

Factors Influencing the use of Antenatal Care Service among Pregnant women in Nasarawa Local Government Area, Kano State, Nigeria

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Abstract

Background: Utilization of antenatal care in Nigeria remains a big health challenge. Aim of the study was to find out the factors influencing the use of antenatal care service among pregnant women.

Methods: Cross-sectional study was carried out during the period of 10th February to 31st March 2021. Total of 143 pregnant women were attended antenatal clinic in Sir Muhammadu Sunusi Specialist Hospital Kano State Nigeria and sample of 104 pregnant women was chosen by using Krejcie and Morgan table.

Results: More than 58 (55.8%) of the respondents didn't attend antenatal care clinic regularly during their pregnancy period. Only 28 (26.9%) of the respondents completed 4 antenatal care visits because 33 (11.5%) of respondents said that distance was main reason to reach clinic on time. One third 34 (32.7%) of the respondents had complications during pregnancy because of lack of sufficient antenatal visit during pregnancy period.

Conclusion: Poor women may not have the financial assets required to either get registered at antenatal clinics or pay for the services rendered during the pregnancy period. Place of residence was another factor which influences the utilization of antenatal care. This may lead to women where they would partially attend the antenatal clinics.

Keywords: Antenatal care, Culture & customs, distance, pregnancy, Utilization

Introduction

Countries in Sub-Saharan Africa (SSA) and Southern Asia covers approximately 86% (254000) of the estimated global maternal deaths in 2017, with sub-Saharan Africa alone accounting for roughly 66% (196000), and Southern Asia accounted for nearly 20% (58000).^[1] Although by 2015, maternal mortality had

decreased by over 40% from the 1990 levels, maternal death rate continued to remain unacceptably high in SSA.^[2] Not accessing quality antenatal care (ANC) leads substantially to these preventable maternal deaths.^[3,4]

Women in Nigeria who do not have complete antenatal care has increased risk of experiencing a

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neonatal and maternal death, Lack of antenatal care is associated with a 40% increase in the risk. Women with irregular antenatal care attendance are much more prone to pregnancy complications such as, eclampsia and anemia besides higher adverse birth outcomes including preterm birth, low birth weight and still birth. Poor access to antenatal care services during pregnancy leads to poor pregnancy outcomes like preterm births.^[5]

Pre-term deliveries remain a significant perinatal challenge, with pre-term babies accounting for 5-25% of all deliveries and up to 75% of all perinatal mortality in some series.^[6,7,8] While only 0.87% of all live births occur at a gestational age less than 31 weeks, births below this gestational age are responsible for 84% of the neonatal mortalities among infants of all gestational ages in the developed world.^[9] In Nigeria, pre-term babies account for 40-60% of all perinatal deaths.^[10,11,12]

The factors that influence the initiation or attendance of antenatal care include lack of transport that will convey the pregnant woman to the health center, distance, religious, employment status, difficulties in preparation of children most especially those multi para, and inconvenient clinic hours. Psychosocial factors include whether the pregnancy was planned, the woman's reaction to the pregnancy, a delayed diagnosis of pregnancy, and in availability of social support.^[13] Many factors also serve as a barrier to access antenatal care during pregnancy which include Woman education, Culture, Parity, Maternal age, Inability to afford cost of antenatal care, Family refused, Lack of awareness about the important of antenatal care, Distance and transport problem, Time consuming during antenatal care, Lack of family support.^[14] Aim of the present study was to find out the factors influencing the use of antenatal care service among pregnant women in Sir Muhammadu Sunusi Specialist Hospital Kano State Nigeria

Methodology

A cross sectional study was conducted in Sir Muhammadu Sunusi Specialist Hospital Kano State Nigeria. The study was conducted during the period of 10th of February to the 31st March 2021. There were 143 pregnant women attended antenatal clinic at Sir Muhammadu Sunusi Specialist Hospital during

these periods. Total of 104 pregnant women were selected for the research study by using the Krejcie and Morgan table. Data analysis was carried out by using SPSS 22. Categorical variables were presented as frequencies and percentages.

Formula for determining sample size^[15]

$$S = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-p)}$$

S = required sample size

X² = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size

P = the population proportion (assumed to be .05 since this would provide the maximum sample size)

D = the degree of accuracy expressed as a proportion (.05).

Limitation of the study: The study was restricted to a small Hospital, so the result was valid only for the specific area and situation. Limited resources were the major constraint in research as it was self-financed study.

Results

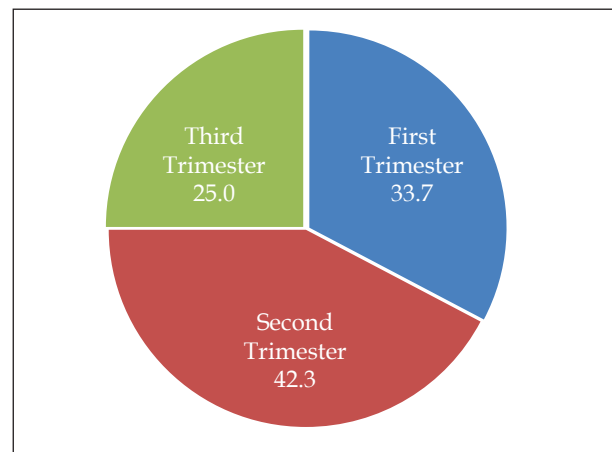


Figure 1: Percentage distribution of First Antenatal visit of Pregnant women

[Figure 1] shows the percentage distribution of first-time antenatal visit of pregnant women. Result indicates that one third of the women 34 (33.7%) visited antenatal care clinic in the first trimester itself and 44 (42.3%) of the women visited in second trimester and 26 (25.0%) of pregnant women visited only in the third trimester for the first-time antenatal care.

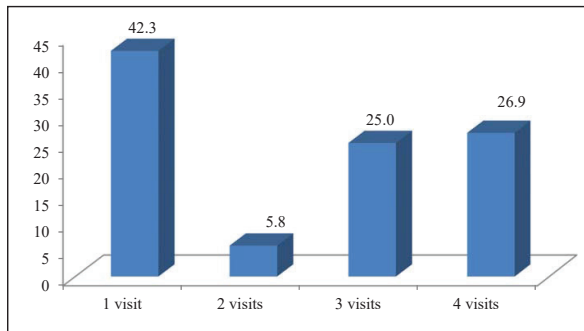


Figure 2: Number of antenatal care visits of pregnant women (N=104)

From the [Figure 2] it is seen that 44 (42.3%) of the women had visited only one time in antenatal clinic during their entire pregnancy period and 26 (25.0%) of the women completed 3 visits for antenatal care during their pregnancy. Only 28 (26.9%) of the women completed 4 visits for antenatal care visit during their pregnancy which was recommended by World Health Organization. It concludes that there was some lacuna in visiting antenatal care service among pregnant women that must be completed by providing accessibility and availability of healthcare institute especially for pregnant women.

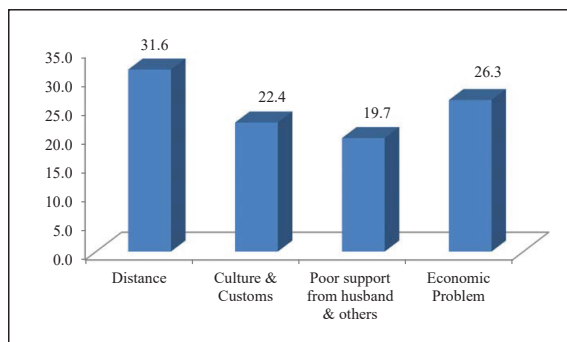


Figure 3. Reasons for not visiting minimum antenatal care service centre (N=76)

[Figure 3] shows the reasons for not visiting minimum antenatal care service during their pregnancy period. Result indicates that utilization of health care centre with respect to distance was one of the major problems in the study area. Results reveals that 24 (31.6%) of the women didn't attend antenatal clinic regularly because antenatal clinic was far from their place of living. Another reason was that economic status of family. In this study also shows that 20 (26.3%) of women didn't visit because lack of money and followed by culture & customs and poor support from husband & family members 17 (22.4%) and 15 (19.7%) respectively. It concludes that culture

& customs and family support has a major role in making pregnant women to visit the antenatal care clinic regularly.

Table 1: Distance between the place of living of pregnant women and antenatal clinic

Distance in Kilo Meter	Frequency	Percentage
0-10	10	(9.7)
11 -20	52	(50.0)
21 -30	30	(28.8)
31 and above	12	(11.5)
Total	104	(100.0)

[Table 1] indicates the distance between place of living of pregnant women and antenatal clinic. Result shows that 52 (50.0%) of the women were living 11-20 KM far from antenatal clinic and 12 (11.5%) of the women were living 30 KM far from antenatal clinic. It can conclude that adequate infrastructure facility of healthcare services was very less in the study area as a result women either postpone or reluctant to visit antenatal care.

Discussion

This study assessed factors affecting mothers in attending a recommended number of ANC services visits in the study area. Study showed that timing of first ANC visit did seem to be influenced by distance to the closest ANC facility. Present study shows that 33.7% of women attended in the first trimester of pregnancy. Attendance in the first trimester of pregnancy, also a long time period, is clearly not determined by geographic access, but likely by other factors, for instance cultural issues around making the pregnancy publicly known can play a role^[16]

The present study shown that 28 (26.9%) of the women had utilized antenatal care (completed 4 visits minimum) during their pregnancy which recommended by World Health Organization while the remaining 73.1% of the women occasionally attended the focused antenatal care. There were many factors for not visiting minimum antenatal care service during their pregnancy period. Result reveals that 15 (19.7%) of the women didn't attend antenatal clinic regularly because poor support from husband & family members. With respect to getting consent from family members and husband in order to use antenatal care service, women who claimed that they did not experience any problem getting permission are more likely to utilize antenatal care adequately

than women who experienced problems in that regard.^[17,18] This is an aspect where decision to utilize health service by women is hinged on the consent of their husbands or family members. If family members do not see any need for pregnant women to attend antenatal care, it becomes a problem for such women to access health service centre.

Culture and customs with respect to visit health facility alone is another factor determining adequate antenatal care utilization. In this study also shows that 20 (26.3%) didn't visit because of culture & customs 17 (22.4%). In some cases, women may not be willing to visit health facility without being accompanied by either their husbands or close relatives based on their beliefs or conviction.^[19] Women who reluctance because of their culture & customs to visit healthcare facility alone is not their problem are more likely to utilize antenatal care adequately than women who claimed that it is their problem. This implies that the more the number of women who consider not visiting health facility alone, the less the proportions of women that would adequately utilize antenatal care. Place of residence is another factor which influences antenatal care utilization.^[20-22] Accessibility to knowledge on health matters is a significant component of maternal and child health. When women are equipped with adequate knowledge on antenatal, natal, and post-natal services, it tends to increase their utilization of such services during their pregnancy period, delivery and post-natal period and also finding conducted in Magadi in Kenya^[23] which demonstrated that an increase in distance to the nearest healthcare facilities was associated with fewer antenatal visits.

Present study shows that 20 (26.3%) didn't visit antenatal clinic because lack of money. Poverty at household level may constitute a great barrier to accessing maternal health services. Women from poor households may not have the financial resources needed to either get registered at clinics or pay for the services rendered during the prenatal period. This may lead to a situation where such women would partially attend the clinics or not attend at all. The wealth index was strongly and negatively associated with the utilization of ANC services in rural Ethiopia. This study showed that women in middle and richer economic status were more likely to attend ANC service than those of poorer women. It is in line with several studies in different countries.^[24]

Similarly, a study from China found that women who had higher household incomes were more likely to have sufficiently utilized ANC services (AOR = 1.631, CI = 1.0-2.5).^[25]

Conclusion

Health-seeking behaviour of women has an important influence on health problems experienced during pregnancy. Therefore, attention should be given to improve the health seeking behaviour of women by health workers and other concerned members. But antenatal care coverage alone cannot reduce the incidence of health problems during pregnancy period. Further research must be needed to well understand the factors influencing antenatal care-seeking in the first trimester itself of pregnancy. As a result, this might be helping to identify the client behavior. Finding a Quality-Gap is always good rather than to find out Coverage-Gap with respect to antenatal care service. It can be helpful to execute application research while improving quality of care at health facilities to meet operational knowledge on how this is best done, and thus help to close the Quality-Gap. Afterall, it is essential to study the impact of accessibility and level of service requirement during antenatal period of women in the study area.

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Ethical Clearance

The study entitled "Factors influencing the use of antenatal care service among pregnant women in Nasarawa Local Government Area, Kano State, Nigeria" was approved by the Institutional Ethics Committee of P.P. Savani University, Surat.

Conflict of Interest: Nil

Source of Funding: Nil

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