that population one PHC area was covered so as to cover required sample size.

In Urban areas, one ward was selected at random.

From each of these areas, 30 delivered women and 30 pregnant women were being included in the sample.

ANM registers- R15 was used as basis to select the required sample randomly. The list was obtained from ANM and 30 Delivered and 30 Pregnant women were selected randomly in each urban and rural site.

Details of Urban area sample are given in a following table:

Selected district	Urban Area (Municipal Council)	Sample selected		N
		Pregnant women	Delivered women	
Gadchiroli	Gadchiroli	30	30	60
Latur	Ahmedpur	30	30	60
Thane	Jawhar	30	30	60
Ahmednagar	Rahata	30	30	60
Kolhapur	Gadhinglaj	30	30	60
Total	5	150	150	300

Details of Rural area sample are given in a following table:

Selected district	Rural Area (PHC)	Sample selected		N
		Pregnant women	Delivered women	
Gadchiroli	Mahagaon PHC (Aheri Block)	30	30	60
Latur	Bhatagali PHC (Latur Block)	30	30	60
Thane	Dhundawadi PHC, (Dahnu Block)	30	30	60
Ahmednagar	Deothan PHC (Akole Block)	30	30	60
Kolhapur	Watanagi PHC (Ajara Block)	30	30	60
Total	5	150	150	300

Qualitative Sample Size:

In-depth Interviews (IDIs):

At the community level, in-depth interviews (IDI) of 4 women (2 delivered and 2 pregnant) from the qualitative sample were conducted to record their views from each district; one each from a rural and an urban area.

Health functionaries and village leaders were considered as important stakeholders, so their views were also recorded by conducting IDIs.

Selected decision makers identified from the quantitative samples were also covered by IDIs. These decision makers were husbands/spouse, mother-in-law or any other person in the family. 6 such persons were covered in the sample (3 rural & 3 urban).

The village leaders such as Sarpanch or any other member of VHNSC were included. At the district level, 2 IDIs were conducted.

MO. PHC from the area of selected villages were considered and IDI of MO was taken. One MO per district was selected.

Focus group discussions (FGDs):

Grass-root level workers - ANM, ASHA and AWW were covered by conducting FGD, one in each district.

Thus, the final sample by both methods is summarized in the following table:

Selected district	Quantitative		Qualitative – IDIs			FGDs
	Women (Pregnant & delivered	Women from sample	MO (R) & MOH / MS (U)	PRI / VHSNC member	Decision makers	ASHA, ANM & AWW
Gadchiroli	120	4	2	1	2	1
Latur	120	4	2	1	2	1
Thane	120	4	2	1	2	1
Ahmednagar	120	4	2	1	2	1
Kolhapur	120	4	2	1	2	1
Total	600	20	10	5	10	5

Training of Field Investigators:

Two days training was organized to train investigators about the study objectives and to orient them about the questionnaire. Training was conducted at Prognosis office.

Data Collection and Quality Assurance:

For quantitative data collection, trained and experienced persons were deployed.

For qualitative data collection, researchers with social science background were deployed. Five teams of two such resource persons each were engaged to conduct FGDs and IDIs proposed. Total work load per district was 10 for one team.

One supervisor per district was deployed for supportive monitoring and doing spot / back checks. 10% spot checks and 5% back checks was done to cross check and ensure quality work.

Data Entry and Analysis:

For the collected quantitative data, Prognosis developed separate software using CSPro and data was entered in it. The data was cleaned and was exported in to statistical analysis package SPSS for further analysis. The qualitative data was collected in the form of recordings and field notes which were further converted in to transcripts. The transcripts were further translated in to English language. The qualitative data was analyzed by using the Open Code 3.6 software.

Findings

1.1 Socio-demographic profile

I – Socio-demographic profile

Table-1: Demographic profile of Respondents

Age in Years	Delivered women		Pregnant women	
	No.	%age	No.	%age
Up to 20	54	18	54	18
21 to 25	164	54.6	168	56
26 to 30	72	24	66	22
More than 30	10	3.3	12	4
Total	300	100	300	100
Educational Level				
Illiterate	28	9.3	25	8.3
Class 1 to 4	20	6.7	33	11
Class 5 to 8	70	23.3	63	21
Class 9 to 12	161	53.7	152	50.7
Above 12 th class	21	7	27	9
Total	300	100	300	100
Religion				
Hindu	237	79	240	80
Muslim	49	16.3	52	17.3
Others	14	4.7	8	2.7
Total	300	100	300	100
Caste				
SC	50	16.7	42	14
ST	63	21	74	24.7
OBC	72	24	77	25.7
General	115	38.3	107	35.7
Total	300	100	300	100
Occupation				
Remunerated	51	17	61	20.3
Non-remunerated	249	83	239	79.7
Total	300	100	300	100
Occupation				
House wife	249	83	239	79.7
Agricultural laborer	14	4.7	10	3.3
Self employed	13	4.3	13	4.3
Private worker	21	7	29	9.7

Public servant	3	1	9	3
Total	300	100	300	100
Family type				
Nuclear	79	26.3	88	29.3
Joint	221	73.7	212	70.7
Total	300	100	300	100
Pregnant WomenDelivered Women				
Details of marital information				
Mean Age at marriage	19.19		18.64	
Mean duration of married years	4.2		4.29	
Mean age at first conception	20.14		20.1	
Average number of living children	1		2	
Age at MarriagePregnant WomenDelivered Women				
Up to 18	130	34.3	111	37.3
19 to 21	132	44.0	141	47.7
22 to 24	30	10.0	45	15
More than 24	8	2.7	0	0
Total	300	100	300	100
Duration of MarriagePregnant WomenDelivered Women				
0 to 2 years	106	35.3	123	41
2 to 5 years	112	37.3	100	33.3
More than 5 years	82	27.3	77	25.7
Total	300	100	300	100

When asked about their age, it was found that majority of the respondents from both the pregnant (55%) and delivered women's group (56%) belonged to the age of 21 to 25 years, followed by 26 to 30 years; 24% in pregnant group and 22% in delivered group, 18% were from the age group up to 20 years. Very few (almost 4%) were more than 30 years of age in both the groups that were studied.

When enquired about the education that the study group has attained, 54% from the pregnant group and 51% from the delivered group were educated between classes 9th to class 12th; followed by 22% in both the groups who had attained education between classes 5 to class 8. While averagely 8.5% were illiterate, 8% had studied up to 12th and above.

Majority of the population that was studied were Hindus (80%) followed by Muslims (17%). In the group that was studied, not much variation was seen in the caste that both groups belonged to.

Close to 80% of the pregnant women were housewives while the second largest group (less than 10%) comprised of women that were privately employed. With respect to women who

had delivered, 83% were housewives and the second largest group (7%) had women who were privately employed.

More than 70% of the respondents from both the groups were staying in a joint family.

The mean age at marriage for the pregnant women was 19.19 years and for delivered women was 18.64 years. The mean duration for the marriage of the respondents in both the group was 4.2 years. Also, the mean age at first conception in both the group was 20.1 years.

Table-2: Demographic profile of Spouse

Age in Years	Delivered women		Pregnant women	
	No.	%age	No.	%age
Up to 20	0	0	1	0.3
21 to 25	78	26	87	29
26 to 30	142	47.3	144	48
More than 30	80	26.7	68	22.7
Total	300	100	300	100
Educational Level				
Illiterate	22	7.3	10	3.3
Class 1 to 4	21	7	33	11
Class 5 to 8	54	18	57	19
Class 9 to 12	171	56.9	158	52.7
Above 12 th class	32	10.7	42	14
Total	300	100	300	100
Religion				
Hindu	233	77.7	136	78.7
Muslim	53	17.7	56	18.7
Others	14	4.7	8	2.6
Total	300	100	300	100
Occupation				
Remunerated	291	97.0	289	96.3
Non-remunerated	9	3	11	3.7
Total	300	100	300	100
Occupation				
Unemployed	9	3	11	3.7
Agricultural laborer	21	7	27	9
Self employed	123	41.0	102	34
Private worker	85	28.3	88	29.3
Public servant	62	20.7	72	24
Total	300	100	300	100

When enquired about the spouses' age, it was found that fifty percent spouses' of both the groups belonged to the age group of 26 to 30 years. 26% belonged to the age group of 21 to 25 and more than 30 years in the spouses' of pregnant women's group, while for the delivered group, 29% were from 21 to 25 years and 23% were more than 30 years of age.

Similar to the findings of the respondents group, majority of the spouses' were educated between classes 9 and 12. 19% were educated between classes 5 and 8.

Self-employed formed the largest category for spouses of pregnant women and those that had recently delivered, with 34% and over 41%, respectively, belonging to this category. Over 28% of spouses of women who had delivered and over 29% of spouses of pregnant women were private workers. The third largest group constituted that of public servants with 21% of spouses of delivered women and 24% of spouses of pregnant women forming the group. Less than 10% of spouses for both categories of women were agricultural laborers.

Majority of the population that studied was composed of Hindus (78%) followed by Muslims (18%).

Objective-wise findings:

II - Access to health care

Table-3: Type of health facility usually used (Irrespective of ANC care)

Facility	Delivered Women		Pregnant Women	
	No.	%age	No.	%age
Public facility	189	63.0	184	61.3
Private facility	111	37.0	116	38.7
Total	300	100.0	300	100

When the respondents of the study were asked about the health facility which they usually use (not necessary for ANC or delivery) majority of them in both the groups, 63% in the delivered women's group and 61% in the pregnant women's group, replied that they use the public facility.

Table-4: Distance of nearest health facility

Distance	Pregnant women		Delivered women	
	No.	%	No.	%
Less than 1 km	113	37.7	106	35.3
1 to 5 km	141	47.0	162	54.0
6 to 10 km	37	12.3	29	9.7
More than 10 km	9	3.0	3	1.0
Total	300	100.0	300	100.0

While most of the pregnant women (47%) and women who had delivered (54%) lived at a distance of 1 to 5 km from nearest health facility, the second largest group in both categories 38% and 36% respectively lived very close to the nearest health facility at a distance of less than a kilometer. Thus overall 83% and 90% of the women from the pregnant women and women who had delivered categories resided at a distance of less than 5 km. This shows that access to health facilities is reasonably good.

Table-5: Convenient mode of transport to reach health facility

Mode of Transport	Pregnant women		Delivered women	
	No.	%age	No.	%age
Public transport system	24	8.0	31	10.3
Private transport system	49	16.3	42	14.0
Private motor vehicle	67	22.3	74	24.7
Cycle/Bullock-cart	20	6.7	4	1.3
Walking	140	46.7	149	49.7
Total	300	100.0	300	100.0

In relation to the distance of nearest facility, when respondents were asked about their convenient mode of transport, almost equal proportion of respondents in both the groups felt it convenient to reach the health facility by walk. The other major transport services used were private vehicle owned by the respondents' family. Use of public transport to reach the health facility was minimal.

Table-6: Preferred Place of Delivery

Facility	Delivered Women Actual % (Number)	Pregnant Women Choice % (Number)
Public facility	68 (204)	60.0 (180)
Private facility	32 (96)	26.0 (78)
Not Planned	---	14.0 (42)
Total	100.0	100.0

Public health facilities are preferred by both categories of women with nearly 67% from the pregnant women category and 60% from the women-who-have-delivered category preferring public health services.

1.2 Obstetric History

III – Pregnancy related findings

Table-7: Gravida

Gravida	Pregnant women		Delivered women	
	Number	%age	Number	%age
First pregnancy	120	40.0	57	19.0
Second pregnancy	108	36.0	178	59.3
More than two pregnancies	72	24.0	65	21.7
Total	300	100.0	300	100.0

Out of the total sample for pregnant women, 40% were pregnant for the first time, 36% were pregnant for the second time and 24% were pregnant for more than two times.

In the delivered women group, out of the total sample, 19% were pregnant for the first time, 59.3% were pregnant for the second time and 21.7% were pregnant for more than two times.

Table-8: Cross tabulation of actual place of delivery by Gravida

Gravida	Delivered women (Actual)				Total	
	Public		Private			
	Number	Percentage	Number	Percentage	Number	Percentage
Primi	45	78.9	12	21.1	57	100.0
2+	159	65.4	84	34.6	243	100.0
Total	204	68.0	96	32.0	300	100.0

Public health facility was the preferred choice among the primi para delivered group women and even in the multi-gravida.

Table-9: Cross tabulation of preferred place of delivery by number of living children

No. of living children	Delivered women (Actual)				Total	
	Public		Private			
	Number	Percentage	Number	Percentage	Number	Percentage
One	41	53.9	35	46.1	76	100.0
Two	81	69.2	36	30.8	117	100.0
Three +	35	72.9	13	27.1	48	100.0
Total	157	65.1	84	34.9	241	100.0

It was interesting to see that as the number of living children increased, the preferred place for delivery changed from private health facility to public health facility utilization; though the difference was not statistically significant.

Table-10: Health center for registration

Place of ANC registration	Delivered Women		Pregnant Women	
	No.	%age	No.	%age
Sub center	100	33.6	93	31.2
PHC	17	5.7	50	16.8
RH/Sub district hospital	88	29.6	88	29.5
Private hospital	76	25.6	37	12.4
Other	16	5.4	27	9.1
Total	297	100	295	100

In delivered women respondent, 33% were registered at SC, 6 % at PHC, 30% at RH/Sub District hospital and 26% were registered at private hospital.

In currently pregnant women respondents, 31% had registered at SC, 17% were at PHC, 30% at RH/Sub district and 12 % were at Private hospital.

Table-11: Number of ANC visits

No. of ANC visits	Delivered women
One	13
Two	3.3
Three	16.3
More than three	67.3

When delivered women were enquired about the number of ANC visits they had during their pregnancy, it was found that more than 3/4th of the sample had availed ANC service for three or more than three times.

Table-12: Cross tabulation of preferred place of delivery by Problem during pregnancy

Problem During Pregnancy	Delivered women (Actual)	
	Public	Private
	Number (%age)	Number (%age)
High risk antenatal period	20 (10)	20 (20)
Teenage pregnancy	11 (5.5)	5 (5)
Severe Anemia	4 (2)	5 (5)
Pre-eclampsia	5 (2.5)	7 (7)
Eclampsia	1 (0.5)	3 (3)
IUGR	8 (4)	6 (6)
APH	9 (4.5)	10 (10)
No Problem	164 (82)	66 (66)

When the choice of place of delivery was studied with high risk factor, it was found that both public and private hospitals were equally used at the time of delivery considering the high risk factor.

Below are the results for the preferred place of institutional delivery and the reasons for the same -

Table-13: Reason for preference of PUBLIC facility for institutional delivery (Multiple response)

Reason	Pregnant Women	
	Number	%age
Better care	140	46.6
Free services	143	47.6
Suggested by health workers	109	36.3
Easily Accessible	110	36.7
More Trust	58	19.3

Free treatment or lower costs and eligibility for various schemes was found to be the major reason for preferring public facility for institutional delivery in the pregnant women's group; followed by availability of better services, encouragement by healthcare worker to deliver in public facility. Accessibility to public facility for institutional delivery was also a factor for preferring public facility among the pregnant women.

Table-14: Reason for preference of PUBLIC facility for institutional delivery (Multiple response)

Reason	Delivered Women	
	Number	%age
Better care	155	80.3
No time to go to other private health facility	69	35.8
Unavailability of private health facility	58	30.1
Free services	161	83.4
Availed ANC services from the same institute	105	54.4
Suggested by health workers	73	37.8
Had some complication during delivery	4	2.12

Availability of services for free of cost was found to be one of the major reasons for utilizing public facility for delivery among the delivered women who were interviewed. Better care at public facility and having availed ANC service from the same facility too contributed in deciding public facility as the place for delivery. Health workers played a minimal role and accessibility to private health facility seemed to be an issue.

Table-15: Reason for preference of PRIVATE facility for institutional delivery (Multiple Response)

Reason	Pregnant Women	
	Number	%age
Better care	75	25.0
Easily accessible	46	15.3
More trusted	64	21.4

Table-16: Reason for preference of PRIVATE facility for institutional delivery (Multiple Response)

Reason	Delivered Women	
	Number	%age
Better care	91	95.8
No time to go to other public health facility	13	13.7
Unavailability of doctor's at public health facility	40	42.1
Bad experience in public facility	6	6.3
Availed ANC services from the same institute	23	24.2
Good quality service	55	57.9
Easily accessible	16	16.8
More trusted	29	30.5
Had some complication during delivery	12	12.6

Better quality services provision at the private facility was observed (96%) to be the prime most reason for preferring private facility for institutional delivery among the pregnant women.

Table-17: Recommend the same facility to other beneficiaries

	Number	%age
Yes	171	57.0
No	65	21.7
Don't know	16	5.3
No response	48	16.0
Total	300	100

The satisfaction levels of the respondents seems to be good as 57% of the respondents from the delivered group told that they would recommend the same facility to other beneficiaries.

Table 18: Cross tabulation of Institution Used by Recommend Same Facility to Others

Type of institute utilized	Recommend %			%age
	Yes	No	Can't Say	
Public	57.7	21.6	20.7	100
Private	61.4	24.0	14.6	100

It was seen that a slightly larger proportion of women that used private health facilities recommended them to other beneficiaries. Thus while less than 58% of those who used public health facilities recommended them, almost 62% of those that used public health facilities recommended them.

Table-19: Results within respondents education by utilized place for delivery

Respondents education	Public		Private	
	No.	%age	No.	%age
Illiterate	28	13.7	0	0
Class 1 to 4	17	8.3	3	3.1
Class 5 to 8	57	27.9	13	13.5
Class 9 to 12	95	46.6	66	68.8
Above 12 th class	7	3.4	14	14.6
Total	204	100	96	100

From the above table it is evident that as the level of education increased from secondary to higher secondary, the preferred place for delivery changed from public facility to private facility.

Table-20: Results within respondents occupation by utilized place for delivery

Respondents occupation	Public		Private	
	No.	%age	No.	%age
Remunerated	39	19.1	12	12.5
Non-remunerated	165	80.9	84	87.5
Total	204	100	96	100

There is no effect of respondent's occupation on the preference of place of delivery. Rather, though the respondent's occupation enhanced there was no change in the preferred place for delivery.

Table-21: Results within spouses' education by preferred place

Spouses' education	Public		Private	
	No.	%age	No.	%age
Illiterate	21	10.3	1	1.0
Class 1 to 4	20	9.8	1	1.0
Class 5 to 8	42	20.6	12	12.5
Class 9 to 12	106	52.0	65	67.7
Above 12 th class	15	7.4	17	17.7
Total	204	100	96	100

Similar to the finding from the respondent's education, as the education of the spouse increased from secondary to higher secondary, the preferred place for delivery changes from public facility to private facility.

Table-22: Results within respondents occupation by preferred place

Spouses' occupation	Public		Private	
	No.	%age	No.	%age
Remunerated	196	96.1	94	97.9
Non-remunerated	8	3.9	2	2.1
Total	204	100	96	100

Similar to the findings from the spouses' occupation, there is no effect of respondent's occupation on the preference of place of delivery.

QUALITATIVE FINDINGS

I. Factors/reasons associated with choice of place for recent delivery

1) Trend of increasing institutional deliveries:

Many stakeholders expressed the view that the NRHM and JSY had helped in pushing/motivating institutional deliveries due to factors like free transportation to the health facility and back. Similarly, health functionaries like ASHAs, ANMs, MOs, and MSs reiterated the view that institutional deliveries were on the rise. PRI members expressed a similar view.

“Home deliveries have really gone down. There is hardly any. PHC has a vehicle facility; if need arises the hospital staff carry the patients towards the city. Facilities have improved under this NRHM.”

Opting for institutional delivery is related to greater awareness regarding complications through IEC activities. Here too, it was reported that benefits from JSY were substantial.

“ANM and ASHA come to us regularly and guide us about all the changes during pregnancy. Also they undertake immunization sessions for us and also for our children after delivery.”

2) Socio-economic factors influence choice:

The community stated that losing children before or during delivery was not affordable, hence, institutional delivery had become inevitable. However, the actual socio-economic situation determines whether a family would opt for a public or private health facility.

“The family size has also come down. So people think that when we have to have less kids why not to have it in a good place!”

Higher cost of treatment at the private facility was cited as a factor: poorer people choose public/government health facilities due to better affordability and hence this is the predominant choice as the community is largely poor.

In other places too that were studied, health functionaries like ASHAs, ANMs, MOs, and MS also cited the socio-economic situation as a determinant.

3) Previous positive experience in case of women that had delivered before:

Choice of the type of facility (private or public) is often determined by previous positive experience at the facility. Interestingly, respondents from several districts cited this but the type of facility that tended to be chosen could either be a public facility or a private facility.

For example, respondents in Ahmednagar cited that women who had already delivered had utilized private facilities for ANC services and hence tended to choose private facilities. It was felt that diagnosis is better at private facilities. In the district though, even pregnant women who had not experienced care at any facility tended to choose the private health facilities.

Conversely, the general perception in the community was that public health facilities are good and hence pregnant women who received ANC care from public facilities tended to make these facilities the preferred choice. In Gadchiroli itself though, pregnant women that had not delivered tended to choose private facilities.

Women who had delivered preferred government health facilities owing to prior experience. However, in places, even pregnant women with no prior experience also tended to choose government/public health facilities.

The supportive behavior of staff at the public hospital was cited as a reason to choose the public facility. In one instance, the woman had used the public health facility during a miscarriage and had a positive experience. In another instance, a woman used the sub-center for delivery and the positive experience made her select the government health facility as the preferred place for delivery.

4) Availability of specialists at the facility:

“Private hospitals are specialized, they don’t have all doctors in place. In govt. facilities, Surgeon, Pediatrician, Gynecologist etc. all are available under one roof”

It was reported that public health facilities were well equipped and had well-qualified specialists and hence were preferred.

Also, the availability of all specialist doctors and advanced test facility made the government health facility the preferred place of delivery. One respondent also cited that a woman was referred to the government health facility from a private facility when she faced complications during delivery. Such a referral clearly indicates the superior infrastructure in terms of equipment and qualified doctors, at the public health facility.

5) Good Communication skills of government health functionaries and effective delivery of doorstep services to the community:

“At the time when I was elected as a VHSNC member, the proportion of deliveries taking place in our PHC was good, which has declined now. This is because of the nurse that was here earlier. Community had tremendous faith in her.”

“ANM & ASHA always come & guide us on all the issues, whether related to pregnancy or immunization etc. We have great trust in them.”

Good communication skills of government health functionaries especially field-level health functionaries were an important factor for choosing government health services.

Doorstep services from the public facility in the form of immunization activities, regular visits of ANM, AWW, and ASHA were lauded by the respondents and hence were preferred.

II. Facilitators and barriers for the institutional deliveries including Socio-cultural factors

1) Availability of transport or proximity to a facility is a facilitating factor:

“Our ASHA works efficiently. She arranges for vehicles for the people of our village.”

Easy availability of transport and proximity to the health factor was considered an important facilitating factor in increasing institutional deliveries.

At many places, respondents lauded the transport facilities provided through the JSY and NHRM as transport is an important facilitating factor. Closeness of the facility to home of the beneficiary was also cited as a factor.

With respect to proximity, as has been noted, the public health facility was the usually used health facility for a larger proportion of the women-with 63% of the women in the delivered group and 61% of the women in the pregnant group stating. At the same time, it was observed that 90% of the women from the delivered women's category and 83% from the pregnant women's category reported living within a distance of less than 5 km from the nearest health facility, with 54% and 47%, respectively, living at a distance of less than a kilometer from the nearest health facility.

2) Poor affordability in the community of loss of child is a facilitating factor:

“I had my deliveries at home. I have lost one son when I delivered at home; he could not breathe properly and died immediately. The doctor was not available nearby.”

Respondents from the community expressed the view that losing children during or after pregnancy is not at all affordable, hence institutional deliveries tend to be preferred.

3) Perceived safety of hospitals is a facilitating factor:

Related to poor affordability of losing a child is the factor relating to the perceived safety at hospitals that has proved to be facilitating factor for institutional deliveries. However, respondents here specified that such a perception of safety was related to private health facilities.

The community felt that institutional deliveries were preferred as people felt that an emergency could occur any time during delivery and treatment would be immediate in a hospital setup.

“We stay away from our family and my husband goes to work. What will I do if I deliver at home; so I have chosen to deliver in hospital as there can be complications any time and those can be treated only in the hospital.”

Perceived safety cause a woman from a nuclear family in Kolhapur to choose a hospital delivery as there was no one at home to take care of her.

4) Previous bad experience with local and unqualified doctors is a facilitating factor:

In Latur, the previous experience of not going availing of hospital services led to a woman losing her child. This changed the family's behavior and the woman was sent to the hospital for check-ups as well as for delivery.

Additionally, the family had a prior bad experience with local unqualified doctors and traditional healers who had been unable to prevent successive abortions. This negative experience proved to be a facilitating factor in seeking hospital services for ANC care and for institutional delivery.

“I had miscarriages in the past. I visited many local vaidya’s but of no use. I am now taking complete ANC from ANM and plan to deliver in hospital.”

5) Previous positive experience in terms of specialized services, supportive staff at a health facility is a facilitating factor:

Previous positive experience of another family member and availing of ANC services from a government health facility led to the use of same facility. Also previous positive experience in a government setup for the delivered woman lead to utilization of the same facility.

In Gadchiroli, a woman responded that she found facility at her native place to be a facilitating factor for her ANC services and also for delivery even though the facility was more than 100 kms. Availability of necessary equipment and the supportive behavior of staff at the government facility at her parents’ place was the facilitating factor here.

Positive experience of friends at the private health facility resulted in peer pressure for a woman from Latur who had otherwise received motivation from the ANM of the public facility.

6) Establishment of rapport with family through outreach is a facilitating factor:

At all the places studied, the family members were consulted by the ANM so that they would opt for institutional delivery at the public health facility.

7) Attrition of staff members who have established rapport in the community is a barrier:

In Ahmednagar, a unique reason cited related to attrition of staff at public health facilities. It was felt that if staff members that had already established excellent rapport with the community left the health facility due to any reason, people were reluctant to utilizing the public facility after they had gone.

“The percentage of deliveries taking place in our facility has gone down as compared to previous year. The reason for this is a nurse who used to work in this area. She had such a good rapport with the community that many people didn’t ask for the doctor but for her. And now that she has left, the numbers of deliveries have gone down.”

8) Road blockages that hinder transportation are a barrier as is great distance between home and facility:

Distance of facility from home was cited as a barrier.

Water logging during the monsoon proved to be a barrier for institutional deliveries at many places as roads get blocked and transportation is difficult in such cases.

Given that 90% of women from the delivered women’s category and 83% from the pregnant women’s category lived at a distance of less than 5 km from the nearest health facility, it was no surprise that walking was the most commonly reported convenient mechanism of transport with nearly 50% from the delivered women’s category and nearly 47% from the pregnant women’s category reporting this mode of transportation. Private vehicles (motor vehicles plus other private vehicles) was the second most reported mode of transport with

close to 39% from the both groups delivered women's group and pregnant women's group reporting it. Clearly, accessibility is an important factor.

9) Poor affordability of health care services is a barrier for private facilities while free services are a facilitating factor for public health services:

“Govt. is providing services free of cost.”

In Thane, the higher cost of treatment at the private health facility was considered as a barrier. Conversely, as reported by the woman from Gadchiroli who availed of public health facilities at her parents' place, the free cost was a facilitating factor.

In Kolhapur, the free services proved to be a motivating factor in selecting a public and a woman reported that she opted for the public facility due to free services, despite the absence of the USG facility.

The poor financial situation of many led them to select government health facilities for delivery.

10) Illiteracy and socio-cultural beliefs:

As reported in Gadchiroli, illiteracy was cited as a barrier to the use of institutional services for delivery.

The presumption that private hospitals induce patients to go for C-section rather than normal deliveries made people select government health facilities instead.

“Doctors also suggest them for C-section and not motivate for normal delivery. They also get money, hence they do all this things.”

Conclusions

Qualitative findings supplement what was learned from quantitative analysis by providing the rationale for people's behavior.

- **Perceived safety of institutional deliveries vis-à-vis risk of home deliveries especially when health emergencies arise:** It is learned that loss of a child is not considered a viable option and home deliveries are perceived as risky, hence institutional deliveries have become the norm rather than the exception.
- **Socio-economic factors, affordability, and free services of government health facilities:** Socio-economic factors determine the choice of the type of institution preferred: public or private. In general, poorer families and poorer communities tend to opt for public health services while more affluent families and communities opt for private services. For example, Ahmednagar is predominantly an affluent community where private services are preferred. Government health facilities provide free services which becomes an important factor especially when families are poor.
- **Effectiveness and Efficiency of public health facilities:** Apart from socio-economic factors, when government health services are effective with proper availability of specialists, people tend to prefer public health facilities. Previous positive experience with the facility due to supportive staff and good quality of health care also plays a role as a determining factor.
- **Effective Community outreach by public health facilities:** Similarly when public health facilities have effective community outreach and ANMs are pro-active in ensuring registration as well as establishing rapport, the tendency is to select public health facilities.
- **Accessibility/Distance of facility and availability of transportation:** It is observed that accessibility or close distance also plays a role in the specific facility that is selected for institutional delivery. Families tend to select facilities, private or public, based on proximity and accessibility. Allied to this is the aspect of having transportation. This is where schemes like the JSY under the NHRM that provide for free transportation is considered commendable and many of the respondents believe that the increasing trend towards institutional deliveries can be associated with provision of timely transportation.

Photographs:



