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Assessment Of Awareness Of Folic Acid Use Among Pregnant Women In Primary Health Care Center

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ABSTRACT

It was used for descriptive study assessment of awareness of folic acid use among pregnant women in primary health care center. the sample exclusion the single women and consisted of 40 pregnant women from 4 primary health centers (includes (40) women use folic acid during pregnancy in primary health care center seeking for treatment PHC. included PHC of Al-Sader, PHC of Martyr Ali Al-Kaabi, PHC of Martyr Kazem Abdul Nabi and the model health center of Al-Russafa 3 in The city of Baghdad, during the period from January 2019 to the end of March 2019. The questionnaire consisted of three parts: the first, socio-demographic. characteristics consisted: age mother, monthly income, level of education, occupation and second part, concerning previous reproductive history variables for women, it consisted of gravida, parity, number of abortions, age at marriage, stillbirth, birth defects dead & alive, arrangement present pregnancy, while part three include pregnant women's awareness of folic acid. The The study data was analyzed by using the (Microsoft Excel) 2016 version, during a statistical approach that comprise frequency and percentage

The study results show that the level of awareness for benefits of using folic acid the highest percentage (65.0%) of study sample was (yes). Also, the highest percentage (67.5%) of study sample use folic acid in the first 3 months. the level of education was the highest percentage (30.0%) of study sample was primary school graduate. The highest percentage (32.5%) of study sample was at age group (20-26) years and low educational level(Primary school graduate), housewives with enough somewhat income. As a result of this study it was determined that most of the women shared in the study were

with multigravida (3-4), most of them graduated from primary school and they have a low awareness about folic acid. The study recommends encouraging The health care provider should set up health programs and raise community awareness about the properties of folic acid and early medical examination that would maintain healthy pregnancy.

Keywords: Assessment, Awareness, Folic Acid, Pregnant, Primary Health Care Center

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INTRODUCTION

Folate, also known as folate in its natural form, is a water-soluble form of vitamin B9. It is a natural nutrient found in foods such as leafy vegetables, legumes, egg yolks, liver, and citrus fruits (Obeid, et al., 2010 It is the coenzyme which transmits single carbon groups for the metabolism of nucleic acids and amino acids. Folic acid plays an important role in DNA / RNA synthesis, amino acid conversion, red blood cell formation, and body cell formation and maintenance. Folic acid requirements increase during intervals which transmits s of rapid growth and cell partition throughout life (Coskun & Özdemir, 2009). during early evolution , folic acid assists with neural tube formation. Folic acid is very significant because it can help stop some major birth defects such as spina bifida and anencephaly (CDC, 2018).

Neural tube defects (NTDs), serious birth defects of the brain and spine usually resulting in death or paralysis, affect an predestined 300,000 births s every year all over the world. This defect can preventable through take folic acid in the period of preconception and in duration of first trimester of gestation. worldwide (Flores, et al.,2014). Preventive Services Task Force and Institute of Medicine, The Centers for Disease Control and Prevention, U.S. advise that all women of childbearing age get 400 micrograms of folic acid per day, in supplement to eating foods containing folic acid from a varied diet, to help prevent neural tube defects NTDs (Williams, et al., 2015).

With that said, NTDs occur during days 22--28 of fetal development, before most women know they are pregnant, and thus, starting to take FA addition after the first month of pregnancy is considered too late to prevent NTDs. Thus, in 1992, the U.S. Public Health Service advised that all women able to conceive consume at least 400 micrograms of FA as a daily supplement (Al-Holy, et al., 2018). Currently, the supplementation of folic acid is officially recommended for women of childbearing age in many countries (Gomes, et al., 2016).

METHODOLOGY

A descriptive study has been applied to assess the consciousness of pregnant women about the use of folic acid in the primary health care center at Al-Russafa health Directorate. A non- probability sample (Purposive sample) the sample exclusion the single women and consisted of 40 pregnant women from 4 primary health centers (PHC) included PHC of Al-Sader, PHC of Martyr Ali Al-Kaabi, PHC of Martyr Kazem Abdul Nabi and the model health center of Al-Russafa 3 In the city of Baghdad through the time of January 2019to termination of March 2019. Data were were composed during the use of the interview technique with a diagnosed pregnant woman use folic acid, after obtaining their agreements for participation in the study through interview and informed about the study objectives; It was based on the questionnaire Based on a review of the relevant literature around folic acid and pregnant women. The The validity of the content was confirmed by a

committee of 17 experts their specialities Areas of Nursing and Medicine Reliability was determined through the outcome of a pilot study (10) pregnant women use folic acid in primary health care center consultancy and excluded from the original sample which included (40) pregnant women. The reliability of The questionnaire is specified by using a pre-test post-test technique and calculating the correlation coefficients (r = 0.82). The questionnaire consisted of three parts: the first socio-demographic characteristics consisted: age mother, monthly income, level of education, occupation and second part, concerning previous reproductive history variables for women, it consisted of gravida, parity, number of abortions, age at marriage, stillbirth, birth defects dead & alive, arrangement present pregnancy, While the third part includes the pregnant woman's awareness of folic acid. A questionnaire was presented to the pregnant woman to assess the level of awareness of folic acid use in pregnant women in a primary health care center . The data of the study were analyzed through the use of the (Microsoft Excel) version 2016 during a statistical program that comprise recurrence and percentage .

RESULTS AND DISCUSSION

Table(1) Demographic characteristics of the women (n=40) .

Demographic Variable	F.	%
Age mother(years)		
≤ 20	7	17.5
20-26	13	32.5
27-33	10	25.0
34-40	5	12.5
≥ 40	5	12.5
Level of Education for Women		
Illiterate	6	15.0
Read and write	2	5.0
Primary school graduate	12	30.0
Intermediate school graduate	5	12.5
Secondary school graduate	5	12.5
Institute graduate and above	10	25.0
Occupation for Women		
Nongovernmental occupation	0	0
Governmental occupation	8	20.0
House wife	31	77.5
Student	1	2.5
Monthly Income		
Enough	8	20.0
Enough somewhat	20	50.0
Not Enough	12	30.0

F: Frequency, % : Percentage

Table (2) : Reproductive Characteristics of women (n=40) .

Reproductive Characteristics	F.	%
Gravidity		
Primigravida(1-2)	12	30.0
Multigravida(3-4)	17	42.5
Grandmultigravida(5-6)	8	20.0
Great multigravida (7-8)	3	7.5
Parity		
Primipara(1-2)	10	25.0
Multipara(3-4)	19	47.5
Grandmultipara(5-6)	9	22.5
Great multipara(7-8)	2	5.0
No. of Abortion		
None	30	75.0
1-2	8	20.0
≥3	2	5.0
Age at Marriage		
≤ 20	26	65.0
20-26	12	30.0
27-33	2	5.0
Arrangement Present Pregnancy		
1-4	29	72.5
5-8	11	27.5

F: Frequency, % : Percentage

Table (3) : Awareness about folic acid Pregnant women's (n=40) .

Pregnant women's awareness about folic acid	**F.**	**%**

Do you know the benefits of using folic acid		
Yes	26	65.0
No	14	35.0
What is the folic acid		
Minerals	3	7.5
Vitamin B	6	15.0
Vitamin C	1	2.5
Vitamin A	1	2.5
I do not know	29	72.5
Where is the source of information about folic acid		
Family	2	5.0
Doctor	35	87.5
Friends	1	2.5
Nurse	1	2.5
Internet	1	2.5
Food source for folic acid		
Vegetables	3	7.5
Fruits	2	5.0
All that we mentioned earlier	22	55.0
I do not know	13	32.5
Why folic acid is important for the fetus		
Production of red blood cells	20	50.0
Prevents nervous system malformations	12	30.0
Reduce abortion & premature birth	8	20.0
Folic acid deficiency lead to		
Anemia	24	60.0
Deformation in nervous system	16	40.0
Folic acid was used in the previous pregnancy		
Yes	35	87.5
No	5	12.5
When to use folic acid		
First 3 months	27	67.5
Before & through pregnancy period	10	25.0
Just before pregnancy	3	7.5
Awareness of the correct does of folic acid		
Yes	20	50.0
No	20	50.0
Retreat health centers or women's hospital through pregnancy period		
Yes	38	95.0
No	2	5.0
You think folic acid causes birth defects		
Yes	24	60.0
No	16	40.0
Take dietary supplements		
Yes, before pregnancy	3	7.5
Yes, through pregnancy	36	90.0
Before & through pregnancy	1	2.5

F: Frequency, % : Percentage

The descriptive analysis of socio-demographic characteristics of sample in table (1) reveals that 32.5 % of sample are with age (20-26) years. This finding is in agreement with the findings of a previous study done by Ali and Lefta, 2018 which showed that 72.81% of mothers aged between 20-35 years. The study results showed that the highest percentage (30.0%) of study sample was primary school graduate , while the lowest percentage (5.0%) was read and write.These results disagree with the result of AL-Sharwany, 2017 the study reported (56.48%) of them were university while (18.52%) and graduates (16.67%) were minor ,(6,48%) primary school. With respect to women's occupation the present study shows that the highest percentage \(77.5%) of study sample was housewives, in addition to the monthly income the highest percentage (50.0%) of study sample has enough somewhat, These results agree with the result of AL-Sharwany, 2017 She explained that (34.26%) of the subject contained 1000-2000 EGP, and (44.44%) of them were unemployed, while (14, 81) students.In table 2 the highest percentage of the age at marriage was (≤ 20) year about (65.0%) of study sample, while the represents women's "Gravida" that the highest percentage (42.5%) of study sample was multigravida (3-4) pregnancies. Regarding to women's "parity", the highest percentage (47.5%) of study sample was multi-para having (3-4) deliveries , while the lowest percentage (5.0%) was Great multipara (7-8) .With respect to women's " Number of Abortion " , the highest percentage (75.0%) of study sample not having abortion , while the lowest percentage (5.0%) has (≥3) abortions. With respect to women's "Arrangement Present Pregnancy", The highest percentage (72.5%) of study sample was(1-4) , while the lowest percentage (27.5%) was (8-5).

These results agree with the result of AL-Sharwany, 2017, It showed that the majority (52.78%) were found once or twice, while (15, 74%) were found more than 4 times

Alblowi & Alomayri, 2018 the highest percentage (68.1%) of study sample not having abortion , while the lowest percentage (3.2%) has (≥3) abortions and the highest percentage (36.2%) of study sample was multigravida (1-2) pregnancies while the lowest percentage (6.4%)was Great multigravida (more than 5).

In table 2 regard to the item of "Do you know the benefits of using folic acid" the highest percentage was (yes) about (65.0%) of the study sample, these results agree with the result of Riazi, et al 2012, In our study, 18.9% were aware o In our study, 18.9% were aware of folic acid advantages simile to 72% and 17.6% in the studies of Gjergjaetcal and Coll, et al in Spain, respectively.While item "what is the folic acid" the result was highest percentage (72.5%) of the study sample was do not know, while the lowest percentage (2.5%) for (Vitamin C & Vitamin A). These results agree with the result of (Alblowi & Alomayri, 2018) it shows knowledge of folic acid among women (93.1%) of whom had heard about folic acid (31.7%) of the participants knew that folic acid is a B vitamin, and the rest either did not know it (27.7%), or they did not know it. I gave the wrong answer (40.6%).

The highest percentage of the item "where is origin data about "folic acid" (87.5%) of the study sample was from a doctor. These results do not agree with the result

AL-Sharwany, 2017 Folic acid information sources indicated that (56, 48%) of them obtain information from other sources for expecting TV, scientific journals ... etc. .

In the current study, the highest percentage of item "Food source for folic acid" was (55.0%) of study sample for All that we mentioned earlier, while the lowest percentage (5.0%) for (Fruits). These results disagree with the result of AL-Sharwany, 2017 It was found that (49%) those who said they had green vegetables, while (4, 63%) said bread / grains (corn flakes) (16%) fruits and fruits juice

The highest percentage of "why folic acid is important for the fetus" was (50.0%) of study sample for production of red blood cells, while the lowest percentage (20.0%) for reducing abortion & premature birth. These results disagree with the result of (Al Darzi, et al, 2014) showed that a high percentage of pregnant women (71.2%) were aware of the Significance of folic acid in barring neural tube defects (NTDs).

Related to the item of "Folic acid deficiency lead to" the highest percentage (60.0%) of the study sample for anemia. These results agree with the result of AL-Sharwany, 2017 showed that Neurotransmitter deficiency tube resulting dysfunction, it was shown that (68. 5%) mostly caused by folic acid deficiency

"Folic acid was used in the previous pregnancy" this item showed the highest percentage (87.5%) of study sample for "Yes". These results agree with the result of (Al Darzi, et al., 2014) showed that in our research, most of the pregnant women (81.8%) had taken folic acid supplementation during pregnancy. Alblowi & Alomayri, 2018 showed that (58.4%) During previous pregnancy the participants took a folic acid supplement

Items which state "When to use folic acid" showed the highest percentage (67.5%) of study sample for the first three months, these results agree with the result of Al Darzi, et al., 2014 showed that the study, 72.2% of In the period surrounding the pregnancy(the periconceptional) and the first trimester of pregnancy, pregnant women were familiar with the proper time to take folic acid

Regard the item of "awareness of the correct dose of folic acid" the percentage (50.0%) of study sample for "Yes" and "No" While item of "Retreat health centers or women's hospital through pregnancy period" the highest percentage (95.0%) of study sample for "Yes", these results agree with the result of (Alblowi & Alomayri, 2018) showed that One woman had diabetes and thought the required daily folic acid dose was 400 micrograms. Those without diabetes (91%) did not know the daily dose of folic acid. These results are consistent with a finding (Riazi, et al., 2012) showed that despite this fact that 98.4% of the participants received antenatal care and 79.8% of the pregnancies were planned

The results of item "Youthink folic acid causes birth defects" was the highest percentage (60.0%) of the study sample for "Yes", this agrees with the result of AL-Sharwany, 2017 showed that (86.11%) most of the negative.Regarding taking dietary supplements the highest percentage (90.0%) of the study sample for "Yes", through pregnancy, these results disagree with the result of (AL-Sharwany, 2017) which showed that 78% of sample said that uses before and during pregnancy.

CONCLUSION

The finding of the study indicated that most of the pregnant who participated in the study were the at age group (20-26) years, low educational level, housewives with enough somewhat income also the highest percentage of the study sample was multi-gravida women having (3-4) pregnancies, multi-para having (3-4) deliveries, not having an abortion, age at marriage (≤ 20) year, arrangement present pregnancy having(1-4). The highest percentage of the study sample was known the benefits of using folic acid, their information about folic acid from the doctor, they have known about the food source for folic acid What for folic acid is Significant for the fetus and more of them were think folic acid causes birth defects having. The study recommends that should arranger and perform health programs to educate the community by Healthcare providers about the properties of folic acid and early medical screening that would refinement good health pregnancy, and assistance in the early detection of neural tube defects and therefore anticipate plans for the problem because the termination of pregnancy is unacceptable in our society.

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Conflict of Interest: None to declare.

Ethical Clearance: Ethical Clearance: Prior to the initiation of the present study, official permission was granted from Al-Russafa Health Directorate / Al-Sader Primary Health Care Sector and all PHC which included in the study. Iraq was conducted all tests conformity with of the guidelines adopted

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