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AWARENESS OF PERICONCEPTIONAL FOLIC ACID CONSUMPTION

Gynaecology

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ABSTRACT

OBJECTIVE: The purpose of this study was to determine awareness of Periconceptional folic acid consumption amongst Indian women.

MATERIALS AND METHODS: We selected 100 women attending OPD in the OBGY department of ASRAM. Data was gathered on the basis of questionnaire and interview. Statistical analysis was performed. The value of $p<0.05$ was considered as significant.

RESULTS: The obtained information showed that knowledge of most respondents (86%) was below normal (lack of knowledge), 10% had intermediate knowledge and only 4% had high knowledge. There is a significant relationship between Periconceptional Folic acid awareness and education, employment, time of prenatal care, gravidity and sources of health information. The number of women with high level of knowledge was more among those with higher level of education, employment.

CONCLUSION: There is need to increase awareness of periconceptional folic acid supplementation among reproductive aged women and women planning pregnancy. Different strategies are required to elevate the knowledge about folic acid.

KEYWORDS

Periconceptional period, Folic acid awareness.

INTRODUCTION:

Nutrition of women during the periconceptional period is of utmost importance for the positive influence on maternal and fetal health. Folic acid is important to prevent the problems like low birth weight, placental abruption and the most notable one being neural tube defects. Most common NTDs occur early in pregnancy often before the woman realizes that she is pregnant. It is known that folic acid decreases the incidence of neural tube defects when taken before conception and 1st trimester to about 50-70%.In India, the prevalence of neural tube defects is 3.63/1000 live births. One of the established cause of this fetal malformation is deficiency of folic acid, which is preventable by its supplementation beginning preconceptionally and continuing into 1st trimester.The recommended dose is 400microgram/ day[1].Though there is widespread antenatal folic acid supplementation, there is a need to emphasize on periconceptional folic acid intake as well.

OBJECTIVES:

1) To evaluate the knowledge and attitudes of women regarding periconceptional folic acid use.
2) To educate the women regarding the importance of periconceptional folic acid and provide folic acid to the eligible ones.

METHODS:

The sample size is 100 which includes the women attending OPD in the OBGY department of ASRAMS. Questionnaire is given in regional language to women attending OBG clinic, ASRAMS. The questionnaire includes questions those relating to the demographic background, knowledge and use of folic acid. There are also questions like education, socioeconomic status, maternal characteristics like age at first pregnancy, pregnancy planning, timing of prenatal care etc. Simultaneously the women are educated regarding the folic acid intake.

Statistical analysis will be performed to know the association between the folic acid awareness and maternal characteristics. Percentage of women who are aware and who have taken preconceptional folic acid will be evaluated.

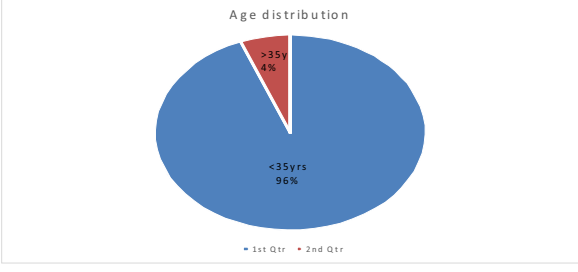
RESULTS:

We interviewed 100 pregnant women aged below 35 years old(94%) and above 35 years(6%).Among them96% were less than <12 weeks GA. Majority of individuals (94%) were uneducated and 6% were educated. Most of the respondents were unemployed and 6% were employed.

Also only 4% had planned pregnancy. Almost 56% of women in this study were nulliparous, 44% were multiparous. Knowledge of most respondents (86%) was below normal (lack of knowledge), 10% had intermediate knowledge and only 4% had high level of knowledge. The most common information sources were government hospitals and health centers (doctors) constituting 88%, family members constituted 2% and media constituted 10%.

On the basis of data analysis, there was a significant relationship between employment, education, annual income, parity, planned pregnancy.

The number of women with high knowledge was more among those with high socioeconomic status, employment and planned pregnancy. No association was found between age, previous history of NTD, previous history of spontaneous abortions, source of information, previous IUD with folic acid awareness and use of folic acid in pregnancy.



DISCUSSION:

In our study, only few participants (14%) were aware of folic acid and its benefits whereas 17.6% were aware in study of Coll.et.al in Spain2.72% were aware in study of Gjergjaetcal3. Pregnant women who are educated are found to have good awareness on folic acid supplementation compared with uneducated women. This is in accordance with the results of other studies. (Ref. 2,6,9,15,16) Employment has an important effect on knowledge as well. In our

study, 6% were employed and of which 66% were aware of periconceptional folic acid supplementation. 94% were unemployed and most of them were house-wives. Women of high socioeconomic status were found to have awareness of folic acid. Parity was found to have significant influence on the awareness of folic acid. We found that awareness of folic acid was less among women with 3 or more children. A similar finding has been reported in the study of Abdulrazzaq.et.al4.

In our study, there is no significance between age and folic acid awareness.

Gynaecologists and media were most frequent sources of information in our study. A similar finding has been reported in Coll's study. We found that there was no relation between previous offspring with NTDs and folic acid knowledge. In Carmichael.et. al study, Knowledge was high among mothers with previous complicated pregnancies resulting offspring with NTDs5. There is significant relation between planned pregnancies and folic acid awareness.

Timmermans.et.al showed that folic acid awareness was higher among women with planned pregnancy6. Unplanned pregnancy was the highest risk factor for inadequate folic acid intake.

CONCLUSION:

There is a need to increase the awareness of periconceptional folic acid supplementation among women of reproductive age and planning pregnancy. Effective intervention programs are needed with an aim to improve periconceptional intake of folic acid and to reduce the high incidence of NTDs.

REFERENCES:

1. 2014 Williams Obstetrics. In: Cunningham, F.Gary, editors. Prenatal diagnosis.24th ed. New York(NY):McGraw-Hill. p.284
2. Coll O, PisaS, PalacioM, QuintoL, CararachV. Aareness of the use of folic acid to prevent neural tube defects in a Mediterranean area. Eur J Obstet Gynaecol Reprod Biol 2004;115:173-7.
3. GjergjaR,StipoljevF, HafnerT, TezakN, Luzar Stiffler V.Knowledge and use of folic acid in Croatian pregnant women-a need for health care education initiative. Reprod Toxicol 2006; 21:16-20.
4. AbdulrazzaqYM, Al-GazaliLI, BenerA, HosseinM, VergheseM, DawoduA, Etal.Folic acid awareness and intake survey in the United Arab Emirates. Reprod Toxicol2003;17:171-6.
5. Carmichael SL,S hawGM, YangW, LaurentC, HerringA, RoyleMH, Etal. Correlates of intake of folic acid-containing supplements among pregnant women. Am J Obstet Gynecol 2006;194:203-10.
6. TimmermansS, JaddoeVW, MackenbachJP, HofmanA, Steegers-TheunissenRP, Steegers-TheunissenRP, SteegersEA. Determinants of folic acid use in early pregnancy in a multiethnic urban population in the Netherlands: The Generation R study. PREV MED 2008;47:427-32.
7. Wu DY, BratG, MillaG, KimJ. Knowledge and use of folic acid for prevention of birth defects amongst Honduran women. Reprod Toxicol2007;23:600-6.
8. Bener A, AlMaadidMG, Al-BastDA, Al-MarriS. Maternal knowledge, attitude and practice on folic acid intake among Arabian Qatari women. Reprod Toxicol2006;21:21-5.
9. Staff AC, LokenEB, HolvenK, SygnestveitK, VollsetSE, SmelandS. Effects of public initiatives aimed at reducing neural tube defects with folic acid supplementation. Tidsskr Nor Laegeforen2005;125:435-7.
10. AhluwaliaIB, DanielKL.Are women with recent live births aware of the benefits of folic acid? MMWR Recomm Rep 2001;50;3-14.
11. Amitai Y,FISHER n, Meirazh, BaramN, TounisM, LeventhalA. Preconceptional folic acid utilization in Israel: Five years after the guidelines. PREV MED2008;46:166-9.
12. Levine NH,Lyon DANIEL k, MulinareJ. Folic acid and preconceptionalcare. Prim Care Update Ob Gyns2001;8:78-81.
13. Canfield MA,PrzybylaSM,CaseAP,RamadhaniT,SuarezL,DyerJ.Folic acid awareness and supplementation among Texas women of childbearing age.PREV MED2006;43;27-30.
14. French MR, BarrSI, Lvy-Milne R.Folate intakes and awareness of folate to pevent neural tube defects: a survey of women living in Vancover, Canada.J Am Diet Assoc 2003;103:181-5.
15. UnusanN.Assessment of Turkish women's knowledge concerning folic acid and prevention of birth defects. Public Health Nutr 2004;7:851-5.
16. Kondo A, KamihiraO, ShiosukaY, Okail, GotohM, OzawaH. Awareness of the ole of folic acid, dietary folate intake and plasma folate concentration in Japan. JObstetGynaecol Res 2005;31:172-7.
17. Rinsky-Eng J, MillerL.Knowledge, use, and education regarding folic acid supplementation: continuation study of women in Coloado who had a pregnancy affected a neural tube defect. Teratology 2002;66:S29-31.
18. Daltveit AK, VollsetSE, LandeB, OienH. Changes in knowledge and attitudes of folate and use of dietary supplements among women of reproductive age in Norway 1998-2000.Scand J Public Health 2004;32:264-71.
19. De Jong-Van den Berg LT, Hernandez-Diaz S, WerlerMM, LouikC, Mitchellaa. Trends and predictors of folic acid awareness and periconceptional use in pregnant women.Am J Obstet Gynecol2005;192:121-8.