

# Utilization of Antenatal Care Services in a Rural **Population Near Chennai**

**KEYWORDS** 

ANC care, full ANC, Standard of Living Index, risk approach, PHC

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ABSTRACT Background: Quality Antenatal care service is essential for reducing the morbidity and mortality among the mothers. Antenatal care service is not uniformly utilised by the mothers in rural areas of India.

Material and Method: It is a population based cross-sectional study which was done among the mothers who delivered between Aug 2004 and July 2005 in a rural area. Sample was selected by cluster sampling method.

Results Mean age of the participants was 24 years. Among 442 mothers above 60% were in the age group of 18-21 Years. Most of the mothers were educated and belonged to better Standard of Living . Nearly 80% of them had full range of antenatal care. About 95% of mothers had  $\geq 3$  ANC visits, 2 TT injections and  $\geq 3$  months IFA tab.

Conclusion: It is concluded that the antenatal care services are well utilised by the rural mothers in Tamil Nadu.

#### Introduction

Health of the mother is health of the nation. A healthy mother leads to healthy baby. Healthy babies are future of our nation. However mothers are at risk at various stages of pregnancy. Antenatal period is crucial due to the fact that most of the complications during pregnancy can be identified through a regular antenatal check up and maternal mortality could be reduced by adopting 'risk approach" ie giving priority to risk pregnancy. In Tamil Nadu, Ante Natal Care (ANC) is well covered due to the high awareness created among them. The main objective of NRHM was to reduce child and maternal mortality by providing universal access to equitable, affordable, accountable and effective primary healthcare services to women in rural areas (National Rural Health Mission). The importance of the Health of the mothers is reflected by the fact that it is one of the MDG Goals, namely Goal 5 to improve maternal health (United Nations, 2000). MDG goal 5 may be difficult to achieve unless all rural mothers irrespective of their education and socioeconomic status have easy access to quality antenatal health care services. Major causes of death of mothers are lack of adequate antenatal care services. This study analyses pattern of utilisation of antenatal health care services by the rural mothers near Chennai.

### Aim and objective

To know utilization pattern of antenatal health care facilities in a rural area near Chennai

#### Methods

This cross sectional study was done in a designated rural population near Chennai. This cross sectional study was done in a designated rural population near Chennai. This population is served by 10 health sub centres, 1 primary health centre, and few private hospitals. They also have access to taluk hospitals and district hospitals. A few private and Government medical college hospitals are available within about 30 kilometers from the study area. Initially the plan was to use simple random sampling method for selection of study subjects. Cluster sampling method was used to select randomly from the whole population, 442 mothers who had vaginal delivery during the last one year

were considered. Information about antenatal care, place of delivery, person conducted the delivery, and other baseline information were obtained from the selected subjects by using a structured questionnaire. Informed consent was obtained. SPSS version 10 was used for data entry and analysis.

#### Results

The current study is a population based cross sectional study in a rural area near Chennai.

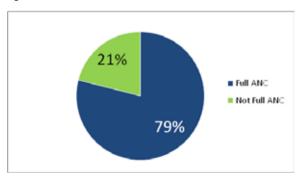
**Table I.** Background characteristics of mothers (n=442)

S.No	Characteristics	Fre- quency	Per- cent- age	95%CI
1.	Age			
	<18 years	58	13.12	9.22-14.86%
	18-21 years	280	63.34	52.65-60.67%
	>21years	104	23.52	17.75-24.82%
2.	Education			
	Illiterate	46	10.4	7-12.19%
	Literate	396	89.6	77.41-82.53%
3	Standard of Liv- ing Index(SLI)			
	Low	119	26.9	20.61-27.99%
	Middle	154	34.8	27.37-35.3%
	High	169	38.2	30.31-38.39%
4	No. of Antenatal Visits			
	<3 visits	17	3.8	2.02%-5.58%
	≥3visit	424	95.9	94 % - 97.75%
5	TT injections			
	<2Doses	24	5.4	3.29%-7.51%
	≥2 injections	418	94.6	92.49%-96.71%

6	Iron and Folic Acid (IFA) tablets			
	<3 months	20	4.5	2.57%-6.43%
	≥3months	356	95.5	93.57%-97.43%
7	Full ANC			
	Received	348	78.7%	74.88%-82.52%
	Not Received	94	21.4%	17.58%-25.22%

Table I show descriptive statistics. The mean age of the participants was 24 years. About 64% of the mothers were in the age group of 18 to 21years. Most of the mothers 396(89.6%) were literate and only 323(73%) of mothers belonged to the better standard of living. It revealed that number of antenatal visits, ≥3visits, was 95.9%, ≥2 TT injections given was 94.6% and consumption of IFA tablets≥3months was 95.5%.

Fig 1 Full ANC availed



Fig;1 shows Full ANC availed by mothers. Nearly 79% of mothers availed full range of ANC (At least three visits for antenatal check-up, one TT injection received and  $\geq$  3 months IFA tablets or adequate amount of syrup consumed).

Fig 2: Comparison of the current study with India and Tamil Nadu - DLHS III(2007-2008)

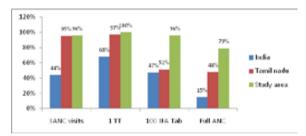


Fig 2 shows the comparison of the current study with India and Tamil Nadu - DLHS III(2007-2008). In the current study antenatal care services like ANC visits ,TT injection and IFA tablets consumption were well above the National level of 44%,68% and47% respectively. However it was similar to Tamil Nadu level except IFA tablet consumption(ANC visit 95%, TT injection 97% and IFA tablet 51%)

#### Discussion

In the present study, antenatal care service utilization was recorded high .The studies done by Ansari and Khan (Ansari and Khan, May 2011) in rural areas of Aligarh showed 40.3% had any ANC checkup, 73.0% had two doses of TT and 47.6% had not received iron folic acid (IFA) tablets Further a study by Sheth J K et al (Sheth J K, 2012) in a rural area in Ahmedabad showed that 72% adequate ANC visits was found , TT coverage was 86% and IFA tab taken by 62% among mothers and only 61.7% of the respondents used antenatal services in a study done in rural area in Madhya Pradesh (Tej Ram Jat, 2011) The findings in the present study are higher than the above studies. The above findings show clearly that the ante natal care in the Northern States is much lower than the present study done in Tamil Nadu. Moreover the above studies were done in 2011and it reveals that even now the proportion of mothers availing Ante Natal services are poor in the northern States when compared to the current study which was done in 2006. A study by C.S.Metgud et al (C.S.Metgud, 2009) in a village in north Karnataka showed nearly 40% of pregnant women had full ANC care which was less than the present study. According to a study by Bajpai R.C et al, (Bajpai R.C., 2012) only 11.5% of mothers had full ANC which is much less than the finding in the current study which could be due to more literate mothers and more mothers of better standard of living. Moreover proportion of mothers who had  $\geq$  3 antenatal visits in the present study are very high (97%) when compared to National level and Tamil Nadu level of 50% and 65% respectively according to NFHS -3 report (2005-2006) (International Institute for Population Sciences, 2007)

## Conclusion

As antenatal care services had been utilised effectively by the rural mothers it may be necessary to educate the mothers during their ANC visits regarding birth preparedness, breast feeding, birth spacing and immunisation of children. Hence the overall health of mothers will improve and the health of the nation. (National Rural Health Mission)

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