A STUDY ON THE DECISIVE FACTORS OF ANTE NATAL CARE CONSUMPTION IN COIMBATORE

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ABSTRACT

Antenatal care, also known as prenatal care, is defined by the National Health Portal of India as the regular medical and nursing care recommended for women during pregnancy. Prenatal care is a form of preventative care with the aim of providing regular health check-ups that allow doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy while promoting healthy lifestyles that will benefit both the mother and child. Antenatal care not only ensures the health of the mother and child, but also helps in the process of women empowerment. This can be attributed to the fact that reproductive capacity is still considered to be a central part of women's identity in most of the societies. The influence of maternal health does not stop with the birth of the child. It further triggers decisions about their employment, practises surrounding motherhood and child care, and dynamics within the house hold. It also plays a key role in individual and household decision making, mobility and financial autonomy. In this background, a study was conducted among 100 mothers (who has delivered before a year of study) in Coimbatore , in order to find out their utilization of Ante Natal Care services, and also to find out the determinants of Ante Natal Care consumption.

Keywords: Primary health care, Antenatal Care,

Introduction:

Women, who constitute more than half of the world population, are the pioneers of development. Their ability to multitask, enables them to stay ahead of men in terms of productivity and performance. They perform the reproductive work that is required to guarantee the maintenance and production of the work force, productive role and community managing work. Women can execute their duties to the fullest optimum, only when they feel empowered. Women empowerment is the process through which, women are able to make their own decisions, control and acquire resources, and are able to evolve independently according to changing situations. Traditionally, education and employment have been viewed as the main sources of women empowerment. But, women's empowerment is a dynamic multi-level process, and is at times deeply influenced by maternal health, especially Ante Natal Care.

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ups that allow doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy while promoting healthy lifestyles that will benefit both the mother and child.

Maternal health not only enables the women to rare a healthy future generation, but in addition, empowers them. This can be attributed to the fact that reproductive capacity is still considered to be a central part of women's identity in most of the societies. The influence of maternal health does not stop with the birth of the child. It further triggers decisions about their employment, practises surrounding motherhood and child care, and dynamics within the house hold. It also plays a key role in individual and household decision making, mobility and financial autonomy.

Objective of the study:

In this background, a study was conducted among 100 new mothers in Coimbatore, in order to:

- Find out theirutilization of Ante Natal Care services
- Find out the determinants of Ante Natal Care consumption.

Limitations of the study:

As the study has adopted Primary Data collection method, all the defects of the method holds for this study also.

Research Methodology:

A sample of 100 respondents were selected in and around the Coimbatore city for the purpose of this study. All the analyses in this study were performed using Primary data. Primary data was collected from the sample respondents through an interview schedule with the help of a semi-structured questionnaire. The technique of purposive sampling was used to collect data for the study. This technique was particularly used, as the study specifically focused on the antenatal health of the new mothers in Coimbatore city. Simple percentage analysis, frequency, cross tabulation, scaling and chi-squared test were used to analyse the data collected during the study period.

Analysis of data and interpretation:

TABLE 1

DETAILS OF ANTE NATAL VISIT

Total no. of Visits / Trimester of 1st visit		0	1	2	3	4	More than 4	Total
1	No.	0	1	1	1	5	92	100
	%	0	1	1	1	5	92	100
2	No.	0	0	0	0	0	0	0
	%	0	0	0	0	0	0	0
3	No.	0	0	0	0	0	0	0
	%	0	0	0	0	0	0	0
Total	No.	0	1	1	1	5	92	100
	%	0	1	1	1	5	92	100

Source: Primary Data

The table reveals that 97 percent of the respondents visited the hospital 4 and more than 4 times, and only 3 percent did not meet the minimum criteria. The table also reveals that all the 100 respondents made their visit to the doctor in the 1st trimester itself, with majority of them visiting the hospitals in the very 1st month. This shows that there has been improvement in the awareness and understanding among the women regarding the importance of Ante Natal visits. Another point to be noted is that, this phenomena can be observed invariably among women residing in both rural and urban areas.

TABLE 2

DETAILS ON AWARENESS OF RESPONDENTS TOWARDS ANTE NATAL CARE

Awareness level / Components of ANC	Strongly Aware	Aware	Neutral	Not Aware	Strongly Not Aware	Total Frequency	Total Respondents	Mean
Regular check-up	80	19	1	0	0	479	100	4.8
Blood and weight test	80	19	1	0	0	479	100	4.8
Urine test	76	19	5	0	0	471	100	4.7
Blood sample test	78	20	2	0	0	476	100	4.8

Abdomen examination	75	21	2	2	0	427	100	4.2
Receiving IFA and Calcium tablets	74	22	2	1	1	467	100	4.7
Immunization against Tetanus Toxoid	72	24	1	1	2	463	100	4.6
Ultrasound Scan	73	21	5	1	0	466	100	4.7

Source: Primary Data

The findings of Table 1 have been complemented by Table 2, whereby the sample respondents are highly aware of the components to be received under Ante Natal Care. The grand mean of sample respondents was above the acceptable level of 3. The result was also tested for statistical significance and is proved to be statistically significant at one percent level of significance.

TABLE 3

DETAILS ON COMPONENTS OF ANTE NATAL CARE (ANC) RECEIVED BY RESPONDENTS

Components of ANC received	Frequency	Percent
Regular check-up	95	95
Weight and blood pressure test	97	97
Urine test	97	97
Blood sample test	98	98
Abdomen examination	99	99
Receiving IFA and Calcium tablets	99	99
Immunization against Tetanus Toxoid	99	99
Ultrasound scan	98	98
None	1	1

Source: Primary Data

99 percent of the respondents have received almost all the components of Ante Natal Care, and only 1 percent did not access Ante Natal Care. This can be attributed to the high level of awareness the women have regarding Ante Natal Care, as mentioned in the previous table.

TABLE 4

DETAILS ON AWARENESS RECEIVED BY THE RESPONDENTS REGARDING COMPLICATIONS FROM THE DOCTORS

Complications		Aware	Not Aware	Total
Vaginal Bleeding	No.	31	69	100
	%	31	69	100
Convulsions	No.	33	67	100
	%	33	67	100
Prolonged Labour	No.	33	67	100
	%	33	67	100
Where to go	No.	43	57	100
	%	43	57	100

Source: Primary Data

The respondents were asked if they were made aware of the complications which may be faced by them during pregnancy, to which majority of the respondents replied that they were not made aware by the doctors about the complications, because they may panic about the probable dangers.

TABLE 5

DETAILS ON THE CAREGIVER WHO ACCOMPANIED THE RESPONDENT FOR CHECKUPS AND AWARENESS RECEIVED BY THEM

Awareness given to caregiver / Caregiver who accompanied		Yes	No	Total
Husband	No.	35	4	39
	%	90	10	100
Mother-in-law	No.	22	0	22
	%	100	0	100
Mother	No.	39	0	39
	%	100	0	100
Total	No.	96	4	100
	%	96	4	100

Source: Primary Data

In 78 percent of the cases, the pregnant women were accompanied either by their husband or mother, while 22 percent were accompanied by their mother-in-law.

CHI- SQUARE ANALYSIS:

In order to find out the determinants of Ante Natal Care consumption, Chi-square tests were run between various socio-economic features and access of Ante Natal Care. The relationship between the variables were tested at 5 percent level of significance.

The socio-economic variables taken for analysis were:

1. Age

2. Educational Qualification

3. Income of the respondent

4. Area of residence

5. Ownership of house

6. Type of family

7. Religion

8. Husband's income

TABLE 6

AGE ANDACCESS OF ANTE NATAL CARE (ANC)

Age:

The following table highlights the relationship between age and components of Ante Natal Care received.

Hypothesis:

There is no significant relationship between age and access of Ante Natal Care.

Age (in yrs) / Components of ANC received	18-22	23-27	28-32	Above 32	Chi-square result
Regular check-up	17	49	27	2	
Weight and blood pressure test	17	50	28	2	Value – 65.218
Urine test	17	50	28	2	
Blood sample test	17	50	28	3	Sig. – 0.000
Abdomen examination	17	51	28	3	
Receiving IFA and Calcium tablets	17	51	28	3	df - 27

Immunization against Tetanus Toxoid	17	51	28	3	
Ultrasound scan	17	51	28	2	
None	1	0	0	0	

Source: Primary Data

In the table, we can see that women in the age groups of 23-27 and 28-32 have highly accessed components of Ante Natal Care, when compared to the other age groups. This can be attributed to the fact that as age increases, the awareness level of women regarding Maternal Health also increases.

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.000. As the significant value is lower than 0.05, the null hypothesis is rejected. **The result shows that there exists a significant relationship between age group of the respondents and their access to Ante Natal Care.**

TABLE 7
EDUCATIONANDACCESS OF ANTE NATAL CARE (ANC)

Educational Qualification:

The following table highlights the relationship between education and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between education and access of Ante Natal Care.

Education / Components of ANC received	Illiterates	Secondary	Higher Secondary	Graduate	Post Graduate and Professional	Chi square result
Regular check-up	2	2	21	53	17	
Weight and blood pressure test	2	2	22	53	18	Value – 306.603
Urine test	2	2	22	53	18	
Blood sample test	2	3	22	53	18	Sig. – 0.000
Abdomen examination	2	4	22	53	18	
Receiving IFA and Calcium tablets	2	4	22	53	18	df - 45

Immunization against Tetanus Toxoid	2	4	22	53	18
Ultrasound scan	2	3	22	53	18
None	0	1	0	0	0

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.000. As the significant value is lower than 0.05, the null hypothesis is rejected. **The result shows that there exists a significant relationship between education of the respondents and their access to Ante Natal Care.**This is because, when women are more educated, they are able to able to analyse and realise the importance of accessing Ante Natal Care.

TABLE 8

INCOME OF THE RESPONDENT ANDACCESS OF ANTE NATAL CARE (ANC)

Income:

The following table highlights the relationship between income of the respondent and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between education and access of Ante Natal Care.

Income (in Rs.) / Components of ANC received	Nil	Below 10,000	10,000 – 20,000	20,000 – 30,000	Above 30,000	Chi square result
Regular check-up	70	2	5	6	12	
Weight and blood pressure test	71	2	6	6	12	
Urine test	71	2	6	6	12	Value – 24.957
Blood sample test	71	2	7	6	12	
Abdomen examination	72	2	7	6	12	Sig. – 0.917
Receiving IFA and Calcium tablets	72	2	7	6	12	df - 36
Immunization against Tetanus Toxoid	72	2	7	6	12	

Ultrasound scan	72	2	6	6	12	
None	1	0	0	0	0	

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.917. As the significant value is higher than 0.05, the null hypothesis is accepted. **The result shows that there exists no significant relationship between income of the respondents and their access to Ante Natal Care.**This must be because their family income may influence them to access Ante Natal Care, rather than the personal income.

TABLE 9

AREA OF RESIDENCE ANDACCESS OF ANTE NATAL CARE (ANC)

Area of Residence:

The following table highlights the relationship between area of residence of the respondent and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between area of residence and access of Ante Natal Care.

Area of Residence / Components of ANC received	Rural	Urban	Chi square result
Regular check-up	36	59	
Weight and blood pressure test	37	60	
Urine test	37	60	
Blood sample test	38	60	Value – 5.757
Abdomen examination	39	60	
Receiving IFA and Calcium tablets	39	60	Sig. – 0.764
Immunization against Tetanus Toxoid	39	60	
Ultrasound scan	38	60	df - 9
None	0	1	

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.764. As the significant value is higher than 0.05, the null hypothesis is accepted.

The result shows that there exists no significant relationship between area of residence and access to Ante Natal Care. This may be attributed to the fact that even though the place of residence differs, the care for baby and their self remains the same among all the mothers.

TABLE 10

OWNERSHIP OF HOUSE ANDACCESS OF ANTE NATAL CARE (ANC)

Ownership of house:

The following table highlights the relationship between ownership of house of the respondent and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between ownership of house and access of Ante Natal Care.

Ownership of house \\ Components of ANC received	Own	Rented	Chi square result
Regular check-up	69	26	
Weight and blood pressure test	70	27	
Urine test	70	27	
Blood sample test	70	28	
Abdomen examination	70	29	Value - 39.650
Receiving IFA and Calcium tablets	70	29	Sig. – 0.000
Immunization against Tetanus Toxoid	70	29	df - 9
Ultrasound scan	70	28	
None	0	1	

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.000. As the significant value is lower than 0.05, the null hypothesis is rejected. **The result shows that there exists a significant relationship between ownership of house and access to Ante Natal Care.** Own house is a reflection of high living standard of people, and high living standards leads to increased consumption of Ante Natal Care.

TABLE 11

TYPE OF FAMILY ANDACCESS OF ANTE NATAL CARE (ANC)

Type of family:

The following table highlights the relationship between type of family and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between type of family and access of Ante Natal Care.

Type of family Components of ANC received	Joint	Nuclear	Chi square result
Regular check-up	20	75	
Weight and blood pressure test	20	77	
Urine test	20	77	
Blood sample test	20	78	
Abdomen examination	20	79	Value - 4.893
Receiving IFA and Calcium tablets	20	79	Sig. - .844
Immunization against Tetanus Toxoid	20	79	df - 9
Ultrasound scan	20	78	
None	0	1	

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.844. As the significant value is higher than 0.05, the null hypothesis is accepted. **The result shows that there exists no significant relationship between type of family and access to Ante Natal Care.**

TABLE 12

RELIGION ANDACCESS OF ANTE NATAL CARE (ANC)

Religion:

The following table highlights the relationship between religion of the respondents and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between religion of the respondents and access of Ante Natal Care.

Religion / Components of ANC received	Hindu	Christian	Muslim	Chi square result
Regular check-up	68	12	15	
Weight and blood pressure test	70	12	15	
Urine test	70	12	15	
Blood sample test	71	12	15	
Abdomen examination	72	12	15	Value - 7.239
Receiving IFA and Calcium tablets	72	12	15	Sig. – 0.988
Immunization against Tetanus Toxoid	72	12	15	df - 18
Ultrasound scan	71	12	15	
None	1	0	0	

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.988. As the significant value is higher than 0.05, the null hypothesis is accepted. **The result shows that there exists no significant relationship between religion of the respondents and access to Ante Natal Care.**

TABLE 13

INCOME OF HUSBAND ANDACCESS OF ANTE NATAL CARE (ANC)

Income of husband:

The following table highlights the relationship between the income of the respondents' husbands and access of Ante Natal Care.

Hypothesis:

There is no significant relationship between income of the respondents' husbands and access of Ante Natal Care.

Income of husband (in Rs.) / Components of ANC received	Below 10,000	10,000-20,000	20,000-30,000	Above 30,000	Chi square result
Regular check-up	3	16	14	62	
Weight and blood pressure test	4	16	14	63	
Urine test	4	16	14	63	
Blood sample test	4	17	14	63	
Abdomen examination	4	18	14	63	Value – 71.302
Receiving IFA and Calcium tablets	4	18	14	63	Sig. – 0.000
Immunization against Tetanus Toxoid	4	18	14	63	df - 27
Ultrasound scan	4	17	14	63	
None	0	1	0	0	

Source: Primary Data

The Chi-square result shows that at 5 percent level of significance, the significant value is 0.000. As the significant value is lower than 0.05, the null hypothesis is rejected. **The result shows that there exists a significant relationship between income of the respondents' husbands and access to Ante Natal Care.** This is because when the family income is high, people automatically tend to prioritize health of the family, including their personal health, apart from focusing on the basic needs. This is explained by the significant relationship between consumption of Ante Natal Care and income of the husband.

Findings of the study:

- 97 percent of the respondents visited the hospital 4 and more than 4 times and all the 100 respondents made their visit to the doctor in the 1st trimester itself.

- 99 percent of the respondents have received almost all the components of Ante Natal Care, and only 1 percent did not access Ante Natal Care.

- The respondents were aware of the components of Ante Natal Care to be received.

- Majority of the respondents said that they were not made aware by the doctors about the complications, because they may panic about the probable dangers.

- In 78 percent of the cases, the pregnant women were accompanied either by their husband or mother.
- The Chi square test between socio-economic variables and access of Ante Natal Care reveals that **age, education, ownership of house and income of the husband share a significant relationship with access of Ante Natal Care**.

Conclusion:

Thus from the above study, we can conclude that though the ante natal health situation in Coimbatore is satisfactory, it has not achieved Zero Maternal Mortality Ratio. In fact, in the year 2016, Coimbatore had the highest number of maternal mortality in Tamil Nadu. This can be attributed to the lack of cognizance regarding the importance of Post Natal care. Therefore, more recognition must be given to maternal health not only for the purpose of a healthy young generation, but also for the empowerment of the whole of motherhood.

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