

UTILIZATION OF CHILD HEALTH SERVICES FOR MOTHERS IN RURAL AREA OF DISTRICT GHAZIABAD

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Abstract-

Introduction-Maternal and Reproductive Health Services in health systems constitutes a large range of curative and preventive health services. This study was done to visualize the utilization of child health services.

Material and Methods- It was a community based cross sectional study conducted for a period of 1 year. Multistage sampling was used and the sample size was found to be 575 females. A semi-structured questionnaire was used to collect the relevant data. Analysis in form of proportion was done using SPSS software.

Results-The utilization of postnatal care was seen to be more in rural area (96.66%).In rural area out of 159 mothers who received ANC only 132(83.02%) mothers gave colostrum to their baby whereas out of 21 mothers who did not receive ANC only11(52.38%) mothers gave colostrum and this difference was found to be statistically significant.

Conclusion-Need of greater co-operation between the govt. and private sector with involvement of the NGO's for wide spread utilization and efficient services.

Keywords- maternal, health services, rural area.

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Introduction- The term “Maternal and Child Health” is widely used by many national and international organizations for the set of services related to maternity and basic childhood health care such as deliveries and immunizations. Maternal health encompasses all activities such as Antenatal Care, Delivery Care, Postnatal Care and Maternal Complications around Delivery catered and provided to a woman of their reproductive age (from 15 to 49 years). On the other hand, Child Health includes all medical assistance such as Childhood Vaccination Coverage, Child Illness and Treatment and Childhood Mortality to right after birth [1]. As compare with NFHS-3 study (2005-2006) to UNICEF Coverage evolution survey (2009-2010) shows increase in major indicator for maternal and child health in Uttar Pradesh i.e. mothers who had 3 ANC visits for their last birth 26.3% to 38.2%, institutional births 22% to 62.1%, mothers who received PNC within 2 days of delivery for their last birth 14.2% to 26.8% ,children fully immunized 22.9% to 40.9% , children with diarrhea in last 2 weeks taken to a health facility 53.3% to 54.6 , children with ARI/fever in last 2 weeks taken to health facility 63.6% to 72.3% [2]. However, utilization of maternal and child health services by the target population continues to be poor [3]. This could be due to lack of awareness, availability, or accessibility to these services. The major killers of children are – acute respiratory infections, dehydration due to diarrhea, measles and neonatal tetanus and in some areas malaria. The high prevalence of malnutrition contributes to over 50% of child deaths. A significant proportion of mortality occurs in low-birth weight babies. It has been recognized that further reduction of IMR will require focused attention on Neonatal mortality [4]. The immunization coverage has seen an improvement over the years. However, there is further need for improvement especially in DPT 3 and OPV 3 coverage and reducing drop outs [5]. Still we have not reached the goal of universal immunization against all vaccine preventable diseases which was to be achieved by 2010, as envisioned in National Population Policy 2000 [6].

Materials and Methods-

It was a Community based cross sectional study carried out in community development Block of Dist. Ghaziabad for a period of 1 year from August 2016- July 2017 [10].

According to NFHS-3, prevalence of Child health services are,

Child breastfed within 1 hr. of birth - 24.5%.

Vaccination coverage (All) - 44%

Children had ARI- 71%

Children had Diarrhoea treated with ORS- 26%

Mean Prevalence (P) = 41.37%

The sample size is calculated by the formula ($n = Z.Z.P.Q/L.L$)

Sample Size for Child Health Services (n)= $4.41.59/4.1.4.1=575.60$

Multistage sampling technique was used to cover the sample size for present study:

Stage 1. For the study, Dasana Community development block of Ghaziabad was selected by simple random sampling method.

Stage 2. Out of selected Community development block Dasana, 4 subcentres were selected by simple random method Bhauwapur, Duhai, Attor, Bomota sub centers was selected by simple random sampling method.

Stage 3. Under the selected sub centers, village Shahpur, Bijnauli, Attor and Bomota was selected by simple random sampling method and number of respondents were equally divided in these four villages, households in that villages were studied till the desired sample size is achieved.

House to house visits were made till respondents could be found in 4 villages in 4 sub centers. Interview was conducted at the house of the respondents. Being cross sectional study, only one visit was made to each individual mother. A pre-designed and pretested proforma was used during the data collection. In the first part of the proforma socio-demographic data were collected. Both bivariate and multivariate analyses have been used. Data was coded and correlated tables were prepared and data analyzed using SPSS (version 16.0) package.

Results-

Table1 - Age Wise Distribution of Mothers.

Age group (in years)	(n= 433)	
	Number	%
<20	7	1.61
20-24	199	45.96

25-29	159	36.72
30-34	59	13.63
≥35	9	2.08
Total	433	100

he above table shows that maximum number of mothers (45.96%) were in the age group of 20-24 years followed by(36.72%) in the age group of 25-29 years.

Table 2--Distribution of Mothers in Rural Area According to Parity and Place of Delivery

Parity	Place of delivery in rural area		Total
	Home	Institution	
1	4(23.53%)	79(48.47%)	83(46.11%)
2	6(35.29%)	63(38.65%)	69(38.33%)
3	5(29.41%)	20(12.27%)	25(13.89%)
≥4	2(11.76%)	1(0.61%)	3(1.67%)
Total	17(100%)	163(100%)	180(100%)
	$\chi^2=10.043$ df=2 p=0.0066 The bottom 2 rows were clubbed calculation		

Table2 shows In rural area institutional delivery was more in mothers of parity 1.Lowest institutional delivery was seen in mothers of parity 4 and above.Home delivery was seen to be highest in mother whose parity was 3 and this difference was found to be statistically significant.

Table3- Distribution of Mothers in rural area according to receipt of Post Natal Care Visit within 48 Hours of Delivery and Utilisation of Antenatal Care .

Antenatal care received in rural area	Receipt of post natal care visit within 48 hours of delivery in rural area		Total
	Yes	No	
Yes	158(99.37%)	1(0.62%)	159(100%)
No	16(76.19%)	5(23.80%)	21(100%)
Total	174(96.67%)	6(3.33%)	180(100%)
	$\chi^2=24.158$ df=1		
	p<0.0001		

Table3- shows In rural area out of 159 mothers who received ANC 158(99.37%) mothers received PNC within 48 hours after delivery whereas out of 21 mothers who did not receive ANC 16(76.19%) mothers received PNC.This difference was found to be statistically significant.

Table 4—Distribution of Mothers in Rural Area According to Colostrum Given and Utilisation of Antenatal Care

ANC received in rural area	Colostrum given in rural area		Total
	Yes	No	
Yes	132(83.02%)	27(16.98%)	159(100%)
No	11(52.38%)	10(47%)	21(100%)
Total	143(79.44%)	37(20.56%)	180(100%)
	$\chi^2 =10.663$ df=1		
	p=0.0011		

Table 4- shows in rural area out of 159 mothers who received ANC only 132(83.02%) mothers gave colostrum to their baby whereas out of 21 mothers who did not receive ANC

only 11(52.38%) mothers gave colostrum and this difference was found to be statistically significant.

Table 5--Distribution of Mothers in Rural Area according to Pre lacteal feed given and Utilisation of Antenatal care.

ANC received in rural area	Pre lacteal feed given in rural area		Total
	Yes	No	
Yes	19(11.95%)	140(88.05%)	159(100%)
No	9(42.86%)	12(57.14%)	21(100%)
Total	28(15.56%)	152(84.44%)	180(100%)
	$\chi^2 = 13.490$ $df=1$ $p=0.0002$		

Table 5- In rural area out of 159 mothers who received ANC 19(11.95%) mothers gave pre lacteal feed whereas out of 21 mothers who did not receive ANC 9(42.86%) mothers gave pre lacteal feed to their baby and this difference was found to be statistically significant.

Discussion-The current study shows age wise distribution of mothers. Table 1 shows that maximum number of mothers 46.11 % were in the age group of 20-24 years in rural area group whereas majority were 42.78% seen in the age group of 25-29 years in urban slum. Paras Agarwal et. al (2004) found in their study that 44% mothers were 24-29 years of age group, 35.5% belongs to 18- 23 years and 21% belongs to 30 years or above who availed antenatal care [7]. Afrin Sagir et. al (2006) found in their study that 64.9% mothers were in the age group of 21-30 years ,27% were 31-40 years, 5.4% were less than 20 years and 2.7% were above 40 years [8]. The present study shows Distribution of Mothers in Rural Area According to Parity and Place of Delivery. In rural area institutional delivery was more in mothers of parity 1. Lowest institutional delivery was seen in mothers of parity 4 and above. Home delivery was seen to be

highest in mother whose parity was 3 and this difference was found to be statistically significant. Home delivery was seen to be highest in mother whose parity was 3 and this difference was found to be statistically significant. Regarding place of delivery K. Navaneetham et. al (2000) found that women who had first order births were about one and a half times to two and a half times more likely to have delivered their babies at a health care institution than women who had their second order births in all three states Andhra Pradesh, Karnataka and Tamil Nadu [9]. On the other hand, women with birth order 4 and above were less likely to do so.

Distribution of Mothers according to receiving of Post Natal Care Visit within 48 Hours of Delivery and Utilisation of Antenatal Care in Rural Area. In rural area out of 159 mothers who received ANC 158(99.37%) mothers received PNC within 48 hours after delivery whereas out of 21 mothers who did not receive ANC 16(76.19%) mothers received PNC. This difference was found to be statistically significant.

Distribution of Mothers in Rural Area According to Colostrum Given and Utilisation of Antenatal Care. In rural area out of 159 mothers who received ANC only 132(83.02%) mothers gave colostrum to their baby whereas out of 21 mothers who did not receive ANC only 11(52.38%) mothers gave colostrum and this difference was found to be statistically significant.

Distribution of Mothers in Rural Area according to Pre lacteal feed given and Utilisation of Antenatal care. In rural area out of 159 mothers who received ANC 19(11.95%) mothers gave pre lacteal feed whereas out of 21 mothers who did not receive ANC 9(42.86%) mothers gave pre lacteal feed to their baby and this difference was found to be statistically significant.

Conclusion-The utilization of postnatal care was seen to be more in rural area (96.66%). Majority of mothers started breast feeding within 0-1 hour after birth in rural area (38.88%) started breastfeeding within 1-6 hrs of birth. Colostrum was not given by 20.56% rural mothers. 86.49% mothers in rural area were unaware of the usefulness of colostrum. Prelacteal feed was given by 15.56% of rural mothers. 39.29% mothers in rural area felt that child hunger was not satisfied with only breast milk. 42.86% mothers in rural area gave honey as a prelacteal feed whereas 35.09% mothers in urban slum gave plain water as a prelacteal feed. Exclusive breast feeding was given by (53.89%) mothers in rural area in comparison to only (31.11%) mothers in urban slum. Need of greater co-operation between the govt. and private sector with involvement of the NGO's for wide spread utilization and efficient services.

Conflict of interest- none declared

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References-

1. National Centre for Health Statistics. Health, United States, 2002. Hyattsville, MD: Public Health Service; 2002.
2. World Health Organization Bulletin, WHO Geneva, 2007.
3. Kumar R. Singh M. M, Kaur A.; Reproductive health behaviour of rural women JIMA vol.-93:129-31, 1995.
4. World Health Organization: Core Programme in Family and Community Health; On WHO India facilitated the celebration of “Global WHO day” at New Delhi on 7th April 2005.
5. Annual Report 2010-11. Department of Health and Family Welfare. Ministry of Health and Family Welfare, Govt. of India, p. 71-72.
6. National Population Policy 2000. Available from http://www.mohfw.nic.in/NRHM/Documents/national_population_policy_2000.pdf. Accessed on 10/06/2012.
7. Agarwal Paras, MM Singh, Suneela Garg; Maternal Health-Care Utilization Among Women in an Urban Slum in Delhi, Indian Journal of Community Medicine Vol. 32, No. 3, July 2007.
8. Afrin Sagir, Aditi Vian Varma, Charmaine Minoli Samarasinghe, and Sworoo Thomas John; Maternal and Child Health Services Utilization in Coastal Karnataka, The journal of Young investigators, Volume 19, Issue 16 October 2009.
9. Zulfia Khan, Saria Mehnaz, Najam Khalique, Mohd Athar Ansari, Abdul Razzaque Siddique; Poor perinatal care practices in urban slums, Possible role of Social mobilization networks, Indian Journal of Community Medicine, vol.34, issue 2, April 2009 page 102-107.
10. Vimal Arya, Kumar Gunjan. Utilization of maternal health services in rural area of district Ghaziabad (U.P.). Indian journal of applied research, vol7, issue 9, September 2017. Page 347-348.