ASSESS OF KNOWLEDGE AND PRACTICE REGARDING PRENATAL CARE AMONG PREGNANT WOMEN VISITING PRENATAL OPD IN SELECTED CHC

Mrs. Nongmaithem Premlata Devi
**Professor, DRIEMS School & College of Nursing, Cuttack, Odisha, India.*
DOI: http://doi.org/10.47211/trr.2023.v09i02.002

ABSTRACT
The goal of antenatal care (ANC) is to achieve a good health both mother and baby by effectively identifying issues during pregnancy. The vast majority of maternal deaths are related to becoming pregnant or giving birth, which can be avoided if appropriate medical treatment are implemented. Despite the fact that the government is making a lot of efforts, the outcome are still far from what is desired. Objectives: To evaluate the quality of prenatal care knowledge & practice among pregnant mothers. Thirty pregnant women visiting the prenatal OPD at CHC Tangi, Cuttack were the subjects of a non-experimental descriptive survey. A structured questionnaire was adopted to gather the data. Of the 30 (thirty) prenatal women, 17(or57%) had lack of knowledge, which was followed by 7(or30%) moderate pregnant mothers and 6 (or20%) excellent antenatal mothers. According to the findings, maternal literacy continues to be an important indicator of how effectively women use antenatal care. Health care professionals ought to teach mother's about the value of ANC and the risky symptoms of pregnancy as well as play an essential role in encouraging the expecting mother and her family to use the ANC services.

Key words: *Antenatal care service, Risky symptoms, Knowledge, Pregnancy, Maternal Deaths*

ABOUT AUTHOR:

Author, Mrs. Nongmaithem Premlata Devi is Professor, DRIEMS School & College of Nursing, Cuttack, Odisha, India. She is an accomplished researcher in antenatal care. She has published numerous papers in reputable Scientific Journals and has presented her findings at conferences.

INTRODUCTION

"A pregnant woman is like a beautiful flowering tree, but take care when it comes time for the harvest that you do not shake or bruise the tree, for doing so, you may harm both the tree and its fruits".

- **Peter Jackson-**

Prenatal women obtain antenatal care, which involves ensuring frequent check-ups during the pregnancy in order to encourage health lifestyles [Rai et al. 2017]. Prenatal Care, commonly referred to as antenatal care, is a type of preventive medical treatment. Women can learn about safe pregnancy behaviours from qualified medical professionals at this time, and they can recognize the danger signals of pregnancy and child birth. At this crucial moment in their lives, the mothers who are expecting will be provided with psychological, emotional, and social support as well [$UNICEF_3$ 2021].

The fundamental goal of prenatal care is to ensure that the mother and the unborn baby are healthy at the end of the pregnancy. High quality care is much more crucial all through pregnancy and delivery are among the most common causes fatalities for women. And majority of these pregnancy-related complications can be avoided or managed. The following factors account for about 75% of all maternal deaths:

- Dangerous abortion; heavy bleeding; infections; elevated blood pressure during pregnancy; issues from delivery[Say L et. al.2014].

The latest available data indicates that every day, nearly 800 women die from preventable cause associated to pregnancy and childbirth [UNPF]. Complications from pregnancy are the leading cause of death for girls between the ages of 15 and 19. Adolescent girls are more likely to experience problems during pregnancy since they are growing as individuals. In addition, compared to women who are marry as adults, young brides are less likely to get sufficient medical attention while pregnant or given birth in a hospital [$UNICEF_3$].

Approximately 810 women died from preventable causes related to pregnancy and childbirth in 2017 in the world [WHO_1]. And nearly all of the 300,000 women who die each year from complications connected to pregnancy or childbirth do so in low-resource settings, and many of these fatalities could have been avoided [Alkema L et. al.2016: Tuncalp O et. al. 2017].

Maternal health issues are all related to the well-being of women throughout pregnancy, childbirth and following the event of delivery. High-quality prenatal care is essential for mother and child health, primarily to lower maternal death from pregnancy [$UNICEF_1$]. The most frequent direct causes of maternal harm and fatalities include excessive bleeding, infection, unsafe abortions, high blood pressure, and obstructed labour, and some of the indirect causes, are anemia, malaria, and heart conditions. The majority of these maternal deaths can be avoided with prompt intervention and excellent maternity care throughout the pregnancy. Prevention of unnecessary maternal deaths continues to be one of the top concerns on the world-wide agenda. [WHO_2].

Pregnant women can receive tetanus vaccinations, medical care for hypertension to prevent eclampsia, vitamin supplements and additional services through antenatal care. HIV tests and drugs to prevent mother-to child HIV transmission can also be provided as part of antennal care. [$UNICEF_5$].

Every two minutes, a woman dies either during pregnancy or childbirth around the world. In 2020, there will be 287,000 fatalities worldwide. The main causes of maternal mortality include infections linked to pregnancies, complications from improper abortions, severe bleeding, high blood pressure, and illnesses related to pregnancy. All of these factors could be largely avoided if more people had access to outstanding healthcare. If this trend continues, by 2030 the lives of roughly 1 million more women will be at risk. [$UNICEF_4$].

Between 2010 to 2016, 62% of pregnant women worldwide attended the minimum number of prenatal visits told by the WHO, a total of four. [$UNICEF_2$]. The minimum recommended number of antennal appointments has now been increased from 4 to 8 based on the most recent study, which indicates that women began attending antenatal sessions with a minimum of 8.[WHO_3].

The percentage of expectant mothers obtaining the recommended of 4 minimal antenatal appointments has increased from 37.0 to 51.2% according to the survey performed in India between2006 and 2016 [NFHS,2019]. The number of institutional deliveries increased from 38.7 to 79% within the same time period as a result of efforts by the government to provide financial assistance to women for institutional deliveries.[NFHS,2019 ;Gupta SK et al, 2012; Kumar V et al, 2015]. Pre-eclampsia, eclampsia and antepartum haemorrhage cause an increase in the number of maternal deaths. Numerous studies have shown that if the antenatal contacts are used to identify and treat the aforementioned causes, the rate of maternal mortality can be decreased [Say L et al.2014].

Early in pregnancy, based on the needs of the individual woman, an agreed-upon schedule of prenatal visits should be established. Throughout pregnancy, a women's risk should be examined to see if she need any further care [Department of health, 2019].

Knowledge of health issues is crucial to enhancing maternal health. The goal of this study was to determine if expectant mothers understood the value of prenatal care during pregnancy. This will be useful for setting baseline information and for future health intervention programme development.

MATERIALS AND METHODS

A quantitative analysis for this investigation, a non-experimental descriptive survey methodology was employed. The study was done on expectant mothers who went to the prenatal OPD at CHC Tangi in Cuttack. The sampling method was convenient. Thirty expectant mothers who were present at the antenatal OPD at CHC Tangi in Cuttack made up the sample size. To evaluate the level of knowledge regarding antenatal care, a structured knowledge questionnaire was created. The tool was split into two halves:

Section A: It had five demographic factors: age, education level, occupation, family structured and parity.

Section B: it contained 09 questionnaires to evaluate ANC practices and 17 items to evaluate the understanding of prenatal care.

RESULTS & DISCUSSION

In the current study, nearly all (45%) of prenatal moms were between the ages of 18 and 22; 33% were between the ages of 23 and 27; 17% were between the ages of 28 and 32; and 07% were over the age of 33. Pregnant women who had 10th class (47%) were more likely to be graduate (27%), had only completed their primary school (23%), or were illiteracy (03%). 93% of pregnant women were housewives, 03% worked as laborers, and 03% had jobs. 75%of the 30 prenatal moms were from combined families, whereas 27% were from nuclear families. 40% of the pregnant women were multi gravida, while 60% of the pregnant women were primigravida. Thirty prenatal women were studies, and seventeen (57%) had inadequate knowledge, seven (23%) had moderate knowledge, and six(20%) had strong knowledge.

A study done by Manisha, Chhillar Rekha and Dular Sunil Kumar (2020) indicated that just 20 percent mothers were just starting their pregnancies had strong understanding about antenatal care, fifty percent had moderate knowledge, and 30% showed poor knowledge. There was no correlation between primigravida mother's awareness of prenatal care and certain socio-demographic factors. The present study shows that majority of antenatal mother knowledge on antenatal care were poor and knowledge score was found association with parity of mothers.

According to the study done by Patel et al. 2016 nearly 70% of women were practicing ANC correctly, and demographic characteristics such as education and socio-economic status had a significant association with practices about ANC. In this study around 70% antenatal mothers practices ANC and practices about ANC was found adequate. And also shows that practice on antenatal care had a significant association with education and type of family.

TABLE .1: Pregnant women's Frequency and percentage distribution based on a few demographic factors. N=30

S.no.	Demographic Elements	Frequency(f)	Percentage (%)
1.	**Age in years**		
	a) 18-22	13	43
	b) 23-27	10	33
	c) 28-32	05	17
	d) 33-37	02	07
2.	**Education**		
	a) Illiterate	01	03
	b) Primary School	07	23
	c) 10th class	14	47
	d) 12th standard & above	08	27
3.	**Occupation**		
	a) Labor	01	03
	b) Unemployed	28	93
	c) Employee	01	03
4.	**Family Structure**		
	a) Nuclear	08	27
	b) Joint	22	73
5	**Parity**		
	a) Primi	18	60
	b) More than 01	12	40

TABLE .2: Frequency and distribution of pregnant mothers awareness regarding prenatal care. N=30

Degree of Knowledge	Sequence of score	Frequency (f)	Percentage (%)
Inadequate knowledge	0-11	17	57
Moderate knowledge	12-14	07	23
Excellent knowledge	15-17	06	20

Table .2 represents the general level of prenatal mother's awareness of antenatal care. Of the thirty prenatal mothers, 57 percent had inadequate knowledge, followed by 23 percent moderate knowledge and 20 percent excellent knowledge.

Table .3: Frequency and percentage distribution of practice of antenatal mothers regarding ANC.

S.no.	Parameter of practice	Category	Frequency (f)	Percentage (%)
1.	Did you do early pregnancy registration?	Yes	30	100
		No	0	0
2.	Are you doing routine antenatal checkup?	Yes	29	96.7
		No	1	3.3
3.	Did you administer full TT dosage?	Yes	28	93.3
		No	2	6.7
4.	Did you maintain regular healthy diet?	Yes	25	83
		No	5	17
5	Do you maintain personal hygiene?	Yes	24	80
		No	6	20
6	Are you taking iron & folic acid supplements in time?	Yes	26	86.7
		No	4	13.3
7	Do you maintain antenatal exercise?	Yes	2	6.7
		No	28	93.3
8	Have you ever taken medicine without doctor's advice?	Yes	2	6.7
		No	28	93.3
9	Do you consume tobacco during pregnancy?	Yes	0	0
		No	30	100

The data presented in the above table .3 reveals that the frequency and percentage distribution of demographic variables of antenatal mother according to practice on ANC , (30) 100% of the antenatal mothers do early registration , 96.7%(29) do regular antenatal check-up,93.3%(30) administered full dose TT Immunization, 83% (30) maintain regular healthy diet, 80%(24) maintain personal hygiene, 86.7% take iron & folic acid supplements in time, only 6.7% maintain antenatal exercise, 6.7% taken medicine without doctor advice and 0% antenatal mother consume tobacco during pregnancy.

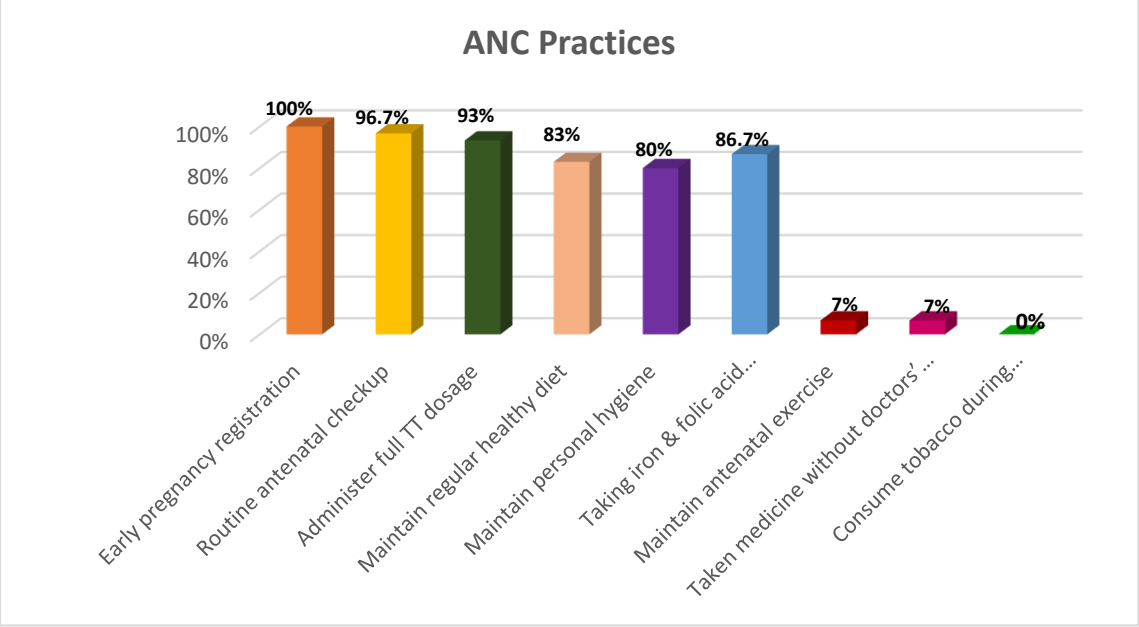

Figure .1 Respondents sources of information regarding practice of antenatal care.

Table .4: Association of overall knowledge regarding ANC with demographic factors. N=30

Demographic Factors	Chi-square value	Df	'P' value	Level of significance (P≤0.05)
Age	4.439	6	.617423	Not Significant
Education	7.271	6	.296511	Not Significant
Occupation	7.040	4	.133789	Not Significant
Family Structure	0.234	2	.889585	Not Significant
Parity	8.197	2	.016598	Highly significant

*Significant at **P≤ 0.05**

Table 4 demonstrate that there is significant relationship between parity and knowledge of ANC among prenatal mothers.

Table .5: Association of overall practices regarding ANC with demographic factors. N=30

Characteristics	Chi-square value	Df	'P' value	Level of significance (P≤0.05)
Age	3.18681	3	.363711	Not Significant
Education	17.7551	3	.000494	Highly significant
Occupation	2.48911	2	.288071	Not Significant
Family Structure	15.8980	1	.000067	Highly significant
Parity	1.22381	1	.268616	Not Significant

*Significant at **P≤ 0.05**

Table .5 shows that there is significant connection between education and family structure with the ANC practice among pregnant mothers.

CONCLUSION

The objective of the current study was to evaluate the expectant women who visited the antenatal OPD, CHC Tangi, Cuttack on the basis of their knowledge and practice of antenatal care. The study's findings led to the following conclusions, which were drawn. Antenatal mother understanding of antenatal care was lacking, and many antenatal mothers who visited OPD were unaware of the significance of antenatal care. As a result, it is determined that pregnant women need to have their knowledge of prenatal care strengthened. Furthermore, a specially designed programme must be developed and implemented to enhance maternal health practices with the goal to enhance both mother and foetus health.

REFERENCES:

1. Alkema L, Chou D, Hogan D, Zhang S, Moller A-B, Gemmill A, et al. The Lancet. 2016, Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. 387(10017):462–74.
2. Department of Health (2019 edition) Clinical Practice Guidelines: Pregnancy Care. Canberra: Australian Government Department of Health; https://www.health.gov.au/sites/default/files/pregnancy-care-guidelines_0.pdf
3. Gupta SK, Pal DK, Tiwari R, Garg R, Shrivastava AK, Sarawagi R, et al. 2012, Impact of Janani Suraksha Yojana on institutional delivery rate and maternal morbidity and mortality: an observational study in India. J Health Popul Nutr.30(4):464–71.
4. Kumar V, Misra SK, Kaushal SK, Gupta SC, Khan AM,2015. A study on the effect of janani Suraksha yojana on antenatal registration and institutional deliveries in the Agra district of Uttar Pradesh. Indian J Public Health.59:54–7.
5. Manisha, Chhillar Rekha and Dular Sunil Kumar (2020). Assessment of knowledge regarding antenatal care among the primigravida mother, European journal of molecular & clinical Medicine.Vol-07(11):6613-18
6. National Family Health Survey (NFHS-4),2019. 2015-16, India fact sheet, International Institute for Population Sciences (IIPS) & ICF. Mumbai. http://rchiips.org/nfhs/pdf/NFHS4/India.pdf.
7. Patel Barun Bhai, Gurmeet peanaya, Sinalkar Datttreya Ramkrishna et.al.2016.A study on knowledge and practices of antennal care among pregnant women attending antenatal clinics at a tertiary care Hospital of Pune, Maharashtra. Medical Journal of Dr. D.y Patil University.9(3):354-362.
8. Rai Shivani.2017, Assess the Knowledge and Belief Regarding Antenatal Care among Antenatal Mothers in Selected Hospitals of District S.A.S Nagar, Punjab 2011–2012, 5(4), 411- 415.
9. Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels JD, et al. 2014, Lancet Global Health, Global Causes of Maternal Death: A WHO Systematic Analysis.;2(6): e323-e333.

10. Tunçalp Ö, Pena-Rosas JP, Lawrie T, Bucagu M, Oladapo OT, Portela A, et al. BJOG. 2017, WHO recommendations on antenatal care for a positive pregnancy experience-going beyond survival. 124(6):860–2. pmid:28190290
11. $UNICEF_1$,Maternal Health. https://www.unicef.org/india/what-we-do/maternal-health
12. $UNICEF_2$, 2019. Antenatal care. https://data.unicef.org/topic/maternal-health/antenatal-care/
13. $UNICEF_3$.2021, Antenatal care, https://data.unicef.org/topic/maternal-health/antenatal-care/
14. $UNICEF_4$.Maternal and newborn health.https://www.unicef.org/health/maternal-and-newborn-health.
15. $UNICEF_5$.Antenatal care,2022.https://data.unicef.org/topic/maternal-health/antenatal-care
16. UNPF. Maternal Health, https://www.unfpa.org/maternal-health
17. WHO_1, Maternal mortality, https://www.who.int/news-room/fact-sheets/detail/maternal-mortality
18. WHO_2. Maternal death. https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4622
19. WHO_3, 2019 WHO recommendations on antenatal care for a positive pregnancy experience. http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/.