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Socio-cultural determinants of antenatal care service utilization in the Kumbungu district of Ghana, a descriptive cross-sectional study

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ABSTRACT

The potential of antenatal care for reducing maternal morbidity and improving newborn survival and health is widely acknowledged. Yet there are worrying gaps in the factors that influence ANC attendance. The study determined the Socio-cultural factors influencing attendance for ANC services and to establish the effects of these factors on the quest to improve maternal and child health and prevent maternal mortality. Data was collected using quantitative and qualitative methodologies. The tools used for data collection included questionnaire and in-depth interviews. Data was collected from ANC clients/ registrants, ANC providers as well as opinion leaders who matter in social and cultural issues. The study established that social and cultural barriers such as beliefs, female literacy, poverty, and age of women, quality of care and myths and misconceptions influenced the timing and utilization of ANC services. The study concluded that low empowerment of women, low educational levels, poor health infrastructure and poor attitude of health staff as well as pregnancy outdooring and other cultural factors determines partly the utilization of ANC service. Therefore intervention measures in place to improve women access and utilization of ANC services mainly address the supply side and ignore the demand side which makes the whole process fail to improve the situation on ground. More friendly and sufficient health care services were therefore recommended to be provided to boost confidence of the community masses on health care and its providers. In addition, appropriate health education that is culturally acceptable and addresses the harmful traditional practices and benefits of safe motherhood should be explored and employed as short term measure. I believe that empowering women may be a more permanent work out on this issue.

Keywords: Pregnancy, Sociocultural, Antenatal, utilization, "Pregnancy Outdooring"

INTRODUCTION

While Ghana's maternal mortality ratio has reduced from 760 in 1990 to 380 in 2013, there remains a substantial amount of effort to reach the Millennium Development Goal 5 target of 185 deaths per 100,000 live births (UN-MMEIG, 2013). Maternal Mortality Rate is the number of maternal deaths during a given time period per 100,000 live births during the same time period (UN-MMEIG, 2014).

A further 3,100 women died from pregnancy related complications in Ghana between January and December 2013 (UN-MMEIG, 2014). Despite the high maternal deaths recorded, Ghana is considered as one of the countries in Sub-Saharan Africa 'making progress' towards the MDG 5 target (UN-MMEIG, 2014).

In less developed countries, available literature suggests direct consequences of pregnancy and childbirth continue to be responsible for most deaths (Ronsmans et al. 2006). The outcomes are mainly as a result of hemorrhage, sepsis and hypertensive complications (UNDP, 2011). These conditions can be as a result of several factors including political, educational, social and cultural factors (Dako-Gyeke et al. 2013).

Where facilities and appropriate interventions are available, it is estimated that about 90% of such maternal deaths can be avoided; especially when 15% of these complications develop unexpectedly and become life threatening (Dako-Gyeke et al. 2013). As a result, women are encouraged to receive continuous maternity care from skilled providers.

In Ghana, even though evidence shows that there has been significant reduction in child (under-5) mortality (111 per 1,000 live births in 2003 to 82 per 1,000 live births in 2011) and maternal mortality (740 per 100,000 live births in 1990 to 350 per 100,000 live births in 2010), MDG 4 and 5 remain the goals that Ghana has underachieved (UNDP, 2014). The situation is worse in some parts of the country, like Northern Ghana, where 71% of women are reported to have delivered at home and 25% at a hospital/clinic (Nyarko et al. 2006; Arthur, 2012).

Previous studies indicate structural factors, including lack of financial or economic resources, transportation, and delivery supplies, lack of coordination and referral between TBAs at the community level and facilities can all inhibit women from using facility-based services (Ronsmans et al. 2006). Some studies show that barriers to access, especially financial ones, rather than traditional beliefs, were the main obstacles to ANC and delivery at health care facilities (Nyarko et al. 2006).

However, other studies indicate client's negative perceptions of healthcare staff, including reports of unfriendliness at delivery also serve as barriers to obtaining skilled care (Nyarko et al. 2006).

Furthermore, researchers emphasize socio-cultural influences on use and non-use of public health facility services including ANC in developing countries (Papen, 2008). This includes extensive evidence provided on how gendered social roles and sex differences lead to inequalities in health-related options and outcomes for both women and men (Papen, 2008Historically, Ghanaian culture emphasizes pregnancy as a potentially dangerous period that requires spiritual protection (Overbosch et al. 2004). Thus, care for pregnant women is multifaceted, involving the medical and also psychosocial, economic and spiritual support. To help address social, cultural and spiritual concerns, the contemporary growth of charismatic and evangelical Christian churches has provided a new avenue for many Ghanaian women to seek protection from the dangers they perceive from the natural and supernatural forces such as witches, wizards, and sorcerers (Gupta et al. 2000).

Also, TBAs are noted to enjoy patronage due to their high sensitivity to sociocultural norms together with a greater ability to incorporate psychosocial care into their services compared to modern health facilities (Mathole et al. 2004).

It is an undeniable fact that the continual deficit in the/ Gaps in the continued use of maternity services from a skilled provider in Ghana is as a result of several factors, both individually and societal driven.

These therefore suggest the need for further investigation into the socio-cultural context of provision and utilization of health care services during pregnancy and delivery. Socio-cultural perceptions, which allow or disallow use of pregnancy-related services including psychosocial, medical, and spiritual support, must be examined.

This study therefore sought to provide an exploratory perspective by focusing on the socio-cultural beliefs, perceptions and knowledge about factors that influence delivery of pregnancy care services and how they affect care seeking behavior among pregnant women.

Insufficient ANC is one of the main determinants of poor maternal and child health outcomes (Shaokang 2002; Overbosch, 2004).

Ghana has a high maternal mortality rate of 350 deaths per 100 000 (UN MNCH, 2014) which is unacceptable according to internationally agreed standards.

Apart from women who die due to pregnancy complications, about 30% of other women will develop short- and long-term disabilities, such as obstetric fistula, a ruptured uterus, or pelvic inflammatory disease (MNPI, 2002). These serious adverse events can be prevented with

provision of adequate and improved services such as quality antenatal care to women in Ghana.

To ensure safe motherhood, there is a need to understand factors which promote pregnant women to have control over the resources and decisions that impact their health and safety (MNPI, 2002). Women of rural Ghana are usually a vulnerable group of people who are at heightened risks of maternal mortality and morbidity due to limited use of maternal health care services and lack of empowerment in making independent decisions.

In the Kumbungu district, traditional sources of delivery by TBA's remains high, as the district annual health report indicates that out of a total delivery figure of 1019 in 2014, 77.95% were delivered by TBA's (KDHD Annual health Report, 2014).

Still births have also increased by nearly 50% from a figure of 25 in 2013 (KDHD Annual health Report, 2014).

Though Antenatal registrants keep increasing marginally year by year, about a half of it is usually delayed and average number of visits is almost 3 (KDHD Annual health Report, 2014).

One of the principal objectives of achieving the primary health care programmes in developing countries including Ghana is to improve reproductive and child health services. There is therefore the need to identify and improve those services that are critical to health of the women and girls. These services include antenatal care, delivery, postnatal care and family planning.

Therefore affordable, available and accessible antenatal care services will enhance and improve utilization. Women in reproductive health in Kumbungu district utilize antenatal care services but the factors that influence the utilization is not known.

A careful study of the trends of Antenatal care services in the Kumbungu District reveals a steady increase in coverage from 77% in 2013 to 86.0% in 2014 (Kumbungu district Annual health report, 2014). With all these successes chucked, there is still the problem of women not making the required four (4) visit coverage of ANC.

It is against this background that the study would be undertaken to best address the question ''which factors influence the utilization of ANC in the Kumbungu District, targeting the socio-cultural ones?''.

The aim of the study was to explore the socio-cultural determinants of antenatal care services utilization among pregnancy women in the Kumbungu district of the northern region of Ghana.

Specifically, the study sought to assess the level of knowledge of women in the Kumbungu district on the importance of antenatal care, to explore the indigenous cultural and social

practices that involves pregnant women and how these factors influence antenatal care utilization in the Kumbungu district and to unearth the current standards and practices of maternal health providers in the district.

MATERIALS AND METHOD

This study which aimed at exploring the socio-cultural determinants of Antenatal care services utilization was carried out in Kumbungu District of Northern Ghana.

The research was a descriptive study with cross-sectional design. The study population comprised of mothers and pregnant women in the reproductive age group (15–49 years) seeking antenatal care services from five (5) health facilities in the Kumbungu District of the Northern region of Ghana. These facilities include Kumbungu health Centre, Kpulinyin CHPS, Dalun Health Center, King's medical center and Voggu CHPS. They were selected purposively based on the how scattered they are from the district capital in other to get a holistic overview of situations in the district.

A published table of sample sizes determined using the Raosoft Inc. software for sample size calculation that takes into account combinations of precision, confidence levels and variability was used to determine sample size. Given that the population of women of child bearing age in the Kumbungu district is 12655 (KDHD, 2014), a precision level of plus or minus ten percent statistical level of confidence of 95%, the study considered a sample of 375 respondents. The respondents were drawn from Voggu, Dalun and Kumbungu sub districts out of the five sub districts in the district.

The study units were pregnant women and women in their reproductive age in general.

The study subjects were pregnant women seeking Antenatal care services for the first time.

The study looked into the way culture and other indigenous practices influence the way these units access Maternal Health services in the district. A total sample size of 400 participants was eventually used for the administration of questionnaires. Another set of questionnaires comprising 31 questions were administered to antenatal care service providers to elicit information on their roles in influencing antenatal care services utilization. As stated earlier, the sample size of 373 was determined using the Raosoft Inc. software for sample size calculation. But this was increased to 400 to take care of error, non-response and other eventualities.

The Raosoft Inc – Sample size calculator (Appendix 1) is software that aids in the determination of sample size for surveys / data collection.

It calculates and shows the sample size after you have inputted the required figures including the margin of error, confidence level, population size etc.

Purposive Sampling was used to select five (5) health facilities namely Kumbungu health centre, Kpulinyin CHPS, Gbullung Clinic, Gizaa CHPS and Voggu CHPS out of the ten (10) health facilities in the district based on the availability of maternal reproductive and child health services. Based on convenience, questionnaires were administered to 80 clients seeking Antenatal care services from each of the five (5) health facilities selected. This was used to elicit socio-demographic data, knowledge of respondents on ANC, Socio-cultural factors influencing ANC and other relevant information from participants.

In terms of the numbers you selected in determining the sample size the percentage of error associated with the population, these are given by;

$$X = Z(^c/_{100})^2 r(100\text{-}r)$$

$$N = {}^{Nx}/_{((N\text{-}1)E^2 + x)}$$

$$E = \text{Sqrt } [^{(N\text{-}n)x}/_{n(N\text{-}1)}]$$

where N is the population size, r is the fraction of responses that you are interested in, and $Z(c/100)$ is the critical value for the confidence level c.

The recruitment period for the study was from the second week of March to the end of April 2015, recruitment was done by the researcher and 5 research assistants who were students from the researcher's school where he teaches. The interviewing assistants were trained to conduct administration of the questionnaires. The study recruited 400 pregnant mothers and all 22 healthcare workers working in the antenatal sections. Participating mothers were conveniently sampled; the research team visited the maternity section of the facility after seeking approval from the head and explained the purposed of the study to the nurse of the section who then approved for the research assistants to start work.

Research assistants with the help of nurses used the health cards of mothers to confirm the gestation and other details, eligible mothers were given information for the study and asked if they were willing to participate. Participating mothers were consequently recruited until the sample size was reached.

We recruited two health workers from the antenatal section of each health centre and 7 from the district reproductive health facility based on their availability in the section at the time of conducting the study. Two of the participating health workers were male nurses, the rest were females. Two were nurse midwives, 4 were community health nurse by training, also 7 were enrolled nurses and only two were registered nurses.

In –depth interviews were conducted to ANC attendees, providers and opinion leaders at the public/private health facilities. The interview was conducted in Dagbanli, the language that was convenient for the interviewees. Survey questionnaires were administered to ANC

attendees on exit after receiving ANC services and ANC providers at the Clinic. Some variables were quantified and others explored in depth, thus generating descriptions. The study utilized two main data collection methods namely: Survey and Key Informants.

Data was analyzed using the statistical package for social scientists (SPSS) version 22.

Descriptive statistics (tables, frequency) and inferential statistics (Including Correlation and Regression Analysis) were used for interpretation of data. The list of indicators that were used included the dependent variable which is the utilization of ANC services and also independent variables included age, marital status, education, literacy among others.

Qualitative data from key informant interviews were typed edited and entered into a computer and summarized. Social demographic characteristics of the sample were reported using descriptive statistics.

To answer objective one (to establish the knowledge of mothers about the benefits of seeking ANC early), data from the survey were analyzed quantitatively.

RESULTS AND DISCUSSION

Socio-Demographic Characteristics of Respondents

This section focuses on both ANC providers and ANC clients (attendees) as the study set out to establish in terms of age, gender, and occupation, level of education, marital status, religion, parity, Trimester of pregnancy and gravidity.

Characteristics of Antenatal Care Clients

This subsection focuses on the socio-demographic characteristics of respondents who were ANC clients/ pregnant women.

The majority of ANC clients were in the age bracket of 20-29 years (66.2%). The median age of ANC clients was 25 years.

Also, the field results show that majority of the women 61.4% were farmers (mainly practicing subsistence farming) and thus they would have low level of income. Also, majority of the respondents (98.1%) were married, the study revealed that marital status plays a significant role in determining when women utilize ANC service. It was discovered that most married women go for antenatal care early than single, widowed and divorced mothers. As regards religion, majority of the respondents were Muslims comprising of 93.3%.

Comparison of Christian, traditional and Islam religions on the utilization of ANC services revealed no significant difference.

Religious affiliation does not influence the timing of the ANC in the area of study.

On levels of education, majority (80.7%) of respondents indicated that they had not attended any school before, 13.7% primary school while 3.5% of them had been to senior high school.

There was significant difference in proportion of the ANC attendees in the timing for antenatal care and use of other ANC alternatives in relation to literacy levels.

Findings from the study revealed that, the low levels of education had significantly influenced the timing and utilization of ANC at health facilities.

With regards to gravidity, 31% of respondents were primigravidae. The majority were actually of more gravidity (68.4%).

The distribution of respondents by gravidity revealed that mothers with less gravid (Primigravidae) pregnancies start ANC late in pregnancy than those who have experienced more pregnancies.

It is clear that over 40% of respondents registered for antenatal care after the first trimester. This means that over 50% registered late for antenatal care services. A significant number of respondents (6.4%) were within the third trimester of pregnancy.

Characteristics of Antenatal Care Services Providers

As part of the study, twenty-two (22) ANC providers were included using a brief questionnaire. These included the District public health officer, nurses and midwives offering ANC services from facilities the study considered.

This subsection therefore looks at the background of these health care staff/ ANC providers.

Undisputedly, there were more female antenatal care providers (86.4%) than their male counterparts. This is probably the case in most parts of the country and the African continent as a whole.

The study also revealed that all respondents had between zero (0) and five (5) years of service experience in the delivery of antenatal and reproductive health services.

The above table also indicates that over 60% 0f antenatal care service providers had received training to offer antenatal care services. This could be either in-service training or training received at school.

The Relationship Between Study Variables

H_0: *Is there significant relationship between Marital Status and Antenatal Care Service Utilization*

From the analysis of results of spearman's rank correlation test, it is indicated that there is a positive weak but significant relationship between marital status and ANC Utilization (r= .218**, p< 0.01). We can say statistically that, there is enough evidence to accept the null hypothesis. These results imply that marital status has an effect on the utilization of ANC services.

Also, a weak negative correlation exists between Marital status and Age of Respondent (r= -.002, p<0.01) though it is insignificant and there is a negative weak but significant

relationship between marital status and religion (r= -.141**, p<0.05). For relationship between marital status and occupation of respondent (r= -.043, p>0.05), this suggest that there is negative weak correlation but no enough evidence to accept the null hypothesis. For relationship between marital status and level of education (r= -.073, p>0.05), this suggest that there is a weak negative but insignificant relationship with regards to the respondent's level of education and marital status.

For relationship between marital status and gravidity of respondent (r= .083, p>0.05), this suggest that there is positive weak correlation but no enough evidence to accept (H_0), the relationship to be significant.

Attitude of ANC providers also has a weak negative correlation with marital status but the relationship is significantly correlated (r= -.150**, p>0.05).

Client's accessibility to ANC services has an insignificant positive but weak correlation with marital status of respondent. (r= .002, p>0.05)

However, ANC clients commute to access services has a weak positive but significant relationship with marital status (r= .183**, p>0.05). Whiles knowledge of respondents with regards to ANC and its importance has a weak negative and insignificant relationship with marital status (r= -.034, p>0.05).

Hence we can say statistically that, the direct relationship is weak for marital status to ANC utilization and indirect weak negative relation for marital status and religion, attitude of ANC providers and how clients commute to access ANC services.

We can then justify that there is a significant moderate direct and indirect impact through its weak correlation with the other variables and this therefore implies that marital status has an impact on ANC utilization directly and indirectly.

H_0: Is there relationship between Gravidity and Antenatal Care Service Utilization

A moderate and positive relationship was observed to exist between gravidity and Antenatal Care Service Utilization under study (r = .373**, p<.01) and a weak positive but significant correlation with Age variable (r= .190**, p>.05).

This implies that gravidity can affect the perception of Antenatal Care Service Utilization and also has a link with the Age of ANC clients. An appreciation in Age and more experienced pregnancies would lead to a better Utilization of Antenatal Care Services.

H_0: Is there relationship between Current practices/Attitudes of ANC staff and Antenatal Care Service Utilization

The results from table above present a significant but weak negative relationship between attitudes of ANC providers and the utilization of ANC services (r = -.153**, p>.05).

It also presents a significant but weak negative relationship between Age of and attitude of ANC providers (r = -.147**, p>.05). This shows that the age of the client can determine how the service providers handle/serve them.

There is only a positive and weak correlation between marital status and attitude of ANC providers which tells us that once client is married, then attitude of ANC providers can become positive towards them. Also, Significant relationship exists between Antenatal care utilization and Accessibility to ANC services (r = -.180**, p>.05) and How clients commute to access ANC services (r = -.125*, p>.05), though these are all weak negative correlations.

H₀: Is there relationship between How Clients Commute to Access ANC Services and Antenatal Care Service Utilization

It is observable that, from spearman's rank correlation test performed, only four (4) variables are significantly correlated to how ANC clients commute to access the services. (r = .179**, p>.05). These include marital status (r = .183**, p>.05), Religion (r = -.112*, p>.05) and Attitude of ANC staff (r = -.125*, p>.05).

Hence we can say that, there is a direct relationship between how clients commute to access ANC services and utilization of ANC services.

Also, there exist an indirect relationship between marital status, religion, and attitude of ANC providers and the utilization of ANC services in the Kumbungu District.

H₀: Is there significant relationship between Knowledge and Importance of ANC and Antenatal Care Service Utilization (Objective 1)

From the analysis of results of spearman's rank correlation test, it is indicated that there is a weak negative but significant relationship between the knowledge of ANC clients on ANC and its importance and ANC utilization (r= .152**, p< 0.01). We can say statistically that, there is enough evidence to accept the null hypothesis. These results imply that knowledge of ANC clients on ANC and its importance has an effect on ANC utilization.

Though weak, there exists a negative correlation between knowledge of ANC clients on ANC and its importance and age of clients (r= .127*, p<0.01) and there is a positive weak significant relationship between knowledge of clients on ANC and its importance and the educational level of clients (r= .155**, p<0.05). Hence we can say statistically that, the direct relationship is strong for knowledge of ANC clients on ANC and its importance to the utilization of ANC services and indirect strong positive relation for knowledge of ANC clients on ANC and its importance and client's age and educational level. We can then justify that there is a significant moderate direct and indirect impact of knowledge through its moderate correlation with the other variables and this therefore implies that clients knowledge of ANC have an impact on ANC utilization directly and indirectly.

REGRESSION ANALYSIS FOR INDEPENDENT/PREDICTOR VARIABLES WHICH ARE CORRELATED TO DEPENDENT VARIABLE

Table: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.456[a]	.208	.197	.268
a. **Predictors:** (Constant), knowledge on early Attendance at ANC Services, How Respondents Commute to access ANC services, Gravidae of Respondent, Attitude of ANC service providers, Marital Status of Respondents				

Table: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.925	5	1.385	19.250	.000[b]
	Residual	26.405	367	.072		
	Total	33.330	372			
a. **Dependent Variable:** ANC Utilization						
b. Predictors: (Constant), knowledge on early Attendance at ANC Services, How Respondents Commute to access ANC services, Gravidae of Respondent, Attitude of ANC service providers, Marital Status of Respondents						

Table: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.609	.136		4.483	.000
	Marital Status of Respondents	.345	.105	.157	3.291	.001
	Gravidae of Respondent	.210	.028	.346	7.387	.000
	Attitude of ANC service providers	-.040	.016	-.118	-2.493	.013
	How Respondents Commute to access ANC services	.035	.021	.080	1.703	.089
	knowledge on early Attendance at ANC Services	-.062	.028	-.103	-2.198	.029
a. Dependent Variable: ANC Utilization						

Model Summary

In multiple regression, we look at the adjusted R square value instead of the R square value. Adjusted R square measures the proportion of the variability in the dependent variable that is explained by the independent variables in the model.

The table above in the model summary indicates the adjusted R square value as **.197** representing a **19.7%** of the total variability in Antenatal Care Service Utilization which is explained by the independent variables in the model (knowledge on early Attendance at ANC Services, How Respondents Commute to access ANC services; Gravidae of Respondent; Attitude of ANC service providers; and Marital Status of Respondents).

The variability between R square (20.8%) and adjusted R square (19.7%) is 1.1% which is statistically significant. This implies that some of the independent variables included in the regression model are redundant.

ANOVA Table for significance of Model

The ANOVA table is to test the null hypothesis for the regression model. This is statistically denoted by;

H$_0$: None of the independent variables help predict the dependent variables.

H$_1$: Some of the independent variables help in predicting the dependent variables.

From the ANOVA table above, the area of interest which helps to predict and make assumptions for the research is the F-statistics and Significance levels.

Clearly it is shown that, the p-value compared to the significant value, that is $p < .05$. So we have enough evidence to reject the null hypothesis (H$_0$) and accept the alternative hypothesis (H$_1$). Therefore, we can conclude by saying, some of the independent variables help in the prediction of the dependent variable.

Coefficient of y estimates

From table **4.23**, it clearly shows the significance level of the independent variables and the constant in the model. It is realized that, the constant of proportionality in the model is significant indicating a F-statistic value of $(3.291, p<0.05)$.

Marital Status of Respondents has a t-value $(3.291, \mathbf{p < .05})$ meaning Marital Status is statistically significant keeping all other variables constant.

Gravidae of Respondent as part of the predictors has a t-value $(7.387, \mathbf{p < .05})$, indicates that we reject the null the hypothesis and accept the alternative hypothesis that gravidae of the respondent is statistically significant in predicting the dependent variables.

For the case of Attitude of ANC service providers as a predictor variable has a t-value of $(-2.493, \mathbf{p <.05})$ which tells us that there is enough evidence to reject the null hypothesis and accept the alternative hypothesis, that is attitude of ANC providers is statistically significant to the model. More so, for how respondents Commute to access ANC services, the table show a t-value of $(1.703, \mathbf{p > .05})$ illustrating statistically insignificant and redundant variable predictor to the model. This tells us that, there is enough evidence to accept the null hypothesis and reject the alternative hypothesis.

With regards to knowledge on early attendance to ANC services recorded a t-value $(-2.198, p < .05)$ which indicated a statistically significant predictor. This gives us enough evidence to reject the null hypothesis and accept the alternative hypothesis.

Now we can write the model in mathematically form as;

ŷ = .609 + .345 (Marital Status of Respondents) + .210 (Gravidity) - .040 (Attitude of ANC service providers) - .062 (knowledge on early Attendance at ANC Services) + $\mathcal{E}_o$

Where;

Predictors = Marital Status, Gravidity, Attitude of ANC service providers, knowledge on early Attendance at ANC Services

$\hat{y} = is\ the\ estimated\ values\ for\ y$

IN-DEPTH/ KEY INFORMANT INTERVIEWS

As stated in chapter three, 40 in-depth interviews were conducted on key informants based on their ability to furnish the researchers with relevant information pertaining to the topic under discussion. They were taken from 20 communities served by the five (5) health facilities sampled for the study.

The in-depth interviews asked how they see/ value pregnancy in their community. "Do you think pregnancy should be guarded/ protected?

"Pregnancy is a very serious condition every married person wants his wife to be in"

"I think pregnant women are vulnerable and need protection."

"Yes, pregnant women need special attention"

Respondents were also asked whether there exist any traditional or cultural practices with regards to pregnancy. What are they and how are they helpful? These are some of their responses;

"Well, there used to be some cultural practices for pregnant women, but because of education, nobody wants to practice them anymore"

"yes, there is. We call it "pag-prigibu"

"Yes, it called "puli yihibi"

"It is believed to aid in protecting the pregnant women and their unborn children".

"yes women are aware of the dangers of pregnancy, that's why we need to seek protection against both evil and danger"

How is this done?

"Well, it depends on the tribe and the culture you belong".

"For us here, everything rests on the husband's sisters, they do it"

"When they realize that you are pregnant, they quickly start their consultations and from there they outdoor you".

"I think when I was pregnant; it was my husband's senior father (uncle), who performed the rights because he is the family head".

"It's a very long process, but it involves rituals being performed and the pregnant woman taken through some processes."

"It is done on women who become pregnant for the first time"

"It is an honour to be outdoored as a woman legally married".

Respondents Opinion about the number of visits ANC should be made
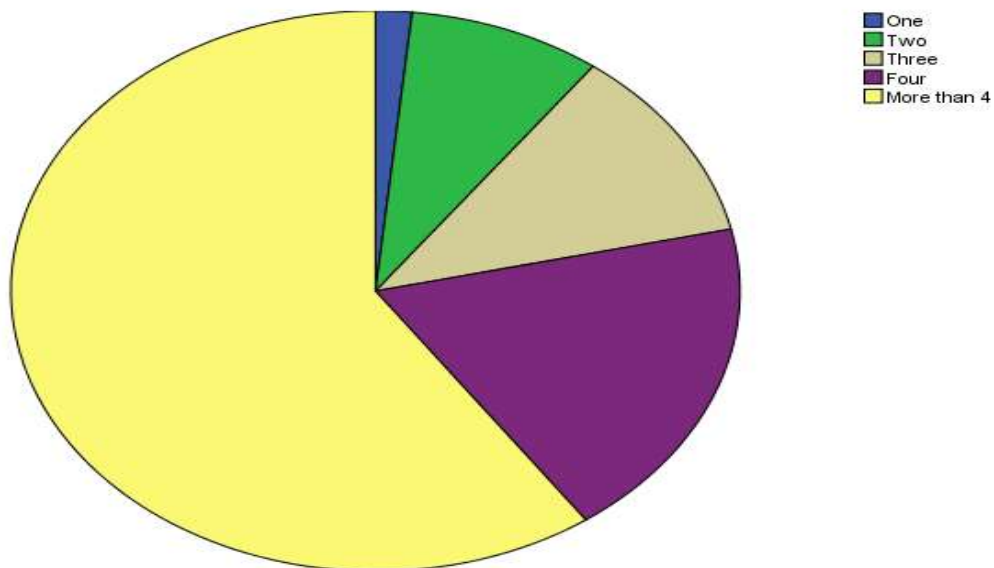

Figure 1: Source: Field work, 2015; Kumbungu district

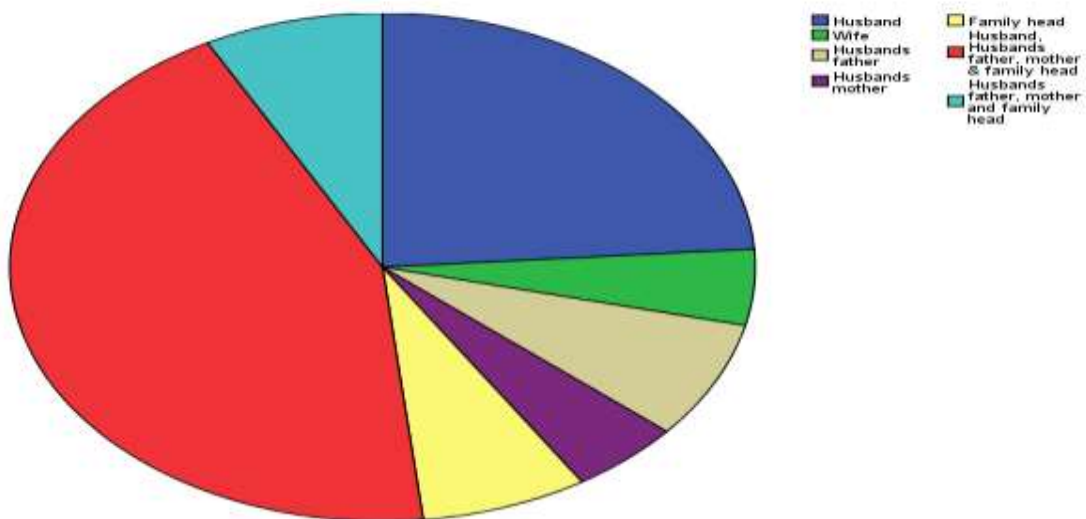**Decisions regarding Pregnancy and its care**
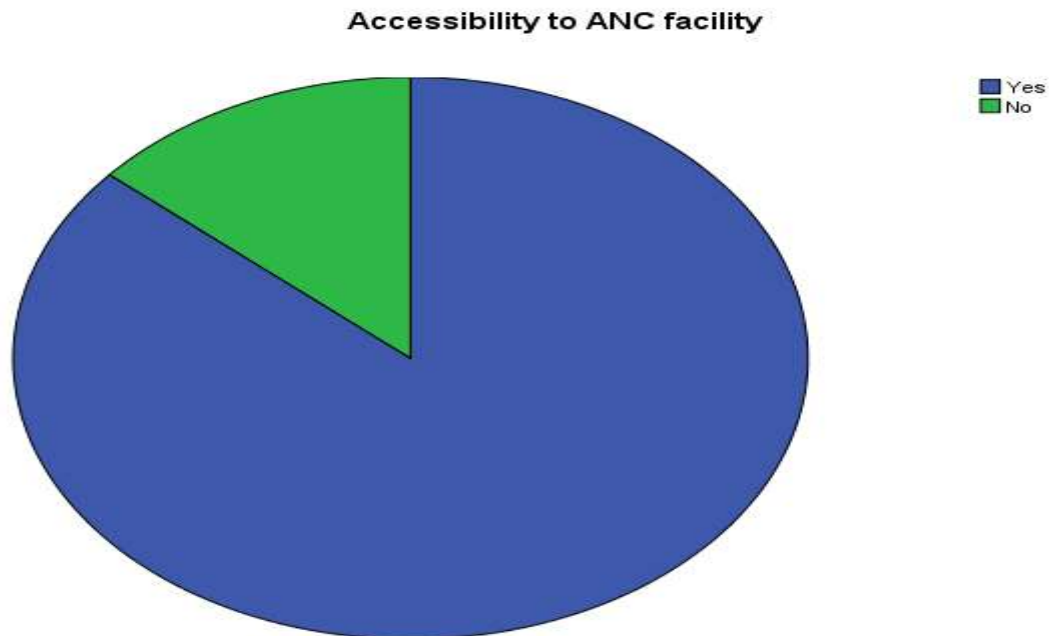

Figure 2: Source: Field work, 2015; Kumbungu district

Figure 3:Source: Field work, 2015; Kumbungu district
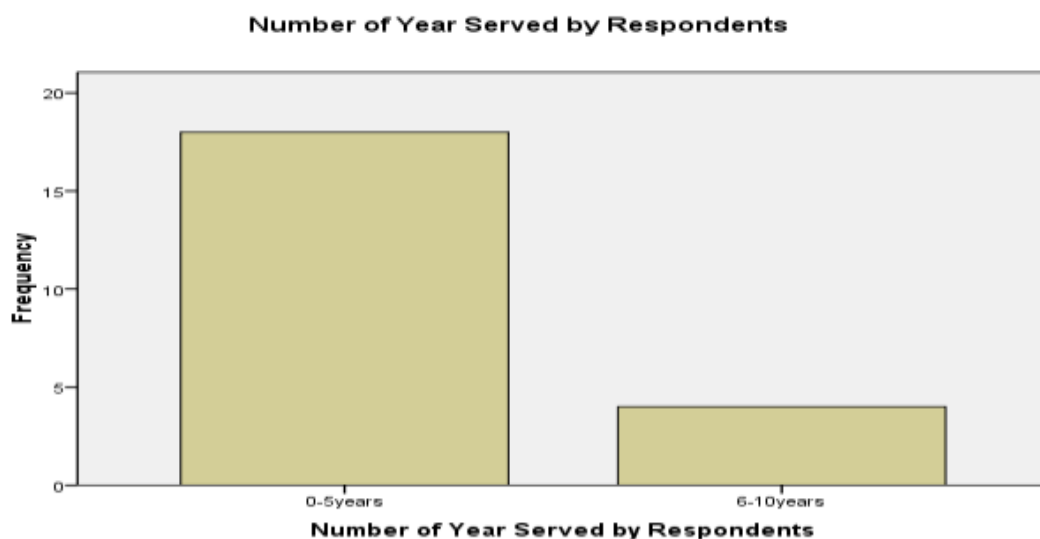
Figure 4: Source: Field work, 2015; Kumbungu district

Table 1: Age of Respondents

	Variable	Frequency	Percent
Valid	15-19	29	7.8
	20-24	100	26.8
	25-29	147	39.4
	30-34	71	19.0
	35-39	22	5.9
	40-44	4	1.1
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 2; Respondents Occupation

	Variable	Frequency	Percent
Valid	Farmer	229	61.4
	Business	72	19.3
	Civil	67	18.0
	servant		1.3
	Others	5	100.0
	Total	373	

Source: Field work, 2015; Kumbungu district

Table 3; Marital Status of Respondents

	Variable	Frequency	Percent
Valid	Married	366	98.1
	Single	7	1.9
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 4; Respondents Religion

	Variable	Frequency	Percent
Valid	Christian	17	4.6
	Muslim	348	93.3
	Traditionalist	8	2.1
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 5; Respondents Level of Education

	Variable	Frequency	Percent
Valid	Primary	51	13.7
	Secondary	13	3.5
	Tertiary	8	2.1
	None	301	80.7
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 6; Gravidity of Respondent (Primigravidae?)

Variable		Frequency	Percent
Valid	Primigravidae	118	31.6
	Multigravidae	255	68.4
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 7; Parity of Respondent

	Variable	Frequency	Percent
Valid	1-2	162	43.4
	3-4	93	25.0
	None	118	31.6
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 8; Trimester of Pregnancy at ANC Registration

Variable		Frequency	Percent
Valid	1-2 months	18	4.8
	3-4 months	182	48.8
	5-6 months	149	39.9
	7-8 months	24	6.4
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 9; Age of Respondents

Variable		Frequency	Percent
Valid	18-22	2	9.1
	23-28	18	81.8
	34-38	2	9.1
	Total	22	100.0

Source: Field work, 2015; Kumbungu district

Table 10; Professional Qualification of respondents

Variable		Frequency	Percent
Valid	Certificate in nursing	16	72.7
	Diploma in Nursing/Midwife	2	9.1
	Certificate in clinical medicine	2	9.1
	Others	2	9.1
	Total	22	100.0

Source: Field work, 2015; Kumbungu district

Table 11; Attitude of ANC service providers

Variable		Frequency	Percent
Valid	1-2 poor	49	13.1
	3-4 fair	69	18.5
	5-6 good	199	53.4
	7-8 excellent	56	15.0
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 12; Structure in which ANC services are delivered

Variable		Frequency	Percent
Valid	Room	360	96.5
	Under a Tree	11	2.9
	On a veranda	2	.5
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 13; Average Time Spent on Each Client during ANC

Variable		Frequency	Percent
Valid	1-20 minutes	110	29.5
	21-40 minutes	200	53.6
	41-60 minutes	52	13.9
	60+ minutes	11	2.9
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 14; Shortage of drugs

Variable		Frequency	Percent
Valid	Yes	92	24.7
	No	281	75.3
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 15; Decisions in the House

	Variable	Frequency	Percent
Valid	Husband	67	18.0
	Husbands mother	42	11.3
	Husbands father	32	8.6
	Wife	15	4.0
	Family head	52	13.9
	Spiritualist	32	8.6
	All of the above	133	35.7
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

Table 16; Traditional Factors Influencing the use of ANC Services

	Variables	Frequency	Percent
Valid	Restriction from certain Foods	143	38.3
	"Pregnancy Outdooring"	185	49.6
	Hiding the pregnancy for the first five months	24	6.4
	Others	21	5.6
	Total	373	100.0

Source: Field work, 2015; Kumbungu district

CONCLUSION

The study found that the following factors determine the utilization of antenatal care services by pregnant mothers in the Kumbungu district;

1. Low empowerment, including poverty is major factors hindering women from seeking antenatal healthcare in Ghana and also partly responsible for the high maternal mortality rate in Ghana.

2. Education is also another important factor hindering mothers especially in the rural areas. Some mothers are not educated and have no orientation or knowledge about the western medicine and these mothers rely more on traditional birth attendants (TBAs)

3. Poor healthcare facilities and also poor quality of healthcare services by the healthcare staffs were also seen as a major factor hindering women from having access to maternal healthcare facilities. Mothers often complain being attended to by unskilled health care personnel with poor attitude.

4. Poor infrastructural facilities, bad roads make travel to healthcare facilities very tiring and unsafe for mothers, as they usually walk to seek these services.

5. Socio-cultural factors are other reasons responsible for non utilization of Antenatal care services. Some cultures still rely on traditional birth attendants. In some cultures as well women must get permission from their husbands in order to seek maternal healthcare.

6. Traditional beliefs and practices also do affect antenatal care utilization as some cultures still practice pregnancy outdooring that prevents pregnant mothers from seeking early ANC services.

Maternal mortality in developing countries continues to be a serious public health problem and determines partly the low life expectancy rate in Ghana.

As enumerated above, the study has identified several factors that are important determinants of Antenatal health services in the study area.

More friendly and sufficient health care services should be provided to boost confidence of the community masses on health care and its providers. In addition, appropriate health education that is culturally acceptable and addresses the harmful traditional practices and benefits of safe motherhood should be explored and employed as short term measure. I believe that empowering women may be a more permanent work out on this issue.

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