

# PERCEPTION OF RURAL PREGNANT WOMEN ON THE SOCIAL DETERMINANTS INFLUENCING ANTENATAL CARE SERVICE UTILIZATION IN NORTH WEST, OF NIGERIA

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## Abstract

*This study assessed the perception of rural pregnant women on the social determinants influencing (Education and income) on antenatal care services utilization in Northwest, Nigeria. Two research questions were raised to guide the study. The study used a descriptive survey research design. The population comprised 2,138 pregnant women from which a sample of 215 respondents were sampled through simple random technique. The instrument was valid and reliable with a Cronbach Alpha reliability index of 0.844. Descriptive statistics of frequencies, percentages, means and standard deviations were used to describe the demographic characteristics of the respondents and to answer the research questions respectively. Inferential statistics of Pearson product moment correlation coefficient was used to test the formulated hypothesis at 0.05 level of significance. The findings of the study revealed that, there was a significant influence of level of education on antenatal care service utilization among rural pregnant women in northwest, Nigeria and there was a significant influence of level of income on antenatal care service utilization among rural pregnant women in northwest, Nigeria.*

**Keywords:** Antenatal, Social determinants, pregnant women, North-west

## Introduction

Maternal well-being means making sure that all women receive the care they require to be safe and healthy throughout pregnancy and childbirth. A woman's health is a critical area that reflects to national health standards and basic to women's advancement. Antenatal care (ANC) is defined as occurring before birth, prenatal or diagnostic procedures or examination during pregnancy (American Heritage Dictionary, 2017). Pre-natal care is a type of preventive health care with the goal of providing regular check-ups that allow doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy while promoting healthy lifestyles and benefits for both mother and children. In addition, ANC provides women and their families with appropriate information and advices for a health pregnancy, safe birth, and postnatal recovery, including care of newborn,

promotion of early exclusive breastfeeding and assistance with deciding on future pregnancies in order to improve pregnancy outcomes.

Antenatal care has long been considered a basic component of any reproductive health care programme. Different types of antenatal care models have also been put into practice all over the world. For instance most developed countries use prenatal care which is based on larger number of visits between 8-10 visits which include starting antenatal care as early as conception takes place to monthly visits up to 28 weeks which is followed by weekly up to 36 weeks till delivery. According to Tukur and Oche (2015), pregnant women in these high income countries receive adequate antenatal care which includes frequent tests and ultra sound examination. The women also give birth under supervision of medically trained personnel and have access to emergency treatment if complications arise. But this is not the case in most developing countries like Nigeria where many of these women who attend antenatal care clinics come only once or twice and sometimes late in pregnancy.

Antenatal care services utilization plays a dual role in the attainment of the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). While it is one of the indicators of the MDGs on improvement of maternal well-being, it also contributes to some of the indicators of MDGs on reduction of child mortality. Health care utilization refers to the use of health care services including antenatal care. People use health care for many reasons including preventing and curing health problems, promoting, maintenance of health and "well-being or obtaining information about their health status and prognosis. Utilization is the measure of the population's use of the health care services available to them. This includes, the utilization of hospital resources, personal care and physical resources. Health care utilization and health status are used to examine how efficiently a health care system produces health in a population. Therefore the need for proper utilization of antenatal care services by women" (WHO, 2014).

Social determinants of health care are the conditions in which people are born, grown, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.

In North West Nigeria, the decision to seek health care is made by either the head of the family or the husband. In situation where these are not available, the woman may need to wait. In the process of waiting, her labour may progress, hence this may lead to late presentation at hospital. It may be very difficult for the woman who is already in advanced labour to timely reach the health center. Reaching the health center in time also depends on availability of resources (money, ambulance, public transport) to aid in taking the woman to the health center. Obstetric complications are not often predictable, and can happen when the family does not have money. There is also the challenge of use of waiting homes. This is because the family cannot be sustained without the women since the role of child care and cooking are always performed by the women (Fawole & Adeoye, 2015).

United Nations International Children's' Emergency Fund (UNICEF), Nigeria 2016). For instance, the percentage of births handled by skilled professionals range

from as high as 81.8% in the South East but as low as 9.8% in the North West. Similarly, 90.1% of women in the North West are more likely to give birth at home compared to 22.5% in the South West (National Demographic Household Survey 2013). In addition, North West is next to North East which has an estimated maternal mortality rate of 1,549 which is more than five times the global average.

Studies have shown that, there is relationship between educational attainment and maternal death. Thaddeus and Maine, (2016) opined that formal educated women are better able to break away from traditions to utilize modern means of safeguarding their own health. This is in accordance with Adamu (2011) study of gender implications for women's survival in South Asia. The researchers found that educated women were better able to utilize health facilities available in the community to their advantage. Mother's education has contributed significantly to increased health facility utilization in previous studies. Furthermore, the Nigeria Demographic and Health Survey 2013 reported that only 10% of deliveries to mothers with no education occurred in health facilities compared to 90% of deliveries to mothers with education (Nigeria Demographic and Health Survey. 2013). This further emphasizes the importance of education in decision making.

Education serves as a proxy for information, cognitive skills, and values: education exerts effect on health-seeking behavior through a number of path ways. These pathways include higher level of health awareness and greater knowledge of available health services among educated women, improved ability of educated women to afford the cost of medical healthcare, and their enhanced level of autonomy that results in improved ability and freedom to make health-related decisions, including choice of maternal services. (Idris, Sambo, & Ibrahim, 2013). Educated mothers are more likely to take advantage of public health-care services than other women, but it may also impart feelings of self-worth and confidence as well as reduce the power differential between service providers and clients, thereby reducing the reluctance to seek care.

National wealth is not a necessary condition for maternal mortality reduction. Likewise, Singh, Pallikadavath, Ram & Alagarajan (2014) revealed that income was not a significant determinant of the antenatal care service utilization. Interestingly, in many developing countries, women are reluctant to seek antenatal care services from the health centers, even when they are provided free of charge. However, it was found that there was a significant association between socioeconomic class and health seeking behaviours. Similarly, in a study of maternal health care in Thailand, Raghupathy, (2010) found the positive impact of income on health service use. Singh *et al.*, (2014), identified that household wealth was associated with antenatal care use. From the above findings, it is very clear that economic status of women is important for the frequency of antenatal care visits.

The cost of antenatal care services, prescription of drugs and transportation determine the affordability of antenatal care services. For instance, Amosu, Degun, Thomas, Olanrewaju, Babalola, Omeonu and Nwogwugwu (2011) found cost to be a critical determinant of health care access in Nigeria. They argued that, this is mostly a

rural concern where a large percentage of the population lives in poverty and have difficulty paying for services. People residing in the rural area pay a large proportion of their income than their urban counterparts. Studies in Nigeria, Swaziland, Ghana, and Uganda showed a decline in use of health services as a result of introduction of user's fees. In Tanzania, there was a 53.4% decline in antenatal care while Nigeria reported a 56% rise in maternal mortality after the introduction of user's fees (Atuyambe, Mirembe, Tumwesigye, Annilca, Kirumira, and Faxelid 2014).

In Nigeria, several studies found that low income people have higher incidences of illnesses but use services less often (Anh, 2013), showed that an increase in the cost of health care especially as it affects the poorer patients who need to make return visit to a health care facility and those who deem their illness not serious enough to seek care affect their return to the health facilities. As women in many developing countries are expected to conform to social and gender roles and remain at home to perform household work, they cannot develop economic independence. As a result, they may be unable to afford services, especially since essential goods such as food and education must be purchased before health care, thus making their access to health care services limited.

Of the 1,820 health facilities distributed within the three tiers of health care delivery systems in Sokoto State alone, maternal mortality ratio was reported as 2,151/100,000 live births while the mean age at dead was 27 years. Experts in 2017 also said mothers who delivered at health facilities are more likely to have positive pregnancy outcome than those delivering at home or elsewhere. However, only 39% of births in Nigeria were delivered at health facility in 2016. Generally, the maternal and child health indicators are poor in Nigeria and more worrisome in northwest Nigeria comprising; Jigawa, Katsina and Sokoto States. The contribution of this to the poor maternal and child health indicators in the state cannot be over emphasized. Furthermore, despite general improvement in antenatal care attendance by pregnant women, majority of them still delivered at home. It was reported that 85% of pregnant women delivered at home in 2018 in Sokoto State (National Population Commission) and a similar situation is observed across North West, Nigeria. This called for an investigation as to why pregnant women are not attending ANC in their communities despite health facilities been spread across the State.

### **Objectives of the Study**

The study assessed the perception of rural pregnant women on the social determinants influencing antenatal care service utilization in North West, of Nigeria. However, the specific objectives were:

1. to investigate the perception of rural pregnant women on education as a social determinant influencing antenatal care services utilization in North West, of Nigeria.
2. to investigate the perception of rural pregnant women on income as a social determinant influencing antenatal care services utilization in North West, of Nigeria.



### Research Questions

In line with the specific objectives, the following research questions were structured:

1. What is the perception of rural pregnant women on education as a social determinant influencing antenatal care services utilization in North West, of Nigeria?
2. What is perception of rural pregnant women on income as a social determinant influencing antenatal care services utilization in North West, of Nigeria?

### Methodology

The study adopted a descriptive research survey design. Descriptive survey research describes behaviours by gathering people's perceptions, opinions, attitudes and beliefs about a current issue for example, antenatal care services. Descriptive research survey, according to Daramola (2006), is the systematic attempt to describe the characteristics of a given population or areas of interest, factually. Probably that is why Sambo (2008), observed that it is a research method which aims at describing, recording, analyzing and interpreting existing conditions that yield valid and reliable education research results.

The population of this study comprised of 6,245 pregnant women in the seven States of North West, Nigeria attending antenatal care services in each senatorial district selected. However, the target population was 2,138 pregnant women from three states namely, Jigawa, Katsina and Sokoto State out of which the sample was randomly selected by balloting. The sample size was 215 rural pregnant women which were selected from the target population of 2138. The instrument for this study consisted of structured close-ended questionnaire which had forty two (42) items under seven (7) sections. These items were based on the objectives and research questions raised for the study and on review of related literature. The questionnaire was designed by the researcher and named "Influence of Socio-culture on Antenatal Care Services (ISCACS)". *The instrument was judged valid and reliable with a Cronbach Alpha reliability index of 0.844.*

### Result

**Research Question One:** What is the perception of rural pregnant women on education as a social determinant influencing antenatal care services utilization in North West, of Nigeria?

**Table 1:** Weighted Mean score on the perception of education as a social determinant influencing antenatal care services utilization in North West Nigeria.

S/N	Item Statements	SA	A	D	SD	N	4	3	2	1	$\Sigma$	$\bar{x}$	Std.	Decision
1	I am not educated, so I do not know about booking for ANC	64	119	32	0	215	256	357	64	0	677	3.2	1.8	Agree
2	I only have primary education which makes it difficult to understand the process of ANC	76	10	76	53	215	304	30	152	53	539	2.5	1.6	Agree
3	I prefer traditional birth attendants because they speak my local language	76	75	54	10	215	304	225	108	10	647	3.0	1.7	Agree
4	I registered late for ANC because that is when I think it is important to do so	54	75	10	76	215	216	225	20	76	537	2.5	1.6	Agree
5	Since I do not always fall sick, I attend ANC only once within a pregnancy period	54	108	31	22	215	316	324	62	22	624	2.9	1.7	Agree
6	I learnt about ANC from my friends when they visited me	32	86	97	0	215	128	258	194	0	580	2.7	1.6	Agree

Decision Rule: 2.5, Source: Field Work, 2019

Table 1 revealed that rural pregnant women in North West Nigeria belong to the group of pregnant women who did not know about ANC booking due to no proper education, with a mean of 3.2. For instance those had primary education scored with a mean of 2.5 and 3.0 for item statements 2 and 3, and 2.9 for preference to traditional birth attendants and not falling sick respectively. Also, the value of standard deviation was not too high from each other. This was an evidence to show that level of education of pregnant women influence their antenatal care services utilization in the study area.

**Research Question Two:** What is perception of rural pregnant women on income as a social determinant influencing antenatal care services utilization in North West, of Nigeria?

**Table 2:** Weighted mean score on perception of income as a social determinant influencing antenatal care services utilization

S/n	Item Statement	SA	A	D	SD	N	4	3	2	1	$\Sigma$	$\bar{x}$	Std	Decision
1	My husband income cannot sufficiently cater for the family	10	108	97	0	215	40	324	194	0	558	2.6	1.6	Agree
2	I do not have a job to earn money to support my Antenatal Care	32	108	75	0	215	128	324	150	0	602	2.8	1.7	Agree
3	My family is large that most of the resources are spent on family needs only	75	43	97	0	215	300	129	194	0	623	2.9	1.7	Agree
4	If Antenatal care is free, I will be able to use it	36	104	75	0	215	144	312	150	0	606	2.8	1.7	Agree
5	High cost of Antenatal care services is a hindrance to my patronage	22	96	75	22	215	88	288	150	22	548	2.5	1.6	Agree

Decision Rule: 2.5, Source: Field Work, 2019

In table 2, results indicated that rural pregnant women's husbands' income was not sufficient to cater for their families as well as their ANC. With a mean score of 2.6, lack of jobs to support ANC with a mean of 2.8 which was higher than the weighted mean of 2.5 the accepted agreement level. It was revealed that if ANC were to be free and no high cost involved, utilization could have been better. Thus, there was evidence to show that level of income had an influence on antenatal care services utilization among rural pregnant women in North West Nigeria, since all the mean values in table 4.3 were greater ( $>$ ) than the agreed 2.5. There was also no much difference in the standard deviation of each variables.

### **Discussion of Findings**

The result from the first table showed that the overall mean value of the finding of the study on research question one indicated 2.8 which is higher than the weighted mean score of 2.5 agreement level. The finding concurred with what was obtained by other researchers like Azuh (2011) who stated that educational attainment of respondents is positively associated to antenatal care services utilization. Also Butawa, Tukur, Idris, Adiri, and Taylor (2011) observed that positive association existed between level of education of respondents and antenatal care services utilization.

While table 2 revealed a mean average of 2.72 is greater than the weighted mean of 2.5. This showed that pregnant women believed that income had positive influence on antenatal care services utilization among rural pregnant women in the area of study. The findings agreed with the results obtained from Ajaegbu (2013) which revealed that money or treatment was the major barrier that hindered women from accessing maternal health care services. In the same vein, Idris, Sambo and Ibrahim (2013), revealed that income influenced antenatal care services in North West Nigeria and that poor income status of women restricted their utilization of antenatal care services which is responsible for high rate of maternal deaths and complications. Also from the result obtained in table which showed that one of the reasons for not been able to utilize antenatal care was high cost with a mean weighted score of 2.5 and another which says that if ANC were to be free with score of 2.8 indicated that income had positive significant influence on the ANC services utilization. This was also in line with Akanbiem, Manuwa, Olumide, Fagbamigbe and Adebawale (2013) revealed that, free health care services for pregnant women were main determinant of utilization of antenatal care.

### **Conclusion**

It is evident from the findings of this study that in the perception of pregnant women in North West, Nigeria social determinants such as level of education and level of income, have influence on antenatal care services utilization among pregnant women in North West Nigeria.

## Recommendations

1. There is need for North west government to intensify efforts on increasing the proportion of educated women by encouraging the enrolment of young girls in school and committing more resources to adult education in order to give illiterate women the opportunity of receiving formal education.
2. The National Health Insurance Scheme (NHIS) should be made easily available to rural pregnant women for them to enjoy a relief from the burden of huge medical bills. This will help to reduce COSO, and ANC will be affordable.

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