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Knowledge, Attitudes and Practice of Pregnant Women about Anemia during Pregnancy in Baghdad Teaching Hospital

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ABSTRACT

Objectives: to assess the level of knowledge, attitude and practice of pregnant women about anemia. To assess the association between knowledge of pregnant women and their socio – demographic variances. To assess the association between the practice of pregnant women and their socio – demographic variances. Methods: cross sectional study, carried out among pregnant at Baghdad Teaching Hospital, from 25th February to 28th April, 2023. A total of 300 pregnant women participated in the study. The tool of study was questionnaire. Results: The study revealed 63.3% of pregnant women had good knowledge, positive attitude found in 65.3% and health practice in 59.3% among pregnant women regarding anemia, the study show association between the knowledge of the pregnant woman and educational level of her and her husband, also there is association between the practice of pregnant woman and her occupation. Conclusion: A noticeable general good level of knowledge , attitude and practice among pregnant women regarding anemia during pregnancy, level of knowledge in pregnant woman associated with the educational level of her and her husband and healthy practice increase in employed pregnant woman. Recommendations: Raise the level of knowledge and practice for prevention, learn pregnant women healthy dietary habit and encourage pregnant women to early registration in primary health care center.

Keywords: anemia, knowledge, attitude, practice, women.

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INTRODUCTION

Anemia represents a significant public health concern globally, affecting populations in both developed and developing nations, with profound implications for human health, economic stability, and social progress. It can occur at any stage of the life cycle. (Bekele et al., 2016).

Anemia stands as one of the most common reasons for medical consultations due to its high prevalence among children, young women, and elderly individuals, particularly in the presence of malnutrition. (Chulilla et al., 2009).

Anemia during pregnancy is a major cause of morbidity and mortality in pregnant women in developing countries and has both maternal and fetal consequences (Turner et al., 2022).

The World Health Organization (WHO) reports a prevalence of anemia at 41.8% among pregnant women, with the highest rates observed in Africa (61.3%) and South East Asia (52.5%). Sub-Saharan Africa emerges as the most affected region, with an estimated 17.2 million cases of anemia among pregnant women, constituting roughly 30% of global instances. Anemia contributes to 20% of all maternal deaths worldwide. The value of prevalence of anemia among pregnant women in Iraq was30.80% in2011 (Gebre, & Mulugeta, 2015).

A study conducted in India on the knowledge, attitudes, and practices of pregnant women regarding anemia revealed significant correlations. Lower knowledge about anemia in pregnant women was associated with a five-fold increase in the risk of anemia. Similarly, poor practices related to the prevention of anemia among pregnant women increased the risk of anemia by six times. In as much as, determination of knowledge, attitude and behavior pattern of population is important for improvement of the health program (HESHMAT et al., 2009).

Anemia during pregnancy defined as HB<11g/dl during first and last trimester. Given that hem dilution occurs significantly during second trimester, defines anemia in second trimester as HB<10.5 g/dl (Grewal, 2010).

Anemia in pregnancy is typically diagnosed through a combination of medical and family histories, a physical examination, and laboratory tests and procedures. Since anemia may not always present with noticeable symptoms, healthcare providers may discover its presence while investigating other medical conditions during routine examinations (Acharya, 2019).

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The sequel of anemia in pregnancy encompasses still birth, low birth weight, preterm birth, decrease work capacity, maternal performance and tolerance to infection, hemorrhage, cardiac failure and ultimately death (Obse, Mossie, & Gobena, 2013).

Since 1990, the economic hardship in Iraq has resulted in deterioration in the economy and of ability to meet basic needs: food, medicine, water and sanitation, social and cultural. Prevalence of anemia among pregnant women in Iraq was 30.80% in 2011. In Iraq, several articles documented high prevalence of anemia because many factors including: poor dietary habit, multigravida, short spacing between children, shortage iron and folic supplement and poor counseling (Ahmed, & Mohammed-Ali, 2013).

Subjects and Methods

A cross section study was conducted in (Obstetric and Gynecological) outpatient clinic of Baghdad Teaching Hospital, from 25th February to 28th April 2023. Total 300 pregnant women were enrolled for the study. Convenient sampling technique was adopted. Inclusion criteria: The pregnant women coming for antenatal checkup during data collection period and who accepted to participate in the study .Exclusion criteria: Pregnant women who presented with acute illness (active bleeding, acute febrile illness and acute abdominal pain). Pregnant women who refused to participate in the study. Oral permission was obtained from each pregnant woman who participated in the survey after explaining to women the objective of the study, the right to refused or with draw from study, also explained to all pregnant women that their answers would be confident and will be used only for scientific research purpose. The instrument used in this study was structured questionnaire specially designed for this study by researcher (Mosleh, 2010). The questionnaire included four parts: First part, the questions were about socio demographical data of pregnant women and her husband.

Second part, about assessment of knowledge of pregnant women regarding anemia through 17 questions. Third part; the questions were about opinion and attitude of pregnant women through 8 questions. Fourth part; the questions about the practices of pregnant women during pregnancy through 10 questions. The questionnaires were answered during face to face personal interview with pregnant women by the researcher. The data collected were analyzed using descriptive

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statistics Microsoft Excel. Chi –square test was used to test the statistical significance in the study with significant level (p- value< 0.05).

RESULTS

Table 1: *Socio-demographical characteristics of pregnant women*

Variables		F	Percentage%
Mother's age	15-25	99	33.0%
	26-36	140	46.7%
	≥37	61	20.3%
Gravidity	1-3	131	43.7%
	4-6	120	40.0%
	≥7	49	16.3%
Mother's educationallevel	Illiterate	40	13.3%
	R&W	66	22.0%
	Primary	86	28.7%
	Secondary	66	22.0%
	Higher secondaryschool	42	14.0%
Mother's occupation	House wife	261	87.0%
	Employed	39	13.0%
Trimester	First	55	18.3%
	Second	67	22.3%
	Third	178	59.3%
Husband's educationallevel	Illiterate	34	11.3%
	R&W	38	12.7%
	Primary	73	24.3%
	Secondary	96	32.0%
	Higher secondaryschool	59	19.7%
Husband'soccupation	Free job	202	67.3%
	Employed	98	32.7%
	Urban	208	69.3%

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	Rural	92	30.7%

Table 1 shows the highest proportion of participants were of age group26-36 year 46.7%. Maximum percentages of pregnant womenhad primary school 28.7%. Most of them were housewives 87.0%. More than half of them at third trimester59.3% .Highest percentage of education level of their husbands were secondary school 32.0%. Most of the husbands had free job 67.3%. Most of them were lived in urban area 69.3%.

Table 2: *Knowledge toward anemia among study sample*

Knowledge	**Correct**		**Incorrect**		**Don't know**	
	F	**%**	**F**	**%**	**F**	**%**
Anemia is decrease hemoglobin % in the blood.	**131**	**43.7%**	**16**	**5.3%**	**153**	**51.0%**
Anemia threats mother health.	**278**	**92.7%**	**14**	**4.7%**	**8**	**2.7%**
Anemia does not threat fetus health.	**215**	**71.7%**	**49**	**16.3%**	**36**	**12.0%**
During pregnancy no increases iron need.	**177**	**59.0%**	**85**	**28.3%**	**38**	**12.7%**
Minimum hemoglobin % accepts at third trimester is11g/dl.	**136**	**45.3%**	**60**	**20.0%**	**104**	**34.7%**
Repeated pregnancy at less than 2 years intervals not increase anemia risk in last pregnancy.	**138**	**46.0%**	**115**	**38.3%**	**47**	**15.7%**
Tiredness and weakness are symptom of anemia.	**265**	**88.3%**	**27**	**9.0%**	**8**	**2.7%**
Pallor of the face and nail signs of anemia.	**263**	**87.7%**	**28**	**9.3%**	**9**	**3.0%**
Palpitation and shortness of the breath are not signs of anemia	**158**	**52.7%**	**109**	**36.3%**	**33**	**11.0%**
Eating green leafy vegetable decrease anemia.	**277**	**92.3%**	**17**	**5.7%**	**6**	**2.0%**
Meat, fish, and eggs rich sources in iron eating it decrease anemia.	**228**	**76.0%**	**39**	**13.0%**	**33**	**11.0%**
Drink tea with meals effect iron absorption.	**228**	**76.0%**	**51**	**17.0%**	**21**	**7.0%**
Drink (lemon- orange) juices with meals not affect iron absorption.	**115**	**38.3%**	**155**	**51.7%**	**30**	**10.0%**

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Take supplements should be after doctor prescription.	**274**	**91.3%**	**22**	**7.3%**	**4**	**1.3%**
Supplements have side effects may occur after take it.	**118**	**39.3%**	**143**	**47.7%**	**39**	**13.0%**
Vaginal bleeding during pregnancy increase risk of anemia.	**249**	**83.0%**	**32**	**10.7%**	**19**	**6.3%**
Antacids not affect supplements contain iron if take together.	**68**	**22.7%**	**103**	**34.3%**	**129**	**43.0%**

Table 2 represent a set of questions to evaluate the Level of knowledge about the definition of anemia as decrease hemoglobin level 43.7% was answered yes. Level of knowledge about the threats and complications of anemia on mother 92.7% while anemia does not threat fetus health 71.7% of the study group were answered. Blood loss increased risk of anemia, 83.0%of the study group.

Table 3: *Assessment of Knowledge Score of pregnant women toward anemia.*

		F	%
Valid	Poor < 41	110	36.7%
	Good ≥41	190	63.3%
	Total	300	100%

Min. score = 30 Max .score = 51 Median = 41

Table- 3 use to assess the knowledge of pregnant women 63.3% of them in the study had good knowledge and 36.7% had poor knowledge according to score**.**

Table 4: *Attitude toward anemia among the study group*

Attitude	Yes		No	
	F	%	F	%
Approval regular visit to primary health care center	141	47.0%	159	53.0%
Approval use supplement regular daily	152	50.7%	148	49.3%
Approval birth spacing not less than 2 years	227	75.7%	73	24.3%
Approval of tea drinking with meals	187	62.3%	113	37.7%

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Approval of drinking (lemon –orange) juices withmeals	235	78.3%	65	21.7%
Approval use supplement (1-2) hours before or aftermeals	76	25.3%	224	74.7%
Approval use supplement immediately before orafter meals	241	80.3%	59	19.7%
Approval of use of three main meals daily	186	62.0%	114	38.0%

Table 4 represent assessment of questions to evaluate the Attitudes concerning about regular visits to primary health care center 47% of the pregnant women in the study were observed that regularly. It was observed that 25.3% among pregnant women in the study approve to use supplements (1-2) hours before or after meals, while using supplement directly before or after meals was found in 80.3% among pregnant women in the study.

Table 5: *Assessment of Attitude score of pregnant women toward anemia*

		F	**%**
Valid poor	**<16**	**104**	**34.7%**
Good	**≥16**	**196**	**65.3%**
	Total	**300**	**100%**

Min. score = 10 Max. Score = 24 Median = 16

Table 5 shows the assessment of attitude of pregnant women toward anemia 65.3% of pregnant women in the study had good attitude, while 34.7% pregnant women had poor attitude according to score.

Table 6: *Practice toward anemia among study group*

Behavior	Yes		No			
	F	%	F	%	F	%
Visit primary health care center in this pregnancy	158	52.7%	142	47.3%		
Take supplements from primaryhealth care center	140	88.6%	18	11.4%		
Using supplements taken fromPHCC	67	42.4%	68	43.0%	23	14.6%
	Daily		Irregular		Not taken	
Use supplements only after	256	85.3%	44	14.7%		

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doctor prescription during thispregnancy					
Eating three main meals daily	159	53.0%	141	47.0%	
Drinking tea with meals	109	36.3%	191	63.7%	
Dinking (lemon- orange) juiceswith meals	228	76.0%	72	24.0%	
Use antacids with supplementscontain iron	185	61.7%	115	38.3%	
Eating green leafy vegetablefrequently	184	61.3%	116	38.7%	
Eating meat , fish and eggsfrequently	191	63.7%	109	36.3%	

Table 6 demonstrate the practices of the sample toward anemia. Regular visits to PHCC in this pregnancy 52.7% were reported this practice, 88.6% of them take supplements from PHCC and 43.0% were irregular use of supplements. Eating iron rich food (plant source and animal source) 61.3% and63.7% respectively reported among pregnant women in the study.

Table 7: *Assessment of scores of the study sample practice toward anemia*

		F	**%**
Valid	**Unhealthy < 24**	**122**	**40.7%**
	Healthy ≥ 24	**178**	**59.3%**
	Total	**300**	**100%**

Min. score = 14 Max. score = 30 Median = 24

Table 7 shows the assessment of the pregnant women practices in the study toward anemia divided to healthy practice and un healthy practice based on score 59.3%of pregnant women in the study had healthy practice and 40.7%% of them had unhealthy practice.

Table 8: *Association between the knowledge of pregnant women and their Socio- Demographic characteristics*

		Knowledge Score				P value
		Poor < 41		Good ≥ 41		
		Frequency	%	Frequency	%	

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Mother's age	15-25	42	42.4%	57	57.6%	0.133
	26-36	43	30.7%	97	69.3%	
	≥37	25	41.0%	36	59.0%	
Gravidity	1-3	52	39.7%	79	60.3%	0.606
	4-6	42	35.0%	78	65.0%	
	≥7	16	32.7%	33	67.3%	
Mother's educationallevel	Illiterate	25	62.5%	15	37.5%	
	R&W	25	37.9%	41	62.1%	0.004*
	Primary	26	30.2%	60	69.8%	
	Secondary	23	34.8%	43	65.2%	
	Higher secondary school	11	26.2%	31	73.8%	
Mother's occupation	Housewife	97	37.2%	164	62.8%	0.723
	Employed	13	33.3%	26	66.7%	
Trimester	First	15	27.3%	40	72.7%	0.267
	Second	25	37.3%	42	62.7%	
	Third	70	39.3%	108	60.7%	
Husband's educationallevel	Illiterate	19	55.9%	15	44.1%	0.023*
	R&W	14	36.8%	24	63.2%	
	Primary	30	41.1%	43	58.9%	
	Secondary	33	34.4%	63	65.6%	
	Higher secondaryschool	14	23.7%	45	76.3%	
Husband's occupation	Free job	78	38.6%	124	61.4%	0.371
	Employed	32	32.7%	66	67.3%	
Address	Urban	73	35.1%	135	64.9%	0.436
	Rural	37	40.2%	55	59.8%	

***** Statistically significant

As shown in table 8; The study found that there was association between the level of the knowledge and education status (p-value0.004) at (p- value <o.o5) level of significance, also there was a

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significant association between the knowledge of pregnant women and the education level of their husbands (p- value 0.023) at (p- value <0, 05) level of significance.

Table 9: *Association between the practice of pregnant women and their Socio-Demographic characteristics*

		Practice Score				P value
		< 24		≥24		
		Frequency	Percentage%	Frequency	Percentage %	
Mother's age	15-25	34	34.3%	65	65.7%	0.822
	26-36	50	35.7%	90	64.3%	
	≥37	19	31.1%	42	68.9%	
Gravidity	1-3	39	29.8%	92	70.2%	0.234
	4-6	43	35.8%	77	64.2%	
	≥7	21	42.9%	28	57.1%	
Mother's educationallevel	Illiterate	17	42.5%	23	57.5%	0.081
	R&W	27	40.9%	39	59.1%	
	Primary	30	34.9%	56	65.1%	
	Secondary	22	33.3%	44	66.7%	
	Higher secondary school	7	16.7%	35	83.3%	
Mother's occupation	Housewife	96	36.8%	165	63.2%	0.021*
	Employed	7	17.9%	32	82.1%	
Trimester	First	22	40.0%	33	60.0%	0.583
	Second	21	31.3%	46	68.7%	
	Third	60	33.7%	118	66.3%	
Husband's educational	Illiterate	12	35.3%	22	64.7%	0.446

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level	R&W	14	36.8%	24	63.2%	
	Primary	27	37.0%	46	63.0%	
	Secondary	36	37.5%	60	62.5%	
	Higher secondary school	14	23.7%	45	76.3%	
Husband'soccupation	Free job	70	34.7%	132	65.3%	0.897
	Employed	33	33.7%	65	66.3%	
Address	Urban	69	33.2%	139	66.8%	0.598
	Rural	34	37.0%	58	63.0%	

* Statistically significant

As shown in the table 9; the study found there was a significance association between the practice of the pregnant women and their occupation (p- value 0.021) at (p- value <0.05) level of significance.

DISCUSSION

This study showed that around half of pregnant women between (26-36) years. Similarly with that study in PHCC in Resafa conducted by Gibson (2007) found mean age 28.6 years among pregnant women. Number of pregnancy between 1-3 pregnancies found in more than quarter. This might be explained by shift in trend to have few children in the community. This study found that highest proportion of pregnant women have Primary school educational level and 32.0% of their husband have secondary school educational level. Consistent study in Thi-Qar by Al-Ghuzi & Al-Asadi (2014) who showed low education level more among women than men.

This study showed less than quarter of pregnant women employed and more than quarter of their husband employed. In contrast to Alaadin (2004) who conduct a survey found about 80% of adult males were employed compared to about 13% of females. This finding might be explained by change in economic status in Iraq.

This study found that most of pregnant women lived in urban areas. This finding might explained by conflict in our country shift population from rural areas to urban areas.

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This study showed that more than half of pregnant women at third trimester by depend on their answers.

In a study conducted by Gebre & Mulugeta (2015) it was found that 63.3% of pregnant women have general good knowledge and information about anemia which might explain the recorded prevalence of anemia among the pregnant women in Iraq 30.80%.

This finding is lower than that reported in Palestine by Abu-Hasira (2007) about 88.2% of the pregnant women had knowledge about concept of anemia. This difference might be attributed to activities and international agencies e.g. WHO and UNICEF for the last decades. The activities and international agencies in Iraq were interrupted by violence.

In this Study, majority of the pregnant women were aware about the danger of anemia on mother s health and only 16.3% of them believed that anemia during pregnancy threats fetus health. Similarly the figure observed in study done by Massawe et al., in Tanzania that only 5% of the sample believed that anemia may not be danger for mother. Inconsistent with Abu-Hasira (2007); the study done in Nablus found that poor knowledge regarding the impact of anemia on the women s health but aware about it is complications on child. This finding might be explained by chance, the pregnant women had poor knowledge about these facts in the sample.

The study showed that around half of pregnant women had knowledge about it. This might be explained by poor health education regarding change in HB levels during pregnancy.

This study reported that highest percent of studied sample had good knowledge regarding answer on questions of signs and symptoms of anemia respectively. Consistent with a Study by Kalimbira et al., (2009) in Malawi in Africa showed that 96.6% had knowledge about anemia and correctly indicated it signs.

This study showed good knowledge regarding the causes of anemia among pregnant women similar to the study done in Tanzania by Massawe et al., which reported that majority of the pregnant women were aware the about causes. Another Study conducted by Waggiallah & Alzohairy (2013) on Saudi population in Qassim region was found a satisfactory general good knowledge of anemia but they were not very well aware about anemia causes.

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This study found majority of the pregnant women were aware about eating food rich in iron from plant and animal sources respectively can decrease the incidence of anemia. In contrast the Study done in Africa that found eating adequate amount of food is a main prevention of anemia. Other Study done in Nepal by Ghimire & Pandey (2013); showed knowledge regarding source of iron contain foods were poor. Study in West Africa found knowledge about anemia prevention and treatment need to be addressed; because it was generally poor. This finding regarding poor knowledge to iron rich food might be explained by poor education among the study group.

Only 28.3% of pregnant women were aware in the study about the increase need to iron during pregnancy. This finding might be explained by lack knowledge about the physiological changes during pregnancy, role and importance of iron for the body. This study showed that 76% of pregnant women had knowledge about tea negative effect on iron absorption. This finding might be explained by good knowledge among pregnant women regarding the effects of tea.

This Study showed that more than half of pregnant women had knowledge about positive effect of (lemon- orange) juice on enhancing absorption of iron from meals. Consistent study in Nablus (2007) found that 46.7% of study group had aware about that positive effect. This study showed that greatest proportion of pregnant women use supplements after doctor prescription only. This finding might be explained by fair of pregnant women to use drugs that may harm their fetus.

The supplements had side effects my occur after take it (27).This study showed that more than quarter of the pregnant women lacked information about side effect of supplements and found that less than quarter of the pregnant women had knowledge about antacids negative effect on absorption of supplements contains iron .This finding might be explained by low health education level of the pregnant women or their irregular visits to antenatal care centers.

This study reported a significant association between the knowledge of the studies sample and educational level of pregnant women and their husbands. This finding is consistent with a study in India by Tashara et al (2015) showed a significant relationship between education level and the level of knowledge on iron deficiency anemia in pregnancy, but inconsistent with another study in Yenepoya by Baby et al., (2014) in India which found no significant association between the knowledge and selective demographic variables such as age, gravid, education, occupation and

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monthly income. This difference might be attributed to methodological differences including the design, setting and sample size.

The conducted study showed that highest percentage of the studies sample had good attitude regarding anemia. This finding consistent with a study done by Sedlander et al., showed a satisfactory level of attitude score toward a protective behavior against Iron Deficiency Anemia. This study showed that 50.7% of the pregnant women approved to use supplements regularly and daily during pregnancy which might be explained by the pregnant women were aware about the importance of these supplements during pregnancy for the mother and fetus health.

Attitude to birth spacing not less than two years reported in majority of the studied sample. Consistent with a Study done in Sudan by Morsy & Alhady (2014); which found that highest percentage of the pregnant women in the study had more than two years interval birth spacing and. Short birth interval does not give the mother enough time to recuperate from nutrition burden of previous pregnancy which may leads to poor pregnancy outcome and good pregnancy outcomes are expected where there is gap of at least (18-23) months between consecutive pregnancies. This study showed that most of of pregnant women were drinking (lemon – orange) juice with meals and that great percentage of pregnant women had three main meals daily .This finding might be explained by good opinions among pregnant women regarding diet habit during pregnancy.

Attitude about regular visits to primary health care center found that less than half of the studies group. This finding might be explained by pregnant women lacked knowledge about the importance of PHCC for the mother and her child health.

Drinking tea with meals by more than half of the pregnant women .This finding might be explained by tea is a popular drinking in our country. Supplements intake before or after meals apart of (1-2) hours found by quarter of the pregnant women and immediately before or after meals majority of the sample were use them immediately before or after meals Which might be due to the pregnant women lacked awareness about proper use of supplements. It was found that most of the pregnant women had healthy practices regarding anemia. This finding might be explained by good Knowledge among pregnant women regarding healthy practice to anemia prevention.

This study showed that more than half of the pregnant women visited primary health care center during this pregnancy, majority of them were take supplements from PHCC and only 42.4%

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regularly used these supplements during pregnancy. In contrast a study was done in Nepal by Ghimire & Pandey (2013). Showed good practice for antenatal care visit, but there were not a good practice for prevention of anemia and they were not taken the complete course of iron supplements during pregnancy.

This study showed that majority of the pregnant women used supplements only after doctor prescription during this pregnancy.

Eating three main meals daily found as a practice in half of the sample. Consistent with study done in Nablus (2007) which found that health practice to word regular of eating three main meals and eating rich iron foods. Only about quarter of the pregnant women included in the study drunk tea with meals and 76.0% of pregnant women drunk citrus juices with meal. This finding might explained by pregnant women good knowledge.

This study showed that highest percentage of the sample had use antacids with supplements contain iron. This finding might be due to their poor knowledge about the effect of antacids on iron absorption. In the conducted e study found that more than half of pregnant women had eaten green leafy vegetables frequently and 63.7% of them had eaten (meat, fish, and egg) frequently. This finding might be due to cultural habits of Iraqis who like eating meats daily.

This study found a significant association between the practices of pregnant women in the study and their occupation and. In contrast to a study by Onyeneho & Subramanian (2016); in south eastern Nigeria found the practices for prevention and management of anemia in pregnancy affected by a high level of education. Inconsistent study by Ghimire & Pandey (2013); in Nepal found no association between practice and socio – demographic characteristics such as age of mother, education, occupation, economic status and parity of mother, which could be due to different culture.

CONCLUSION

Pregnant women in the study had general good knowledge, positive attitude and healthy practice regarding anemia during pregnancy. Association was found between education status of pregnant women and their husbands and knowledge of pregnant women to toward anemia. Association was found between the practice of pregnant women and their occupation.

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Recommendations

1-Risk of anemia increase during pregnancy, so it is important to raise level of knowledge and practice for prevention and treatment of anemia through media, internet, television, and health companies to reach every family, especially women in reproductive age.

2-Good nutrition is the cornerstone of any approach for prevention or treatment of anemia. It is important that physician or health professionals must give more attention to educate pregnant women about healthy dietary habits as a part of health promotion.

3-It is also very importance to encourage pregnant women to early registration to primary health care center, regular visits and encourages the regular use of supplements during pregnancy and also to attend postnatal visits during lactation for follow up.

Dedication:

To soul of my father, my dear mother, My Sister and Brothers

For their Patience and Encouragements with Love and Respect.

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First of all, I thank Allah almighty for granting me the knowledge and the patience with which this research was accomplished and I pray that his blessing up on me continue throughout my life and special peace to his messenger Mohammed (PBUH).

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