

A statistical study to assess the pattern of folic acid consumption in Pregnant women

Majeed Ali Fahad ^{1*}

¹Forensic Evidences Dept./Al-Salam University College, Baghdad, Iraq

*Corresponding Author: Majeed Ali Fahad

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ABSTRACT: Background and purpose: Annually about half a million children in the world are born with neural tube defects and folic acid plays a role, it is effective in preventing this, so this study had been conducted to determine the pattern of folic acid intake during pregnancy.

This research is a descriptive-analytical study, it depends on gathering information through interviews and completion. It was a questionnaire. The sample numbers were 322 people who had been sent to Al-Mahmodya Hospital.

Results indicated 81.4% of women had consumed folic acid during pregnancy, which at the time of starting consumption was 23.9%. Percentage was mentioned from the first month and 16.4% after the third month of pregnancy. None of the units studied the time of cutting consumption was not mentioned before the third month. The most common reason for not consuming is not known how to take folic acid was mentioned (73.3%). Between Folic Acid consumption during pregnancy and women's education ($P = 0.004$, occupation) ($P = 0.034$) neural tube defects with number of infants and, ($P = 0.046$) abortion number, ($P = 0.000$) number of pregnancies, ($P = 0.052$). A significant relationship was found, also between folic acid consumption with previous planning for pregnancy ($P = 0.060$) and Pregnancy care ($P = 0.047$) also had a significant relationship.

Although a significant percentage of women have consumed folic acid during pregnancy, but the onset time of consumption was not the right time. Therefore, it seems necessary to know as many women as possible. Appropriate measures should be taken regarding the benefits of folic acid and how to use it.

Keywords: folic acid, pregnancy, Neural tube defects

1. INTRODUCTION

Folic acid is one of the types of vitamins [1]. This vitamin acts as a coenzymes in the conversion of amino acids for DNA and RNA synthesis, new cell production, Protein metabolism and normal growth are essential [2] during pregnancy in response to maternal erythropoiesis and placental and fetal growth need folic acid increases [3], so the consumption of folate supplements in Pregnancy to maintain and consume folic acid levels is enhanced by rapidly growing tissues.

Based on the absorption of 50% folate from food 400 micrograms daily is recommended during pregnancy [4]. Folic acid deficiency may result from inadequate consumption, impaired absorption, increased need or impaired metabolism or lose it a lot. Symptoms of more deficiency in wefts that the rate of cell proliferation is high in them and as a result of need they are found to have a lot of folic acid [5]. Studies the limitations made in this regard indicate that there is a shortage. This vitamin can recur with miscarriage and side effects midwifery such as premature separation of the placenta, toxemia, defects organs, fetal heart disease, preterm labor and low weight be accompanied at birth. Although these reports are not conclusive, the most important link was between folic acid and it's potential effect Pregnancy has a possible role in preventing neural tube defects. It is like spina bifida and anencephaly [1], so the most important folic acid deficiency that causes damage to the fetus includes It is a neural tube defects [4,6,7] with a prevalence of about 1 to 2 cases every 1000 births leads to disability and death at birth it is possible. Survival after birth requires care, it has complex medicine and surgery and is often associated with disability. In 1989, this issue caused the death of 523 in other words, 1.3% of the total neonatal mortality has become in the United States [4]. Anencephaly with a long survival is contradictory and if the patient survives with a neural tube defect, lack of motor function as the most

important cause of disability causes inability to stand without help, incontinence and there is a delay in evolution [8]. Since this year is not limited millions of babies around the world are born with neural tube defects [9] and supplemental folic acid consumption from the beginning of pregnancy, it is effective in preventing this, so this research is determining the pattern of folic acid consumption during pregnancy.

2. Materials and Methods

This research is a descriptive-analytical study. The purpose of determining the pattern of folic acid consumption during pregnancy in Al - Mahmodya Hospital in Baghdad . A total of 322 women 322 women who ended their pregnancies in 2020, they had been interviewed in the research units. They were hospitalized for termination of pregnancy or delivery and they were 20 weeks pregnant or older. Sampling method, this has been the case with women who have been hospitalized and their acceptance was paired as the units of research, they were selected and the questionnaire prepared about them was completed, it turns out. Research questionnaire using books and resources in order to determine it’s validity, it was from the opinions of professors and direction to determine it’s reliability, the retest method was used. Results were analyzed by using SPSS statistical software in order to statistically analyze the chi-square test used.

3. Results

The majority of units studied in the age group of 20-24 years and had a gestational age of 36-40 weeks. 42 % of women with primary education and only 5.3% had a university education. Among the research units illiterate, 70% use folic acid during pregnancy, they said that this amount was measured in the units in question. University education was 94.1%. 44.7% of Women have a pregnancy and only 4% of them have a history of more than 5 pregnancies were mentioned. Two samples (0.6%) had a history of giving birth to babies with neural tube defects. 79.8% of women became pregnant with pre-planned. 81.4% of women consume folic acid during pregnancy had started taking it at 23.9% of the first month and 16.4% were mentioned after the third month of pregnancy(Figure 1) . 48.7% of women in the ninth month and 6.8% in the third and fourth months of pregnancy have stopped taking folic acid and none of the units studied at the time of cessation of consumption were not mentioned before the third month. The most common cause of death is not consumption, lack of knowledge about the necessity of consuming folic acid mentioned was (73.3 %). Between the consumption of folic acid during pregnancy and the rate of education of women (P = 004.0) (Table 1), (P = 0.000) number of pregnancies,(table 2), (P = 0.052) employment number of abortions (P = 0.046) and number of neonates with tubal defects neural (P = 034.0) (Table 3) had a significant relationship. Also between folic acid intake and previous planning pregnancy (P = 006.0) ,(Table 4) and prenatal care there was also a significant relationship (P = 047.0).

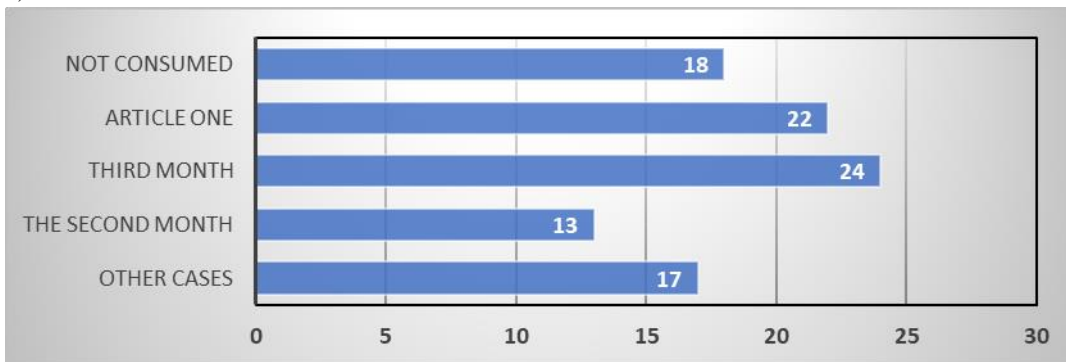


figure 1. Frequency distribution at the time of onset of folic acid use during pregnancy, women referring to Al- Mahmodya Hospital in Baghdad – 2020.

Table 1. Relationship between folic acid consumption during pregnancy and the amount of education in women referring to Al-Mahmodya Hospital in Baghdad – 2020.

Consumption of folic acid / education	No		Yes		Total	
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage
illiterate	14	70	6	30	20	100
Primary	101	73/2	37	26/8	138	100
Elementary	71	88/8	9	11/3	80	100
Secondary	60	89/6	7	10/4	67	100
Academic	16	94/1	1	5/9	17	100
Total	262	81/4	60	18/6	322	100

Table 2. Relationship between folic acid consumption during pregnancy and occupation in Women referring to Al-Mahmodya Hospital in Baghdad – 2020

Consumption of folic acid / Type of employment	No		Yes		Total	
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage
unemployed	248	80/5	60	19/5	308	100
employed	14	100	0	0	14	100
Total	262	81/4	60	18/6	322	100

Table 3. Relationship between folic acid intake during pregnancy and the number Children with neural tube defects in women were referred to hospital .Al-Mahmodya -Baghdad 2020

Consumption of folic acid / Number of babies With neural tube defects	No		Yes		Total	
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage
0	262	81/9	58	18/1	320	100
1	0	0	2	100	2	100
Total	262	81/4	60	18/6	322	100

Table 4. Relationship between folic acid intake during pregnancy and planning Previous for pregnancy in women referring to Al-Mahmodya Hospital Baghdad-2020

Consumption of folic acid \ Planning	No		Yes		Total	
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage
Yes	217	84/4	40	15/6	257	100
No	45	69/2	20	30/8	65	100
Total	262	81/4	60	18/6	322	100

4. Conclusion

According to the present study, the consumption of folic acid during Pregnancy and the level of education of women showed a significant relationship Thus, during pregnancy, 70% of people are illiterate In contrast, 94.1% of people with university education have acid They had consumed folic acid. The results of other studies have also been found Education increases women's information and awareness about Folic acid and as a result lead to proper consumption will be. 100% of business people versus 80.5% of people Housewives mentioned folic acid intake and a significant relationship Folic acid was found between employment and consumption. It seems That working women have better information and behaviors There is more hygiene in them, which is why or due to higher education in employed people or To their more communication which leads to an increase in their awareness Can be relevant. Between the consumption of folic acid during pregnancy and multiplication Pregnancies were found to have a statistically significant relationship Most people who have not taken folic acid have a history They had fewer pregnancies. Other studies have also found this finding Confirm [14]. Between the consumption of folic acid with a history of miscarriage A statistically significant relationship was found and the results showed that the majority of Yet People with a history of miscarriage have taken folic acid And the highest rate of consumption has been in people with a history An abortion was mentioned. It may be concluded that People who have failed in a previous pregnancy are trying Get more information and follow the health recommendations as well Perhaps more training will be given to such clients. Two of the samples (0.6%) have a history of giving birth The baby had neural tube defects that were unfortunately being consumed They did not mention Folk, but it seems that they are people Who have previously had a problem with this issue should be He had a lot of sensitivity and in this regard Have also received sufficient training. Therefore in cases This is an educational or care deficiency that has a history Midwifery has become neglected. Research done in Colorado It has been shown that 69% of women with a history Pregnancy with neural tube defects is complementary It is necessary to be aware of folic acid during pregnancy and 47% Women about the required dose and supplement before the next pregnancy to prevent recurrence of neural tube defects were known [15]. The majority of subjects (79.8%) for pregnancy She planned it herself and wanted their pregnancy Between folic acid intake during pregnancy and previous planning There is a statistically significant relationship to pregnancy Studies also confirm this finding [13]. [Study that Performed by Ahlovalia et al., Showed that women Their pregnancy was unintended, less information than Folic acid [9.] Based on the study of Squadron 2 and Contributors 44% of the women studied had a planned pregnancy Previously, only 35% of them consumed folic acid 55% of women had unwanted pregnancies Only 2.8% of them mentioned consuming folic acid . [16] The majority of people have been cared for during pregnancy (98.4%) But about half of them take care of themselves They had started after the third month, which is now the best time Consumption of folic acid is before this time. In a study that In Shahroud, it was found that 22.7% of women Had not been referred for care during pregnancy and 28.9% did not have regular referrals [17] that these findings were necessary It requires more attention and attention to this matter. Therefore, according to It turns out that the late start of

prenatal care is one of Care problems in our health care system. Consumption of folic acid during pregnancy and period care Pregnancy was found to be significantly correlated with 82% Caregivers used folic acid 60% of people who did not care mentioned not consuming Due to the significant effect of period care Pregnancy had such expected results. The majority of women do not know the reason for not taking folic acid They had mentioned the necessity of consuming it. French et al This is exactly what they found [18] in other studies Do not use with items such as unwanted pregnancy and low age Has a significant relationship [19]. In the present study with the fact that the majority of women in the period Pregnancy consumed folic acid, but only 23.9% They have started taking it from the first month of pregnancy and 16.4 Percentage of them start consuming folic acid after the third month Have done. Therefore, it can be stated that although A significant percentage of women during pregnancy take folic acid They have taken it, but it was not the right time to start taking it Is. Research has shown that Norwegian women also take acid supplements Folic is much later than necessary to prevent Neural tube defects are consumed [20]. In Garcia et al Contributors 95% of women during folic acid pregnancy Had consumed [21]. According to the present study, a significant percentage of women in They had taken folic acid during pregnancy, but time It was not the right time to start taking it. Since the goal Our ultimate goal in the healthcare system is quality improvement and demand Is life, so it seems necessary in Especially to make women more familiar with the benefits of acid Folic and how to use it Take appropriate measures To prevent disorders caused by folic acid deficiency Come on.

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