Assessment of Antenatal Care Services among Pregnant Women's in Al-Hilla City

تقييم خدمات الرعاية قبل الولادة بين النساء الحوامل في مدينة الحلة

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الخلاصة:

خلفية البحث: معرفة الاستفادة من الرعاية السابقة للولادة في صفوف النساء في الفئة العمرية الإنجابية في مدينة الحلة. وتقييم خدمات الرعاية قبل الولادة أمر بالغ الأهمية ولا سيما لتعزيز فعالية تقديم الخدمات وتلبية احتياجات النساء الحوامل وخدمات الرعاية السابقة للولادة.

الهدف: لتقييم خدمات الرعاية السابقة للولادة وتحديد العلاقة بين مستوى خدمات الرعاية السابقة للولادة مع البيانات الديموغرافية وخصائص التاريخ صحي لتحديد العلاقة بين مستوى الخدمات المقدمة بين هذه الخصائص.

المنهجية: أجريت دراسة وصفيه في مراكز الرعاية الصحية الاولية في مدينة الحلة للفترة من الثاني من كانون الأول ٢٠١٤ ولغاية العاشر من ايار ٢٠١٥ جمعت عينة غير احتمالية (غرضية)من٢٢٠امراه حامل اللواتي يراجعن المراكز الصحية في مدينة الحلة، وجُمِعَت البيانات من خلال استخدام الاستبانة التي تم تطويرها بعد تحديد صدقها وثباتها وباستخدام تقنية المحاورة مع النساء الحوامل . حددت ثبات استمارة الاستبانة من خلال أجراء الدراسة المصغرة وحددت مصداقيتها من خلال مجموعة مكونة من (١٣) خبير. تمّ تحليل البيانات عن طريق الإحصاء الوصفي والإحصاء التحليلي.

النتائج:أظهرت نتائج الدراسة إن التقييم النهائي لمستوى الرعاية ما قبل الولادة كان متوسط بنسبة ٧٣.٣%.

الاستنتاج:نستنتج من هذه الدراسة بان (العوامل الديمغرافية والتاريخ الصحي للحامل) لها تأثير على خدمات ما قبل الولادة.

التوصيات:أوصت الدراسة بضرورة زيادة اعداد المراكز الرعاية الصحية الأولية جديدة لتقلل الزخم الحاصل على المراكز الصحية التي تعاني من كثافة سكانيةعالية والتركيز على إنشاء غرف كافية لبقية مراكز الرعاية الصحية الأولية واتباع نموذج الرعاية السابقة للولادة لمنظمة الصحة العالمية في خدمات رعاية الأم والطفل، وأن الاكتشاف المبكر وكشف من مضاعفات الحوامل والتي تعزز الرعاية الصحية للأمهات في مجتمعنا.

الكلمات المفتاحية : تقييم، النساء الحوامل ،العناية قبل الولادة.

Abstract:

Background: The study examine the knowledge and utilization of antenatal care among the women of reproductive age group in Al-Hilla city. Perspectives of antenatal care services is particularly critical for enhancing effectiveness of services delivery and addressing pregnant women's needs and antenatal care services.

Objectives: To assess of antenatal care services in pregnant women's andidentify the relationship between level of antenatal care serviceswithdemographicdata and maternal health history characteristics.

Methodology: Descriptive Study is carried out in Al-Hilla City/ primary health care centers, from December, 2nd 2014 to May, 10th, 2015. A non-probability (Purposive Sample) of (220) pregnant women's, those who visited primary health care centers. The data were collected through the utilization of the developed questionnaire after the validity and reliability are estimated, and by means of interview technique. Reliability of the questionnaire is determined through a pilot study and the validity through (13) experts. The data analyzed through the use of the descriptive and inferential statistical analysis procedures.

Results: The findings of the present study indicate that the overall assessment for pregnant women's compliance antenatal care is middle at 73.3%.

Conclusions: Thestudyconcludeif that the factors (demographic data and maternal health history) to effect antenatal care compliance**.**

Recommendations: The study recommended the increase number ofprimary health care centers to reduce the momentum on health centers, which suffers from high population density and concentration to create enough room for the rest of the primary health care centers. Follow the previous model of care for the birth of a new world health organization in maternal and child care services, and that early detection and detection of complications pregnant and that promote maternal health care in our community.

Key words: Assessment,antenatal care, pregnant women's.

INTRODCTION

Antenatal care (ANC) is an important health service, which detects and sometimes reduces the risk of complications among pregnant women. The quality of care is likely to influence effective utilization and compliance with interventions(1) . ANC is a combination of monitoring for problems in mother and fetus, treatments and preventive care, health education, support and advice for pregnant women. Until recently, antenatal care has been largely unevaluated. There is limited evidence on specific component of antenatal care, but there was, at the time of planning the study, little evidence of overall effects of antenatal and delivery care on mothers and their babies, either in developed or in developing countries(2) . At each antenatal visit, midwives and doctors should offer information consistent advice, clear explanations, and provide women an opportunity to ask questions(3). Given good quality and regular attendance. In addition, ANC attendance during pregnancy has been shown to have a positive impact on the use of postnatal healthcare services, which also play a key role in detecting risky conditions after childbirth consequently leading to better maternal health outcomes(4) . The availability and accessibility of modern health services in developing and low income countries have increased over the past decades. While the effectiveness in curing diseases may lead to greater utilization of modern health services compared to traditional practices, their utilization is likely to be higher among urban dwellers and those with higher socioeconomic status than by rural residents and groups with a lower socioeconomic status in developing countries (5). The predictors of the utilization of ANC services in most developing countries include socio-demographic factors, availability and access to the health facilities, the educational level of the women and their husbands, perceptions of women regarding ANC and their knowledge of the importance of ANC services demographic factors such as the number of previous pregnancies, the number of on the utilization of antenatal care children, maternal age, and marital duration also are reported to have an influence(6) .

OBJECTIVES

The study aims to:

1.Assess of pregnant women's compliance about antenatal care.

2. Find out the relation between pregnant women's compliance about demographic data and maternal health history.

METHODOLOGY

Descriptive study was carried out through the present study in order to achieve the objectives. The period of the study is from December, 2nd, 2014 to May, 10th, 2015.The study is conducted in Al-Hilla City/ primary health care centers. A Non-Probability (Purposive Sample) of (220) withpregnant women's , those who visited/ primary health care centers, were included in the study sample. The data had been collected through the utilization of the developed questionnaire after the validity through (13) expertsand reliability were estimated, and by means of structured interview technique with the subjects who were individually interviewed. Datacollection process has been performed from February, 1st, 2015 until the March, 3rd, 2015. Each subject takes off approximately (20-30) minute to complete the interview.

The study instrument

A questionnaire is adopted and developed by after extension literature review and review the articles which were related to this field. The final study instrument consists of three parts:

Part 1: Demographic Data:

A demographic data sheet, consists of (5) items, which included residency, age, level of education, occupation, and monthly income.

Part 2: Maternal health history:

The second part of the questionnaire is comprised of (5) items, which Primigravida, duration of pregnancy, abortion, complications, health education, and visits services provider.

Part 3: Antenatal care services:

This part of the questionnaire is comprised of (5) domains, including the registration servicesdomain, consists of (3) itemsdiagnostic and treatment servicesdomain, consists of (9) items, laboratory test domain and consists of (6) items, meat, livestock and fish and consists of (6) items, tetanus vacation servicesdomain, consists of (3) itemshealth education and consists of (14) items[7].

The statistical data analysis approaches was used in order to analyze the data of the study under application of the statistical package (SPSS) ver. (20), and the Microsoft excel (2013). Data were presented using descriptive the in from of frequencies and Percentages. Summary Statistics tables including: Mean, Mean of scores (M.S), standard deviation (SD). Relative sufficiency (R.S): used to assess of patients' compliance regarding therapeutic regime with

coronary heart disease by three grades (good, fair, poor) scoring by (79-100, 56-78, 33-55) .Person's correlation coefficient: was used to estimate the scale reliability through the application. Chi- square test: used to find out the association between of the patient's compliance and their demographic data and clinical data

RESULTS

Table 1: Distribution of Pregnant Women's by Demographic Data.

Demographic Variable			Demographic Variable		
age (year)	**F**	**%**	Level of education	F	%
15 -19	11	5.0	illiterate	12	5.5
20 -24	81	36.8	Reads and writes	27	12.3
25 -29	48	21.8	Primary	96	43.6
30 -34	38	17.3	Medium	35	15.9
35-39	30	13.6	Secondary	22	10.0
40-44	12	5.5	Institute	12	5.5
Total	220	100.0	College and above	16	7.2
Mean =24.4	S.D = 0.18		Total	100	100%
Residency	**F.**	**%**	**Monthly income (dinars)**	F.	%
urban	134	60.9	< 300.000	88	40.0
Outskirts	49	22.3	300.000- 600.000	68	30.9
rural	37	16.8	601.000- 900.000	33	15.0
Total	220	100.0	>900.000	31	14.1
Occupation	**F.**	**%**	Total	220	100.0
Housewife	189	85.9			
Employed	31	14.1			
Total	220	100.0			

F. Frequency %. Percentage

Table 1 show that the highest percentage of pregnant women's were age (36.8%) (20-24) years old; urban (60.9%); housewife (85.9%); primary school (43.6%) and less than 300.000 dinars monthly income (22%) .

Table 2: Distribution of The Study Sample by their Maternal Health History

Maternal Health History Variable			Maternal Health History Variable		
Previous Pregnancy	F.	%	Health education	F.	%
Once time	76	34.5	Yes.	165	75.0
Twice time	63	28.6	No.	55	25.0
Third times	40	18.3	Total	220	100.0
Fourth times more	41	18.6	Services Provider	F.	%
Total	220	100.0	Doctor	84	38.2
Duration of pregnancy	F.	%	Nurses	63	28.6
First trimester	73	33.2	Means healthy	7	3.2
Second trimester	94	42.7	Healthy Advice	6	2.7
Third trimester	53	24.1	Health massage	5	2.3
Total	220	100.0	Not Services	55	25.0

Abortion	F.	%	Total	220	100.0
Number of abortion	166	75.5	Types of visit	F.	%
Once time	44	20.0	Regularly	160	72.7
Twice times more	10	4.5	Irregular	33	15.7
Total	220	100.0	Somewhat	27	12.3
Complications	F.	%	Total	220	100.0
No. Complications	155	70.5			
Anemia	33	15.0			
Hypertension	21	9.5			
D.M	9	4.1			
Kidney disease	2	0.9			
Total	220	100.0			

F : frequency,(%) : percentage

Table 2 show that the highest percentage of the pregnant women's sample with regard to maternal health history (34.5%) primigravida, (42.7%) second trimester, (75.5%) without abortion, (70.5%) without complications, (70%) agree health education, (38.2%) doctor services provider and (72.7%) regularly visits

Table 3: Antenatal Care Services for pregnant women

Main Domain	Rating	F	%	M.S	RS	Assessment
Registration Services.	Good	147	66.8	2.66	88.6	Good
	Fair	73	33.2			
	Poor	0	0			
Diagnostic and Treatment Services.	Good	73	33.2	2.10	70	Fair
	Fair	98	44.5			
	Poor	49	22.3			
Laboratory Test.	Good	37	16.8	1.66	55.3	Poor
	Fair	73	33.2			
	Poor	110	50			
Tetanus Vacation.	Good	147	66.8	2.33	77.6	Fair
	Fair	73	33.2			
	Poor	0	0			
Health Education.	Good	110	50	2.21	73.6	Fair
	Fair	47	21.4			
	Poor	63	28.6			
Overall Assessment of Pregnant Women Services	**Good**	**88**	**40**	**2.2**	**73.3**	**Fair**
	Fair	**88**	**40**			
	Poor	**44**	**20**			

Table 3 showthat the study subjects are fair with overall antenatal care services at provide primary health care centers.

Table 4: Association between Antenatal Care Services and theirDemographicData

Characteristics	Rating			Chi-square test			
Age	**Poor**	**Fair**	**Good**	χ^2	**D.F**	**P -value**	**Sig.**
15 -19	1	4	6	**5.730**	**10**	**0.073**	**NS**
20 -24	7	23	18				
25 -29	16	32	33				
30 -34	8	14	16				
35-39	8	10	12				
40-44	4	5	3				
Residency				**95.556**	**4**	**0.000**	**H.S**
urban	0	38	54				
Parties	0	23	21				
rural	44	27	13				
Occupation	e			**1.089**	**2**	**0.535**	**N.S**
Housewife	39	73	77				
Employed	5	15	11				
Level of education				**30.454**	**12**	**0.106**	**N.S**
illiterate	2	6	4				
Reads and writes	8	14	5				
Primary	21	31	44				
Medium	5	13	17				
Secondary	2	18	2				
Institute	3	2	7				
College and above	3	4	9				
Monthly income (dinars)				**22.753**	**8**	**.000**	**H.S**
< 300.000	24	41	23				
300.000- 600.000	14	27	27				
601.000- 900.000	4	12	17				
>900.000	2	7	21				

χ^2: Chi-square, **D.F**: Degree of Freedom, **p-value**: probability value, **Sig.**: Significant, **S**: Significant, **HS** : high Significant, **NS**: Not Significant.

Table 4 showthat there was high significant difference in the overall antenatal care services with demographic data regard to their residency and monthly income at ($P \leq 0.01$), shows that there wasnot significant ($P \leq 0.05$) and it appears from this table that there was no significant difference concerning with their occupation and level of education at ($P > 0.05$).

Table 5: Association between Antenatal Care Services and their Maternal Health History

Characteristics	ANC Score			Chi-square test			
Gravid a	**Poor**	**Fair**	**Good**	χ^2	**D.F**	**P -value**	**Sig.**
Once time	20	29	27	11.252	3	0.010	**S**
Twice time	11	25	27				
Third times	4	17	19				
Fourth times more	9	17	15				
Duration of pregnancy				8.050	2	0.018	**S**
First trimester	15	29	29				
Second trimester	21	35	38				
Third trimester	8	24	21				
Abortion				0.500	2	0.779	**N.S**
No. Found	36	68	62				
Once time	6	18	20				
Twice times more	2	2	6				
Complications				10.598	8	0.343	**S**
No. Complications	28	63	64				
D.M	4	2	3				
Hypertension	5	11	5				
Anemia	7	10	16				
Kidney disease	0	2	0				
Health education				17.441	1	0.000	**H.S**
No.	10	29	16				
Yes.	34	59	72				
Services Provider				19.113	10	0.039	**S**
Nurses	10	24	29				
Doctor	23	28	33				
Health massage	1	2	2				
Means healthy	1	4	2				
Healthy Advice	0	1	5				
No. services	9	29	17				
Visits				16.652	6	0.011	**S**
Regularly	29	70	61				
Irregular	9	15	9				
To some extent	6	3	18				

χ^2: Chi-square, **D.F**: Degree of Freedom, **p-value**: probability value, **Sig**.: Significant, **S**: Significant, **HS** : high Significant, **NS**: No. Significant.

Table 5 shows that there was significant difference in the overall antenatal care services with maternal health history regard to their health education at ($P \leq 0.01$), it appears from this table that there was significant difference concerning with their gravida, duration of pregnancy, services provider, visits and complication at ($P \leq 0.05$) and shows that there was no significant difference concerning with their abortion at($P > 0.05$).

DISCUSSION

The findings of the present study show that the majority of the studied sample the age groups (20-24) years,this result is supported by another study in that they found that most of the study sample are within the age group of (20-30) years old[8]. A study was done in Iraq who found that majority of the study subjects were (20-24) years on the same subject,

this differences may be due to that most women marry early age, early marriage is one of the reasons and proper reproductive age in Al-Hilla city[9].Regarding to the residency majority of the study sample (60.9%) were urban area, this result is supported by previous study in Erbil governorate, Iraq (2014) in their result indicated that most of participants were urban area(75.9%)[10]. This can be explained by the study sample included sector health and most of them inhabited urban and these services are widely distributed primarily in urban areas and are easily accessible. Concerning occupational status, the findings of the present study reveal that most of studied subjects (85.9%) were housewife, this result issupported byEgyptian study related to women's satisfaction and perception of antenatal care it showedthat in their result that (95.1 %) were housewives[11].Regarding educational levels the majority of sample (43.6%) were primary educational, this result is supported by another study which agree with the present study[12].The study shows that majority of the study sample (40%) were less 300.000 dinars monthly income, this result is coincide to was (32.9%) less than 500.000 dinars monthly income, this agreement of both studies are reasons living conditions prevailing in the country and living below the poverty line with low monthly income of Iraqi family[13].The findings of the study indicate that majority of the studies number of previous pregnancy had (34.5%) one gravida, that result is supported present result indicated that majority of this subjects (42.3 %) were one gravida. The results showed that the ideal period for women between the ages of (21-25) years, early marriage[14]. Regarding to the duration of pregnancy the findings of the present study show that majority of the study sample (42.7%) were second trimester, Another studyindicated that majority of this subjects (67.8%) were second trimester. It is considered critical for pregnant stages of embryo formation pregnant need special attention to nutrition and health status monitor and follow up the schedule tetanus vaccine and prevent anemia[15]. Another result indicates the majority pregnant women's haven't abortion of the study sample (75.5%) don't have abortion, this result is supported by another study (72.4%) this result indicated that most of pregnancies were without abortion. The reason for this result of promoting antenatal check-ups and associated counseling in general and the study showed that the first and second trimester of pregnancy are the highest in the study sample[16]. Concerning pregnant women's complication, the findings of the present study show that majority of the study sample (70.5%) were no complication, this result is supported by study in South of Africa 2014, was (72%) this result agree with the result of present study indicated that most of pregnancies were without complications. The reason for this result were in first or second gravid and reduce complications during visits regularly get knowledge, awareness and health education pregnancy without complications[17]. Regarding

to health education of pregnant women's the findings of the present study show that majority of the study sample (75%) were high health education, this result is supported by study in North Nigeria 2013, was (86.5%) this result agree with the result of present study indicate high percentage of health awareness to the majority of pregnant from urban areas and the center of the AL-Hilla City provide means awareness dramatically, better pregnant-provider interactions regarding advices during ANC and time schedule of visits[6]. Looking at the services provider of pregnant women's the findings of the present study show that majority of the study sample (38.2%) were services provider, this result is supported by study in Egypt (2012),was (87%) this result agree with the result of present study indicated that majority of services provider. Because the sample of the study is the female gender (pregnant) exclusively awareness by MCH unit, and this program is significant to the maternal physician[18]. Regarding visits of pregnant women's, majority of the present study sample (72.7%) are regularly visits this result is supported by study in India 2013,was (77%) indicated regularly visits. The reason for this registration plays a very prominent and important role from both the provider side and the pregnancy side for availing ANC and This may indicate women were motivated to continue their ANC check-up.The results of the study indicate that there is significant association between the ANC services with demographic data of pregnant women's, that ANC services of pregnancy have been influenced by their residency, level of education and monthly income[19]. Found that there was a non-significant association between the ANC services with demographic data their age group, occupation and monthly income[20]. Also in Table 4. The results of the study indicate that there is significant association between the ANC services with maternal health history of pregnant women's their gravida, duration of pregnancy, health education, health provider and visits[12]. While there is a non-significant relationship between the ANC services and their maternal health history abortion and complication[21].

CONCLUSION

Maternal and child health services including family planning, health education and postnatal visits services need Improvement. The services provided in PHC centers could be curativefor all individuals population whatever difference with their demographic characteristics.

RECOMMENDATIONS:

1- Adoptions of the new WHO antenatal care model in our maternal care services to eradicate of women's barrier to attending regularly for antenatal care visits, and that revealed early detection of pregnant complication and that promote maternal health care in our society.

2- Increase the total number of PHC facilities according to the numbers of clients within area, taken into account international standards (2-3 per 10000).

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