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Knowledge and attitudes of Rural First-Trimester Pregnant Women about Antenatal Care in Shekhan District

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Abstract

Objective: An essential component of the package of services aimed at enhancing mother and infant health is antenatal care (ANC). Thus this study aims to assess the knowledge and attitudes of pregnant women in the first trimester about antenatal care in the community of rural areas who visited primary health care centers of Shekhan District. Methods: A cross-sectional study was carried out in the Primary Health Care Centers of Shekhan District in the Kurdistan Region of Iraq from November 2021 through April 2022 on 300 convenient sample selected pregnant women in the first trimester of their pregnancy, residents in a rural area attended Primary Health Care Centers in Shekhan District. Data were collected using the direct interview with a structured questionnaire established through the review of related literature, which included general pregnant information, clinical pregnancy investigations, drug use, and questions related to ANC knowledge and attitude. A descriptive analysis of data was done using the SPSS program Version 23 IBM. Result: The results reveal that the pregnant women had good knowledge, 206 (68.7%) and a strong attitude, 165 (55%) toward antenatal care with a mean and standard deviation of 12.83(1.679) and 12.33(2.199), respectively. Conclusion: The study concluded that most Shekhan rural pregnant women had good knowledge and showed a positive attitude toward ANC services, visited physicians for ANC, and committed to investigation-related pregnancy.

Keywords
Knowledge and attitude, Rural, First-Trimester, Pregnant Women, ANC

An essential component of the package of services aimed at enhancing mother and infant health is antenatal care (ANC), which is also known as prenatal care, family planning, emergency obstetric care, and skilled delivery care[1]. Antenatal care is the health examination of the maternal and fetus throughout pregnancy in order to get the optimum outcome for the mother and child. Compared to no prenatal screening, newborns that received early monitoring and continued care during pregnancy were more favorable [2]. Approximately 6 million women get pregnant yearly; 5 million such pregnancies result in a child being born. Improved maternal and newborn health status is related to proper prenatal health care utilization. The development of the woman, the fetus, and the newborn should all be impacted by pregnancy care [3]. According to UNICEF [4], Services for maternal health might be essential in enhancing reproductive health. Each year, complications related to pregnancy or delivery claim the lives of more than 500,000 women. The ANC estimates important aspects of health, including disease

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prevention, health screening, diagnosis, and promotion of health. Every effort was made to protect the women's emotional and physical health, avoid preterm labor, and foresee challenges and complications during childbirth. Creates a guarantee that maternal mortality and morbidity are reduced [5]. The amount to which prenatal care is used may be significantly influenced by what is known about expectant mothers; thus, and according to reports from many regions of the world, pregnant women who have more knowledge about prenatal care are more likely to utilize such care [6]. Prenatal services are either liked or disliked by the pregnant woman, depending on her attitude. Thus, a pregnant woman's personal experience with prenatal healthcare might be either positive or negative [7]. In developing countries, the experienced reasons are nearly similar, which include hemorrhage, eclampsia, complications due to abortion, infections, and disabilities [8]. Despite of, the authors stated that in most developing nations, access to ANC is highly limited, and the use rates might be low even where it is available [9].

Aim of the study

The study aims to assess the knowledge and attitudes of pregnant women in the first trimester regarding antenatal care in the community of rural areas who visited primary health care centers of Shekhan District.

Patients and methods

A cross-sectional survey is carried out in the Primary Health Care Centers of Shekhan District in the Kurdistan Region of Iraq from November 2021 through April 2022. The current study recruited 300 pregnant women by adopting a convenience selection method of sample selection who was in the first trimester of their pregnancy, residents in a rural area, and agreed to be subjects in the present survey in all Primary Health Care Centers in Shekhan District. In contrast, those in the second and third trimesters, not residents of rural areas, were excluded from this study. Therefore, the structured questionnaire for data collection was established by reviewing related literature, which included general pregnant information, clinical pregnancy investigations, drug use, and questions related to ANC knowledge and attitude. Such data were collected by visiting the Primary Health Care Centers in the Shekhan District. Finally, information was gathered by directly interviewing the first-trimester pregnant women after getting their permission.

A descriptive analysis of data from the present study was done using frequency, percentage, mean, and standard division, besides the levels of pregnant women's knowledge and attitude were calculated by the sum of their scores and using cut-off points as Low Knowledge (7-9), Fair Knowledge(10-12), Good Knowledge (13-14), and Weak Attitude (5-8), Fair Attitude (9-12), Strong Attitude (13-15). the SPSS program Version 23 IBM was used to calculate such analysis.

Ethical consideration

Firstly, approval is obtained from the College of Health and Medical Technology-Shekhan. Then another permission is obtained from the Shekhan Healthcare Sector. Finally, verbal consent is obtained from pregnant women after clarifying the objectives of the study to participate in this survey.

Study results

The present study shows that in more than half of the pregnant women aged between 26 to 35 years of age (51%), their level of education ranged between Illiterate and read and write (28.3%) and (25%) respectively, nearly half of them have low socioeconomic (44.7%). Finally, the majority of the pregnant had antenatal care visits with both general practitioner (GP) and specialist doctor consultations for such care (99.3%) and (73%), respectively (Table 1). Further results indicate that nearly half of the pregnant women had multigravida (48%) and multipara (45%), while nearly one-third had an abortion, more than half had anemia, two-thirds had UTI, and the majority of them had no preeclampsia, eclampsia, and gestational diabetes (98.3%), (98.7%), and (91%) respectively (table 2). Moreover, the study presents that less than ten percent of the pregnant use drug without counseling the

doctors (8.7%) or using dexamethasone drug (6%), while the majority of them take folic acid (85.3%). In addition, most pregnant had no chronic diseases (90.03%), screened for Hemoglobin (93.3%), measuring blood pressure (95.3%), and urine test for protein (87%), but two-thirds of them did not screen for HIV (69.7%) and syphilis infection (77%) (Table 3). And finally, the results reveal that the pregnant women had good knowledge, 206 (68.7%) and a strong attitude,165 (55%) toward antenatal care with a mean and standard deviation of 12.83(1.679) and 12.33(2.199), respectively (Table 4).

Table 1. Pregnant women's sociodemographic variables. n=300

Pregnant Women's variables		Frequency	Percent
Age	16-25	112	37.3
	26-35	153	51.0
	36-47	35	11.7
Education Level	Illiterate	85	28.3
	Read and Write	75	25.0
	Elementary school	44	14.7
	Intermediate school	31	10.3
	Secondary school	30	10.0
	Institute/College	35	11.7
Socioeconomic	Low	134	44.7
	Medium	127	42.3
	High	39	13.0
Antenatal care visits	No	2	0.7
	Yes	298	99.3
Doctor Consultation for Antenatal Care	GP	49	16.3
	Specialist	32	10.7
	Both	219	73.0

Table 2. Pregnant women's gynecological history. n=300

Gynecological History		Frequency	Percent
Gravida	Primigravida	50	16.7
	Multigravida	144	48.0
	Grand multi	106	35.3
Para	Primigravida	51	17.0
	Primipara	58	19.3
	Multipara	135	45.0
	Grand multipara	56	18.7
Abortion	No abortion	199	66.3
	Abortion	94	31.3
	Recurrent abortion	7	2.3
Anemia	No	146	48.7
	Yes	154	51.3
UTI	No	98	32.7
	Yes	202	67.3
Preeclampsia	No	295	98.3
	Yes	5	1.7
Eclampsia	No	296	98.7
	Yes	4	1.3
Gestational diabetes	No	273	91.0
	Yes	27	9.0

Table 3. Medical health variables of pregnant women. n=300

Current Health variables		Frequency	Percent
Taking folic-acid	No	44	14.7
	Yes	256	85.3
Chronic disease	No	271	90.3
	Hypertension	15	5.0
	Diabetes Mellitus	14	4.7
Using drugs without counseling from a doctor	No	274	91.3
	Yes	26	8.7
Using Dexamethasone during pregnancy	No	282	94.0
	Yes	18	6.0
Blood screening for HIV infection	No	209	69.7
	Yes	91	30.3
Blood screening for syphilis infection	No	231	77.0
	Yes	69	23.0
Blood screening for hemoglobin level	No	20	6.7
	Yes	280	93.3
Blood pressure examination	No	14	4.7
	Yes	286	95.3

Urine test for Protein	No Yes	39 261	13.0 87.0

Table 4. Pregnant women's level of knowledge and attitudes toward antenatal care. n=300

Knowledge and Attitude		Freq. (%)	Mean (SD)
ANC knowledge	Low Knowledge Fair Knowledge Good Knowledge	19 (6.3) 75 (25) 206 (68.7)	12.83 (1.679)
ANC Attitude	Weak Attitude Fair Attitude Strong Attitude	14 (4.7) 121(40.3) 165(55)	12.33 (2.199)

Discussion

In this study, it was noted that the age of pregnant women was within the reproductive age group (26 − 35 years) 51%. And the lowest percentage (11.7%) in age groups (36-47) years. In 2014, a study was done in Iraq showed that the highest percentage of pregnant women was (34.2%) in the age group (31-40) years, and the lowest rate (13.2%) in age groups (>40) [10]. In 2010, a study was established in Erbil that showed that the highest percentage of pregnant women was (96%) within the age group (21-25) years and the lowest rate (14%) in age (>35) years [11]. Furthermore, the study showed that the illiterate and read and write levels of education stand for a high percentage of pregnant women in the rural area in the Shekhan district. While a study in 2018 in Duhok city showed the highest rate (29.8%) of pregnant women had primary school graduation [12]. Also, the current study showed that pregnant women with a low socioeconomic status had the highest visit for antenatal care supported by the general practitioner (GP) and specialist doctors consultation for such care. A survey made in Erbil in 2015 showed that prenatal care visits of less than three visits have the highest percentage (40.8%), and those who had more than three visits showed the lowest rate (29.6%) among pregnant women [13]. Regarding pregnant women's gynecological history, the present study showed that nearly half of them had multigravida and multipara, while almost one-third had an abortion. A study conducted in Kurdistan showed that pregnant women (27.7%) had abortions [14]. Moreover, more than half of the pregnant women had anemia, and two-thirds of them had UTIs, less than ten percent of pregnant women use a drug without counseling the doctors (8.7%) or using a dexamethasone drug (6%), at the same time, most of them take folic - acid (85.3%). A study in Erbil in 2015 showed pregnant women with anemia have a percentage of (31.1%), UTIs (33.1%), taking folic acid (79.8%) [15]. Further study in Median-Saudi in 2017 showed that (92.1%) take folic acid [16]. In addition, the current study results showed that most pregnant women had no chronic disease, were screened for hemoglobin, measured blood pressure, and made urine tests for proteinuria; also, two-thirds of them had not screened for HIV and syphilis infection. A study in Erbil in 2015 showed (Anemia, UTI, hypertension, and Gestational diabetes mellitus) have a percentage of (31.1%, 33.1%, 8.3%, and 6.5%) [15]. This study reveals that pregnant women had good knowledge and a strong attitude about antenatal care. Also, a study in Pakistan by Akhtar et al. (2018) said that 21.4% of pregnant women had good knowledge, and only 39.7% of women had a strong attitude toward antenatal care [17].

Conclusions

The present study concluded that most Shekhan rural pregnant women had good knowledge and showed a positive attitude toward ANC services, had multigravida and multipara, visited physicians for ANC, and committed to investigation-related pregnancy. However, despite all this, ten percent use a drug without counseling the physicians. Thus physicians and nurses should focus on increasing awareness and knowledge of pregnant women about the benefit of antenatal care to increase the pregnant's attitude toward such care.

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