

## ORIGINAL ARTICLE

## Utilization of Reproductive and Child Health Services and Client Satisfaction under Different Level of Health Facilities

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### Article Cycle

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### Abstract

**Background:** The utilization of any social services, including health services, has never been equitably distributed throughout society. People with access to the facilities are generally found to make greater use of them than people who have neither knowledge nor access to the facilities. **Objective:** To study the utilization pattern of RCH services, to identify factors influencing the utilization of RCH services in district Etawah and to describe level of client satisfaction about the various RCH services provided by Health Facility. **Methods:** This was a cross sectional study conducted in two blocks of Etawah i.e., Basrehar and Jaswant Nagar. Purposive sampling method was used and 260 participants were interviewed during the study period i.e., from May 2018 to April 2019. All the antenatal mothers and mothers with child up to 24 months attending OPD of selected health facility were included in the study. **Result:** Mean age of participants was found to be  $24.9 \pm 3.6$  years. The proportion of previous delivery that was institutional was found to be 71.7% where as 28.3% had previous home delivery. Most common place for institutional delivery was found to be CHC. **Conclusion:** Utilization of RCH services were found to be not adequate in the study.

### Keywords

Cross Sectional Study; Health Facility; Client Satisfaction

### Introduction

Maternal complications and poor perinatal outcome were associated with non utilization of antenatal and delivery care services. Poorer outcomes were seen in unbooked than booked pregnant females.(1)

In lower and middle-income countries, less than 50% of all pregnant women have a minimum of four antenatal care visits.(2) Cost, distance, viewpoint of health providers, and other factors put the secondary care and private sector facilities inaccessible to most of the poor urban residents. The health of the urban poor is considerably worse off

than the urban middle and high income groups and is perhaps even worse than the rural population.(3) Socioeconomic factors have often been used as revelatory factors for low utilization of RCH services. The socioeconomic factors are related to socioeconomic factors, and often in the scarcity of good data, it is very difficult to explain the poor utilization of RCH services.(4)

### Aims & Objectives

1. To study the utilization pattern of Reproductive and child health services

2. To identify the factors influencing the utilization of Reproductive and Child Health services at various levels of health services in district Etawah
3. To describe level of client satisfaction about the various Reproductive and child health services provided by different health facilities in Etawah

## Material & Methods

**Study Type:** A cross sectional study

**Study population:** Pregnant women and women with child upto 24 months in the 2 blocks of District Etawah.

**Study area:** Two blocks of District Etawah.

**Study Duration:** One and half years (Jan 2018 to July 2019)

**Sampling technique:** Purposive sampling

**Inclusion Criteria:** All the selected pregnant women and women attending PHC, CHC and Subcentre OPD in the selected block whose child was less than 24 months and giving consent for the participation in the study for exit OPD interview

**Exclusion Criteria:** Women not giving consent for the participation in the study for exit OPD interview

### Methodology

There are 8 blocks in District Etawah. Of these, 2 blocks of Basrehar and Jaswant Nagar were selected randomly. In each of the selected block, one block CHC was included, and 2 PHCs and 3 subcentres were selected randomly. In Basrehar block we conducted exit OPD interview at CHC Basrehar on every Monday. So there were total 12 visit at CHC Basrehar during the period of three months. Similarly for PHC, exit interview were conducted on every Tuesday of a week. So, we had a total of 6 visit at each PHC. For Subcentre we had exit OPD interview on every Wednesday of week, so there were total 4 visit at every selected Subcentre. A total of 130 participants were interviewed in Block Basrehar during 3 months of study at different health care facility. Out of 130 participants, 100 participants were from CHC, 20 from PHC and 10 were from subcentre. Only 130 participants were interviewed during 3 months due to lack of time and manpower.

After the study period of three month in the Basrehar we conducted our study in Jaswantnagar block. To ensure comparability between the two blocks we interviewed same number of participants from CHC, PHC and subcentre of Jaswantnagari.e, a total of 130 participants, out of which 100 from CHC, 20 from PHC and 10 from subcentre were interviewed. After interviewing the required participants in the CHC, PHC and Jaswantnagar block we stopped there only and didn't had any further interview at that health facility.

On the day of exit interview every 10th patient who was registered for ANC was selected from register, if she refused next female was taken for interview. Beside this, mother attending paediatric OPD were also interviewed. If participant of both groups were available preference was given to pregnant mothers as they were current utilizers. In the selected PHC same procedure was done. In

Subcentre all the pregnant female and women up to child less than 24 months interviewed A pretested semi structured Questionnaire containing both open and closed ended question were used. Information were gathered under the following RCH services:

- Institutional delivery
- Contraception services
- STI treatment services
- Child care services like diarrheal treatment
- Vaccination services

**Ethical approval-** The study was approved by the Institutional Ethics Committee i.e,UPUMSSaifai on 13-08-2018 (Ethical clearance certificate no.-45/2018)

**Consent** – Written Consent was taken prior to the interview in the form attached with the questionnaire.

**Data Analysis:** The data collected were encoded into Microsoft Excel sheet and analysed using SPSS version 23. Data was analyzed using appropriate statistical tests like frequency, percentage mean, chisquare and logistic regression. Charts like bar charts and pie charts were for presentation of data

## Results

In the present study a total of 260 participants were interviewed out of which 20 were primigravida (i.e, those who were currently pregnant and had no previous delivery or abortion) and 240 were primipara, multigravida and multipara. The most common age group of participants was between 25 to 30 years i.e, 46.9%. Mean age was found to be  $24.9 \pm 3.6$  years. ([Table 1](#))

Majority of the females practiced exclusive breast feeding (66.60%). On doing analysis of question related to vaccination it was noted that only 77% of the children upto the age of 2 years had received single dose of any vaccine registered under national immunization schedule (this does not include vaccine during pulse polio immunization). Maximum participants visited PHC for their child's diarrhoeal treatment (47.9%) followed by CHC (43.8%). ORS was prescribed to 53 children out of 73 children (72.6%) who took treatment for diarrhoea. Out of 233 participants who needed services for STI, only 53 (21.5%) seek treatment, while 180 (69.2%) did not seek any treatment.

## Discussion

Our study revealed that 28.3% participants had home delivery and 71.7% had institutional delivery. Majority of the institutional delivery were conducted at CHC (85.4%) followed by PHC.

Majority of the other studies had showed proportion of institutional delivery less than our study. (5-10) However, some studies had shown higher proportion of institutional deliveries like Kotresh and Kumar P(9) had 93.5% and Dabade K J(10) et al had 90.3% of institutional deliveries, this difference could be attributed to different study setting.

This study revealed that 131 participants (50.4%) ever used any of the contraception while 129 participants (49.6%) never used any contraception, and most commonly used contraceptive was condom (39%) followed by OCP (34%). Study conducted by Banerji B et al(11) resulted prevalence of 68.5% of contraception services utilization. Malathi et al (12) study showed family planning services utilization rate as 77%. In their study also the most common contraception was condom (38.6%). The present study found the proportion of exclusive breastfeeding as 67%. Bhavsar et al(13) also got the similar prevalence of exclusive breastfeeding of 66% in their study.

This study revealed that there was significant association between place of delivery and exclusive breast feeding(pvalue-0.001), as it was found more common in institutional deliveries (86.5%) as compared to home deliveries (13.5%). This study shows significant association between literacy level and exclusive breast feeding (pvalue-0.001). As the literacy level increases practice of exclusive breastfeeding also increases. Association was also found between socioeconomic class and exclusive breast feeding (pvalue-0.001), exclusive breastfeeding found more common in higher monthly per capita income group participants While the study conducted by Bhavsar et al(13) didn't found any association between socioeconomic class and exclusive breast feeding(p value - 0.949), that may be due to different study setting. This study revealed significant association between religion and place of delivery. Institutional delivery was more common in Hindu religion as compared to Muslim. Other studies didn't find these associations that were found in our study, that may be due to the fact that other study didn't tried to relate these variables with the different RCH services.

**Conclusion**

The proportion of previous delivery that was institutional was found to be 71.7% where as 28.3% had previous home delivery. Most common place for institutional delivery was found to be CHC. The study found significant association of exclusive breastfeeding and contraception usage with the monthly per capita income, education level and place of delivery. Majority of the participants were moderately satisfied with RCH services received by them.

**Recommendation**

Promotion of female literacy is required to improve utilization of maternal health services as it was highly associated with usage of RCH services.

**Limitation of the study**

The total number of participants were only 260, so generalizability of the study is less.

**Relevance of the study**

This study revealed the current utilization rate of different RCH services and factors affecting it in Etawah district

**Authors Contribution**

All authors have contributed equally.

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**Tables**

**TABLE 1 PARTICIPANTS ACCORDING TO SOCIO-DEMOGRAPHIC CHARACTERISTICS (N=260)**

Characteristics	Category	Frequency	Percentage (%)
Age	< 20 years	5	1.9
	Between 20 to 24years	115	44.2
	Between 25 to 30 years	122	46.9

	>30 years	18	6.9
	<b>Total</b>	<b>260</b>	<b>100</b>
Religion	Hindu	247	95.0
	Muslim	13	5.0
	<b>Total</b>	<b>260</b>	<b>100</b>
Education Up To	Illiterate	36	13.8
	Primary	89	34.2
	Secondary	52	20.0
	Higher Secondary	56	21.5
	Graduate	17	6.5
	Post graduate	10	3.8
	<b>Total</b>	<b>260</b>	<b>100</b>
Monthly Per Capita Income	<2000 Rs	166	63.8
	≥2000 Rs	94	36.2
<b>Total</b>		<b>260</b>	<b>100</b>

**TABLE 2 DISTRIBUTION OF PARTICIPANTS BASED ON THE OF PLACE OF LAST DELIVERY OF BABY (N=240)**

Place	Frequency	Percent
Home	68	28.3
Institutional	172	71.7
<b>Total</b>	<b>240</b>	<b>100</b>

**TABLE 3 ASSOCIATION BETWEEN PLACE OF DELIVERY AND EXCLUSIVE BREAST FEEDING**

Exclusive breast feeding	Place of delivery		Total	P value
	Home	Institutional		
Yes	21 (13.5%)	134 (86.5%)	155 (100%)	$\chi^2= 47.114$
No	47 (55.2%)	38 (44.8%)	85 (100%)	
<b>Total</b>	<b>68 (28.3%)</b>	<b>172 (71.7%)</b>	<b>240 (100%)</b>	

**TABLE 4 ASSOCIATION BETWEEN MONTHLY PER CAPITA INCOME AND CONTRACEPTION USE**

Contraception use	Monthly per capita income		Total	P value
	≤2000	>2000		
Yes	60 (48.7%)	63 (51.3%)	123 (100%)	$\chi^2= 75.223$
No	93 (79.4%)	24 (20.6%)	117 (100%)	
<b>Total</b>	<b>153 (63.7%)</b>	<b>87 (36.3%)</b>	<b>240 (100%)</b>	

**TABLE 5 ASSOCIATION BETWEEN RELIGION AND PLACE OF DELIVERY**

Place of delivery	Religion		Total	P value
	Hindu	Muslim		
Home	60 (88.2%)	8 (11.8%)	68 (100%)	$\chi^2=7.463$
Institutional	167 (97%)	5 (3%)	172 (100%)	
<b>Total</b>	<b>227 (94.5%)</b>	<b>13 (5.5%)</b>	<b>240 (100%)</b>	

**TABLE 6 LOGISTIC REGRESSION ANALYSIS OF EXCLUSIVE BREAST FEEDING WITH DIFFERENT COVARIATES**

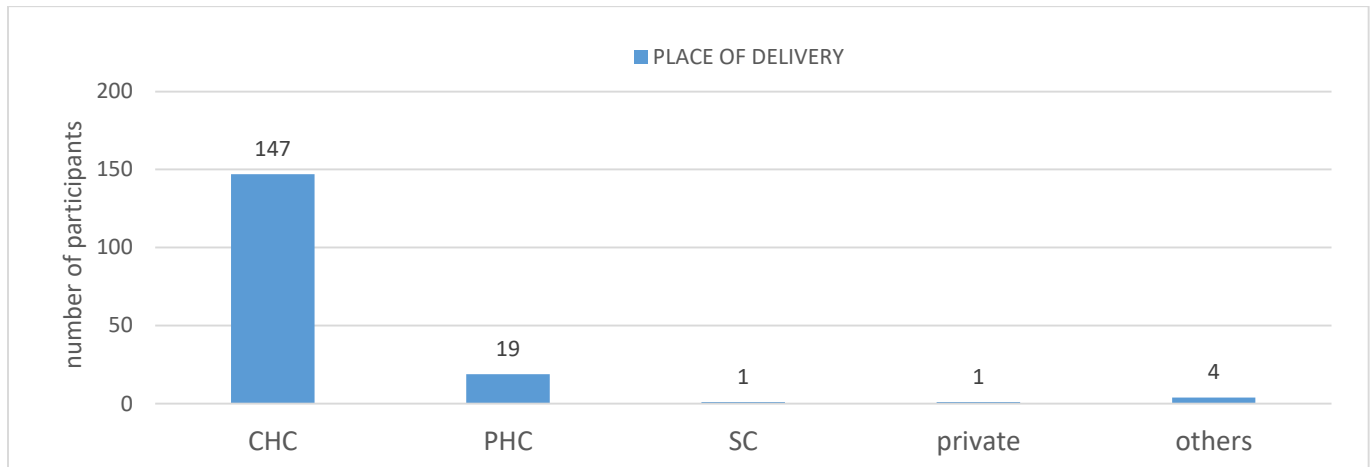
Covariates	Category	Univariate Analysis			Multivariate Analysis		
		Crude odds ratio	C.I (95%)	p value	Adjusted odds ratio	C.I (95%)	p value
Per capita income	<2000	1	6.908 -	<0.001	1	5.191 -	<0.001
	≥2000	13.222	21.037		10.450	25.207	
Place of delivery	Home	1	4.212 -	<0.001	1	2.822 -	<0.001
	institutional	7.892	14.789		5.860	12.170	
Religion	Hindu	1	0.040 -	0.005	1	0.128 -	0.413
	Muslim	0.148	0.554		0.546	2.326	

**TABLE 7 LOGISTIC REGRESSION ANALYSIS OF CONTRACEPTION USAGE WITH DIFFERENT COVARIATES**

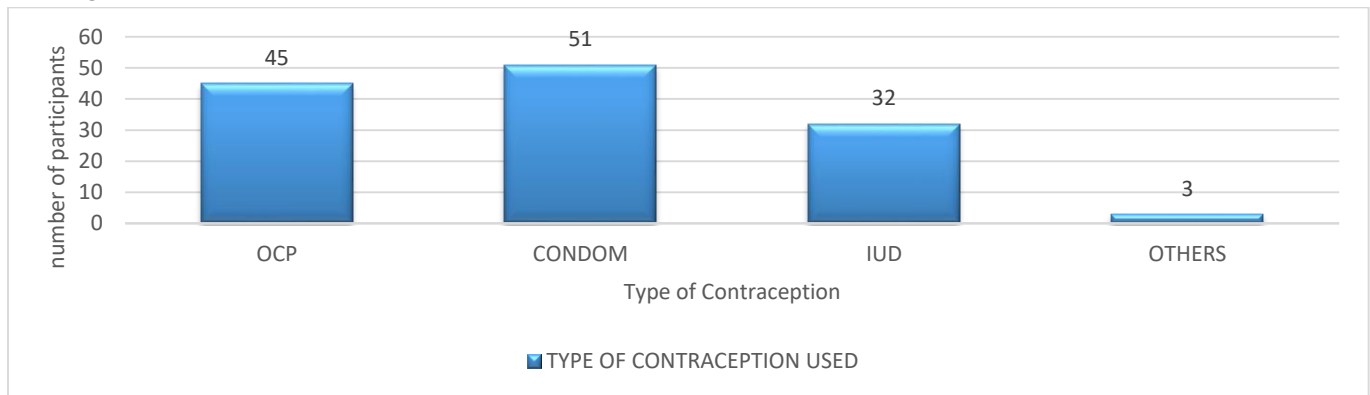
Covariates	Category	Univariate Analysis			Multivariate Analysis		
		Crude odds ratio	C.I	P value	Adjusted odds ratio	C.I	P value
Per capita income	<2000	1	2.770-	0.002	1	5.191 -	<0.001
	≥2000	4.718	8.037		4.854	25.207	
Place of delivery	Home	1	1.422-	0.002	1	0.762-	0.250
	institutional	2.546	4.558		1.471	2.837	
Religion	Hindu	1	0.009-	0.013	1	0.020-	0.094
	Muslim	0.074	0.576		0.166	1.359	

**Figures**

**FIGURE 1 COLUMN GRAPH SHOWING THE PLACE OF INSTITUTIONAL DELIVERY OF STUDY PARTICIPANTS**



**FIGURE 2 COLUMN GRAPH SHOWING THE DISTRIBUTION OF TYPE OF CONTRACEPTION USED BY PARTICIPANT**



**FIGURE 3 PIE CHART SHOWING THE DISTRIBUTION OF SATISFACTION LEVEL OF PARTICIPANTS WITH THE QUALITY OF OVERALL SERVICES AT CENTRE**

