

A Survey of Determination the Level of Antenatal Care Utilization in Primary Health Care Centers of Al-Diwaniyah City

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Abstract- Background: Antenatal care (ANC) can be described as the care providing by health care authorities to pregnant and teenage mothers to ensure the best health for mother and her fetus during the pregnancy. The most important aspects of ANC are: Identification of risks; Prevention of pregnancy-related or associated diseases as well as their management; Health education and finally health promotion.

Aim of the study: This study aims at identifying the level of delivery of antenatal care services as well as the main obstacles affecting the use of antenatal care among pregnant women in the center of Al-Diwaniyah city / Iraq.

Methodology: A descriptive design, cross-sectional study was used to obtain the study objectives. During the period from 2nd January 2019 to 10th April 2019. A Non-Probability, convenient sampling for pregnant women and all population with regard to health workers in antenatal care.

Results: There is a positive relationship between the educational level of pregnant women and their level of knowledge of prenatal health care. There is also a relationship between increased knowledge of pregnant women about the importance of health care and the cause of pregnancy (mother's desire to be pregnant). As for health workers, there was a positive relationship between the perception of health care among workers and the source of information about such care (experience and practice). There is also a positive relationship between the perception of health workers and favoritism and instrumentality.

Conclusions: For pregnant women: There is a relationship between knowledge with (level of education and influence to be pregnant

For health workers: The biggest source for information was partner and experience. The most problems which encountered the health workers were inadequate rooms to provide antenatal care services

Recommendations: Increasing the awareness of pregnant women, families, and society about the importance of antenatal health care through direct health education for women in health care centers or through social media and radio stations.

-Give the females a greater chance to complete their studies because of their significant role in improving reproductive health, family health and society.

Index Terms- Antenatal care, Utilization, Primary Health Care

I. INTRODUCTION

Antenatal care (ANC) can be described as the care providing by health care authorities to pregnant and teenage mothers to ensure the best health for mother and her fetus during the pregnancy. The most important aspects of ANC are: Identification of risks; Prevention of pregnancy-related or associated diseases as well as their management; Health education and finally health promotion⁽¹⁾. The principles of ANC for women with normal pregnancies are to provide tips; education; reassurance; and backup; to address and treat the minor impediments of pregnancy; and to provide effective screening during the pregnancy⁽²⁾.

Antenatal health care reduces morbidity and mortality for mothers and their fetus for antenatal, through detection and treatment complications, and identification indirectly through developing complications during labor and delivery, thus maintain referral to the level of health care appropriately, also HIV and malaria infections for example, as indirect causes of maternal morbidity, contribute 25% approximately of maternal mortality. Antenatal health care also giving an important chance to dealing with concurrent problems through carry a deferens services⁽³⁾.

- Study settings

The study site was limited to Al-Diwaniya city center, which contained 14 primary health care centers where the program of maternal and newborn health services is provided by Diwaniya Health Department \ Iraqi Ministry of Health.

- Study design

A descriptive design, cross-sectional study was used to obtain the study objectives. During the period from 2nd January 2019 to 10th April 2019.

- The Sample of the Study

A Non-Probability, convenient sampling for pregnant women and all population with regard to health workers in antenatal care.

The Sampling of the Study : The information obtained from the primary health care centers (14 health centers), representing the health centers in the center of Al-Diwaniyah, revealed (1,606) pregnant women and (50) antenatal health care workers according to the statistics of December 2018.

The Study Instrument

Two structured questionnaires were used to obtain information from study participants, one for pregnant women and a different one for antenatal care workers.

Parts of Pregnant Women Questionnaire

1-Socio-Demographic Characteristics for Pregnant Women

2-Pregnant Women Information about previous and Present antenatal care

3-Pregnant women knowledge about importance of antenatal care

Parts of Questionnaire for Health Workers

1-Socio- Demographic Characteristics for Health Worker

2- What Problems are Encountered in the Course of Providing Antenatal Care Services to Pregnant Women

3- Health Care Workers Perception About Certain Services

Statistical Analysis

The Statistical Package of Social Sciences (SPSS), V.24, (Microsoft excel 2010) was used for analysis and results were presented in tabular form.

II. RESULTS

Table (1): Socio-Demographic Data for Pregnant Women

Demographic data of pregnant	Rating and scoring	Freq.	%
Age (years)	16 – 24	135	33.8
	25 – 33	210	52.5
	34 – 42	55	13.8
	Total	400	100
Marital Status	Married	396	99.0
	Divorced	2	.5
	Widowed	2	.5
	Total	400	100
Level of Education	Illiterate	29	7.3
	Able to read and write	62	15.5
	Primary school graduate	147	36.8
	Intermediate school graduate	82	20.5

	Preparatory school graduate	34	8.5
	Institute graduate	42	10.5
	College graduate	4	1.0
	Total	400	100
Occupation	Free work	15	3.8
	Housewife	268	67
	Government employee	68	17.0
	Student	49	12.3
	Total	400	100
Husband Job	Free business	68	17.0
	Government employee	203	50.8
	Worker	51	12.8
	Unemployed	50	12.3
	Student	25	6.3
	Retired	3	0.8
Total	400	100	
Economic Status	Not enough	112	28.0
	Sometimes enough	113	28.3
	Enough	175	43.8
	Total	400	100
Gravidity	0	76	19.0
	1 – 3	237	59.3
	4 – 6	87	21.8
Parity	0	77	19.3
	1 – 3	254	63.5
	4 – 6	69	17.3
	Total	400	100

Table (1) socio-demographic data shows the majority sample of pregnant are (52,5%) within age between (25–33) years. The vast majority of marital state(99 %) are married. Concerning the level of educational, the study indicates that the majority of the pregnant women are primary school graduate(36.8%). Regarding to occupational status(87%) are housewives. Regarding to their husbands jobs (50.8%) of them are government employee .The economic status is indicate there are(43.8 %) of sample are enough. The larger category of one gravidity and one parity is (25.5%) and(28%) respectively

Table (2) : Information About Previous and Present Pregnancy

Pregnant Information	Rating and Scoring	Freq.	%
With regard to your previous pregnancy, did you attend Antenatal care clinics ?	Yes	380	95
	No	20	5
	Total	400	100

Before you started antenatal care, was it necessary for you to get permission from anyone to attend the antenatal care clinics ?	Yes	374	93.5
	No	26	6.0
	Total	400	100
From whom did you ask for permission to attend antenatal care clinics ?	The husband	368	92.0
	Father of my husband	15	3.8
	Mother of my husband	12	3.0
	The mother	5	1.3
	Total	400	100
Does your husband accompany you to a care clinic ?	Yes	307	76.8
	No	93	23.3
	Total	400	100
If yes, What are the benefits to reproductive health ?	Moral support	230	57.5
	Assistance	52	13.0
	In order to pay	55	13.8
	Other	63	15.8
	Total	400	100
What influenced you to be pregnant ?	The desire to have children	272	68.0
	My husband forced me	31	7.8
	Was unplanned	93	23.3
	Grandma wants many grandchildren	4	1.0
	Total	400	100
Do you remember when you start antenatal care ?	3 months (0-12 weeks)	149	37.3
	4-6 months (13-24 weeks)	245	61.3
	7-9 months (25-36 weeks)	2	0.5
	I do not know	4	1.0
	Total	400	100
Do you remember having any obstetric problems with previous pregnancies?	Yes	196	49.0
	No	204	51.0
	Total	400	100
If yes could this have an influence on antenatal care visits ?	Yes	274	68.5
	No	126	31.5
	Total	400	100
Do you have your antenatal care card for the previous pregnancy ?	Yes	374	93.5
	No	26	6.5
	Total	400	100

Were you satisfied with the services offered at this facility regarding antenatal care ?	Yes	385	96.3
	No	15	3.8
	Total	400	100
Do you have to pay in order to start antenatal care clinics ?	Yes	32	8.0
	No	368	92.0
	Total	400	100
How affordable is this amount to you?	Inexpensive	340	85.0
	Moderate	40	10.0
	Expensive	20	5.0
	Total	400	100.0

Table (2) shows the majority of sample (95%) of them was attend antenatal care clinics, Concerning necessary for to get permission from someone to attend the antenatal care clinics (93,5%) of sample was obtained permission. (92 %) of sample was taken permission from their husbands and (76,8%) was their husband accompany with them to a health care clinic. Majority of them (57,5 %) the benefits to reproductive health is moral support. (68 %) of sample was have desire to be pregnant .(61 ,3 %) was

start antenatal care in 4-6 months .The majority of sample (93,5 %) had antenatal care card for the previous pregnancy. Most of sample (96,3)was satisfied with the services regarding antenatal care in percentage. The majority of them (92%) have no pay in order to start antenatal care. Regarding inexpensive, the majority of sample(85%) was considered the antenatal care is an inexpensive.

Table (3): Socio Demographic Data of health workers. N=50

Demographic Data	Rating and Scoring	Freq.	%
Age (years)	20 – 29	24	48.0
	30 – 40	12	24.0
	41 – 50	8	16.0
	51 – 60	6	12.0
Profession	Physician	14	28.0
	Nurse	33	66.0
	Administrative	3	6.0
Gender	Male	9	18.0
	Female	41	82.0
Years of employment	<= 1	6	12.0
	2 – 8	21	42.0
	9 – 15	9	18.0
	16 – 21	6	12.0
	22 – 28	4	8.0
	29 – 35	4	8.0
Have you been trained in reproductive and child health activities?	YES	38	76.0
	NO	12	24.0
If yes , How long have you been involved in reproductive health and health child interventions? (years)	<= 1	18	36.0
	2 – 9	17	34.0
	10 – 16	8	16.0
	17 – 24	4	8.0
	25 – 31	3	6.0
When did you last receive in-service training in life skills in Obstetric or integrated maternal and neonatal care ?(years)	<= 1	23	46.0
	2 – 7	20	40.0
	8 – 13	5	10.0
	20 – 25	2	4.0

Demographic Data	Rating and Scoring	Freq.	%
What role do you play in antenatal care delivery ?	Physical examination	5	10.0
	Giving information to pregnant	14	28.0
	Documentation	14	28.0
	Provide care	4	8.0
	Description of medicines	9	18.0
	Diagnosis of problems	4	8.0
How many information education and communication sessions are conducted per week on antenatal care ? (sessions)	<= 1	8	16.0
	2 – 4	12	24.0
	5 – 6	30	60.0
Did you received information about antenatal care ?	Yes	48	95.0
	No	2	5.0
Where did you get this information ?	Studying	3	6.25
	Conferences and seminars	10	20.8
	Experience and practice	12	25.0
	Radio and networking sites	8	16.6
	Partners	15	31.25

Table (4.7):Continue.

Table (3) Presents the majority age of health workers between (20- 29) years old present (48 %), majority of profession is nurses (66 %), the majority gender is female (82%), majority of years of employment between (2-8) years (42 %), majority they Have trained in reproductive and child health activities (76%), the majority they have training from one year or less (46%), they presenting information education and communication sessions are

conducted per week on antenatal care (5-6) per week (60%), majority of them received information about antenatal care(94%), majority of them (24%) receiving information from Conferences and seminars.

Table (4):The Problems Which Encountered the Health Workers During the Delivery of Antenatal Care Services to Pregnant Women N=50

What problems are encountered in the course of providing antenatal health care services to pregnant women	Answers	Freq.	%
Insufficient equipment and supplies	Yes	28	56.0
	No	22	44.0
No guidelines and checklist for provision of antenatal services	Yes	31	62.0
	No	19	38.0
Lack of transport	Yes	12	24.0
	No	38	76.0
No wireless communication	Yes	29	58.0
	No	21	42.0
Shortage of professional staff	Yes	23	46.0
	No	27	54.0
Lack of essential medication	Yes	27	54.0
	No	23	46.0
Inadequate rooms to provide focused antenatal services	Yes	37	74.0
	No	13	26.0
Community attitudes towards health workers	Yes	31	62.0
	No	19	38.0
Favoritism and instrumentality	Yes	33	66.0
	No	17	34.0

Table (4): Present the problems which encountered the health workers during the delivery of antenatal care services to pregnant women, show the majority problem (74%) is inadequate rooms to provide focused antenatal services and favoritism and instrumentality was (66%). Their answers to the other of the questions were as follows: Insufficient equipment and supplies were 56% were answered yes , No guidelines and checklist for provision of antenatal services 62% were answered yes , Lack of transport 24% were answered yes, No wireless communication 28% were answered yes , Shortage of professional staff 46% were answered yes, Lack of essential medication 54% were answered yes ,and Community attitudes towards health workers 62% were answered yes.

III. RESULT DISCUSSION

1: socio-demographic of pregnant women

The present study sample included a group of 400 pregnant women. The majority of them (52.5%) were age between (25 - 33) years. This result agree with^(4,5) were the majority of their study the age between (25-33) years and the largest category is with previous studies at an average age of (29.5) years and this is a good indicator to stay away from the most dangerous ages of pregnancy, which are less than 16 and more than 35 years.

About marital status the vast majority of sample (99.0%) were married this result similar the previous study 248 of the women included in the study who were or had once been married, 94.3% were currently married, 3.7% were widows and 2.0% were divorced. This may explain the issue of the Iraqi population⁽⁶⁾, which is often marriage at an early age and adherence to religious and social norms and norms, which must be procreation by marriage exclusively. Regarding the educational level, the study indicates the (36.8%) of sample are primary schools graduates. Many effect that lead to lack achieve high education graduates like economically, population traditions. This result agree with study conducted by⁽⁷⁾ when majority of their study were primary schools graduates. Regarding occupation status for pregnant (87%) of sample were housewives, while their husbands, (50.8%) of sample were government employees.

2: Information about previous and present pregnancy

Discussion table (2): Show that the majority of sample (95%) were attended antenatal care clinics. In Iraq indicate an excellent ratio compared with some countries, such as Egypt where they (90.30%) of pregnant women were receiving antenatal care in 2014. Its highest value over the past 26 years, while its lowest value was (39.10%) in 1995⁽⁸⁾. The majority of sample (92%) of them were received permission from their husbands before visits to health care centers. Most pregnant women have indicated that their husbands have the right to determine when their wives should see health care centers and what they should do⁽⁹⁾. This calls for increased awareness among couples and other large family members of the importance of regular visits to pregnant women in primary health care centers.

Regarding question about accompanied with their husbands (76.8%) of pregnant women were accompanied by their husbands to health care clinic. While (57.5%) of them Benefits of accompany was for psychological support. One of the main factors that encourage to review pregnant women's health care. The study covered the assessment of predisposing and potential factors and the help factor of couples to support their wives' visits to prenatal care centers. The information showed that these factors, the willingness, support and support of the husband were very necessary to motivate pregnant women to perform the review during pregnancy⁽¹⁰⁾.

As shown in the result that (68%) of the women had a desire for pregnancy, this indicate a positive for pregnancy health of the mother and fetus. as the previous studies had shown that: 40% to 60% of all births in United States were unplanned, so the United States is the highest unplanned pregnancy among the rest of the developed world. Moreover, absence of the critical period for the fetus that needs to grow or may delay in diagnosing the unplanned pregnancy often leads to the loss of the opportunity to achieve clinical strategies for better pregnancy⁽¹¹⁾. The result of study show the (61,3%) of pregnant women began antenatal care through 4-6 months, in other hand 37.3% had begun the review prior to the third month of pregnancy. This was much better than a previous study conducted by⁽¹²⁾ in Malawi, In terms of direct antenatal care, 75% of pregnant women reported that they started between 4 and 6 months of gestation. Most of them were satisfied with the antenatal care services in the percentage (96, 3). This percentage is a good when compared to some previous studies such as⁽¹³⁾ where 91% of the mothers in the study were satisfied

with the number of visits and the time spent while receiving care. The majority of sample (92%) do not make any payments to start antenatal care. The majority of sample (92%) do not make any payments to start antenatal care. This encourage pregnant women to receive health care when compared with other countries⁽¹⁴⁾.

3: The demographic characteristics of health workers

Table (3) represent the demographic characteristics of health workers. The majority of sample (66%) are nurses (76%) of them are female. The role of nurses is important because it has a direct impact on increased compliance, according to WHO recommendations, which confirm the importance of screening pregnant women to ANC during the first trimester. A study in Nigeria on contraindications of antenatal care by pregnant women, one of these problems it that the caregiver was male which lead to psychological, cultural and religious barriers⁽¹⁵⁾.

Majority of employee sample (76%) had trained in reproductive and child health activities, This percentage is low compared with other countries. Previous studies have been conducted in Malawi where all health care workers were participated in the research and received training in reproductive health⁽¹⁶⁾.

4: Problems which encountered the health workers during the delivery of antenatal care services

Table (4): Regarding the problems which encountered the health workers during the delivery of antenatal care services to pregnant women, show the majority problem (74%) is inadequate rooms to provide antenatal services. In many previous studies, researchers have found that using adequate place to perform antenatal care in terms of location, suitability, maintaining women's privacy. As well as prevent the spend long periods in inappropriate and uncoordinated places has a greater role in facilitating the tasks of health workers as well as attracting pregnant women to antenatal health care⁽¹⁷⁾ and second problem was favoritism and instrumentality (66%), In a study conducted in Iranin Shahid Beheshti University of Medical Sciences about the factors affecting health workers in the provision of services where good management and support and motivation of direct officials are the main reasons to help health workers to provide the best they have. On the other hand, unfair treatment and cronyism, mismanagement and lack of encouragement were key factors that undermined the determination of the two health years and their activity⁽¹⁸⁾.

IV. CONCLUSIONS:

Conclusions concerning pregnant women:

- 1-the most common of pregnant age was(25- 33) years.
- 2-the vast majority of the study sample was married.
- 3-the overall knowledge of pregnant women about antenatal care was good.
- 4- it found there is a relationship between knowledge with(level of education and influence to be pregnant)

Conclusions concerning health workers:

- 1-The biggest profession in our study was a nurse.
- 2-The majority of participants were female (82%).
- 3-The biggest source for information was partner and experience.

- 4-The most problems which encountered the health workers were inadequate rooms to provide antenatal care services.
- 5-The overall perception of health workers at a high level.
- 6-The major source influence on the perception of health workers.
- 7-There is a relationship between favoritism and instrumentality with a perception of health workers.

V. - RECOMMENDATIONS

Increasing the awareness of pregnant women, families, and society about the importance of antenatal health care through direct health education for women in health care centers or through social media and radio stations.

- Increasing the applied curriculum in the curriculum for students of health professions.

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