Determinants Of Maternal Mortality In Liberian Rural Households: Case Study Of Montserrado County

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Abstract

This study examined the determinants of maternal mortality among women of reproductive age in rural households of Montserrado County, Liberia. A multistage random sampling technique was employed for the study. Firstly, 5 rural communities were randomly selected out of all the rural communities in the county. Secondly, a total of 273 households having nursing women were randomly selected from the communities. Due to the difficulty involved, another set of 31 households having deceased nursing or pregnant woman within the past two years were selected using snowball sampling. The data were analyzed through the use of binary logit model. The result of the analysis showed that age of nursing/deceased mother, parity, distance to nearest health facility, contraceptive method, household monthly expenditure, domestic violence, formal education, household wealth status and type of house significantly influenced maternal mortality within the rural households. The variables that increased the chances of maternal mortality include distance to nearest health facility, low household monthly expenditure, and taking residence in mud house. On the other hand, the variables that reduced the chances of maternal mortality were age of the nursing mother, parity, use of modern contraceptives, non-involvement in domestic violence, higher education level, and household wealth status. The study recommended that there should be concerted efforts to bring about improvement of maternal socioeconomic status. The Ministry of Health should ascertain that adequately equipped health centers are available in every rural community. Also, government should make free health care policy for pregnant women and infants. Women should be encouraged to attend basic education institutions. These would enhance improvement in livelihoods among women in various households and communities.

Keywords: maternal mortality; rural communities; households; nursing/deceased mothers

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I. BACKGROUND OF THE STUDY

According to WHO (2016), more than 800 maternal deaths take place on daily basis. This figure comprises of women that are within reproductive age of 15-49 years. This data largely include less developed countries which are characteristically poor. Maternal mortality depicts inequality status of women which is a common phenomenon in less developed countries that are characterized with poor health systems (Igbal et al., 2014; McCarthy and Maine, 1992). Maternal mortality costs is much more than the demise of an expectant mother. It also implicates adversity for the child, the household and community at large. There are numerous individuals and community-based factors that are directly or indirectly related with maternal mortality. McCarthy and Maine (1992) and Alvarez et al. (2009) state that direct factors include complications of pregnancy which hemorrhage, eclampsia. comprise sepsis. abortion, and obstructed labor. Alvarez et al. (2009) reveal the indirect factors to include preexistent conditions like malaria, anemia and nutritional deficiencies which are aggravated by pregnancy. They also discovered that age and parity that are linked with woman's reproductive status, are also related with maternal mortality. Other factors that indirectly affect maternal mortality were shown to include access to health services, women's behavioral propensity to seek for and utilize health services. According to McCarthy and Maine (1992) and Illah et al. (2013), other factors that influence maternal mortality include socioeconomic, environmental, and cultural factors. The probability that a woman would die or become incapacitated through pregnancy and childbearing is closely associated with her social and economic status, her cultural norms and values, and her home's physical remoteness (WHO, 2008). It is presumed that an impoverished and ostracized woman has more tendency to experience risks of morbidity and mortality. It is proven by WHO (2008) that

maternal mortality rate is a mirror image of imbalances between developed and less developed countries. WHO, UNICEF, UNFPA and World Bank (2012) put death risk as result of pregnancy or childbirth to ratio 1:39 in Sub-Saharan Africa, compared to 1:4700 in developed countries. United Nations (2011) documented high number of maternal mortality among peoples whose women could not access skilled attendants during childbirth. Also, poor and uneducated women were detected to be most vulnerable to maternal mortality and morbidity. High maternal mortality rates have been reported by WHO (2008) to serve as sign of malfunctioned health systems. It also serve as indication of intrinsic gender disparities at the expense of women who are generally characterized with limited control of resources and decision-making. Consequently, this results in restricted access to social sustenance and livelihood, economic prospects and health care services. Gender inequalities are said to manifest through coercion of girl child from poverty-ridden households into child marriage and abuse. These girls are frequently dispossessed of right to decision making. As a result, they are observed to find themselves in great risk of premature pregnancy consequential complications. and Furthermore, several less developed countries have no legal systems that offer provisions for women and girls with regards protection of their reproductive rights. Even when such legal systems exist, there are no painstaking enforcement. Hence, there is perpetual acts of gender inequalities that excessively jeopardize women's lives.

Globally, there is variation in maternal mortality ratios (MMR), and there are varying determinants both between and within countries, which cause bottlenecks for maternal health programs. Ascertaining main determining factors of maternal mortality and their comparative significance is very vital to setting the precedence in developing policy. Therefore, this study aims

at determining factors that contribute to maternal mortality in some selected rural communities in Liberia.

2. METHODOLOGY OF THE STUDY

2.1 The study area

Montserrado is a county in the northwestern portion of Liberia. The national capital (Monrovia) is located in this county. The county has 17 sub political districts. The county has a population of about 1.2 million as at 2008 Census, making it the most populated county in Liberia (Liberia Institute of Statistics and Geo-Information Services, 2017). The county has an area of 1,912.7 square kilometres (738.5 sq mi), making it the smallest in the country in the country (Liberia Institute of Statistics and Geo-Information Services, 2017). The population density is 599.7 inhabitants per square kilometre (1,553/sq mi), the highest in Liberia (Liberia Institute of Statistics and Geo-Information Services, 2017). Montserrado County is bordered by Bomi County to the west, Bong County to the north, and Margibi County to the east, and the Atlantic Coast to the south. Careysburg District and Todee District are the two statutorily created districts in the county (Republic of Liberia, 2008). Commonwealth District, Greater Monrovia District and St. Paul River District are also recognized, but are not officially recognized as administrative districts (Republic of Liberia, 2008). There are 21 townships, seven cities, one borough, and two chiefdoms contain within these districts. The main ethnic groups in Montserrado are Kpelle, Bassa, Mano, Kissi, Loma, and Gola (Republic of Liberia, 2008). Todee District's mainly comprises agrarian population, with farming being their primary economic activity (Liberia Institute of Statistics and Geo-Information Services, 2017). The district is run by chiefdoms and clan systems. Montserrado County contains a large number of native African communities (Republic of Liberia, 2008). Greater Monrovia District is the most populous district in the county and the country. It is home to about 1.0 million people (Liberia Institute of Statistics and Geo-Information Services, 2017). In the county 10% of the population was considered food insecure, with 35% being highly vulnerable, 43% as moderately vulnerable, and 13% were considered food secure regarding access to sustenance. As at 2008, the county eight hospitals, nine health centers, approximately 93 medical clinics functioning (Liberia Ministry of Health and Social Welfare, 2008). Employment is mainly informal, small scale trade and government employment through the national government or foreign governments (Republic of Liberia, 2008). The population in this district has members of each of Liberia's 16 main tribes (Republic of Liberia, 2008).

2.2 Sampling techniques

The county comprises of the following rural communities: Walker, Royal, Pepper, Kpanwen, Gavlehn, Neekly, Kpelleh, Lee, Lorma, Zermu, Thinker, Zalamu, Zopi, Pleemu and Yeagba. For the purpose of this study, five of these communities were randomly selected for data collection. The selected rural communities were Kpelleh, Neekly, Royal, Yeagba and Zopi.

A sample size of 304 households were selected for the study using simple random sampling. These were selected from the total number of households that have nursing/deceased mothers that have nursed child(ren) within past 2 years. However, for ease of analysis, purposive sampling was employed to obtain n>30 households that witnessed maternal mortality. For any household that witnessed maternal mortality, the household heads or any other close relatives of the deceased mother were selected as respondents for the data collection. But among households that never witnessed maternal mortality, the nursing mothers were selected as respondents for the data collection. A structured questionnaire was used for data collection. The data collected include the demographic characteristics of the nursing mothers and their households, and households' behavioral patterns. A total of 400 questionnaire were distributed, but 304 were successfully administered. This gave a success rate of 76.0%.

2.3 Analytical techniques

This study adopted modified McCarthy and Maine's framework. The study examines the distant, intermediate and proxy determinants of maternal mortality in rural Monteserrado. Women who had been pregnant and given birth to at least one child were included in the study. Participants consisted of respondents who were living women and household heads or close relatives of deceased mothers who had died of pregnancy-related factors.

A respondent was eligible for inclusion in this study if her total number of children ever born was one or greater. Deceased women were included in this study as cases of maternal death when they were identified through a respondent as having died while pregnant, during childbirth or within 8 weeks after giving birth. The information required for the study include age, ethnicity, religion, type of residence, educational level, wealth status, type of contraception used, media exposure, distance to health facility, water quality, social autonomy, attitude towards domestic violence, and location.

After gathering the responses from the households, the Statistical Package for Social Sciences (SPSS Version 20.0) was used for data analysis. Frequencies and percentages were computed for categorical variables, and bivariate analysis association was examined using the binary logistic regressions. Statistical significance was tested at the 0.05 level of significance.

2.3.1 Variables and their measurements

Occurrence of maternal mortality was the dependent variable for this study. This is a dummy variable. Death during pregnancy, during childbirth, or within 8 weeks of giving birth = 1; otherwise (living women) = 0.

Explanatory variables include the following: Age of nursing/deceased mother (in years).

Parity (number of children ever born).

Distance to nearest health facility (in minutes by trek).

Patronage of health facility by nursing/deceased mother which is measured as dummy variable: patronage of health facility = 1; otherwise = 0.

Media exposure was measured by frequency of listening to radio, watching television, reading newspaper or magazine. These were measured using "never" = 1; "rarely" = 2; "regularly" = 3; "all the time" = 4.

Method of contraceptive used were categorized into "no method"; "traditional"; and "modern". These are measured as dummy variables.

Religion was categorized as "Christians", "Muslims" and "Traditional". These are measured as dummy variables.

The source of water was classified as "stream", "unprotected well", and "borehole". These are measured as dummy variables.

A variable of social autonomy was introduced to measure participation in decision making in the nursing/deceased mother's involvement in decisions on her own health care (involved = 1; otherwise = 0).

Household expenditure was measured in monetary terms as total household expenses per month (USD).

A composite variable for domestic violence was measured as a dummy variable.

A nursing/deceased mother who witnessed domestic violence = 1; otherwise = 0.

Possession of formal education was scored with years spent in formal institution of formal education as follows: individuals with no formal education = 0; primary education = 6; secondary education = 12; tertiary education = 17. The

figures represent the years spent in educational institutions.

For wealth status, poor household = 1; household belonging to middle class = 2; while rich household = 3.

The type of house is measured as dummy variable for each of these housing types: zinc house; story building; mud house with zinc roof; incomplete building; concrete house with zinc roof.

3. RESULTS AND DISCUSSION

3.1 Demographic characteristics of the selected households in the study area

Table 1 shows the demographic characteristics of the selected households. These include the sex, age, educational level, household size, religion, type of house, frequency of clearing surroundings bushes, presence of drainage system, frequency of cleaning the drainage, and type of toilet facilities.

Table 1: Demographic characteristics of the selected nursing/deceased mothers and households in the study area

Variable	Frequency
Age of nursing/deceased mother	
< 20	58 (19.08)
20 - 29	144 (47.37)
30 - 39	72 (23.68)
40 - 49	30 (9.87)
Parity	
1 - 2	82 (26.97)
3 - 4	129 (42.43)
5 - 6	53 (17.43)
> 6	40 (13.16)
Distance to nearest health facility (minutes	
by trek)	
< 15	93 (30.59)
15 - 30	75 (24.67)
30 - 45	34 (11.18)
45 - 60	42 (13.82)
> 60	60 (19.74)
Patronage of health facility by	
nursing/deceased mother	
Patronize	209 (68.75)
Non-patronize	95 (31.25)
Media exposure	
Never	119 (39.14)
Rarely	99 (32.57)
Regularly	43 (14.14)

All the time	43 (14.14)
Method of contraceptive	50 (00 50)
No method	72 (23.68)
Traditional	50 (16.45)
Modern	182 (59.87)
Religion	
Christians	251 (82.56)
Muslims	40 (13.16)
Traditional	13 (4.28)
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Source of water	
Stream	72 (23.68)
Unprotected well	179 (58.88)
Borehole	53 (17.43)
Social autonomy	12 (2.05)
Involvement in decision making	12 (3.95)
Non-involvement in decision making	292 (96.05)
Household monthly expenditure (USD)	
< 100	80 (26.32)
100 – 199	103 (33.88)
200 – 299	98 (32.24)
300 – 399	12 (3.95)
400 – 499	8 (2.63)
500 & above	3 (0.98)
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Domestic violence	
Involved	52 (17.11)
Non-involved	252 (82.89)
Formal education	10 (15 10)
No formal education	49 (16.12)
Primary education	86 (28.29)
Secondary education	91 (29.93)
Tertiary education	78 (25.66)
Household wealth status	
Poor	204 (67.11)
Middle class	63 (20.72)
Rich	37 (12.17)
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Type of house	
Zinc house	34 (11.18)
Story building	27 (8.88)
Mud house with zinc roof	64 (21.05)
Incomplete building	33 (10.86)
Concrete house with zinc roof	146 (48.03)

Table 1 shows that majority of the selected nursing or deceased mothers were in their 20's. These form about half of the total number of women selected. Most (42.43%) of the women had 3 or 4 children; about 27% of them had 1 or 2 children. Only one third of the women had to trek 16 minutes or less to visit health centers. About one quarter of them had to trek for about 15 - 30 minutes when visiting health centers. The rest (about 45%) trekked more than 30 minutes whenever they visited health centers. This is not an ideal situation for pregnant women. About two thirds of the women in the study area patronized health centers, while the rest did not, suggesting that they utilized other health service providers. In terms of exposure to media through radio, television and newspaper, many (71.71%) of the selected women were never or scarcely exposed to these means of media. Hence, they could not obtain crucial information that may be useful for their health care. About 60% of women in Liberia used modern methods of contraceptives; 16% used traditional methods; about a quarter of them claimed to use no method. Majority of the women were Christians (82.56%); the rest were either Muslims (13.16%) or traditional religion (4.28%). The households in the rural areas of Monrovia had limited access to portable drinking water. Over 80% of the respondent households had no access to hygienic water; less than 20% had access to borehole water that was relatively drinkable. Many women in Liberia were not

known to enjoy social autonomy. Less than 5% were involved in decision making within the households. With an average of 4 children per household, if an individual member would live on USD1 per day (according to UN benchmark), a household would require about USD200 to live above poverty line. From the study, more than 60% of the rural households (within the capital) were living below poverty line. Considering the household wealth status, two thirds of the households were categorized as poor; about 20% were in the middle class, while a little more than 10% were considered to be rich households. Liberian households had good reports of not being involved in domestic violence. This might be due to enforcement of law against genderbased violence in the country. However, this study revealed that one out of every six young women within the age bracket of teen age and 40's did not attend school. This was not quite suitable in spite of the availability of free basic education program within the country. A little more than half of the selected respondents completed secondary education. The study revealed that more than 2 out of every 5 households live in unsuitable houses. Such kind of houses would be a mirror of living conditions of the households. This quite revealed the poverty situation of the households and level of affordability of improved maternal health care services by the pregnant and nursing mothers in the study area.

3.2 Determinants of maternal mortality in rural Montserrado

Table 2: Determinants of maternal mortality in the study area (Binary Logistic Output)

Variables	Coefficients	P-value	
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	2 (2)	0.474
Constant	2.634	0.451
Age of nursing /deceased		
mother		
< 20	0.868	0.352
20 - 29	0.657	0.418
30 - 39	0.372	0.542
40 - 49	-2.676	0.062*
Parity		
1-2	0.046	0.830
3 - 4	0.425	0.515
5 - 6	-0.841	0.057*
> 6	-0.620	0.078*
Distance to nearest health		
facility (minutes by trek)		
< 15	0.117	0.732
15 - 30	5.396	0.249
30 - 45	3.171	0.075*
45 - 60	3.678	0.055*
> 60	0.152	0.697
Patronage of health facility by		
nursing /deceased mother		
Patronize	1.208	0.272
Non-patronize	4.594	0.597
Media exposure		
Never	0.017	0.895
Rarely	1.208	0.272
Regularly	0.595	0.597
All the time	1.297	0.895
Contraceptive Method		
No method	1.557	0.272
Traditional	0.002	0.441
Modern	-15.668	0.000***
Religion		
Christians	7.281	0.007
Muslims	10.445	0.001
Traditional	2.612	0.271
Source of water		
Stream	1.735	0.188
Unprotected well	0.657	0.418
Borehole	4.045	0.257
Social autonomy		
Involvement in decision making	1.735	0.188
Non-involvement in decision		
making		

Household monthly	0.595	0.418
expenditure (USD)		
< 100		
100 – 199	1.861	0.257
200 – 299	13.778	0.000***
300 – 399	4.434	0.035**
400 - 499	4.622	0.202
500 & above	1.735	0.188
Domestic violence	2.511	0.113
Involved		
Non-involved	0.000	0.993
Formal education	-9.902	0.019**
No formal education		
Primary education	1.735	0.188
Secondary education	0.868	0.352
Tertiary education	-8.574	0.003***
Household wealth status	-4.748	0.093*
Poor		
Middle class	0.119	0.731
Rich	-4.053	0.044**
Type of house	-6.965	0.073*
Zinc house		
Story building	2.495	0.114
Mud house with zinc roof	0.595	0.441
Incomplete building	2.988	0.084*
Concrete house with Zinc roof	1.841	0.398
	0.041	0.175
Cox and Snell R ²	0.732	
Nagelkerke R ²	0.896	
Chi-square	85.61	
P-value	0.05	
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NB: * 0.1 significance level; ** 0.05 significance level; 0.01 significance level

Table 2 shows the significant variables that influenced maternal mortality in the rural Montserrado. The significant variables that influenced maternal mortality include age of nursing /deceased mother, parity, distance to nearest health facility, contraceptive method, household monthly expenditure, domestic violence, formal education, household wealth status and type of house. The result shows that the odds of maternal mortality were reduced with

increasing age. A rural nursing mother that is 40 years and above is seven times (e $^{2.676} = 7.27$; p=0.062) less likely to be a victim of maternal mortality compared to the younger mothers in rural area.

The result shows that the chances of maternal mortality were reduced with increasing parity. A rural nursing mother that have given birth 5-6 times is twice (e $^{0.841}$ = 2.29; p=0.057) less likely to be a victim of maternal mortality compared to

those with fewer births. Also, those with more than 6 births were almost twice (e $^{0.62}$ = 1.68; p=0.078) less likely to be a victim of maternal mortality compared to those with fewer births.

Moreover, distance from nearest health facility was observed to increase incidence of maternal mortality in sampled rural areas. A nursing mothers in rural area whose house was 30-45 minutes trek from health facilities is about nine times ($e^{3.171} = 8.62$; p=0.075) more likely to be a victim of maternal mortality compared to those whose houses were closer to the nearest health facility. Those whose houses were 45-60 minutes trek from nearest health facilities were 10 times ($e^{3.678} = 10.00$; p=0.055) more likely to be a victim of maternal mortality compared to those whose houses were closer to the nearest health facility.

The result also shows that the odds of maternal mortality were reduced with use of modern contraceptive method. Nursing mothers that used modern contraceptive method were 43 times ($e^{15.668} = 42.59$; p=0.000) less likely to be a victim of maternal mortality compared to those that used other methods or no method at all.

Households that earn meagre income were observed to have more chances of maternal mortality. A nursing mother from a rural household with monthly income of USD 100-199 was 37 times ($e^{13.778} = 37.45$; p=0.000) more likely to be a victim of maternal mortality compared to those that earned higher monthly income. Similarly, nursing mother from a rural household with income of USD 200-299 was 12 times ($e^{4.434} = 12.05$; p=0.035) more likely to be a victim of maternal mortality compared to those that earned higher monthly income.

The result shows that the odds of maternal mortality were reduced with non-involvement in domestic violence. Nursing mothers in the study areas that did not witness domestic violence had 27 times ($e^{9.902} = 26.92$; p=0.019) less likelihood to be a victim of maternal mortality compared to those that witnessed domestic violence.

The result shows that the chances of maternal mortality were reduced with increasing level of formal education. A nursing mother with minimum of secondary education was 23 times ($e^{.8.574} = 23.31$; p=0.003) less chances of being a victim of maternal mortality compared to those that had less level of formal education. Those that had tertiary education were 13 times ($e^{.4.748} = 12.91$; p=0.093) less chances of being a victim of maternal mortality compared to those that had lower than tertiary level of education.

Furthermore, the result shows that the odds of maternal mortality were reduced with increasing household wealth status. A nursing mother that belonged to a middle class household was 11 times ($e^{\cdot 4.053} = 11.02$; p=0.044) less likely to become a victim of maternal mortality compared to those that belonged to households with lower wealth status. Nursing mothers that belonged to a rural households with rich wealth status were 19 times ($e^{\cdot 6.965} = 18.93$; p=0.073) less likely to become a victim of maternal mortality compared to those that belonged to households with lower wealth status.

The result shows that the odds of maternal mortality were directly related with increasing possibility of living in a mud house. A nursing mother that lived in a mud house had 8 times (e^{2.988} = 8.12; p=0.084) more chances of becoming a victim of maternal mortality compared to those that lived in a more suitable house. This is not unexpected since type of house reflects the household wealth status.

The Cox and Snell's R^2 and Nagelkerke's R^2 were obtained to measure the strength of the association between maternal mortality and the explanatory variables. These two estimated R^2 s were found to be high, accounting for 0.732 and 0.896 for Cox and Snell's R^2 and Nagelkerke's R^2 respectively. These indicate high explanatory power of the model. The Omnibus test of the model coefficients, as revealed by the value of Chi-square test- statistic (85.61), implies that maternal mortality is related to each specified

explanatory variable. It also infers that the overall model is statistically significant.

3.3 Discussion

The risk of maternal mortality was found to be least for older women. This was similar to the findings of Adamu et al. (2003) who observed that teenage mothers had high risks of maternal mortality. The lesser risk of complications in women with previous births may explain the low chances of maternal mortality for high parity. This is in line with findings of Pierre-Marie et al. (2015), Chowdhury et al. (2007) and Mbassi et al. (2011) that revealed that nulliparity increased the risk of maternal mortality.

Lower education and low socioeconomic status may adversely impact employment which in turn result in low income and increased poverty status. This would ultimately result in low household expenditures, including health expenditure. Hence, poor maternal health services' utilization may result with ultimate increase in maternal mortality as outcome. This is corroborated by Aremu et al. (2011). This is pertinent in Liberia where costs of health care services are mostly borne by the patients. Stephenson and Elfstrom (2012) observed that high community wealth was associated with better access to maternal health services.

Liberian women were observed to commonly use modern contraceptive methods as against other methods. This behavioral pattern helps in having significant reduction in maternal mortality. This is contrary to the findings of Durowade et al. (2017) and Oluwole et al. (2016) that observed women in southern Nigeria to have preference for traditional/folkloric over modern contraceptives due to fear of side effects.

The influence of traditional and cultural factors with respect to use of contraceptive methods on maternal health may be especially strong as seen in Thaddeus and Maine (1994) and Karlsen et al. (2011). Use of contraceptives was observed to be

very common among young girls and women in Liberia. Even though primary education was free in Liberian public schools, one out of every 6 women was without basic education. This may be an indication of the deep rooted nature of traditional and cultural values. The significance of higher education may explain its contribution to lower maternal mortality in the study area.

It was observed that distance to the nearest health center was a determinant of maternal mortality for women in the study area. This is not impossible as pregnant women that develop complications would require emergency medical attention. This might be difficult to achieve if there is no nearby reliable health facility. This was similar to the study of Scott et al. (2013) among women in Java.

Liberia has seriously enforced law against domestic violence and violence against female gender. It could be observed that non-involvement of women in domestic violence with their intimate partners significantly caused reduction in maternal mortality. This is similar to the findings of Garg et al. (2020) who revealed that intimate partner violence had negative resultant effects on both mother and child, causing preterm delivery and incidence of low birth rates in Delhi.

The study revealed that households that took residence in mud house had higher probability of witnessing maternal mortality. This is plausible due to the fact that most of such houses are located in indecent neighborhoods. They are also characterized with unhygienic attributes; hence, such house type might contribute to maternal mortality. Although, such report was uncommon in studies conducted by researchers.

4. CONCLUSION AND RECOMMENDATIONS

The findings of this study show that maternal mortality remains an issue to be put into consideration in Liberia. It reveals its determinants in the rural areas in capital

Monrovia. Maternal mortality was associated with age, parity, education, household wealth status, contraceptive methods, proximity to health facilities, incidence of domestic violence. and type of residence. If there would be significant reduction in maternal mortality in the country, all these determinant variables must be seriously addressed. Hence, there is need to put some things in place. There should be concerted efforts from health care stakeholders, the households and the nursing mothers in particular to bring about improvement of maternal socioeconomic status. This is possible through the Ministry of Health by ascertaining that health centers are available in every rural community, and such centers should be well equipped with both adequate human and material resources. The government should make free health care policy for pregnant women and infants, especially at rural communities where poverty has been endemic. Governments at all levels should fashion out ways to encourage citizens, especially female gender to attend basic education institutions which serve as foundation for higher education level. Education has served as a major factor for improved livelihood among women in various households and communities. In addition, the good work of campaign against violence and women victimization in all ramifications should be sustained.

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