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Knowledge, Attitude and Perception of Pregnant Women of Antenatal Care (ANC) in Ago-Iwoye, Ogun State

ABSTRACT. Understanding maternal knowledge and practices of the community regarding care during pregnancy and delivery is very necessary and important. Hence, this study identified pregnant women's knowledge about antenatal care utilization, assessed pregnant women's attitude towards the use of antenatal care and determined the demographic, social and cultural factors that may contribute to the associated knowledge and attitude of pregnant women on antenatal care utilization in Ago-Iwoye, Ogun State, Nigeria. The study was conducted in Ago-Iwoye, Ogun State, Nigeria, and the population consisted of the entire pregnant women with a sample of 89 pregnant women who were purposively selected as the subject for this study through snowballing. Primary data were gathered through the use of a questionnaire and were later analyzed using SPSS. The study found out that the majority of the participating women know the importance of ANC services although education level affected its utilization. The study also established that marital status did not influence service utilization in antenatal services. The study concluded that the main factors influencing the utilization of ANC are the respondent's level of education, knowledge, and attitude. In addition, low income, long-distance, insufficient or expensive transportation services are major obstacles to ANC access for pregnant women.

KEYWORDS: knowledge, attitude, perception, antenatal care

Background to the Study

Antenatal Care (ANC) is given different meanings by different scholars, among others the meaning that says, "Antenatal Care means care before birth and includes education, counselling, screening and treatment to monitor and to promote the well-being of the mother and fetus" (Adewoye et al., 2013). Antenatal Care is an opportunity to promote the benefits of skilled attendance at birth and to encourage women to seek postpartum care for themselves and their newborn. It is also an ideal time to counsel women about the benefits of child spacing (Ye, Harun-Or-Rashid & Junichi Sakamoto, 2010).

According to the United Nations Millennium Development Goals, every year, at least half a million women and girls die as a result of complications during pregnancy, childbirth or the six weeks following delivery. Almost all (99%) of these deaths occur in developing countries. This shows that the Antenatal care activity is very weak in developing countries. The main reasons that hinder the use of antenatal care are different from country to country. Developing countries encounter hemorrhage, followed by eclampsia, infection, abortion complications and obstructed labor. Other issues are lack of knowledge and preparedness about reproductive health in the family, community and health provider (Ojo, 2014).

To alleviate such factors, Antenatal Care is the most important method for detecting pregnancy problems in the early period. Because antenatal care is the best mechanism to minimize maternal mortality and give a piece of good information for pregnant women about their birth and how to prevent related problems. The best and most advantage of Antenatal Care is to protect the health of women's and their infants as well as indicating the danger signals that will be occurred and needs to be further treated by advanced health professionals (Effendi, Isaranurug & Chompikul, 2008).

Several studies indicate that the Antenatal Care utilization rate is still low due to many factors that need to be examined such as sociodemographic factors, knowledge of social support. They conclude that eliminating such factors is important to increase women's participation in Antenatal Care. In Ethiopia, although, access to health care services is improving, the country has faced challenges in increasing health care utilization and the proportion of women who give birth with the assistance of skilled attendants is the lowest in Sub-Saharan Africa (Regassa, 2011).

Proper ANC is one of the important ways in reducing maternal and child morbidity and mortality. Unfortunately, many women in developing countries do not receive such care (Ye et al., 2010). Understanding maternal knowledge and practices of the community regarding care during pregnancy and delivery are very necessary and important. Since data on this very important issue are scarce in some communities, therefore, this study was carried out to evaluate the effect of ANC among women of Ago-Iwoye.

Statement of the Problem

Every minute, at least one woman dies from complications related to pregnancy or childbirth that means 529,000 women a year. In addition, for

every woman who dies in childbirth, around 20 more suffer injury, infection or disease approximately 10 million women each year. Studies reveal that the cause of maternal mortality in developing countries is mostly due to poor accessibility to maternal health services poor referral to appropriate antenatal and delivery care units, and inadequacies of available care. These studies suggested that most of the maternal deaths were preventable with improved coverage of antenatal care, safe delivery and postpartum care. There are regional variations in antenatal care utilization rate basically due to differences in the availability of health care facilities, among the regions during 1985–1990, the antenatal coverage rate for the whole of Africa was 60% compared to 99% for developed countries (Ethiopia Demographic and Health Survey, EDHS, 2016).

Based on EDHS 2016 report, in Ethiopia, the maternal mortality rate has been estimated to be 676 per 100,000 live births. This is one of the highest rates in the World. In addition, women's reproductive health problems are a timely and serious matter of concern, for any health professionals, the government as well as society. Antenatal care related problem parameters are very sensitive because it is directly related with maternal morbidity and mortality, and loss of the fetus. It is a necessary component of maternal health to identify complications. According to the 2011 Ethiopia Demographic and Health Survey (DHS), antenatal care coverage of Ethiopia was 43%. Regular Antenatal Care visits can provide some benefits for the women such as a care provider that can result in reducing complications during pregnancy the absence of this activity affects millions of mothers in the rural as well as urban areas. The Nigerian Demographic and Health Survey (NDHS) in 2013, however, stipulated that approximately 576 women per 100,000 live births die as a result of pregnancy and childbirth-related complications. In the same vein, in a study conducted by Fagbamigbe and Idemudia (2015), findings revealed that affordability, availability, and accessibility of ANC providers are the most common problems facing utilization of ANC in Nigeria. Government-owned health institutions in Nigeria are not being effective in encouraging women to attend antenatal care (Nwosu, Urama & Chigozie, 2012).

Many women from different studies have mentioned that women are embarrassed when visiting an ANC. With improved knowledge about the benefits of ANC and the importance of a positive attitude toward it, these women will come to understand that ANC's medical procedures and interventions will do much to save their lives and improve their children's health. In this way, they will be motivated enough to overcome their reluc-

tance. In many ways, changing attitudes and behavior are the most challenging tasks, but are also the least costly. Proper educational campaigns and the improved dissemination of information are investments for the long-term (Igbokwe, 2012). Most previous studies done on knowledge and attitude of women toward ANC were community-based done on general women of child-bearing age. Until now little has been known about the knowledge and attitude of women who are currently using ANC services. Therefore, this study will help to the percentage of women who benefit from this very important service of women's health and have a good attitude about antenatal care services. This study examines the extent to which pregnant women utilize the services of orthodox medicine both for care and delivery. Hence, this study was set out to assess knowledge, attitudes and the level and reasons of the utilization of antenatal care clinics by pregnant women regarding its benefits in Ago-Iwoye.

Objectives

- i. To identify pregnant women's knowledge about antenatal care utilization in Ago-Iwoye.
- ii. To assess pregnant women's attitude towards the use of antenatal care in Ago-Iwoye.
- iii. To determine the demographic, social and cultural factors that may contribute to the associated knowledge and attitude of pregnant women on antenatal care utilization in Ago-Iwoye.

Significance of the study

This study is significant and worthy of investigation to provide corresponding research into the impact of antenatal care on pregnant women in Ago-Iwoye, Nigeria.

The significance of this study will be helpful to pregnant women in various endeavors in an integrated and enthusiastic approach in tackling problems and challenges inherent in the conception period. However, it will contribute to academic knowledge in availing researchers to have a broad insight into the consequences of having sound antenatal care. However, the significance of this research study will also be a source of empirical framework for future researchers into this concept. This study

is intended to extract the knowledge and attitude of pregnant women on the benefits of ANC utilization during antenatal visits. The findings of this study in Ago-Iwoye will serve as a reference for giving intervention accordingly by the health care providers and others who are concerned; for conducting further researches; the findings of this study will have special importance for health care providers because it will serve as a baseline for filling gaps of the actual practices on antenatal care. The findings with relevant recommendations will be also submitted to the health care centers involved in the study for the implementation of the researchers' recommendation.

Literature Review

Knowledge of Women towards Antenatal Care

Health knowledge is considered to be one of the key factors that enable women to be aware of their rights and health status to seek appropriate health services. Studies conducted in different parts of the world have discovered that level of knowledge of mothers toward ANC is important for utilizing ANC service: The level of knowledge of pregnant mothers also varies in different parts of the world (Carroli, Rooney and Villar, 2014).

An institutional-based cross-sectional study conducted in north-central Nigeria to investigate knowledge and utilization of ANC service has revealed that 87.7% of women of childbearing age were aware of the benefits of antenatal care out of which 25.9% had fair knowledge about the activities carried out during the antenatal care services, 69.9% had good knowledge while only 4.2% had poor knowledge (Igbokwe, 2012).

Similarly, a study that was conducted in Tunisia to investigate mothers' knowledge about preventive care indicated that 95% of women knew the importance of antenatal examination (Ojo, 2014). Different to these findings a cross-sectional study conducted using two-stage cluster sampling at 24 selected villages in the Kham District, Nagoya, Japan found that most of the respondents 73.9%, lacked sufficient knowledge towards ANC (Maputle et al., 2017).

In another cross-sectional study conducted in Metekel zone, North West Ethiopia, 65.6% of women interviewed knew at least half of the knowledge questions on ANC and so labeled as knowledgeable (Tur, 2009).

Determinants of Knowledge of Women towards Antenatal Care

Different factors can influence the knowledge of the women towards ANC service. A study done on knowledge and practice of antenatal care in an urban area of India revealed that the primipara had more knowledge than the multipara although it was not statistically significant. This study also revealed that women having adequate knowledge of ANC were found to be statistically associated with their educational status, religion, age at marriage and house ownership. With an increase in the educational status, the adequacy of knowledge also increased correspondingly (Carroli, Rooney & Villar, 2014).

ANC Knowledge and its Utilization

In the study done in Metekel Zone, Northwest Ethiopia, among the socio-demographic factors; being in an urban residence, possessing radio and educational status of secondary school and above were more than 4 times, two times, and three times more likely to be knowledgeable about ANC (Tur, 2012). It could be in the realization that knowledge of pregnant mothers is a major factor in determining the extent of utilization of antenatal services. Reports from different parts of the world have indicated that the educational level of pregnant mothers toward ANC care service influences its utilization. A study done in the Copper belt Province of Zambia to identify factors associated with late antenatal care attendance in selected rural and urban communities found that inadequate knowledge about ANC resulted in 2.2 times high odds for late ANC attendance than women who had adequate knowledge in the urban district. The perception of no benefits derived from the commencement of ANC early was associated with a 4 times likelihood of late attendance in the urban district (Carroli, Rooney & Villar, 2014).

Attitude of Women towards Antenatal Care

“Attitude” is a state of readiness or tendency to respond in a certain manner when confronted with certain stimuli, is mostly dormant and is expressed in speech or behavior only when the object or situation is encountered (Banda, Michelo & Hazemba, 2012). It is a person’s affective feelings of like and dislike. So in this study, attitude refers to the expectant mother’s affective feelings of like and dislike to antenatal services. Thus, the pregnant women’s personal experience with antenatal services can be positive or negative. A Pakistan community-based survey on the provision and utilization of routine antenatal care has described that attitude towards ANC at government health facilities was mostly negative. In another cross-section

study conducted using two-stage cluster sampling at 24 selected villages in the Kham District of Xiengkhouang Province, Nagoya, Japan, 61.9% of study participants had harbored a negative attitude towards the ANC.

Previous studies in rural areas of the developing world have shown an association of specific attitudes with the utilization of and access to health services. The attitude towards ANC at government health facilities was significantly associated negatively with ANC and shows low utilization of ANC. Studies have reported negative attitudes as a major barrier to ANC utilization (Effendi, Isaranurug & Chompikul, 2008). Based on the Kham District of Xiengkhouang Province, Nagoya, Japan women who had a positive attitude were 3 times more likely to receive ANC services than those who had a negative attitude. Other studies in Indonesia have also reported a similar finding in which respondent's attitude was a critical factor in encouraging pregnant women to receive ANC service. The level of education has a significant influence on the attitude of pregnant women to antenatal services. Pregnant women with basic education usually manifest a positive attitude. Pregnant mothers with secondary and tertiary education qualifications had a positive attitude to antenatal services while the attitude to antenatal services by pregnant women with no formal education and primary education showed negative (Alam et al., 2016).

According to the study conducted in Nigeria attitude of pregnant women towards antenatal services was positive. It reveals the attitude of pregnant women with secondary school and tertiary education was positive while pregnant women with no formal education and primary educations were negative respectively.

Generally, different studies in different countries showed that there were similarities and differences in pregnant women's knowledge and attitude on the benefits of antenatal care. The study conducted in the same area found good knowledge and attitude, and other findings were the opposite. Therefore, this review helps to compare the finding of this study.

Theoretical Framework

Max Weber Action Theory

Max Weber conceived sociology as a comprehensive science of social action. His primary focus was on the subjective meanings that human actors attach to their actions in their mutual orientations within specific socio-historical contexts. Coser says, "In his analytical focus on individual

human actors he differed from many of his predecessors whose sociology was conceived in socio-cultural terms”.

Max Weber began with the idea of social action to make sociology a scientific inquiry. Thus, the idea of action is central to Max Weber’s sociology. For Weber, the combined qualities of “action” and “meaning” were the central facts for sociology’s scientific analysis.

Weber defined sociology is, “the interpretative understanding of social action in order thereby to arrive at a causal explanation of its courses and effects.” Action in Weber’s analysis is all human behavior to which an actor attaches subjective meaning. According to Weber “Action is social, in so far as the subjective meaning attached to it by the acting individual it takes account of the behavior of others and thereby oriented in its course.”

Weber was particularly interested in how social action is often conceptualized by social actors in terms of means-ends chains. For instance, a large bureaucratic organization will organize the activity of social individuals by assigning each worker a particular role in a hierarchy.

The responsibilities associated with this role are rules, or norms, that serve as means to the ends served by the bureaucracy. These norms serve to make organized social action possible; that is they routinize and formalize social interaction among individuals who, for whatever reason are committed to serving the organization.

Application to this study

The primary task of sociology is the study of social action. Sociology studies the different aspects of human behaviour particularly the meaning, purpose and value of human behaviour. Max Weber observes that social action is that action of an individual which is somehow influenced by the action and behaviour of other individuals and by which it is modified and its direction is determined.

Methodology

The study was conducted in Ago-Iwoye, Ogun State, Nigeria. Ago-Iwoye is a town located in Ijebu North Local Government Area of Ogun State, Nigeria. It is the most populous town in the local government area because of the state university (Olabisi Onabanjo University) which is resident there. The population of this study consisted of the entire pregnant women in Ago-Iwoye. A sample of 89 pregnant women was purposively selected as

the subject for this study. This was done through snowballing. The snowballing helps to get a referral of pregnant women based on the antenatal appointments they have at the local health centers in Ago-Iwoye. Data was sourced from primary and secondary sources. Primary data were gathered through the use of questionnaire while secondary data were gathered through journals, textbooks, periodicals, symposia and seminal papers. Data were analyzed using SPSS.

Data Analysis, Interpretation and Discussion

Data Analysis of Respondents Bio-Data

From table 1 below, data shows the age range distribution of the respondents and it is evident that 16 respondents who are 17.98% were between 16–20 years of age. 18 (20.22%) respondents were between the ages of 21 and 25 years 22 (24.72%) respondents were between the ages of 26–30 years old while the remaining 33 respondents (37.08%) were above 30 years old. The results again showed that majority of the 59.55% of the respondents were females while 40.44% were males. These implied that the study area was dominated by females. It can be inferred from the table that 12 respondents (18.48%) were primary school certificate holders. 39 respondents (43.82%) were SSSCE holders, 30 respondents (33.71%) were graduates from various tertiary institutions while the remaining 8 respondents (8.99%) had no formal education and dropped out from the primary schools. It can be inferred also that all the respondents either belonged to the Christianity religion or Islam while none of the respondents in this study was a traditionalist. The table reveals that 66 respondents (74.16%) were Christians while the remaining 23 respondents (25.85%) were Muslims. The table also shows that 24 respondents (26.97%) were traders. 9 respondents (10.11%) were civil servants, 21 respondents (23.60%) were self-employed. 19 (10.11%) of the respondents were artisans, 8 of the respondents (8.99%) were students while the remaining 8 respondents (8.99%) filled housewives. The table reveals that 26 respondents (29.2 1%) were attending the antenatal clinic with their first pregnancy; 23 respondents were there with their second pregnancy while the remaining 40 respondents (44.94%) were thereafter their second or more delivery. Finally, the table reveals that 12 respondents (13.48%) claimed that they had—their last delivery at home were 64 respondents (71.91%) had their last delivery at the hospital while the remaining 13 respondents (14.61%) had their last delivery at traditional midwifery.

Table 1. Socio-Demographic Characteristics of the respondents

Gender	Freq.	%	Age	Freq.	%	Employment Status	Freq.	%
Male	36	40.4	16-20 years	16	17.9	Trader	24	26.9
Female	53	59.5	21-25 years	18	20.2	Civil servant	9	10.1
Total	89	100	26-30 years	22	24.7	Self-employed	21	23.6
Religion	Freq.	%	Above 30 years	33	37.1	Artisan	19	10.1
Christians	66	74.2	Total	89	100	Student	8	8.9
Muslims	23	25.9	Educational Qualifications	Freq.	%	House wife	8	8.9
Traditionalist	-	5	Primary School	12	13.4	Total	89	100
Total	89	100	SSSCE	39	43.8	Number of Children	Freq.	%
Place of Last Delivery	Freq.	%	Tertiary	30	33.7	First pregnancy	26	29.2
House	12	13.4	Others	8	8.9	Less than 2 children	23	25.8
Hospital	64	71.9	Total	89	100	More than 2 children	40	44.9
Traditional Midwife	13	14.6				Total	89	100
Total	89	100						

Survey (2019)

Presentation of Data: Section B

The data collected in this section were analyzed using the descriptive statistics of (Mean) and inferential statistics of (z-test). The mean was used to analyze data relating to the research questions. The interpretation of each item of the questionnaire was determined based on the mean of the item relative to the real limits of numbers shown below:

Responses	Rating Scale	Limits of Numbers
High	4	3.50-4.49
Low	3	2.50-3.49

Survey (2019)

Any item with a mean score from 2.50–3.49 suggests “low” and any item with a mean score from 3.50–4.49 suggests “good”. The z-test was the statistical tool used in testing two of the research questions.

Knowledge of Pregnant Women on Antenatal Care

Table 2 shows the pregnant women’s responses to the question on knowledge regarding antenatal care. There were 12 items in the questionnaire on knowledge. Out of 12 items to determine the mean ratings of the respondents on the knowledge of utilization of antenatal clinic by pregnant women, one (1) item, was rated ‘low’. The item rated low was: Can emotional disturbance affect fetal growth? (3.43). All the remaining 11 items were rated ‘high’.

In all, the total mean was 3.65, which is rated high, this suggests that there is a piece of significant knowledge about antenatal care utilization of pregnant women in Ago-Iwoye.

Since the total mean of the knowledge score of the respondents was 3.65. The knowledge score was further divided into two levels which are good knowledge and poor knowledge using the total mean knowledge score as the cutoff point. The proportion of respondents with good knowledge was 22.72 (51.85).

Table 2. Knowledge of Pregnant Women on Antenatal Care

Knowledge on Antenatal Care	Mean	Remarks
Do pregnant women need to go for an antenatal check-up?	3.92	High
If yes is it required to go for ANC even if there is no complication during pregnancy	3.67	High
Should the first antenatal check-up be one in the first 3 months?	3.87	High
Does a pregnant woman need a vitamin supplement and iron and folic acid tablet during pregnancy?	3.54	High
Does a pregnant woman need to take extra food compared to a non-pregnant state?	3.52	High
Blood screening for HIV infection and hemoglobin level	3.59	High
Blood pressure and Blood sugar level examination?	3.55	High
Can high blood pressure affect the fetus growth?	3.66	High
Is ultrasound scan safe for the fetus?	3.73	High
Is antenatal class good to prepare expecting mothers mentally?	3.54	High
Can emotional disturbance affect fetal growth?	3.43	Low
Where is the ideal place a pregnant woman should deliver her baby?	3.87	High
Total mean	3.65	

Survey (2019)

Attitude towards Ante Natal Care among Pregnant Women

There were 10 statements to measure the attitude level of the respondents. Table 3 shows the pregnant women's responses to the items on their attitude towards antenatal care. Out of 10 items to determine the mean ratings of the respondents on the attitude of the utilization of antenatal clinic by pregnant women, all of the items on the questionnaire were rated 'high'.

In all, the total mean was 3.80, which is rated high, this suggests that there is a significant attitude of the pregnant women towards the utilization of antenatal care clinic in Ago-Iwoye. Since the total mean score on the attitude of the respondents was 3.80. The attitude score was further divided into two levels which are a good attitude and a poor attitude using the total mean attitude score as the cutoff point. For the individual questions, it was noted that there was a good response to the statement on going for an antenatal checkup when pregnant where the mean rating was 3.98. However, the proportion of respondents with a good attitude was 19.48 (51.30).

Table 3. Attitude of Pregnant Women towards Ante-Natal Care

Items	Mean	Remarks
Early antenatal booking is good for my pregnancy	3.85	High
I will go for antenatal booking before the third month of my pregnancy	3.69	High
Do you believe that vitamin supplement is good for the fetus?	3.68	High
I believe alcohol drinking will affect fetal growth	3.88	High
Do you go for an antenatal checkup when pregnant	3.98	High
Antenatal follow up is good to monitor the mother's and fetus' health	3.88	High
Will you allow the doctor to check your blood pressure and blood sugar level?	3.77	High
Do you plan to deliver in the hospital if you are pregnant again?	3.89	High
Would you do early preparation for the delivery	3.75	High
Are you ready to face any pregnancy and delivery complication	3.69	High
Total mean	3.80	

Survey (2019)

Factors Associated with Knowledge and Attitude of Pregnant Women

There were 15 statements to identify factors that are associated with the knowledge and attitude of the women who visited selected health centers for antenatal care. Table 4 presents responses of pregnant women to the items on these factors. Out of 15 items to determine the mean ratings of the respondents on these factors 13 items were rated low. The items that were rated high were: 'I don't like to visit the antenatal clinic because of the long waiting time' (3.55) and 'Did you took it as a normal thing to do to start antenatal' (3.77) all the remaining items were rated 'low'.

In all, the total mean was 2.90, which is rated low, this suggests that there are significant factors responsible for the knowledge and attitude of pregnant women on antenatal care use in Ago-Iwoye.

Table 4. Factors Associated with Knowledge and Attitude of Pregnant Women

Items	Mean	Remarks
I wait to get permission before visiting an antenatal clinic	3.34	Low
I am reluctant to visit the antenatal clinic because of long-distance	3.04	Low
I don't like to visit the antenatal clinic because I perceived it as showing off the pregnancy	3.02	Low

I don't like to visit the antenatal clinic because I fear that witches may terminate the pregnancy	2.21	Low
Were you forced to visit the antenatal clinic	2.12	Low
Do you have to visit the antenatal clinic because you coincidentally conceived	2.04	Low
Did you took it as a normal thing to do to start antenatal	3.77	High
I have the perception of being at high risk when I visit the antennal clinic	2.87	Low
I don't feel like visiting the antenatal clinic because there may be no midwife	3.11	Low
I don't like to visit the antenatal clinic because I am not satisfied with the services	3.05	Low
I don't like to visit the antenatal clinic because of the bad attitude of the health workers	3.11	Low
I don't like to visit the antenatal clinic because of the long waiting time	3.55	High
I cannot visit the antenatal clinic because of paying for ANC services	3.23	Low
Are you shy or embarrassed to visit the antenatal clinic	2.04	Low
Total mean	2.90	

Survey (2019)

Discussion of findings

Out of 100 proposed sample sizes for this study, a total of 89 pregnant women agreed to participate in this study making the response rate 89. The mean age for the study subject was 25.92 with the majority of them being greater than 25 years of age. The majority (72) were currently living with their partners and had an educational status of greater than senior secondary school education (77) grade. The largest number of the respondents 72 (80.90) were housewives. Sixty-six (74.16) of the women were Christians.

The present study has demonstrated that the majority of the participating women know the importance of ANC services, almost all respondents indicate they know the existence and importance of ANC. It would be expected that knowledge of the role played by ANC would have brought positive results in terms of the utilization of the ANC services (Nisar & White, 2014).

In this study education level did affect utilization of ANC, Regassa (2011) demonstrated that low utilization of ANC is associated with low ed-

education. The lack of effect of education on utilization of ANC In this study may be due to high levels of low education among the participating women making it hard to show a difference. Moreover, Ye et al. (2010) argue that education assists in adequate utilization of ANC services.

However, education has no direct influence on the utilization of ANC as argued as utilization may be determined by several factors. The study has established that marital status had no influence on service utilization in antenatal services. This finding differs from Au et al. that unmarried status influenced less uptake of antenatal care services.

The same factors were used to identify factors that are associated with the knowledge and attitude of the women who visited selected health centers for ANC checkups. Some studies claimed that the educational status, partner support and health facility visit for ANC during the most recent pregnancy were found to be associated with the attitude of the women.

Conclusion

In conclusion, the results of this study confirmed that the utilization rate of ANC services was high in Ago-Iwoye area of Ogun State, Nigeria. The main factors influencing the utilization of ANC are the respondent's level of education, knowledge, and attitude. In addition, low income, long-distance, insufficient or expensive transportation services are major obstacles to ANC access for pregnant women.

Recommendations

It is recommended that health education programs should be undertaken by communities to improve women's awareness of ANC and that the Ministry of Health should provide ANC services such as mobile health care and home care visits for remote villages or those difficult to reach. At the same time, ANC services should be affordable, especially for poor pregnant women.

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