

Babylon University Collage of Nursing



Knowledge and Practices of pregnant Women for Prevention of Anemia in Al-Hilla City

Research project

Provided to Babylon University as Part of The Requirements for Obtaining a Bachelor's Degree for The Collage of Nursing

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بسمالله الرحكن الرتحيم

"يَخْلُقُكُمْ فِي بُطُونِ أُمَّهَاتِكُمْ خَلْقًا مِنْ بَعْدِ خَلْقٍ فِي ظُلُمَاتٍ ثَلاثٍ ذَلِكُمُ اللَّهُ رَبُّكُمْ لَهُ الْمُلْكُ لا إِلَهَ إِلا هُوَ فَأَنَّى تُصْرَفُونَ"

صدق الله العظيم

سورة الزمر الاية 6

الإهداء

الى خالق اللوح والقلم وبارئ الذر والنسم وخالق كل شيئ من العدم الى القاف والنون وكان خير الرُسل وما كادوا ليزلقوه بأبصارهم إلا هو ذكر للعالمين .. نبى الرحمة الى تراجمة وحى الله ومهبط سره الى السادات الاطهار وعروته الوثقى ..اهل بيت النبوه الى مراد قلبى .. الأقرب لى من نفسى المغيب عن الأبصار والكامن بعين البصيرة كلماتي المسطرة ترجمان عنائي للوصول إليك بزادي العلمي.. صاحب العصر والزمان لعلى أفي تلك الأبوه حقها ، وإن كان لايوفي بكيل ولا وزن ، فأعظم مجدي انك لى أب .. ابى الحبيب الى وطنى الأول ومدرستى الاولى .. الى تلك الحبيبة ذات القلب النقى والنظرة الدافئة الى من تفتش سعادتها في سعادتي .. امي الحبيبه الى من اشاركهم لحظاتى .. الى من يفرحون لنجاحي وكانه نجاحهم اخوتي بكل حب اهديكم هذه الجهد المتواضع

شكر وتقدير

أحمد الله حمداً كثيراً، وأصلِّي وأسلَّم على سيدنا وشفيعنا (محمد) وعلى آله الطيبين الطاهرين وأصحابه المنتجبين على إنجاز هذا الجهد المتواضع.

ولا يسعني في هذا المقام إلا أن أتقدم بجزيل شكري وعظيم امتناني إلى الدكتوره (وفاء احمد امين) في جامعة بابل كلية التمريض الإشراف على بحثي أولاً، ولما أبداه من رعاية ونصح وتوجيه وتصويب ثانياً، حيث كان لسديد آرائه وقيمة ملاحظاته اليد الطولى والكأس المعلى في إظهار هذا البحث بالصورة التي هي عليه الآن شكلاً وموضوعاً فجزاه الله عنا خير جزاء وأمد في عمره.

كما أتقدم بجزيل شـكري وامتناني إلى أسـاتذة جامعة بابل كلية التمريض لرعايتهم واهتمامهم وحرصهم العالي على إنجاز متطلبات البكالوريوس بنجاح ودقة.

كما أتقدم بشكري وتقديري إلى كل من ساعدني في إنجاز هذا البحث وأمدني بالمصادر

وعززني بالمراجع.

واخيرا اتقدم بجزيل الشكر والامتنان لكل الامهات الاتي سعن لمساعدتنا في انجاز بحثنا واكمال مهمتنا.

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Abstract

Background: Pregnant women are at increased risk for Iron deficiency anemia due to increased blood volume during pregnancy resulting from increased support to the fetus and placenta. In general, women in childbearing stage suffer from the loss of large amounts of blood due to childbirth or menstruation, which are factors contributing to the development of iron anemia. The study aims: To find out relationship between knowledge, practices with their socio-demographic and obstetric data. Methodology: A descriptive and analytic study design is conducted on Non probability (purposive sample) of (100) pregnant women attending Babylon hospital for maternity and children ,Al-Emamm Al-sadiq teaching hospitals in Al-Hilla City. The study carried out from (1st to 28th Feb 2023). Data collected through a questionnaire constructed for the purpose of this study it consists of three parts: socio demographic, obstetric information, knowledge and practices of pregnant women toward anemia, the questionnaire and content validity has been attested by the (6) experts. A descriptive and inferential statistical analysis have been used to analyze the data. Results: The highest percentage (42.0%) were between age (20-25) years old, were diploma or college educational level, Housewife, residency in rural, the overall knowledge and Practices of pregnant toward anemia were fair. Conclusions: The study concludes that significant relationship between demographics characteristics with practice and significant relationship between obstetric characteristics and knowledge of pregnant toward Anemia.

Recommendations:

It is recommended that educational programs by the Ministry of Education during the adolescence period to provide information on anemia in females because most women before pregnancy have anemia..

Key words:

Knowledge, Practice, Pregnant Women, Anemia.

Chapter One

1.1. Introduction

Iron deficiency anemia (IDA) is one of the most common problems between under-nutrition and public health problems worldwide with the highest prevalence in developing countries (AlAbedi, 2020).

According to the World Health Organization (WHO), anemia in pregnancy is defined as a Hemoglobin (Hb) concentration of less than 11 grams per deciliter (g/dl). Anemia during pregnancy is a major cause of morbidity and mortality of pregnant women in developing countries, and has both maternal and fetal consequences (WHO, 2014).

WHO estimates 40% of pregnant women worldwide are anemic, with iron deficiency anemia being the most common form. Annually, nearly 510,000 maternal deaths occur worldwide, associated with childbirth or early postpartum complications. Approximately 20% of maternal death is caused by anemia; the majority of this taking place in developing countries (Kefiyalew F, 2014).

Pregnant women are at increased risk for Iron deficiency anemia due to increased blood volume during pregnancy resulting from increased support to the fetus and placenta. In general, women in childbearing stage suffer from the loss of large amounts of blood due to childbirth or menstruation, which are factors contributing to the development of iron anemia (Souganidis E S, 2012).

Gestational anemia has a significant global burden, affecting 32.4 million (38.2%) of pregnant women. It is a severe public health problem in South East Asia (48.7%) and Africa (46.3%). Global data show that 56% of pregnant women in low- and middle-income countries have anemia (Osman M, 2020).

Anemia has a number of causes, with the most significant contributor being iron deficiency. Reports state that approximately 50% of anemia cases are considered to be due to iron deficiency, but this varies by population group and region. Anemia in pregnant women has severe consequences on health, social, and economic development, resulting in increased risk of low physical activity, maternal morbidity, and mortality, especially in those with severe anemia (Gedefaw L, 2015).

Severe anemia (<7 g/L) during pregnancy has been associated with major maternal and fetal complications. It increases the risk of preterm delivery, low birth weight, intrauterine fetal death, neonatal death, maternal mortality, and consequently infant mortality. (Bizuneh Ayano BA, 2017).

During antenatal checkup, comprehensive nutritional knowledge about iron rich diet and Supplements should be made an integral component. Women should be informed effective nutritional practices and benefits of the iron supplements. In antenatal checkup individual should motivate to increase the consumption of such food those are rich in iron, reduce the consumption of tea and coffee that inhibit iron absorption (Rizvi, 2012).

Knowledge towards antenatal visits, importance of a healthy diet, and iron and folic acid intake during pregnancy could have a profound influence on their hemoglobin levels (Margwe, 2015).

Routine antenatal is a key passage point for pregnant women. Pregnant woman get a wide scope of wellbeing advancement and preventive well-being administrations, including information about healthy practices during pregnancy, nourishing help, and iron deficiency anemia prevention. Moreover pregnant women attitude and knowledge about iron deficiency anemia and supplements is an important. It includes as a barrier factor or motivation for iron supplements intake (Gowri, 2017).

The fight against anaemia seems to be a daunting task across the globe especially in developing countries. Anaemia's devastating effects could take a significant toll on national economies. It is estimated that 58% of pregnant women in developing countries are anaemic; anaemia is the cause of 20% maternal deaths; and further to that, 50% of all maternal deaths are linked to anaemia. It is believed that half of all pregnant women in Africa are anaemic (Bismark, 2013; Rizvi, 2012).

Likewise, Health care professionals in Pakistan commonly observe that practice of pregnant women eat less during pregnancy to prevent difficulty in delivery, and 25% of women take iron supplements that also tea, coffee consumption, low intake of eggs and red meat are associated with anemia(Bismark ,2013).

Iron deficiency anemia (IDA) is one of the mostcommon problems between under-nutrition and public health problems worldwide with the highest prevalence in developing countries (Abd Alhussen, 2020).

The frequency of anemia is particularly high in the developing nations (33–75%). In industrialized nations, around 15% of pregnant women are anemic. Anemia is reported to be prevalent in the UK at a rate of 24.4% prenatally and almost 30% of women are anemic postpartum (Zahraa Al-Sattam 2022).

The World Health Organization (WHO) estimates showed in 2011, 32.4 million (38%) of pregnant women, while 496 million (29%) of those who are not pregnant between the ages of 15-49 years suffer from anemia. Moreover, previous studies on IDA have revealed a prevalence of 73.9% in Guyana, 22.1% in Egypt, 39.7% in Kuwait, 78.0% in Liberia, and 50.0% in Bahrain. (World Health Organization, 2014).

In Iraq, the Nutrition Research Institute showed, through a section of research and studies, the prevalence of iron deficiency among pregnant women 38% and nonpregnant 25%, respectively (Nutrition research institute Iraq,2014).

Grand-multiparity, too early pregnancies, too many and too frequent pregnancies, spacing of less than one year, low socioeconomic status, illiteracy, and late booking of pregnant women at antenatal care units are among the known risk factor for development of anaemia during pregnancy (Hailu Jufar).

Anemia during pregnancy may result into pre-term delivery, prenatal mortality, low birth weight and low mental capacity of children .L ack of knowledge regarding anemia, iron rich foods and the importance of iron supplementation among pregnant women special effects on the health of pregnant women (Balasubramanian 2016).

Anemia is generally preventable and easily treatable if detected in time. Effective management of anemia involves treatment of the underlying reasons, restoration of the hemoglobin concentration to normal levels, and treatment and prevention of complications. Despite this fact, anemia is a common cause of morbidity and death during conception (Ahmed 2019).

Good knowledge and eating iron-rich foods when preparing food at home by women to prevent iron deficiency varies depending on the culture and awareness of women. While lower maternal education is associated with a higher incidence of low-birth weight, neonatal death in infants, and prematurity of women with severe iron deficiency (Tashara I F, 2015).

1.2. Objectives:

- 1. To assess the demographic and obstetric data of pregnant.
- 2. To identify knowledge and practices concerning anemia among the participants.
- 3. To find out relationship between knowledge, practices with their sociodemographic and obstetric data.

Chapter Two

2. Methodology:

A descriptive-analytic study. Non-probability (Purposive sample) of (100) pregnant women attending Babylon hospital for maternity and children ,Al-Emamm Al-sadiq teaching hospitals in Al-Hilla City. The study carried out from (1st to 28th Feb 2023). Data collected through a questionnaire constructed for the purpose of this study, A questionnaire was used as a data-gathering tool, consists of three parts include:

1st part consists of:

- A. Sociodemographic Data include (7) items (age, educational level, occupation, residency, economic level, family number, source of information).
- B. Obstetric information include (3) items (number of pregnancy, para, have miscarriage).

2nd Part: knowledge of pregnant women toward Anemia

This part consists of (7) items. These items are rated according to a three level Likert scale (I know, I am not sure, I do not know), scored (1-2-3).

3rd part: Practices of pregnant women toward Anemia

This part consists of (12) items. These items are rated according to three level Likert scale (always, never, sometime), scored (1-2-3).

Content validity has been carried out through (6) experts. Descriptive statistical and Inferential analyses are used to analyze the data were analyzed using the statistical. Package for social sciences ("SPSS version 20").

Chapter Three

3. Result:

Table 1: Distribution Socio-Demographical characteristics of pregnantwomen (No.100).

Variables	Groups	Frequency	Percent
Age	20-25	42	42.0
	26-30	29	29.0
	31-35	19	19.0
	36-40	10	10.0
	Total	100	100.0
Educational status	Not read and write	4	4.0
	Reads and writes	9	9.0
	Primary	7	7.0
	Secondary	37	37.0
	Diploma or college	43	43.0
	Total	100	100.0
Occupation	Employee	47	47.0
	Housewife	53	53.0
	Total	100	100.0
Residency	Urban	45	45.0
	Rural	55	55.0
	Total	100	100.0
Economic status	Somewhat	3	3.0
	sufficient		
	Enough	73	73.0
	Not enough	24	24.0
	Total	100	100.0
Family number	1-2	17	17.0
	3-4	45	45.0
	5 or more	38	38.0
	Total	100	100.0
Source of information	Family members	54	54.0
	and friends		
	Colleagues	19	19.0
	T.V and the internet	27	27.0
	Total	100	100.0

Table (1): this table demonstrated, that the highest percentage (42.0%) were between age (20-25) years old. The highest percentage (43.0%, 53.0%, 55.0%, 73.0%, 45.0%) were diploma or college educational level , Housewife, residency in rural , enough economic status, their family number were (3-4), respectively. The highest percentage (54%) the source of information were their family members and friends.

Variables	Groups	Frequency	Percent
Number of pregnancies	1-2	51	51.0
	3-4	41	41.0
	5 or more	8	8.0
	Total	100	100.0
Number of births	1-2	48	48.0
	3-4	52	52.0
	Total	100	100.0
You have a miscarriage.	Yes	51	51.0
	No	49	49.0
	Total	100	100.0

Table 2: Distribution Obstetrics information of Sample No (100)

Table (2): This table demonstrated, the highest percentage (51.0%) were (1-2) as number of pregnancies, the highest percentage (52%) were (3-4) number of para, the highest percentage (51.0%) have miscarriage.

Table 3: knowledge of pregnant toward Anemia

		Fre				Assess.
Items	Groups		Perc.	Mean	St deviation	
You know the meaning of	I Know	38	38.0	1.97	.858	Fair
anemia	I'm not sure	27	27.0			
	I don't know	35	35.0			
	Total	10	100.0			
		0				
Anemia is more prevalent in	I Know	32	32.0	2.06	.839	Fair
pregnant women	I'm not sure	30	30.0			
	I don't know	38	38.0			
	Total	10	100.0			
		0				
There are many symptoms	Know	23	23.0	2.01	.689	Fair
of anemia(fatigue, headache,	I'm not sure	53	53.0			
pale and other)	I don't know	24	24.0			
	Total	10	100.0			
		0				
Do you know there are	Know	37	37.0	1.85	.757	Fair
many cause of anemia (iron	I'm not sure	41	41.0			
deficiency ,folic acid,B12	I don't know	22	22.0	1		
	Total	10	100.0			
		0				
	Know	24	24.0	2.07	.742	Fair

I'm not sure	45	45.0			
I don't know	31	31.0			
Total	10	100.0			
	0				
Know	31	31.0	1.95	.757	Fair
I'm not sure	43	43.0			
I don't know	26	26.0			
Total	10	100.0			
	0				
Know	38	38.0	1.83		Fair
I'm not sure	41	41.0			
I don't know	21	21.0		.753	
Total	10	100.0			
	0				
Know	38	38.0	1.99	.870	Fair
I'm not sure	25	25.0			
I don't know	37	37.0			
Total	10	100.0			
	0				
verall			1.76	0.783	Fair
	I don't know Total Know I'm not sure I don't know Total Know I'm not sure I don't know Total Know I'm not sure I don't know	I don't know 31 Total 10 0 0 Know 31 I'm not sure 43 I don't know 26 Total 10 0 0 Know 38 I'm not sure 41 I don't know 21 Total 10 0 0 Know 38 I'm not sure 25 I don't know 37 Total 10 0 0	I don't know 31 31.0 Total 10 100.0 0 0 0 Know 31 31.0 I'm not sure 43 43.0 I don't know 26 26.0 Total 10 100.0 0 0 0 Know 38 38.0 I'm not sure 41 41.0 I don't know 21 21.0 Total 10 100.0 0 0 0 Know 38 38.0 I'm not sure 25 25.0 I don't know 37 37.0 Total 10 100.0 0 0 0	I don't know 31 31.0 Total 10 100.0 0 0 100.0 Know 31 31.0 1.95 I'm not sure 43 43.0 1.95 I don't know 26 26.0 100.0 0 Total 10 100.0 0 1.83 I don't know 38 38.0 1.83 I'm not sure 41 41.0 41.0 I don't know 21 21.0 1.83 I don't know 38 38.0 1.99 Know 38 38.0 1.99 I'm not sure 25 25.0 1.99 I don't know 37 37.0 1.91 I don't know 10 100.0 10	I don't know 31 31.0 Total 10 100.0 0 0 1.95 Know 31 31.0 I don't know 26 26.0 Total 10 100.0 I don't know 26 26.0 Total 10 100.0 0 0 0 Know 38 38.0 I don't know 21 21.0 I don't know 21 21.0 Total 10 100.0 0 0 .753 Total 10 100.0 0 1 .753 Total 10 100.0 0 .753 .753 Total 10 100.0 1 don't know 37 37.0 Total 10 100.0 0 10 100.0 0

MS (Poor =1-1.6, Fair = 1.7-2.3, Good = 2.4-3) frq=frequency, perc=percent

Table (3) demonstrated the overall knowledge of pregnant toward anemia were fair.

Variables	Groups	Fre.	Perc.	Mean	St deviation	Assess.
Regular antenatal	Never	33	33.0	2.02	.829	Fair
checkup, blood tests	Sometimes	32	32.0			
during pregnancy	Always	35	35.0			
	Total	100	100.0			
My food must include	Never	41	41.0	1.84	.801	Fair
green vegetables	Sometimes	34	34.0			
(Spinach, parsley)	Always	25	25.0			
	Total	100	100.0			
Taking special diet	Never	19	19.0	1.87 .485	Fair	
during pregnancy rich in	Sometimes	75	75.0			
iron	Always	6	6.0			
	Total	100	100.0			
Eating red meat daily	Never	30	30.0	1.73	.510	Fair
	Sometimes	67	67.0			
	Always	3	3.0			
	Total	100	100.0			
Eating chicken or fish	Never	42	42.0	1.67	.637	Poor
continuously	Sometimes	49	49.0			
	Always	9	9.0			
	Total	100	100.0			
	Never	48	48.0	1.63	.677	Poor
Consume Iron tablets in	Sometimes	41	41.0			
spite of healthy diet	Always	11	11.0			
	Total	100	100.0			
Taking iron tablet with	Never	44	44.0	1.65	.642	Poor
vit C	Sometimes	47	47.0			
	Always	9	9.0			
	Total	100	100.0			
Avoid drinking tea or	Never	36	36.0	1.75	.642	Fair
coffee with meal	Sometimes	53	53.0			
Drinking tea after on	Always	11	11.0			
hours after eating	Total	100	100.0			
Don't Drink milk or	Never	34	34.0	1.72	.570	Fair
vogurt dorivativas	Sometimes	60	60.0			
yogurt derivatives (cheeses	Always	6	6.0			
(CHEESES	Total	100	100.0			
and other) During meals						

 Table 4: Distribution Practices of pregnant toward Anemia.

ometimes lways otal ever ometimes lways	59 11 100 49 34	59.0 11.0 100.0 49.0			
otal ever ometimes lways	100 49	100.0			
ever ometimes ways	49		1.60		
ometimes ways		49.0	1.60		
ways	34		1.68	.750	Poor
5		34.0			
atal	17	17.0			
otal	100	100.0			
ever	38	38.0	1.79	.715	Fair
ometimes	45	45.0			
ways	17	17.0			
otal	100	100.0			
ever	47	47.0	1.64		Poor
ometimes	42	42.0		671	
ways	11	11.0		.0/4	
otal	100	100.0			
ever	41	41.0	1.66		Poor
ometimes	52	52.0		607	
ways	7	7.0		.007	
otal	100	100.0			
ever	41	41.0	1.66		Poor
ometimes	52	52.0		607	
ways	7	7.0		.607	
	100		, ,		
otal	100	100.0			
	ways otal ever metimes ways otal ever metimes ways	ways 11 tal 100 ever 41 metimes 52 ways 7 tal 100 ever 41 metimes 52 ways 7 52 va 3 va 41 va 52 va 41 va 41 va 52 va 41 va 52 va 41 va 52 va 41 va 52 va 41 va 52 va 52	ways 11 11.0 otal 100 100.0 over 41 41.0 ometimes 52 52.0 ways 7 7.0 otal 100 100.0 over 41 41.0 over 41 41.0 over 41 52 over 52 52.0 oways 7 7.0 oways 7 7.0	ways 11 11.0 otal 100 100.0 over 41 41.0 ometimes 52 52.0 ways 7 7.0 otal 100 100.0 ways 52 52.0 ways 52 52.0 otal 100 100.0 otal 52 52.0	ways 11 11.0 .674 otal 100 100.0 .674 over 41 41.0 1.66 ometimes 52 52.0 ways 7 7.0 otal 100 100.0 ever 41 41.0 otal 100 100.0 ever 41 41.0 otal 100 100.0 ever 41 41.0 otal 52 52.0 otal 607

MS (Poor =1-1.6, Fair = 1.7-2.3, Good = 2.4-3).

Table (4): this table demonstrated the overall assessment Practices of pregnant toward of anemia, were fair.

Table 5: The Relationship between Socio-Demographics Characteristicsand knowledge of pregnant toward Anemia.

No	Relationship between demographics characteristics and knowledge of pregnant toward Anemia	χ²-test	DF	P-value
1	Age	60.861ª	42	.030 S
2	Educational level	51.753ª	56	.036 <mark>S</mark>
3	Occupation	19.433ª	14	.149 NS
4	Residency	14.966ª	14	.380 NS
5	Economic status	31.630ª	28	.290 NS
6	Family number	45.756ª	28	.018 S
7	Source of information	49.989ª	28	.006 <mark>HS</mark>

Table (5.): shows that there is significant relationship between all demographics characteristics and knowledge of pregnant toward anemia $P \le 0.05$, except (occupation, residency, and economic status).

Table 6: The relationship between obstetric characteristics and knowledgeof pregnant toward Anemia.

No	Relationship between obstetric characteristics and knowledge of pregnant toward Anemia	χ²-test	DF	P-value
1	Number of pregnancies	32.139ª	28	.269 NS
2	Number of birth	24.333ª	14	.042 S
3	Miscarriage	44.173 ^a	28	.027 S

Table (6.): shows that there is significant relationship between all obstetric characteristics with knowledge of pregnant toward Anemia at $P \le 0.05$, except in number of pregnancies.

Table 7: The relationship between demographics characteristics and
Practices of pregnant toward Anemia.

No	Parameters	Chi square value	DF	Significance
1	Age	75.732 ^a	63	.130
				NS
2	Educational status	111.596 ^a	84	.024
				S
3	Occupation	25.586 ^a	21	.223
				NS
4	Residency	48.539 ª	21	.001
				HS
5	Economic status	46.447 ^a	42	.294
				NS
6	Family number	69.133a	42	.005
				HS
7	A source of	90.153a	42	.000
	information			HS

Table (7.): shows that there is significant relationship between all demographics characteristics and practice of pregnant toward anemia in $P \le 0.05$, except (age, occupation, and economic status).

Table 8: The Relationship between Obstetric Characteristics andKnowledge of Pregnant toward Anemia.

No	Parameters	Chi square value	DF	Significance
1	Number of pregnancies	64.922ª	42	.013
	I B I B			HS
2	Number of birth	23.955ª	21	.295
-				NS
3	Number of children	61.162ª	42	.028
5				S

Table (8.): shows there is significant relationship between all obstetric characteristics and practices of pregnant toward Anemia in $P \le 0.05$, except (number of birth).

Chapter Four

4. Discussion

The result of present study reported that table (1); the highest percentages (42%) of pregnant women were within age groups (20-25) years. This result disagrees with a study conducted by (Keneni 2018) found that the majority of the respondents (38.4%) were between 31-35 years of age. This may be due to size of the sample.

Regarding economic status, the highest percentage of participants with sufficient of economic status .This finding in agreement with (Samia Abdel alhakeem, 2019) who reported that economic status of sample was sufficient.

The highest percentage of of study sample were live in rural this result not in the same line with (Keneni, 2018) found that most of sample live in urban. The highest percentage of of study sample were (3-4) number of family number this result is dis agreement with (Serbesa, 2019).

This table 2; demonstrated, the present study has reported that the highest percentage (51%) of the study sample were number of pregnancy (gravida) ranging (1 - 2) this finding is in agreement with study done by (Serbesa, 2019).

According to knowledge of pregnant the result of the study shows that table 3; the highest percentage do not know Anemia is more prevalent in pregnant women this result is agreement with (Habib, 2018) found that the most sample do not know anemia is more prevalent in pregnant women.

The study sample of study were not sure about anemia and complication on fetus and women during pregnancy and postpartum .This result is not in the same line with (Habib, 2018) study found that the most sample werehave knowledge on complication of anemia. The results of present study shows that the level of knowledge and practices of the participants were fair .This results in the same line with (Abd Alhussen, 2020) study reveals that the majority of women have a moderate level of knowledge and practices related to iron.

The highest percentage of study sample were not sure that (iron deficiency, folic acid, B12), cause anemia .This result is in agreement with (Abd Alhussen, 2020) found that the most sample has low level of knowledge on cause of anemia.

The highest percentage of study samples were not know that anemia is more common in pregnant women. This result is in agreement with (Abd Alhussen, 2018) found that most of the sample not know that anemia occurs during pregnant women.

The study sample of study were they know food contain iron and folate prevent anemia .This result is in the same line with (Abd Alhussen, 2020)) study found that the most sample know the contain of food that prevent anemia.

According to practices Table (4):

of pregnant the result of the study shows that the highest percentage always were they know the benefits of regular antenatal checkup blood tests during pregnancy this result is disagreement with(Habib,2018) found that the most sample never know the benefits of regular antenatal checkup blood tests during pregnancy.

The result of present study reported that the highest percentage of pregnant women never consume iron tablets in spite of healthy diet. The result dis agrees with a study conducted by (Ameen, 2019) found that of pregnant women sometimes consume iron tablets in spite of healthy diet.

The study result found that the highest percentage of study sample were they eating real meat daily during the pregnancy this result is the same line with the (Amani Waleed ,2007).

The study result found that the highest percentage of study sample were they eating chicken or fish continuously this result is the same line with (Matida Tefera 2019).

The result of present study reported that the highest percentage of pregnant women never avoid drinking tea or coffee with meal. This result is disagree with a study conducted by (Amani waleed; 2007) found that, pregnant women never avoid drinking tea or coffee with meal.

The result of present study reported that the highest percentage of pregnant women never drinking milk or yogurt derivatives this result is dis agree with study conducted by (Ameen , 2019). Found that of pregnant women sometimes don't drinking milk or yogurt derivatives.

The study result found that the highest percentage of study sample were they sometimes Eating grain legumes (brown bread),rich in iron this result disagree with a (Ameen, 2019) found that the most sample always Eating grain legumes (brown bread),rich in iron.

The study result found that the highest percentage of study sample Eating breakfast regularly is (47 % never) This result disagree with a study (Ghazwan AlAbedi 2020).

According to practices of pregnant the study result found that the highest percentage of study sample were they never taking folic acid This result disagree with a study conducted by (Ameen , 2019) found that the most sample always taking folic acid.

Chapter Five

5.1. Conclusions:

- 1. The highest percentage of the sample at age ranged from (20-25) years and they are accounted for (42%), were diploma or college, Housewife and represented in rural areas.
- 2. The highest percentage of the sample were Gravida (3-4), Para (3-4), and they have miscarriage.
- 3. The overall assessment knowledge and Practices of pregnant toward anemia were fair.
- 4. There is significant relationship between all demographics characteristics and knowledge of pregnant toward anemia $P \le 0.05$, except (occupation, residency, and economic status).
- 5. Significant relationship between all obstetric characteristics with knowledge of pregnant toward Anemia at $P \le 0.05$, except in number of pregnancies.

5.2. Recommendation:

- 1. Educational programs by the Ministry of Education during the adolescence period to provide information on anemia to them.
- 2. Health education through the Ministry of Health for all women about anemia and its prevention through healthy nutrition and health practices.
- 3. Ministry of Health focus through encouragement of women through Media/ TV, Radio, Posters, etc. For safety measurement toward anemia.
- 4. Preconception care for all women planning for pregnancy.
- 5. Primary health care centers play a role in early screening for anemia and provide a supplement of iron and folic acid.
- 6. Further studies are needed to cover various aspects of anemia.

References

References

- AlAbedi G A, Arar A, Alridh MS; Assessment of Pregnant Women Knowledge and Practices Concerning Iron Deficiency Anemia at Al-Amara City/Iraq. Medico-legal Update, 2020, 20(3) PP: 152-156.
- World Health Organization (WHO): Global Nutrition Targets 2025 Anaemia Policy Brief, Geneva. 2014; 1-8Kefiyalew F, Zemene E, Asres Y, Gedefaw L. Anemia among pregnant women in Southeast Ethiopia:
- Prevalence, severity and associated risk factors. BMC Res Notes. 2014; 7(1):771.
- Souganidis E S, Sun K, Pee S, Kraemer K, Rah J, Pfanner R M. Sari M. Bloem M W. Semba R D. Relationship of maternal knowledge of anemia with maternal and child anemia and health-related behaviors targeted at anemia among families in Indonesia, Matern Child Health J. 2012; 16: 1913–1925.
- Osman M, Nour T, Bashir H, Roble A, Nur A, Abdilah A;:Risk Factors for Anemia Among Pregnant Women Attending the Antenatal Care Unit in Selected Jigjiga Public Health Facilities, Somali Region, East Ethiopia 2019: Unmatched Case–Control Study .Journal of Multidisciplinary Healthcare Journal of Multidisciplinary Healthcare .2020:13 769–77.
- Gedefaw L, Ayele A, Asres Y, Mossie A. Anaemia and associated factors among pregnant women attending antenatal care clinic in Walayita Sodo town, Southern Ethiopia. Ethiop J Health Sci. 2015; 25(2):155–164. doi:10.4314/ejhs.v25i2.8.
- Bizuneh Ayano BA. Assessment of prevalence and risk factors for anemia among pregnant mothers attending ANC clinic at Adama.Hospital Medical Collage, Adama, Ethiopia. Am J Gynecol Obstet. 2017;6:31–39. doi:10.11648/j.jgo.20180603.11.

- 8. Rizvi, F. (2012). Impact of maternal education, and socioeconomic status on maternal nutritional knowledge and practices regarding iron rich foods and iron supplements. Ann Pak Inst Med Sci, 8(2), 101-105.
- Margwe, J. (2015). Prevalence, knowledge, and attitude of pregnant women on control measures of anaemia in Mbulu District, Tanzania. Sokoine University of Agriculture.
- 10.Gowri, D., Sakthi, D., & Palanivel, C. (2017). Influence of Awareness and Attitude about Anemia and Iron Supplements on Anemic Status of Pregnant Women Attending a Tertiary Care Centre in South India. Journal of Contraceptive Studies.
- 11.(Bismark Dwumfour-,2013) (Rizvi, 2012).
- 12.(Rizvi, 2012). Recent statistics revealed that tea, coffee consumption, low intake of eggs and red meat are associated with anemia (Baig-Ansari, Badruddin et al. 2008).
- 13.Ghazwan Abdulhussein AlAbedi 1, Aqeel Aziz Arar2, Mustafa Salim Abdul Alridh3, Assessment of Pregnant Women Knowledge and Practices Concerning Iron Deficiency Anemia at Al-Amara City/Iraq. Medico-legal Update, July-September 2020, Vol.20, No. 3.
- 14.Zahraa Al-Sattam1, Samia Hassan2, Bushra Majeed1, Zaid Al-Attar;: Knowledge about Anemia in Pregnancy among Females Attending Primary Health Care Centers in Baghdad. *Open Access Maced J Med Sci.* 2022 Feb 06; 10(B):785-792.
- 15.World Health Organization (WHO): Global Nutrition Targets 2025 Anaemia Policy Brief, Geneva. 2014; 1-8.
- 16.Nutrition research institute Iraq, Wheat flour fortification, Iraq. 2014; 1-24.
- 17.Hailu Jufar A. Prevalence of Anemia among Pregnant Women Attending Antenatal Care at Tikur Anbessa Specialized Hospital, Addis Ababa Ethiopia. J.Hematol. Thromboembolic Dis. 02, 2–7 (2013).

- 18.Balasubramanian, T., Aravazhi, M., & Sampath, S. D. (2016). Awareness of anemia among pregnant women impact of demographic factors on their hemoglobin status. Int J Sci , 3(12),PP: 303-305 (Justina A,2018).Justina A. Margwe1, 2 and Athumani M. Lupindu;: Knowledge and Attitude of Pregnant Women in Rural Tanzania on Prevention of Anaemia. African Journal of Reproductive Health September 2018; 22 (3): 71.
- 19. Ahmed W A, Safety Measurement among Pregnant Women with Anemia at Babylon Teaching Hospital. Indian Journal of Public Health Research & Development, 2019.10(6) PP: 383-388).
- 20. Tashara I F. Achen R K. Quadras R. D'Souza M V. Jyothi P J. Knowledge and self-reported practices on prevention of iron deficiency anemia among women of reproductive age in rural area, International Journal of Advances in Scientific Research. 2015; 1: 289-292.
- 21.Serbesa M, Department of Nursing, Haramaya University, Harar, Ethiopia ISSN 2422-8427 An International Peer-reviewed Journal DOI: 10.7176/JMPB Vol.53, 2019.
- 22.HabibA, Afzal M, Parveen K, Hussain M, Gilani S ;:(2018) Knowledge, Attitude and Practices of Pregnant WomenRegarding Iron Deficiency Anemia in A Rural Area of Lahore. Journal of Health, Medicine and Nursing Journal...50,
- 23.Abd Alhussen G , Aziz A ;: , (2020,) Assessment of Pregnant Women Knowledge and Practices Concerning Iron Deficiency Anemia at Al-Amara City/Iraq. Medico-legal Update.20
- 24.Ameen W; Safety Measurement among Pregnant Women with Anemia at Babylon Teaching Hospital Iraq. Indian Journal of Public Health Research & Development, 2019, 10(6) PP: 383-388
- 25.World Health Organization (WHO): Global Nutrition Targets 2025 Anemia Policy Brief, Geneva. 2014; 1-8.

Appendix

جمهورية العسيراق وزارة الصحة دائرة صحة محافظة بارسسل Ministry Of Health العديسر العساء Babylon Health Directorat مركس التدريب والتتمية البشرية Email : babiltrainning@gmail.com وحدة أدارة البحوث : 35 . #11 لأجل عراق نغضر مستنام _سنعط معا للرشيد استهلاك الطقة الكهريانية والمعاقظة على شينة من اللوث 1. 12113: 1 1 1 177.7 السي/ دستشفى الأمام الصادق (ع) وستشفى بابل التعليمي للنسانية والأطفال قسم الصحة الدامة م/ تسهير ال مهمية تحية طيبة ... أشارة إلى كتاب جامعه بابل /كلية التمريض / شعبة الشؤون العلمية ذي العدد ٩٧ في تسهيل مهمة الطلبة المدرجة أسمانهم أدناه من الجامعة آنفا لإجراء بحث التخرج الموسوم والخاص بالتخرج بعنوان :-(معارف وممارسات النساء الحرامل أيما يتعلق بققر الدم) للتفضل بالاطلاع وتسهيل مهمة الموما إليهم وحسب الضوابط والامكانيات على أن لا تتحمل موسساتكم أية تبعات مادية وقاتونية.... ... مع الاحترام . -: + Lawil ١- على حسين غلاقي ۲- على حسين عبد على ۳- على حسين عبد على عيسى وزارة السحة دانرة متعة بابل +- على رسول عياس stail Enp. مركز القدريب وانتنجهم a, الدكتور محمد عبد الله عجرش مدير مركز التدريب والتثمية البة 150 4. 171 1 6 نسخة منه إلى : مركز التدريب والتنمية البشرية / وحدة إدارة البحوث مع الأوليات . V1- 1/1-دائرة صحة محافظة بابل / مركز التدريب والتتمية البشرية // أيميل المركز babiltrainning@gmail.com

Assessment Knowledge of Pregnant Women and practices for prevention concerning anemia.

1 St part A: Socio-Demographics	al data
Age: years	
Educational level: Don't Read Primary Secondary	and Write Read and Write Institute or College
Occupation: Employed	House wife
Residency: Urban	Rural
Economic level: Enough	To Some Extent Enough Not Enough
Family number : 1-2	3-4 5 or more
source of information:-	
1-family members and friends:	
2-colleagues :	
3-TV and net:	
4-private physicians or nurses	
5-others:	

B. Obstetric information

Number of p	pregnancy (Gravida)): 1-2 3-4 5 or more	
Para:	1-2 3-4	5 or more	
Do you have	e miscarriage	Yes No	

No	Items	I know	I'm not sure	Don't know
1	You know meaning of anemia			
2	anemia is more prevalent in			
	pregnant women			
3	There are many symptoms of			
	anemia.			
4	Do you know there are many cause			
	of anemia			
5	Anemia risky and effect on fetus			
6	Anemia have complication during			
	pregnancy ,labor and postpartum			
7	Food contain iron prevent anemia			

2nd part: knowledge of pregnant women toward Anemia

3rd part: Practices of pregnant women toward Anemia

No	Items	Always	Sometimes	Never
1	Regular antenatal checkup, blood tests			
	during pregnancy			
2	My food must include green vegetables			
3	Taking special diet during pregnancy rich			
	in iron			
4	Eating red meat daily			
5	Eating chicken or fish continuously			
6	Consume Iron tablets in spite of healthy			
	diet			
7	Taking iron tablet with vit C			
8	Avoid drinking tea or coffee after meal			
9	Don't Drink milk or			
	yogurt derivatives (cheeses			
	and other) During meals			
10	Eating grain legumes (brown bread),rich			
	in iron			
11	Taking folic acid according to instruction			
12	Eat dried fruits such as raisins, apricots			
	and dates			

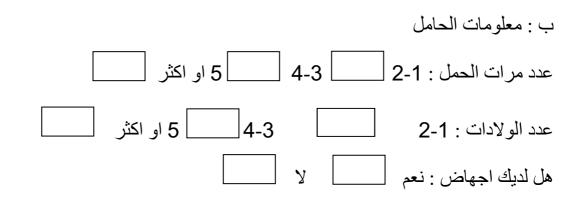


((Knowledge and Practices of pregnant Women for Prevention of Anemia in Al-Hilla City))

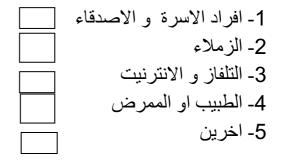
ولكم فائق الشكر والاحترام......

الاسم: -الشهادة: -سنوات الخبرة: -مكان العمل: -التاريخ: -التوقيع: - معارف وممارسات النساء الحوامل للوقاية من فقر الدم في مدينة الحلة. أهداف: 1. لتقييم المعلومات الاجتماعية والديمو غرافية والتوليدية للنساء الحوامل. 2. لتقييم معرفة وممارسات المشاركين تجاه فقر الدم. 3. لمعرفة العلاقة بين المعلومات الاجتماعية والديمو غرافية والتوليدية للنساء الحوامل مع المعرفة والممارسة تجاه فقر الدم





ج : مصدر المعلومات



الجزء الثاني : معلومات الحوامل حول فقر الدم

لا اعلم	غير متأكد	اعلم	الفقرة	التسلسل
			هل تعلم عن فقر الدم الناتج عن	1
			نقص الحديد ؟	
			فقر الدم اكثر انتشار الدى النساء	2
			الحوامل	
			هنالك العديد من اعراض فقر	3
			الدم	
			هل تعلم هنالك العديد من اسباب	4
			فقر الدم ؟	
			هل تعلم ان فقر الدم خطر و	5
			يؤثر على الجنين ؟	
			فقر الدم له مضاعفات اثناء	6
			الحمل و المخاض و ما بعد	
			الو لادة	
			الطعام الذي يحتوي على الحديد	7
			يمنع فقر الدم	

الجزء الثالث : وقاية الحامل اتجاه فقر الدم

ابدا	بعض الاحيان	دائما	الفقر ة	التسلسل
, <u> </u>	بعص الاحيان	<u>s</u>	.	-
			فحص منتظم قبل الولادة /	1
			اختبارات الدم اثناء الحمل	
			يجب ان يتضمن طعامي على	2
			الخضروات الخضراء	
			اتباع نظام غذائي خاص اثناء	З
			الحمل غني بالحديد	
			تناول اللحوم الحمراء يوميا	4
			تناول الدجاج او السمك باستمرار	5
			اخذ اقراص مكملات الحديد على	6
			الرغم من اتباع نظام غذائي صحي	
			اخذ اقراص مكملات الحديد مع	7
			فیتامین c	
			تجنب شرب الشاي او القهوة بعد	8
			الوجبة	
			لا تشرب الحليب او مشتقات الالبان	9
			و غير ها اثناء الوجبات	
			تناول البقوليات الغنية بالحديد	10
			تناول حمض الفوليك وفقا للتعليمات	11
			تناول الزبيب المجفف و التمر	12

الملخص:

خلفية: تتعرض النساء الحوامل لخطر متزايد للإصابة بفقر الدم الناجم عن نقص الحديد بسبب زيادة حجم الدم أثناء الحمل الناتج عن زيادة الدعم للجنين والمشيمة. بشكل عام، تعاني النساء في مرحلة الإنجاب من فقدان كميات كبيرة من الدم بسبب الولادة أو الحيض، وهي عوامل تساهم في تطور فقر الدم الحديدي . **تهدف الدراسة إلى**: معرفة العلاقة بين المعرفة والممارسات مع بياناتها الاجتماعية والديمو غرافية والتوليد .

المنهجية: تم تصميم در اسة وصفية وتحليلية على (عينة هادفة) غير احتمالية لـ (100) امرأة حامل في مستشفى بابل للولادة والأطفال بمستشفيات الإمام الصادق التعليمية بمدينة الحلة. أجريت الدراسة في الفترة من (1 إلى 28 فبر اير 2023). البيانات التي تم جمعها من خلال استبيان تم إنشاؤه لغرض هذه الدراسة يتكون من ثلاثة أجزاء: الاجتماعية الديمو غرافية، والمعلومات التوليدية، ومعرفة وممارسات النساء الحوامل تجاه فقر الدما وصفي وسمايين والمحادي المعلومية من خلال استبيان ما يتماوه لغرض هذه الفترة من (1 إلى 20 فبر اير 2023). البيانات التي تم جمعها من خلال استبيان تم إنشاؤه لغرض هذه الدراسة يتكون من ثلاثة أجزاء: الاجتماعية الديمو غرافية، والمعلومات التوليدية، ومعرفة وممارسات النساء الحوامل تجاه فقر الدم، وقد تم إثبات صحة الاستبيان والمحتوى من قبل (6) خبراء. تم استخدام تحليل إحصائي وصفي واستنتاجي لتحليل البيانات.

النتائج: كانت أعلى نسبة (42.0٪) بين سن (20-25) سنة، كانت دبلوم أو مستوى تعليمي جامعي، ربة منزل، إقامة في الريف ، كانت المعرفة والممارسات الشاملة للحامل نحو فقر الدم عادلة.

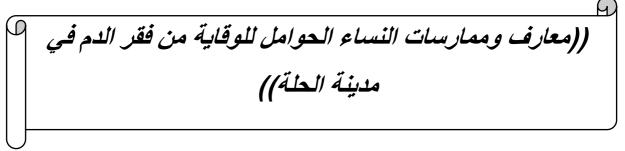
الاستنتاجات: خلصت الدراسة إلى أن العلاقة الهامة بين الخصائص الديمو غرافية مع الممارسة والعلاقة الهامة بين الخصائص التوليدية ومعرفة الحوامل نحو فقر الدم .

التوصيات: يوصى بأن تقوم وزارة التربية والتعليم ببرامج تثقيفية خلال فترة المراهقة لتوفير معلومات عن فقر الدم لدى الإناث لأن معظم النساء قبل الحمل مصابات بفقر الدم.

الكلمات المفتاحية: المعرفة والممارسة، والنساء الحوامل، وفقر الدم.







مشروع تخرج مقدم لكلية التمريض جامعة بابل ضمن متطلبات الحصول على درجة البكالوريوس في التمريض



شوال 1444

نيسان 2023