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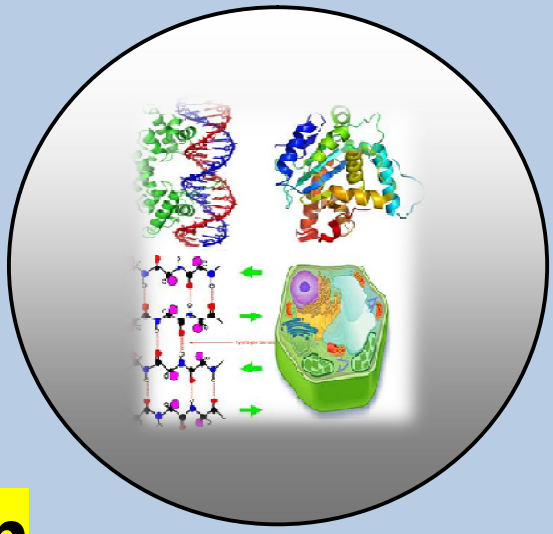

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RESEARCH PAPER

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Sociodemographic Factors Affecting Ante-Natal Care in Rural Areas of Lucknow District

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ABSTRACT

There are numerous potential causal factors including environmental factors that can influence the determinants of gestational weight gain and its consequences and others that may affect those consequences by other routes. These consequences i.e. adverse health outcomes to the mother can arise in the prenatal and/or postpartum periods.

To study the socoidemographic factors affecting Ante-Natal Care in rural areas of Lucknow district.

It was a community based prospective study conducted for a period of 12 months in the rural areas of Lucknow during January 2012 to January 2013. 50 pregnant females in the reproductive age group (15-45yrs) were included in the study and all the pregnant females who showed non co-operation or refusal to provide necessary information were excluded. . It was a purposive sampling. The data was analyzed using the statistical software SPSS 16.0 for windows and Microsoft Excel programme.

Mean weight gain during first trimester was higher among those availing Ante-Natal Care services (3.17) as compared to those not availing Ante-natal care services (2.38) .Majority of the subjects were > 18 of age at the time of marriage (n=36) were literate n=33 and had parity <4.These findings suggest that an improvement in consummation age increasing literacy and maintaining of a small family size.

The findings in the study showed progressive trends in utilization of ANC services across all sociodemographic groups irrespective of their menstrual and obstetric history. The trend showed a positive indication of maternal well being with ANC service utilization on the basis of outcome noted in terms of weight gain during first trimester

Key Words: Sociodemographic Factors, Ante Natal Care, Pregnant Females and Maternal Mortality.

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INTRODUCTION

There are numerous potential causal factors including environmental factors that can influence the determinants of gestational weight gain and its consequences and others that may affect those consequences by other routes. These consequences i.e. adverse health outcomes to the mother can arise in the prenatal and/or postpartum periods. Among the well studied prenatal maternal outcomes that result from excessive gestational weight gain are pregnancy associated hypertension (pre-eclampsia and eclampsia) and risk of complications in labour and delivery. In the postpartum period, weight retention can lead to higher weight status in subsequent pregnancies as well as weight retention and other long term maternal health consequences such as increased risk of type-2 diabetes and cardiovascular disease (Rasmussen et al,2009).

To prevent unwanted outcomes of pregnancy, antenatal care (ANC) is the most important method for detecting pregnancy problems in the early period (Nuraini, et al). ANC is a critical element for reducing maternal mortality, and for providing pregnant female with a broad range of health promotion and preventive health services (USAID , 2007) .One of the most important functions of ANC is to offer health information and services that can significantly improve the health of women and their infants. ANC is also an opportunity to inform women about the danger signs and symptoms for which immediate assistance should be sought from a health care provider (WHO & UNICEF; 2003). Although 76 percent of women received antenatal care, only 44 percent started antenatal care during the first trimester of pregnancy, as recommended. Another 22 percent had their first visit during the fourth or fifth month of pregnancy. Just over half of mothers (52 percent) had three or more antenatal care visits. Urban women were much more likely to have three or more antenatal visits than rural women. The percentage of women who had three or more Ante Natal Care visits ranges from 17 percent in Bihar and 27 percent in Uttar Pradesh to at least 90 percent in Kerala, Goa, and Tamil Nadu. Half of men with a child under age three years said that they were at an antenatal care visit with the child's mother; only 37 percent were ever told what to do if the mother had a major complication of pregnancy (NFHS-3¸ 2005-06). The aim of the study was to study the socoidemographic factors affecting Ante Natal Care in rural areas of Lucknow district.

MATERIAL AND METHODS

It was a community based prospective study carried out in the rural field practicing areas of Era's Lucknow Medical College and Hospital, Lucknow during the period of January 2012 to January 2013.The study group consisted of 50 pregnant females in the reproductive age group of (15- 45 yrs) who gave their consent for the study. All the pregnant females who show non co-operation or refusal to provide necessary information were excluded. Sample size was calculated by the given formula -$n= g \times(\sigma_1^2 + \sigma_2^2) (z_\alpha + z_\beta)^2/d^2$= n= 3 × 14.14 = 33.42. Adding 20 % loss to follow up total sample size taken was n= 50. It was a purposive sampling technique .Data was collected on a structured and pre tested questionnaire. Weight of the pregnant female was recorded within 16-20 weeks. The data was analyzed using the statistical software SPSS 17.0 for windows and Microsoft Excel programme.

RESULTS

The association of various social demographic factors given in Table-1. Maximum number of mothers 41 had not availed the ante natal care services. From those who availed Ante natal care about 4(44.5%) belonged to nuclear family and 5(55.5%) belonged to joint family. 4(44.5%) were hindus and 5(55.5%) were muslims. 6(66.6%) had their family income less than ≤ 5000 and only 1(11.1%) had income above 10000. About 3 (33.3%) were less than 18 years and 6(66.7%) were above 18 years at the time of marriage. 4(44.4%) were illiterate and 5(55.5%) were literate.

Table 2 shows the association of Ante Natal Care with menstrual history**.** From those who availed ante natal care services, 1(11.1%) was ≤ 12 years and 7 (77.7%) were between 13-15 years and only 1 (11.1%) was above 16 years.5(55.5%) had regular mensus and 4(44.4%) had irregular mensus.4(44.4%) had excessive menstrual flow and 5(55.5%) had average or scanty flow.3(33.3%) had mensus for > 5 days.

Table 1. Association of Ante Natal Care with various socio-demographic factors N=50.

SN	Variable	ANC availed (n=9)		ANC not availed (n=41)		Significance of difference (Fisher exact test)
		No.	%	No.	%	
1	Type of family					
	Nuclear	4	44.4	23	56.1	p=0.715
	Joint	5	55.5	18	43.9	
2.	Religion					
	Hindu	4	44.4	20	48.8	p=1.000
	Muslim	5	55.5	21	51.2	
3.	Monthly family income (in Rs)					
	≤5,000	6	66.6	18	43.9	χ^2=1.534; p=0.484
	5001-10,000	2	22.2	15	36.6	
	>10,000	1	11.1	8	19.5	
4.	Maternal age at marriage					
	<18	3	33.3	11	26.8	p=0.697
	≥18	6	66.7	30	73.2	
5.	Education					
	Illiterate	4	44.4	13	31.7	p=0.467
	Literate	5	55.5	28	68.3	

Table 2. Association of Ante Natal Care with menstrual history. N=50

S. No.	Variable	ANC availed (n=9)		ANC not availed (n=41)		Significance of difference (Fisher exact test)
		No.	%	No.	%	
1	Age at menarche					
	≤12 yrs	1	11.1	10	24.4	χ^2=0.759; p=0.684
	13-15 yrs	7	77.7	27	65.9	
	≥16 yrs	1	11.1	4	9.8	
2	Cycle Regularity					
	Regular	5	55.5	31	75.6	p=0.245
	Irregular	4	44.4	10	24.4	
3	Menstrual flow					
	Average/Scanty	5	55.5	31	75.6	p=0.245
	Excessive	4	44.4	10	24.4	
4	Cycle Length					
	<3 days	0	0	2	4.9	χ^2=0.784; p=0.676
	3-5 days	6	66.7	22	53.7	
	>5 days	3	33.3	17	41.5	

Table 3. Association of ANC with early pregnancy outcome. N=50

S. No.	Variable	ANC availed (n=9)		ANC not availed (n=41)		Significance of difference (Fisher exact test)
		No.	%	No.	%	
1.	Parity					
	Primi	3	33.3	8	19.5	χ^2=1.235; p=0.539
	P_2 & P_3	4	44.4	17	41.5	
	≥P_4	2	22.2	16	39.0	
2	Interval since last delivery					
	≤3 yrs	3/5	60.0	20/31	64.5	p=1.000
	>3 yrs	2/5	40.0	11/31	35.5	
3	Pregnancy registered	1	11.1	41	100.0	**p<0.001**
4	No. of ANC visits					
	0	9	100	0	0	χ^2=50.000; **p<0.001**
	1-3	0	0	36	87.8	
	>3	0	0	5	12.2	

Table 4. Association of ANC with mean weight gain during first trimester.N=50

S. No.	Variable	ANC availed (n=9)	ANC not availed (n=41)	Significance of difference (Fisher exact test)
1	Mean Weight gain during first trimester±SD (kg)	2.38±0.92 (n=8)	3.17±3.00 (n=36)	t=0.733; p=0.468

Table 3 shows the association of Ante Natal Care with early pregnancy outcome. 3(33.3%) were primipara and 2 (22.2%) had parity > 4. 2(40.0%) had birth interval > 3 years. Only 1 pregnancy was registered and about 41 were not registered. About 36 (87.8%) had not availed the services.

It was found to be statistically significant.

Table 4 shows the association of Ante Natal Care with mean weight gain during first trimester.

Mean weight gain during first trimester was higher among those availing Ante Natal Care services (3.17) as compared to those not availing Ante Natal Care services (2.38). These findings suggest that an improvement in consummation age increasing literacy and maintaining of a small family size.

DISCUSSION

The present study was carried out to study the socoidemographic factors affecting Ante Natal Care in rural areas of Lucknow district.

Birth order of the conceived child was reported to be $\geq$2 by more than half (N=39) the pregnant females thus giving an impression that majority of pregnant females were not following the national trend of 2 or less children in the household (Shrinivasan, 2012).On evaluation of women according to menstrual history, about 11 women had menarche during the early adolescent period. Menstrual cycle was reported to be regular by 36 women and flow and duration of cycle were observed to be normal in majority of women thus showing that majority of pregnant females had a normal menstrual profile and did not indicate reproductive abnormality indicative of nutritional deficiency (Van der Spuy, 1985).

In the present study, majority of pregnant females had availed ANC services (89.41%) and had their pregnancy registered 42 women. Most of the pregnant females had made $\leq$3 ANC visits (87.8%). The pattern of Ante Natal Care services utilization in present study is similar to that reported by Sharma *et al.* (2012), who showed 97.4% of women in their study in Lucknow, to have availed Ante Natal Care services.

CONCLUSION

The findings in the study showed progressive trends in utilization of Ante Natal Care services across all sociodemographic groups irrespective of their menstrual and obstetric history. The trend showed a positive indication of maternal well being with Ante Natal Care service utilization on the basis of outcome noted in terms of weight gain during first trimester.

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