

# Awareness and Use of Preconception Folic Acid among Antenatal Mothers: A Descriptive Study in Tertiary Care Teaching Hospital

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**Abstract:** Folic acid consumption during pre-conception period is necessary for reducing the incidence of neural tube defect (NTD) in addition to other structural congenital anomalies such defects add a burden to families and society. A cross-sectional study was conducted to obtain awareness and use of preconception folic acid intake among antenatal women. Result showed that, (70%) Maximum woman do not had idea about the role of folic acid during pregnancy. Majority (74%) do not had knowledge about the appropriate time to take folic acid.

**Keywords:** Folic Acid, Pre-conception, congenital anomalies, Neural Tube defect, antenatal women.

## 1. Introduction

Women those who are consuming low level of folic acid during pre-conception period are at risk for poor pregnancy outcomes. The different neural tube defects (NTDs), including spine bifida, anencephaly and encephalocele lead to lifelong disability and premature death.[1] Folic acid consumption pre-conception is necessary for reducing the incidence of neural tube defect (NTD) in addition to other structural congenital anomalies such defects add a burden to families and society. [2] Therefore, it is important for women to be aware of folic acid supplementation before pregnancy to improve their folate nutritional status and prevent NTDs because most women do not yet know they are pregnant until the time of neural tube closure. Thus, the study was conducted to assess the awareness and use of preconceptional folic acid intake among primigravida women. [3]

## 2. Materials and Methods

A cross-sectional study was conducted to obtain awareness and use of preconceptional folic acid intake among antenatal women. Simple random sampling technique was used or collecting data. Prior ethical approval was taken from head of the department of obstetrics and gynaecology department, Gauhati Medical College hospital to conduct this study. The women who were pregnant visiting the Department of Obstetrics, Gauhati Medical College hospital for antenatal check-up were enrolled in this study. The written consent was obtained from those women prior administering the structured questionnaire. A total of 50 antenatal women visiting obstetric outpatient department participated in this study.

### Tools used for the Assessments

- Socio-demographic proforma
- Structure question to assess awareness and use of folic acid during preconception period.

## 3. Results

**Table 1:** Frequency and percentage distribution of socio-demographic data

Table 1: Socio-demographic data (N=50)			
Sl. No.	Socio-demographic Data	n	%
1	<b>Age (in years)</b>		
	18-30	44	88
	31-35	6	12
	36-40	0	0
2	<b>Religion</b>		
	Hindu	36	72
	Muslim	13	26
	Others	1	2
4	<b>Area of living</b>		
	Urban area	20	40
	Rural area	30	60
5	<b>Education</b>		
	Illiterate	5	10
	High school	19	38
	H.S.L.C.	21	42
	H.S.	3	6
	Graduate	2	4
6	<b>Occupation</b>		
	Employed	2	4
	Part-time	1	2
	Homemaker	47	94
7	<b>State of pregnancy</b>		
	1 <sup>st</sup> trimester	6	12
	Second trimester	20	40
	Third trimester	24	48
8	<b>Gravida</b>		
	Primigravida	29	58
	Multi gravid	21	42

Table 1 shows that most of the sample (80%) was in the age group of 18- 30 years. Majority were Hindu (72%).. Area of living was almost equally divided (urban [40%] vs. rural [60%]). Forty two per cent of the participants were .H.S.L.C. passed, followed by H.S. passed (38%). Homemakers constituted the largest majority (94%). In the state of pregnancy status, third trimester (48%) was the highest. Majority that is 58% belongs to primigravida mother.

**Table 2:** Frequency and percentage distribution of awareness and use of folic acid among antenatal woman

Table 2: Frequency and percentage distribution of awareness and use of folic acid among antenatal woman (N=50)			
S. No.	Variables	N	%
1	Heard of folic acid		
	Yes	40	80%
	No	10	20%
2	Time started folic acid supplement		
	Before pregnancy	4	8%
	During pregnancy	42	84%
	Never consumed	4	8%
3	Knew the role of folic acid		
	Yes	15	30%
	No	35	70%
4	Know the appropriate time to take folic acid		
	Yes	13	26%
	No	37	74%
5	Sources of information about folic acid		
	Friends	11	22%
	Media	0	0%
	Health professional	29	58%
	Others	10	20%

Table 2 shows that most of the sample (80%) was heard of folic acid. Majority were started folic acid during pregnancy (84%). (70%) Maximum woman do not had idea about the role of folic acid during pregnancy. Majority (74%) do not had knowledge about the appropriate time to take folic acid. 58% had heard about folic acid from health professional.

#### 4. Discussion

The aim of this study was assessing awareness and use of preconception folic acid supplement among antenatal women. Very low number of respondents knew the benefits of folic acid consumption regarding different aspects as well as the link of NTDs. This result is found consistent with the study done by KoiralaS, Pokharel S [4].

#### 5. Conclusion

This study has shown that there is lack of awareness regarding the use of pre-conception folic acid amongst antenatal women.

#### 6. Recommendation

Therefore, this study recommends that conducting awareness program regarding use of folic acid during pre-conception period is useful. In this endeavour, government health care centres, health workers, non-governmental organization working in health sectors and media house can play a pivotal role in creating awareness regarding folic acid intake among reproductive aged women. To help these women for healthy pregnancy outcome, dedicated preconception awareness programme needs to be established in every health care level.

#### References

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