

Assessment of Pregnant Women's Knowledge about Placenta Previa in Kirkuk Governorate Hospitals.

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الخلاصة

الهدف : تقييم معارف النساء الحوامل حول المشيمة المنزاحة في مستشفيات محافظة كركوك.
المنهجية : دراسة وصفية لتقييم معارف النساء الحوامل حول المشيمة المنزاحة في مستشفيات محافظة كركوك للمدة من شباط 2012- أيار 2012. اختيرت عينة غرضية شملت (62) أمراء حامل مصابة بالمشيمة المنزاحة في المستشفيات الأربعة الرئيسية في كركوك (آزادي - كركوك - الحويجة - دافوق). تم جمع البيانات من خلال استعمال أسلوب المقابلة وطبلة المريضة واستبانته مصححة ومكونة من ثلاث أجزاء الجزء الأول : يتألف من الخصائص الديموغرافية للعينة و الجزء الثاني : يتألف من الخصائص الإنجابية والتي تشمل بعض المتغيرات والمشاكل الصحية السابقة والجزء الثالث : يتألف من أسئلة حول معرفة النساء الحوامل بالمشيمة المنزاحة، ويتألف من اربع محاور، المحور الأول معلومات عامة عن المشيمة المنزاحة والمحور الثاني العوامل والأسباب المؤدية إلى إزاحة المشيمة والمحور الثالث الأعراض والعلامات والمحور الرابع طرق التشخيص. تم تحديد ثبات الاستبانة من خلال دراسة تجريبية (استطلاعية) و صحتها حددت من خلال لجنة مكونة من (19) خبيراً. إجراءات التحليل الإحصائي الوصفي و إجراءات التحليل الإحصائي الاستنتاجي لتحليل البيانات و بمستوى دلالة 5% أو أقل.

النتائج: أظهرت النتائج أن معظم أفراد العينة 90.46% كانت معارفهم جيدة حول المشيمة المنزاحة يمكن استنتاج ذلك من خلال تجربة سابقة بهذا المرض أو عن طريق زيارات النساء الحوامل إلى مراكز الرعاية الصحية الأولية أو العيادات الخاصة. إن تقييم المعارف لم يتأثر بالخصائص الديموغرافية وبعض الخصائص الإنجابية للعينة، وهذا يعني إن استمارة الاستبيان هذه يمكن تعميمها لجميع الحوامل لتحقيق أهداف البحث.
التوصيات : أوصت الدراسة بضرورة زيادة وعي الأمهات من خلال وسائل الإعلام حول مضاعفات الحمل وخصوصاً النزف خلال الحمل (المشيمة المنزاحة) كأحد تلك المضاعفات، وأهمية زيارة رعاية الحوامل في مراحل الحمل المبكرة والتشجيع على الولادة في المستشفيات وذلك لتوفر الكوادر الطبية والتمريضية المتخصصة و توفر المستلزمات الضرورية للعملية القيصرية.

Abstract:

Objective: to Assess Pregnant Women's Knowledge about Placenta Previa in Kirkuk Governorate Hospitals.

Methodology: A descriptive analytic study was used to assess the pregnant women's knowledge about placenta previa in kirkuk governorate hospitals from February 2012 to may 2012. A purposive sample consist of (62) pregnant women with placenta previa in four hospital (Azady, Kirkuk, Al-Hawiga, and Dakuk). The data was collected by using interview technique, patient chart, and constructed questionnaire, which consist of three parts. Part one: consist of demographic information Part two: consist of reproductive information Part three: consist of question regarding pregnant women knowledge about placenta previa, it comprise of four domains which are: Domain I: general information concerning placenta previa. Domain II: causes and predisposing factors. Domain III: signs and symptoms, domain IV: diagnostic methods. Reliability of the questionnaire is determined through the pilot study and the validity through a panel of (19) experts. Descriptive statistical analysis procedures and inferential statistical analysis procedures were employed for data analysis, all the statistic procedures were tested at $P \leq 0.05$.

Results: the result revealed that the majority of the study sample 90.46% has good knowledge concerning placenta previa, it could be concluded that from previous history with PP, or from prenatal visited to the primary health care center or private clinic. The assessment of knowledge is not affected by demographic characteristic and reproductive history factors that mean that the studied questionnaire can be amend for all individuals of the studied population.

Recommendations: The study recommended to increase pregnant women awareness through mass media about pregnancy complications particularly ante partum bleeding, (placenta previa) as one of these complications, importance of frequent prenatal care visits early in pregnancy, and encouraged pregnant women to attempt deliveries at hospital for the availability of specialty medical and nursing staff, as well as the availability of necessary equipments for cesarean section

Keywords: Assessment, Placenta previa, pregnant women, Knowledge

INTRODUCTION

Placenta previa like other abnormal condition during pregnancy, an obstetric complication occurs in second and third trimesters of pregnancy⁽¹⁾. This condition occur when the placenta implantation over or near the internal os of the cervix⁽²⁾. It may causes serious morbidity and mortality to both the mother and fetus, it is one of the leading causes of vaginal bleeding in the second and third trimester. The incidence of placenta previa is (0.3 - 0.5%) of the pregnancies. Bleeding from it accounts for about (20%) of all cases of antipartum hemorrhage⁽³⁾. The maternal mortality rate secondary to placenta previa is approximately (0.03 %). the great majority of death are related to uterine bleeding and the complication of disseminated intravascular coagulopathy⁽⁴⁾. There are four types are generally recognized in placenta previa, complete or total placenta previa in which the placenta covers (360) of the internal cervical os. Incomplete or partial placenta previa in which (0- 360) of the internal cervical os is covered by placenta tissue, Marginal in which the placental tissue abuts but does not cover the os, low lying placenta, in which the edge of the placenta lies abnormally close to but does not abuts the internal cervical os⁽⁵⁾. The risk factors of placenta previa are maternal age, cesarean section, previous placenta previa, high parity, previous abortion, and male fetus. In developed countries the majority of women with placenta previa will deliver healthy babies, and the maternal mortality rate is less than 1%⁽⁶⁾. finally the maternal mortality associated with this condition was as high as 5% in developing countries⁽⁷⁾. Finally, the maternal, fetal mortality and morbidity due to placenta previa is a problem that has not been sufficiently investigated in the obstetric population. In addition, no studies concerned with this issue have been done in Iraq. Therefore, the aims of the present study is concerned with assessing the affecting pregnant women's knowledge regarding placenta previa and its effects on pregnancy outcome, and there is a strong need to identify such problems that the study may hopefully discuss new facts related to such phenomena of interest and contribute to the extension of everybody knowledge as an outcome of the present study.

METHODOLOGY:

A descriptive, study was carried out through the present study through the period from November 1st 2011 to July 12th 2012. The study was conducted in four hospitals at kirkuk governorate which include: General Kirkuk hospital, General AL-Hawiga hospital, Dakuk hospital and Azady teaching hospital. A non-probability, purposive sample of **62** pregnant women with placenta previa were (diagnosed with Ultrasonography) at present pregnancy was selected from obstetrical and gynecological wards of the four hospitals. The purpose of this study was to assessment of pregnant women's knowledge about placenta previa in kirkuk governorate hospitals. Through the review of related literatures and previous studies, the investigator constructed the questionnaire format, which comprised of three main parts, **part one:** Demographic Characteristics: it is concerned with the identification of the demographic characteristics of the study group, which include the following variables (age, level of education, occupation, smoking, residency, and socioeconomic status). **Part two:** Reproductive Characteristics: it is concerned with the identification of the different variable of the study group, which include the following variables: Age at menarche, Age at

marriage, consanguinity, regularity of menstrual cycle, inter-pregnancy interval, gestational age, gravidity, parity, abortion, still birth, neonatal death & its causes, mode & number of previous deliveries, place of previous deliveries, mode of current delivery, previous occurrence of placenta previa, history of multiple pregnancy, previous uterine surgery, uterine anomalies, attendance for prenatal care, type of prenatal care & number of prenatal care visits at current pregnancy. **Part three:** pregnant women's knowledge. This part consists items concerning with the knowledge of pregnant women toward placenta previa. It includes four domains and they are responded by know, (correct answer, scored 2), or do not know (incorrect answer, scored 1) and these domains are: Domain 1: General information concerning placenta previa: It includes (7) items, total score is (14) mark. Domain 2: Causes and predisposing factor of placenta previa: it includes (11) items, total score is (22) mark. Domain 3: Signs and symptoms of placenta previa: It includes (7) items, total score is (14) mark. Domain 4: Diagnostic methods of placenta previa, It includes (6) items, total score is (12) mark. Data was selected through utilization of the study instrument (questionnaire format) for the period from 29th January 2012 to 12th April 2012. 30-45 minutes were consumed to fill the questionnaire. Data were analyzed through the application of descriptive and inferential statistical approaches, and all the statistical procedures were tested at $P \leq 0.05$.

RESULTS:

Table (1): Responses of Pregnant Women upon the item Knowledge

Items	Questionnaire's items		Resp.	Freq.	%	M.S.(level)	S.D.
	<i>Information</i>						
1-General information concerning Placenta previa							
1	Placenta is bloody structure responsible for fetus nourishment in the uterus	No	0	0.0	1.99	0.25	
		Yes	62	100			
2	Normal place of placenta implantation in the upper part of uterus wall	No	13	21	1.79	0.41	
		Yes	49	79			
3	Placenta previa mean the placenta implanted in the lower uterine segment	No	0	0.0	1.99	0.22	
		Yes	62	100			
4	Types of PP Partial placenta previa	No	23	37.1	1.63	0.49	
		Yes	39	62.9			
5	Marginal placenta previa	No	21	33.9	1.66	0.48	
		Yes	41	66.1			
6	Complete placenta previa	No	2	3.2	1.97	0.18	
		Yes	60	96.8			
7	Placenta previa occurred in the second trimester of pregnancy	No	23	37.1	1.63	0.49	
		Yes	39	62.9			
2- Information concerning Causes & predisposing factors of placenta previa							
1	Pregnant woman age 18 years or less , 35 years or more	No	23	37.1	1.63	0.49	
		Yes	39	62.9			
2	Frequencies cesarean section (more than one)	No	19	30.6	1.69	0.46	
		Yes	43	69.4			
3	Smoking and Alcohol drinking	No	16	25.8	1.74	0.44	
		Yes	46	74.2			
4	Frequencies surgical procedures (Dilatation & curettage)	No	17	27.4	1.73	0.45	
		Yes	45	72.6			
5	If fetal gender is male more than female	No	32	51.6	1.48	0.50	
		Yes	30	48.4			

6	Carry heavy equipments or abdominal trauma	No	4	6.5	1.94	0.25
		Yes	58	93.5		
7	Pregnant woman had previous placenta previa	No	15	24.2	1.76	0.43
		Yes	47	75.8		
8	Increased uterine infection	No	15	24.2	1.76	0.43
		Yes	47	75.8		
9	Not enough interval (two years or more) between pregnancies	No	19	30.6	1.69	0.46
		Yes	43	69.4		
10	More than normal placenta weight and size	No	9	14.5	1.85	0.36
		Yes	53	85.5		
11	Uterine fibroid with pregnancy	No	20	32.3	1.68	0.47
		Yes	42	67.7		
3- Information concerning signs and symptoms of placenta previa						
1	Slightly vaginal bleeding during first and second trimesters of pregnancy	No	17	27.4	1.73	0.45
		Yes	45	72.6		
2	Sudden, severe vaginal bleeding during last trimester of pregnancy	No	14	22.6	1.77	0.42
		Yes	48	77.4		
3	Usually vaginal bleeding occurred during rest and sleep	No	20	32.3	1.68	0.47
		Yes	42	67.7		
4	The blood color is fresh ,and usually sudden stopped	No	21	33.9	1.66	0.48
		Yes	41	66.1		
5	Milled abdominal and lower back pain	No	2	3.2	1.97	0.18
		Yes	60	96.8		
6	Slightly or strong uterine contractions	No	5	8.1	1.92	0.27
		Yes	57	91.9		
7	Sometime, no significant signs of PP but appear through routinely ultrasound	No	3	4.8	1.95	0.22
		Yes	59	95.2		
4- Information concerning diagnostic methods of placenta previa						
1	Clinical examination for pregnant woman such as painless vaginal bleeding	No	13	21	1.79	0.41
		Yes	49	79		
2	Trance abdominal ultrasonography (normal ultrasound)	No	4	6.5	1.94	0.25
		Yes	58	93.5		
3	Doppler ultrasonography (cuadirect diameter ultrasound)	No	3	4.8	1.95	0.22
		Yes	59	95.2		
4	Ultrasound detected location of placenta implanted and as covering degree	No	0	0	2.00	0.00
		Yes	62	100		
5	Ultrasound important for each pregnant suffering from bleeding after 20 weeks	No	1	1.6	1.98	0.13
		Yes	61	98.4		
6	Ultrasound explain the procedures that should be taken during 3rd trimester ...	No	12	19.4	1.81	0.4
		Yes	50	80.6		

Table (1): Reveals the comparison significant of items responding for the pregnant women's knowledge about placenta previa and assessment according to cut off point of the studied questionnaire items. The findings of this table indicate that there are a highly-significant differences at $P < 0.01$ between the two categories responding (know, don't know) of the studied score which are pointed mostly within overall comparisons in all domains and sub domains which includes: Sub domain 1- General information concerning placenta previa: The majority of the pregnant women had a lot of information concerning the structure of placenta and its function, site of implantation, types, and time of occurrence. Sub domain 2- Information concerning causes and predisposing factors of placenta previa: About this sub domain, the majority of the study sample had know that the age, frequent C/S, smoking & alcohol drinking, frequent D&C,

carrying heavy load & abdominal trauma, previous incidence of PP, increase uterine infection, short pregnancy intervals, abnormal placenta and fibroid with pregnancy. While half of the women 51.6% their responses to the item 2.5 was below cutoff point, but the difference was statistically not significant. Sub domain 3- Information concerning signs and symptoms of placenta previa: The findings show that women almost know the signs & symptoms of placenta previa, which includes: slight vaginal bleeding was occurs in 1st and 2nd trimester and heavy bleeding in 3rd trimester that occurs during rest and sleep, the characteristic of vaginal bleeding is red with mild abdominal & lower back pain, and it diagnosed by routinely ultrasound. Sub domain 4- Information about diagnostic methods of placenta previa: Regarding this domain, the majority of women know the diagnostic methods of PP, which are clinical examination, ultrasound, and Doppler ultrasound. The findings of this study agree with study done by (8) and (9) on 200 pregnant women with antipartum hemorrhage to assess their knowledge regarding effects of antipartum hemorrhage on pregnancy outcome. The result indicated that (42%) of these women were well aware of the risk of bleeding during pregnancy. In study conduct in Tehran (10) it was determined that (22.3%) of women had high level of knowledge toward antipartum hemorrhage. In another study (11) conducted on 400 pregnant women to determined their knowledge about bleeding during and after pregnancy, it was founded that (53%) of women had a good level of knowledge, (45%) had a poor knowledge, and only (2%) had a moderate knowledge. The explanation of these finding, that the pregnant women may have some information concerning placenta previa. That from their experience with previous history of placenta previa or from prenatal care visits to the private clinic or primary health care center. According the present study findings,

Table (2): Coincidence testing according to equality of variances and mean values parameters by different Responding among the studied domains

Parameter	Test of Homogeneity of Variances		ANOVA Equality of mean values	
	Levene Statistic	Sig. (*)	F	Sig. (*)
Main Domains	5.405	0.000	9.175	0.000

(*) **HS: Highly Significant at P< 0.01**

Table (2) showed the results of Multiple Comparisons by last significant differences for testing of equality of means were represented that with (HS) and (S) (i.e. Highly Significant at P<0.01 and Significant at P<0.05 respectively) which were pointed mostly with overall comparisons, while that with (NS) (i.e. Non Significant at P>0.05) were recorded with the leftover.

Table (3): Multiple Comparison last significant differences among all pairs of different Responding in the studied domains

Multiple Comparisons ^(*)			
Domain (I)	Domain (J)	P-value	C.S. ^(*)
General information concerning Placenta previa	Information concerning Causes & predisposing factors of p. previa	0.013	S
	Information concerning signs and symptoms of placenta previa	0.573	NS
	Information concerning diagnostic methods of placenta previa	0.000	HS
	The effects of placenta previa on pregnant woman health	0.014	S
	The effects of placenta previa on fetal health	0.873	NS
	The effects of placenta previa on Neonatal health	0.090	NS
	Practices and procedure for caring of pregnant woman with placenta previa	0.001	HS
Information concerning Causes & predisposing factors of place	Information concerning signs and symptoms of placenta previa	0.002	HS
	Information concerning diagnostic methods of placenta previa	0.000	HS
	The effects of placenta previa on pregnant woman health	0.000	HS
	The effects of placenta previa on fetal health	0.020	S
	The effects of placenta previa on Neonatal al health	0.000	HS
Information concerning signs and symptoms of placenta previa	Practices and procedure for caring of pregnant woman with placenta previa	0.000	HS
	Information concerning diagnostic methods of placenta previa	0.000	HS
	The effects of placenta previa on pregnant woman health	0.058	NS
	The effects of placenta previa on fetal health	0.469	NS
	The effects of placenta previa on Neonatal health	0.257	NS
Information concerning diagnostic methods of placenta previa	Practices and procedure for caring of pregnant woman with placenta previa	0.006	HS
	The effects of placenta previa on pregnant woman health	0.102	NS
	The effects of placenta previa on fetal health	0.000	HS
	The effects of placenta previa on Neonatal health	0.017	S
The effects of placenta previa on pregnant woman health	Practices and procedure for caring of pregnant woman with placenta previa	0.435	NS
	The effects of placenta previa on fetal health	0.009	HS
	The effects of placenta previa on Neonatal health	0.445	NS
The effects of placenta previa on fetal health	Practices and procedure for caring of pregnant woman with placenta previa	0.393	NS
	The effects of placenta previa on Neonatal health	0.064	NS
The effects of placenta previa on Neonatal health	Practices and procedure for caring of pregnant woman with placenta previa	0.001	HS
The effects of placenta previa on Neonatal health	Practices and procedure for caring of pregnant woman with placenta previa	0.106	NS

^(*) HS: Highly Sig. at $P < 0.01$; S: Sig. at $P < 0.05$ NS: Non Sig. at $P > 0.05$

Table (3) showed the results of Multiple Comparisons by last significant differences for testing of equality of means were represented that with (HS) and (S) (i.e. Highly Significant at $P < 0.01$ and Significant at $P < 0.05$ respectively) which were pointed mostly with overall comparisons, while that with (NS) (i.e. Non Significant at $P > 0.05$) were recorded with the leftover. The first situation to know how can be implemented the fourth objective of this study which says that: " To identify relationship between overall assessment of "Women's Knowledge" and

their demographical characteristics variables as well as some reproductive history variables", Table 2 & 3: that there is only one extreme value fall at the base line (downstairs) and however it was registered at the upper side of the border of the cutoff point (i.e. 1.5) and as well as no any outlier had been occurred. For summarization of the preceding findings, we can conclude that all readings of the studied sample (Grand means of score for overall of the studied knowledge of placenta previa items) had been showed a highly grade of successes of assessment, as well as existence of the convergent property among different respondents, and that indicating a good attribute of reliable for studying phenomena.

Table (4): Association between the demographical and reproductive history variables with categorized suggested of assessments due to "Women's Knowledge" towards of placenta previa

Demographical Characteristics X Assessment Status ^(*)	Contingency Coefficients	Approx. Sig.	C.S.
Age Groups	0.195	0.785	NS
Education level	0.212	0.033	NS
Employment	0.206	0.211	NS
Residency	0.310	0.037	S
Socioeconomic Status	0.318	0.030	S

Table (5): Association between the reproductive history variables with categorized suggested of assessments due to "Women's Knowledge" towards of placenta previa

Reproductive Characteristics X Assessment Status ^(*)	Contingency Coefficients	.Approx Sig.	C.S.
Age at menarche	0.203	0.615	NS
Age at marriage	0.198	0.470	NS
menstrual cycle	0.148	0.239	NS
Inter- pregnancy interval	0.087	0.490	NS
Gestational age per Semester	0.436	0.000	HS
Gravidity	0.164	0.788	NS
Parity	0.283	0.247	NS
Abortion	0.272	0.084	NS
Still birth	0.250	0.126	NS
Neonatal deaths (after birth - 28 days)	0.099	0.734	NS
Mode of delivery?	0.290	0.058	NS
Previous labor place	0.268	0.091	NS
History of placenta previa	0.173	0.167	NS
History of uterine surgery (except cesarean section)?	0.132	0.295	NS
History of twin, triple pregnancies ?	0.038	0.765	NS
congenital uterine abnormality ?	0.098	0.436	NS
Attending of prenatal care	0.101	0.600	NS
Type of attending	0.142	0.558	NS
Attending number during present pregnant?	0.272	0.175	NS

^(*)Assessment Status in high light classification (Pass / Good).

Table (5): showed the results represented that with (NS) (i.e. Non Significant at $P>0.05$) which were pointed mostly within overall comparisons, while that with (HS) or (S) (i.e. Highly Significant at $P<0.01$ and at $P<0.05$ respectively) were

recorded with the leftover and towards residency factor, which was illustrated that low responding were reported at Outskirts, then followed by Socioeconomic Status which were illustrated that highly responding were reported at moderate and high assessment, then followed by Gestational age per Semester which were illustrated that low responding were reported at the 2nd Semester.

CONCLUSIONS:

Age variable had reported with explicitly form that women whom had reported placenta previa diagnosed were focused at elderly pregnancies as well as the vast majority of the studied cases were registered with Governorate residency, which may interpreted the effectiveness of the conventional life style of pregnant women and might be considered as a one source of casual placenta previa. The vast majority of the study sample were reported within low category of Socio-Economic Status, which might be interpreted the effectiveness of the malnutrition as a one source of casual placenta previa disease, The vast majority of the study sample were reported within first consanguinity degree, which might be interpreted the effectiveness of the genetic reason as a one source of placenta previa disease occurrence, Most of the studied pregnant women were characterized of negative smokers, since of fifty percent of their husband smoking cigarette with long period of time, which might be interpreted the incidence numbers of diseased women, Irregular of menstrual cycle and the short Interval between last pregnancy and this pregnancy were reported large numbers of diseased sample, which might be interpreted the incidence of diseased women, Number of abortions, and (C/S), mode of present delivery, having placenta previa in previous pregnancies, having previous twin, triple pregnancies, having previous uterine surgery (except cesarean section), and irregular attending of prenatal care were reported different sources of placenta previa occurrence.

RECOMMENDATION:

- 1- Importance of frequent prenatal care for early detection of any problems, which may occurs during pregnancy.
- 2- Encouraged pregnant woman to attempt her delivery in the hospital, for the availability of all the important equipments and medical and nursing staff if cesarean section is needed.
- 3- In the future, the researchers should be made more studies about this problem at different Iraqi governorates.

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