Socio Cultural Factors in Maternal Health in Rural Areas of Northern Cross River State, Nigeria

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Abstract

Studies have identified socio cultural factors as crucial in maternal health, yet, every year over one million women die of preventable causes as a result of pregnancy and child birth. It is therefore pertinent that a lot is still to be known about conditions that predispose women to high morbidity and mortality in predominantly rural Northern Cross River State. This study therefore, investigated the role of household decision-making, domestic violence, factors determining access to and utilisation of maternal health facilities and socio-cultural practices that influence maternal health status. The study involved quantitative approach only. A sample of 823 respondents was drawn from a total population of 842,561. Multi-staged sampling techniques (cluster, systematic and simple) were used to select participants. Research questions were used to assess relationships among variables. Data were subjected to frequencies, tables, chi square and logistic regression analysis. The socio-economic status of women played a significant role in maternal health (χ^2=13.8; P<0.05). Ever married women had better health status than those that were single (χ^2=10.0; P<0.05); women who had their first babies earlier than 20 years of age had poorer health status compared to those who had them later (χ^2=14.9; P<0.05). However, maternal educational qualification showed no significant relationship with maternal health. Household sanitation and hygiene behaviour were significantly related to maternal health status (χ^2=10.5; P<0.05; χ^2=16.5; P<0.05). Households with poor waste disposal systems reported poorer health status compared to those with better waste disposal systems. Some cultural practices such as early marriage, patriarchy and exposure to intimate partner violence have significant negative relationship with maternal health. Maternal health is the result of cumulative effects of cultural practices, attitudes and behaviours. Improving the household and communal factors could improve maternal health. This could be achieved through improvement of health services and information in the rural communities to properly situate women to be able to resist obnoxious culture bound factors that undermine maternal health through especially women education and economic empowerment.

Background of the Study

Despite broad approaches towards improving maternal health, there is still a slow decline in maternal mortality and morbidity in less developed areas. According to UNICEF, UNFPA, WHO (2000), there are at least 529,000 maternal deaths in the world annually. These deaths are

almost equally divided between Africa (251,000) and Asia (253,000), with about 4% (22,000) occurring in Latin America and the Caribbean. Less than 1% (2,500) occurs in the more developed regions of the world.

Every minute a woman dies in pregnancy and childbirth. Each year more than 536,000 women die due to complications developed during pregnancy and childbirth (WHO, UNICEF, UNFPA and the World Bank, 2007). Apart from these deaths, United Nations, (2007) reported that 10 million more suffer debilitating illnesses and lifelong disabilities. Seventy-five percent of these deaths occur during childbirth and the postpartum period. The vast majority of maternal deaths are avoidable when women have access to vital health care before, during and after childbirth (United Nations, 2007).

The NDHS (2008) observed that maternal mortality depends largely on the environment where women of reproductive age live and whether they have access to information, education and communication resources they need to provide themselves with adequate care. Researchers are, therefore, interested in identifying factors that contribute to high maternal morbidity and mortality. Factors such as culture and socio-economic variables were found to be important determinants of maternal health (Caldwell, 1979, Mosley & Chen, 1984; Gyimah 2002). Ujah et al., (2005) stated that in most areas of sub-Saharan Africa, social restructuring has promoted dangerous inequality. The most effects of these inequalities are on education, maternal and child health; while families are suffering the negative consequences of these many factors and conditions, women are in a particularly vulnerable position because by both definition and default, they suffer the most of all these ill effects. One of these ill effects is the severe stress of pregnancy and childbirth.

The relevance of this study derived from the fact that demographic studies on the effect of socio cultural conditions on maternal health have been very limited in the study area. The present study filled this intellectual gap by providing empirical explanation for the rate of maternal morbidity and mortality in the area. There has been a lack of consensus concerning what maternal health is; as a result, maternal health status has been lumped into two categories of favourable and unfavourable. This trend is overcome by the present study which adopts a framework that divides maternal health outcome or status into three. It provides an epistemological explanation for the loss of useful data in previous demographic studies that lump data into two categories of good and bad or favourable and unfavourable (Stover, et al., 2002; Diallo, 2005; Ross et al., 2005)

Studies have shown that maternal health is not only the result of direct, biomedical conditions but also from factors like the household environmental conditions and other factors deeply rooted in culture, structure, institutional and gender relationship (Kyomuheudo, 2004). This study, therefore, seeks to explore how socio cultural conditions affect maternal health in rural areas of Northern Cross River State of Nigeria.

Study Objectives

The main objective of the study is to examine the household environmental conditions affecting maternal health among rural women of Northern Cross River State. The specific objectives include:

1. An examination of the household structures and condition that affect maternal health
2. An investigation on the effect of communal practices on maternal health.
3. An exploration of the effect of household decision and domestic violence on maternal health.
4. An identification of the socio-cultural practices that affect maternal health.

Research Questions

The issues raised above are crucial to the understanding and appreciation of maternal health in the study area. The question, however, is "what are the effects of socio cultural conditions on maternal health among rural women in Northern Cross River State of Nigeria? This main question can be delineated into the following:

- How does the household structure/status affect maternal health?
- What role does the socio-economic status of women play in maternal health?
- To what extent does household decision making affect maternal health?
- What are the communal practices that affect maternal health?
- How does domestic violence affect maternal health?

Methodology

Research Design

The study adopted the descriptive and exploratory designs that allowed the collection of data from a part or sub-set of a population whose analyses can be generalised on the entire population. The study employed the quantitative and qualitative instruments to explore the role of the cultural environment of the household on maternal health. The Local Government Areas making up Northern Cross River State are located in the Northern part of the state. They are bounded in the north by Benue state; in the south by the Boki Local Government Area. In the

east, it is bounded by the Camerouns and in the West by Ebonyi State. The area covers a large area of over 1000 square miles with a total population of over 2 million (NPC 1991).

The Area is divided into two main geographical zones. To the south is the thick rain forest belt which surges northwards to the foot of the hills that dominate the eastern and north-eastern part of the area. To the north is the savannah belt into which the southern forest zone gently merges.

Sample Design

Multistage sampling procedure was adopted. It began with the purposive selection of the Northern part of Cross River State. This part of the state has five local governments, and was clustered into political wards. These Local Governments were delineated into council headquarters, generally seen as urban and other areas, with absence of electricity, pipe borne water, etc, defined as rural.

The statistical approach in the selection of households was used. The sample was selected using Cochran's sample size formula. This method uses the "risk the researcher is willing to study"; commonly called the "Margin of error the researcher is willing to accept at a particular alpha level (i.e. 0.05 or 0.01)". The formula is

$$n_0 \frac{(t)^2 * (S)^2}{(d)^2}$$

Where n_0 = required sample size, t = value for selected alpha level of .05 in each tail. (The alpha level of 0.05 indicates the level of risk the researcher is willing to take that true Margin of error may exceed the acceptable margin of error).

S = estimate of standard deviation in population

d = estimate of variance deviation for 5 point scale or acceptable margin of error for mean being estimated (number of points on primary scale, acceptable margin of error).

$$= \frac{(2.97)^2 \ (12.20)^2}{(1.671)^2}$$

$$= \frac{8.76 \ x \ 148.84}{1.36} = 954.5 = 955$$

After deriving the sample size of 955, it was distributed among the households (Cochran 1977). However, where a household had more than one ever-pregnant woman, a simple random sampling method of lucky deep

procedure was adopted to select the one that was finally interviewed or administered with a questionnaire.

The study population included a cross-section of women of reproductive age 15-49 and men who have ever fathered a child in the rural communities selected for the study. These were women from the rural communities of the Northern Cross River state.

The Cochran statistics generated 955 respondents with 86.18 percent return rate, which is considered adequate for the analysis.

Research Instruments

Questionnaire

The major survey instrument was the structured questionnaire. The designing of the questionnaire was based on the pilot study that revealed the salient variables that influence maternal health. The survey instrument was cross-sectional and it adopted Self-reported Morbidity Prevalence Questionnaire (SRMPQ).

This method has been shown to be a very good approach in estimating the prevalence of morbidity using different administration schedules that employed disease lists beyond symptom labels. It also classified individuals within disease categories based on symptoms profiles. To measure morbidity, a maternal morbidity prevalence index was used to classify the population into three groups of roughly equal sizes. This was based on a proxy for morbidity determined by the prevalence of morbidity or else symptom list. The three categories were good maternal health (0 report of symptoms of illness), moderate maternal health (1 report of symptom of illness) and poor maternal health (2 & above report of symptoms of the list of illnesses), this was done for self reported illnesses and diagnosed illnesses. This method was used by Mechanic & Newton, (1996; Zakpa et al., 1996; Woolsey, 1999; Sadana, 2000). The study explored maternal morbidity as an indicator rather than focusing on mortality because those situations in the childbearing women's lives that were threatening are the same problems that resulted in maternal death.

Instrument Administration

Principally the researcher administered the research instrument with assistance from trained field assistants and supervisors who visited different parts of the sampled study area to administer the survey instrument. The researcher conducted the FGDs

Methods of Data Analyses

Data collected were edited to eliminate inconsistencies that may undermine content validity. The analysis was undertaken at univariate (frequency tables, charts and graphs), bivariate (Chi Square analysis) and multivariate (Logistic regression) levels.

Results

Socio-Demographic Characteristics of Respondents

The sample for the quantitative survey was sex-specific given the nature of the phenomenon under investigation. However, since pregnancy is the result of the interaction of women and men, the latter were included in the qualitative aspect of the study. Out of 955 questionnaires administered among women aged 15 and above, 823 were found usable for the study.

The sample population has a mean age distribution of 33.6 years. From the table, 55 respondents, or 6.7 percent of the total sample population, belonged to age group less than 19 years. At the other extreme, that is, women of age 45+ comprised 16.9 percent of the total sample population

Table 1: Percentage Distribution of Respondents by selected socio-Demographic characteristics

Characteristics	Categories	Frequency	Percentage
Age	< 19	55	6.7
	20-24	103	12.5
	25-29	146	17.8
	30-34	148	17.9
	35-40	116	14.1
	41-44	116	14.1
	45+	139	16.9
	Total	**823**	**100.0**
Marital status	Single	89	10.9
	Married	580	70.5
	Divorced	52	6.3
	Separated	34	4.1
	Widowed	68	8.3
	Total	**823**	**100.0**
Education	No Schooling	193	23.5
	Primary	240	29.2
	Secondary	228	27.7
	Tertiary	162	19.7
	Total	**823**	**100.0**
Occupation	Trader	207	25.2
	Farmer	363	44.1
	Civil servant	199	24.2

	Others	54	6.6
	Total	**823**	**100.0**
Monthly income in Naira	<N1, 000	293	35.6
	N2, 000 – N5, 000	227	27.6
	N6, 000–N10, 000	160	19.4
	N11, 000-N15,000	87	10.6
	>N16, 000	56	6.8
	Total	**823**	**100.0**
	No response	28	3.4
Age at first Birth	< 15 yrs	94	11.4
	15 –19yrs	293	35.6
	20+	408	49,6
	Total	**823**	**100.0**

The table further indicates that more than 70 percent of the women are currently married. Another 10.4 percent are currently either divorced or separated, while 8.3 percent are widowed. Over ten percent of the women are single.

The table also indicates that 35.5 percent of the women have no schooling and 29.2 percent have only primary education. Nearly 28 percent of the women have some secondary school education, while about 20 percent have some tertiary education. In other words, nearly half of the women have some secondary education or above.

About 69 percent of the study respondents are either traders or farmers and only 24 percent are civil servants. Comparing the educational qualifications with occupation, women in the area of study engage in occupations that require marginal educational qualification. An examination of the monthly incomes of respondents shows that earnings are low in the study area. While 35.6 percent earn less than N1000 a month, 27.6 percent earn between N2000-N5000. The mean income for the respondents is N2, 854. This places an average woman in this area at less than three dollar a day.

The mean age at first birth is 18 years. Table 4.1 shows that 11.4 percent of women had their first babies when they were less than 15 years.

Household Decision

As a means of assessing women's autonomy, respondents were asked who mainly decides how their earnings will be used. This information allows the assessment of women's control over their own earnings and an evaluation of relative importance of their earnings to their

health seeking behaviour and empowerment. Women decision making autonomy is also assess by collecting women's participation in five different types of decision; the respondent's own health care, children's health, children's education, food to be cooked and household purchases. To take decision on the circumstances of their own lives is an essential aspect of empowerment

Harmful Communal Practices

Different cultural practices affect the people differently. These practices are presented to show the effects of these practices on maternal health. Female circumcision, child sex preference, patriarchy and age at marriage are some cultural practices that can affect maternal health.

In discussing harmful cultural practices that affect maternal health status, 48.1 percent of the respondents did not respond to the question "Do your people practice female circumcision? About 27 percent answered in the affirmative while 25.0 percent said it is not practiced in their place.

Despite this high level of non response to the first question, the next question indicated that female circumcision is prevalent in the study area. Over 98 percent of the respondents affirmed that there is one form of female circumcision or another. It therefore means that there was a spurious response to the first question.

Table 2– Distribution of Respondents by communal Practices

Practice	Frequency	Percent
Female Circumcision	221(N=823)	26.9
Type: Complete removal	478	58.1
Partial removal	345	41.9
Total	**823**	**100.0**
Timing: As Babies	200	24.3
As Young Preg. Women	623	75.7
Total	**823**	**100.0**
Support for Female Circumcision	264(N=823)	32.0
Poor Self Perception of Women	474(N=823)	57.6
Child Sex Preference	620(N=823)	75.3
Age at Marriage: 16>	489	59.4
<15	334	40.6
Total	**823**	**100.0**

Note: Multiple Responses was allowed for categories above

Domestic Violence

Domestic violence refers to all language and actions that violates one's physical body, sense of self and trust. It involves threats or acts of inflicting physical, sexual and psychological harm. A household that has these features is likely to influence and determine the health status of those who are at the receiving end. The data in this section show that domestic violence is prevalent and its incidence is against women and this invariably negatively affects maternal health.

A close examination of data show that about 85 percent of women who participated in this study have suffered one form of violence or the other in the hands of their husbands or a close male partner, as can be seen on table 4.6.

The most dominant justification for violence is in line with the findings of the Nigerian Demographic Health Survey (2003:14). It found that 46 percent of women who took part in the study accepted that 'a man was justified for beating his wife if she goes out without telling him'. This finding was also found to be the dominant justification for wife beating in the NDHS,(2008).

The reasons or situations in which violence against women is justifiable

Table 3: Distribution of Respondents by Incidence of Intimate Partner Violence

Which of these has your husband done to you?	Frequency	Percent
No Response	129	15.7
Quarreled with me	463	56.3
Slapped me	111	13.5
Beat me	110	13.4
Broke my bone	10	1.29
Total	823	100.0

Bivariate Analysis

Socio-Economic Status of Women and Maternal Health Status

Table 4 presents information on the effects of socio economic status of women on their health status. The table indicates that about 40 percent of divorced, separated, or widowed (DSW) women have good health status compared with 32 percent of those who are currently married.The table indicates that ever married women have better maternal health status in comparison to single mothers The chi-square test of association shows that there is no significant relationship between marital status and maternal health outcome.

Table 5.1: Distribution of Respondents by Socio Economic status and Maternal Health Outcome

Socio economic Status	Maternal Health Status				X^2	Df	P
	Good	Moderate	Poor	Total			
Marital Status	27	43	16	86			
Single	31.4%	50.0%	18.6%	100.0%			
Married	183	322	58	563	7.950	4	.068
	33.6%	57.7%	10.4%	100.0%			
DSW*	58	76	13	174			
	39.5%	51.7%	8.8%	100.0%			
Total	**263**	**441**	**87**	**791**			
	33.6%	**52.9%**	**12.6%**	**100.0%**			
Educational Qualification							
No schooling	68	95	22	185			
	36.8%	51.4%	11.9%	100.0%			
Primary	82	126	24	232			
	35.3%	54.3%	10.4%	100.0%			
Secondary	66	130	24	220			
	30.0%	59.1%	10.9%	100.0%	3.639	6	.727
Tertiary	47	90	17	154			
	30.5%	58.4%	11.0%	100.0%			
Total	**264**	**441**	**87**	**791**			
	33.2%	**55.8**	**11.0%**	**100%**			
Occupation							
Trader	52	123	24	199			
	26.1%	61.8%	12.1%	100.0%			
Farmer	119	196	32	347			
	34.3%	56.5%	9.2%	100.05			
Civil Servant	66	102	24	192	13.804	6	.033
	34.4%	53.1%	12.5%	100.0%			
Others	26	20	7	53			
	49.1%	37.7%	13.2%	100.0%			
Total	**263**	**441**	**87**	**791**			
	35.0%	**52.5%**	**12.5%**	**100.0%**			
Last Month Income							
<N1, 000	100	148	36	284			
	32.2%	52.1%	12.7%	100.0%			
N2,000-N5,000	70	133	19	222			
	31.5%	59.9%	12.4%	100.0%			
N5100-N10,000	43	91	19	153			
	28.1%	59.1%	12.4%	100.0%	9.707	8	.301
N10,100-N15,000	28	46	6	80			
	35.0%	57.5%	7.5%	100.0%			
>N16,000	22	23	7	52			
	42.3%	44.6%	13.5%	100.0%			
	263	**441**	**87**	**791**			
Total	**33.8%**	**54.5%**	**11.7%**	**100.0%**			
Age at First birth							
<15yrs	31	48	13	92			
	33.7%	52.2%	14.1%	100.0%	14.684	6	.008
15-19yrs	103	161	23	287			
	35.9%	56.1%	8.0%	100.05			

20yrs>	120	224	43	387
	31.0%	57.9%	11.1%	100.0%
Total	**254**	**433**	**79**	**791**
	33.5%	**55.4%**	**11.1%**	**100.0%**

*Divorced, separated and widowed marital statuses were merged for the chi-square analysis to improve the reliability of the test.

The table further examines the relationship between educational qualification and maternal health status. There is no significant relationship between educational qualification and maternal health status. Though education influences people's perceptions and dispositions towards different activities including health activities and behaviour, the data did not support this assertion. It is obvious that depending on a particular environment, the relationship between education and maternal health status may produce different results.

The relationship between monthly income and maternal health status among women in the study area is also examined. Though there is no statistical association between monthly income and maternal health outcome yet, women with higher earnings perform better in terms of maternal health outcome relative to those with lower earnings. Women earning N16, 000 had the highest percentage of good maternal health status (42%) compared to about 30 percent of those earning less than N1, 000 monthly.

The display of the relationship between age at first birth and maternal health status shows a progression from the least percent of age less than 15 to 20 years and above. Considering this graduation from the younger ages to older ones, it is obvious as indicated by the Pearson chi square test of association that there is a significant relationship between age at first birth and maternal health status.

Household Decision-Making and Maternal Health

Joint household decision-making between husband and wife produces better maternal health status. Table 5 below displays the relationship between household decision-making and maternal health. It shows that when both the wife and husband jointly decide on the number of children to have, women tend to have better maternal health outcome as against when each of them decides separately.

Furthermore, the table indicates that the decision on the timing of childbirth crucially affects maternal health depending on who takes the decision. Though there is no statistical association, but it is obvious that when both husband and wife jointly take this decision, maternal health outcome is better. This is shown in the table as decision jointly taken between wife and husband results in 60.8 percent of good maternal health.

Table 5: Distribution of Respondents by Household Decision and Maternal Health Status

Who decides on No. of Children	Maternal Health Status				X^2	Df	P
	Good	Moderate	Poor	Total			
Myself	49	103	23	175			
	28.0%	58.9%	13.1%	100.0%			
My Husband	41	95	14	150			
	27.3%	63.3%	9.3%	100.0%			
Both of Us	161	225	47	433	9.387	6	.115
	37.2%	52.0%	10.9%	100.0%			
Total	251	423	84	791			
	30.8%	58.1%	11.1%	100.0%			
Who Decides on When to have children							
My Husband	39	104	18	161			
	24.2%	64.6%	11.2%	100.0%			
Myself	45	75	18	138			
	32.6%	54.3%	13.0%	100.0%	14.197	8	.091
Both of Us	160	246	46	452			
	35.4%	54.4%	10.2%	100%			
Total	224	425	82	791			
	30.7%	57.8%	11.5%	100.0%			
When you felt discomfort, What did you do?							
Wait for husband	53	94	23	170			
	32.0%	55.3%	13.5%	100.0%	13.523	4	.006
Seek med. Help	185	333	60	578			
	58.1%	57.6%	10.4%	100.0%			
Who decides on how to spend your earnings							
Myself	142	215	48	405			
	39.1%	53.1%	11.9%	100.9%	15.568	4	.006
My Husband	97	199	25	321			
	30.2%	62.0%	7.8%	100.0%			
Who has final say on your Health?							
Myself	81	151	38	270			
	30.0%	55.9%	14.1%	100.0%			
My Husband	74	107	16	197			
	37.6%	54.3%	8.1%	100.05	8.614	6	.186
Both of Us	92	167	30	289			
	31.8%	57.8%	10.4%	100.0%			
Total	187	425	84	791			
	33.1%	56.0%	10.8	100.0%			

Communal Practices and Maternal Health

Table 6 examines the relationship between socio cultural practices and maternal health status. This part took questions on minimum age at marriage, the position of women in the society and child sex preference. The table indicates that those who got married at an age younger than 15 years had very poor maternal health outcome in comparison to those who married later. It is evident from the table that there is a strong and consistent positive association between age at marriage and maternal health status, the $X^2 = 31.321$; df = 4; p<. 05 is significant. It follows that early marriage age is dangerous to the health status of women.

Table 6: Distribution of Respondents by Socio cultural Practices and Maternal Health Status

Harmful Cultural Practices	Maternal Health Status				X^2	Df	P
	Good	Moderate	Poor	Total			
Minimum Age at Marriage							
<15yrs	135	132	12	279			
	16.4%	16.0%	1.5%	33.9%			
>16yrs	273	219	52	544			
	33.2%	26.6%	6.3%	66.1%	31.321	4	.000
Total	408	351	64	823			
	49.6%	42.6%	7.8%	100.0%			
Position of Women							
Important	226	151	18	395			
	27.5%	18.3%	2.2%	48.0%			
Not Important	182	200	46	428	23.601	4	.000
	22.1%	24.3%	5.6%	52.0%			
Total	408	351	64	823			
	49.6%	42.6%	7.8%	100.0%			
Which Sex of Child is Preferred?							
Male child	215	189	42	446			
	26.1%	23.0%	5.1%	51.2%			
Female child	193	162	22	377	23.222	4	.000
	23.5%	19.7%	2.7%	45.8%			
Total	408	351	64	823			
	49.6%	42.6%	7.8%	100.0%			

Table 6 above also shows a consistent relationship between the perception of women on their position in the society and their health status. There is a strong and consistent association between women's self perception at a significance level of $p<05$ with X^2 value of 31.321. It is indicated that women who perceived themselves as being important had over 30 percent of good maternal health status while those with poor self perception have less than 25 percent of the same health category.

The preference for a particular sex of a child has effect for maternal health status. The table indicates that the preference for a baby boy brings about better maternal health status. It is instructive that the child that is preferred as shown in the study area is the boy child.

Household Violence and Maternal Health Status

Table 7 explores the relationship between domestic violence and maternal health status. The table indicates that almost all the respondents have suffered one form of violence or another. These acts negatively affect maternal health status. It is instructive from the table that women who have suffered any form of violence from male partner (husband) had over seventy percent of good maternal health. At the same time, almost 90 percent of all women who have experienced domestic violence have poor maternal health status. Apart from this, women who were only quarrelled with had better maternal health outcome compared to others. The table indicates almost 40 percent of good health for this category of women (ie those who were only quarrreled)

Table 7: Distribution of Respondents by Domestic Violence and maternal Health Status

Which of these have your husband done to you during pregnancy?	Maternal Health Status Good	Moderate	Poor	Total	X^2 cal	Df	P
Quarreled with me	318	237	37	592	74.135	8	.000
	38.6%	28.8%	4.5%	71.9%			
Slapped me	35	61	15	111			
	4.3%	7.4%	1.8%	13.5%			
Beat me	49	52	9	110			
	6.0%	6.3%	1.1%	13.4%			
Broke my bone	6	1	3	10			
	0.7%	.1%	.4%	1.2%			
Total	408	351	64	823			
	49.6%	42.6%	7.8%	100.0%			
Do you think he is Justified?							
Yes	176	209	25	410	79.620	4	.000
	21.4%	25.4%	3.0%	49.8%			
No	232	142	39	413			
	28.2%	17.3%	4.8%	50.2%			
Total	408	351	64	823			
	49.6%	42.6%	7.8%	100.0%			

Multivariate Analyses

Data in this section are subjected to multivariate analysis involving logistic regression. Three sets of independent variables are regressed on the dependent variable (Maternal Health Status). This involves the recategorisation of the dependent variable into '0' and '1', where '1' is the likelihood of good maternal health and '0' is the likelihood of poor maternal health. The odds ratio that is one or significantly greater than one indicates that women with the attribute(s) are likely to have or experience good maternal health than the reference category, while a relative risk odds ratio significantly lesser than one indicates that women with this attributes are likely to have poor maternal health status.

Table 8: Logistic Regression on Cultural Practices and Maternal Health

Categories	Odds Ratio
Marital status	
Single (ref)	1.00
Married	.1.534
Formerly Married	1.298
Age	
< 25 (ref)	1.00
25-39	.998
40+	1.139
Educational Qualification	
No schooling (ref)	1.00
Primary school	1.077*
Secondary& above	.991*
Monthly income	
< N1,000 (ref)	1.00
N2000-N5000	1.194*
N6000+	.616*
Age at first Birth	
< 15 yrs (ref)	1.00
15-19 yrs	.388*
20+	1.854*
Occupation	
Farmer (ref)	1.00
Trader	.948
Civil Servant & Others	.885
Domestic Violence	
Violence (ref)	1.00
No violence	1.746
Cultural Practices	
Harmful (ref)	1.00
Not Harmful	1.783
Household Decision on maternal health	
Husband (ref)	1.00
Self	1.141

Discussion of Findings

Findings on socio economic status show a comparatively high percentage of single mothers. As indicated, the age at first birth in the study area is predominantly young because in the opinion of one man in Wanokom *"Ladies in the rural area tend to have children earlier than their counterparts in the urban centres"*

The researcher also observed a high level of sexual permissiveness among the people because many young women of about 15 years reported to have given birth in the last one year. Most of these young women are still in their parents' house that is, not yet married.

The educational qualification of respondents showed a relatively high level of literacy among women in the study area compared to the national female literacy rate of 35 percent. The high proportion of the population with secondary school or higher qualification means that women in the study area are knowledgeable about maternal health issues. Besides, the high number of educated women indicates that they are potential change agents in the rural area hence advantageous to maternal health.

However, the analysis shows that there is no significant relationship between educational qualification and maternal health status. Though education influences people's perceptions and dispositions towards different activities including health activities and behaviour, the data did not support this assertion

The age at first birth in the study area is very young and affects women's health status. This is obvious because the communities under study have people who have their first babies when they were below 15 years. The reason for this situation is that since the communities are predominantly poor, young women are often enticed by the financial assistance they are likely to receive or are receiving from the male folk, which predispose them to early pregnancy and poor maternal health. After a man impregnates a woman, he moves on to others who are readily available.

The data further indicate a strong and significant relationship between age at first birth and maternal health. Respondents who had first babies when they were above 20 years have better maternal health than those who had them earlier. Women who had their babies later are most likely to experience good maternal health status compared to those who had their babies later.

Women occupations have also been identified as having effects or influence on their health. A majority of the women in the study area are farmers. Kettle (1996) noted that women

are subjected to precarious health conditions by the nature of their activities like farming and this affects their health. He noted further that the peculiar physiology of a pregnant/lactating woman makes her vulnerable to ill-health caused by the different activities she carries out in the environment.

Violence against women is common among women in the study area. Almost all the respondents have suffered one form of violence or the other in the hands of an intimate partner in the last one year. This situation also comes up during pregnancy, which could be inimical to their health condition.

Despite the fact that most people condemned violence against women, about 50 percent of the respondents in the survey data posited that the man was justified by abusing his wife so long the woman was wrong, and the act of violence done in order to correct rather than punish her.

Intimate partner violence is injurious to the health of the women who are at the receiving end. The study found that maternal health status is reduced by the acts of violence that they are exposed to in their households.

Since women are not allowed to take decisions on their own sexuality, they cannot determine when to have sex, when to have children and where to deliver them. De Zaldwondo et al., (1989) observed that the fear of social consequences (being beaten, divorced/abandoned, and neglected) tends to take priority over the fears of health consequences of ill timed sexual acts. This study reinforced the above assertion by indicating that male dominance in decision-making exposes women to poor maternal health status while joint decision making produces better maternal health outcome.

The assertion that women who have complete authority over her income, can decide on her priorities including her health is also extended by the study. This is because women who had free hand on how to spend their earnings have better maternal health in comparison to those whose husbands determine how such earnings were spent.

A majority of the respondents did not respond to the question “Do your people practice female circumcision? The reason adduced for the high level of non-response is obvious. Female sexuality and sexuality generally, is still looked upon as sacrosanct, only discussed in secrecy, especially, among adults. As a result, the people are not positively disposed to discussing/responding to issues about sex or sexual organs.

The preference of particular sex of children has been shown to be prevalent in the study area and the implication of this is obvious, woman in order to keep their homes have multiple births in order to have the preferred sex. This obviously affects the health of women as they pass through several strain and stress of childbirth.

Recommendations

The study established that maternal health outcome among the people of Northern Cross River State is inadvertently tied to the household environmental condition. It is also tied to the community structural condition, that is, macro-level (the social systemic factors). The implication, therefore, is that recommendations should be able to relate to the specific environmental condition and the community systems to improve on maternal health outcome. The recommendation flowing from the above is classified into three broad activities, which include sensitization and education, Government and communal intervention and academic dissemination of scientific information.

Improving maternal health is one of the eight Millennium Development Goals (MDGs) of the United Nations. The study has shown that effort towards achieving better health status for women has not been extensive and successful in the rural areas. The relevant agencies concerned with achieving the MDGs and reproductive health should realize that their efforts have not achieved the desired results in the rural areas generally and the study area particularly. This calls for more concerted programmatic efforts targeted at rural communities.

Conclusion

The findings of this study have shown the links that exist between the household environmental condition and maternal health among rural women of Northern Cross River State by indicating and identifying individual household condition, communal values, attitudes and behaviours that impinge on maternal health. By relating separately and collectively the possible influences of each variable on maternal health, the study contributes significantly to the theoretical relevance of Demography.

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