

## Abstract

*In spite of many approaches towards improving maternal health, there is still a slow decline in maternal mortality and morbidity in less developed areas. There are at least 529,000 maternal deaths in the world annually. These deaths are almost equally divided between Africa and Asia. This situation is still prevalent despite several programmes introduced as interventions to check this trend. One of such programmes is the "safe motherhood initiative", which was introduced as strategic interventions to reduce maternal mortality and morbidity in Nigeria. The safe motherhood interventionist programmes have either not been effective or are misdirected in addressing the issue of maternal morbidity and mortality in Nigeria. These deaths, as well as disabilities therefore, suggest that maternal health is not a simple consequence of reproductive risks alone, but an outcome of a host of maternal health conditions including environmental factors. The study explored women assessment of those environmental factors affecting their health. A sample of 823 respondents was drawn from a total population of 842,561. Women maintained that the factors exposing them to maternal risk included among others household sanitation condition, sources of drinking water, toilet and waste disposal. It is instructive that the exposure of women to harm can be avoided through the improvement of the household environment where they live and operate.*

**Keywords:** Maternal Health, Qualitative Assessment, Environmental Factors

## Background of Study

Pregnancy is a life threatening condition in a majority of developing countries, and its outcome (800 in every 1000) reduces the life expectancy of childbearing women. UNICEF, UNPFA, WHO (2000) indicated that 37,000 maternal deaths occurred in Nigeria in 1999 only. It has also been indicated that maternal mortality ratio varied from 700 to 1,500 per 100,000 women in 2005 (State of Nigeria Health, 2006). Central Intelligence Agency World Fact book, (2012) stated that the maternal mortality rate in Nigeria is 630 deaths per one thousand live births. Nigeria ranks 10<sup>th</sup> in the world in maternal mortality (CIA World Fact book, 2012). For every woman that die of pregnancy related complication, over 20 others suffer lifelong disabilities. This situation is still prevalent despite several programmes introduced as interventions to check this trend and improve maternal health. One of such programmes is the "safe motherhood initiative", which was introduced as strategic intervention to reduce maternal mortality and morbidity in Nigeria. This implies that with the number of maternal mortality, these programmes have either not been effective or misdirected. There are many factors responsible for this situation – social, medical, cultural and environmental.

Following from above, the household environments where childbearing women live have been recognized as having conditions that affect their health (World Bank 2000; UNICEF, 2000). Racioppi (2002) observed that a variety of health conditions such as air quality, building standards, noise, contaminated water, food and toilet facilities are

evident in some household environments. These undermine and determine the health status of childbearing women.

Socio cultural practices are also issues in maternal health. Ascadi & Ascadi (1991) stated that the conditions of women in the family and society are such that traditions and customs concerning marriage, which include acceptance of an early marriageable age for girls and culturally embedded demand for an unlimited number of children, affect the health of women of reproductive age. Also, issues like spousal communication, household decision-making and socio-economic status of women are linked to the maternal health situation. The decision on the number of children, spacing and health care delivery options for the family and domestic violence against women affect maternal outcomes at childbirth (Nwokocha, 2004).

Studies have also shown that maternal health is not only the result of direct, biomedical conditions but also from factors like the household environmental conditions that are deeply rooted in culture, structure, institutional and gender relationship (Kyomuheudo, 2004). Household environmental conditions could constitute safety or threat to the health of the people (World Bank, 2000; UNICEF, 2001). These conditions include air quality, source of water, noise, housing standards and health seeking behaviour. Childbearing women are the most vulnerable to these environmental conditions because of their unique physical and biological characteristics. Studies in developing countries have indicated that the environment where women of reproductive age live,

incidence of diarrhea, poor household source of drinking water and disposal systems may cause maternal morbidities. There is also high risk of accidents or injury resulting from poor housing and diseases due to water contamination (Brockerhoff, 1995; Murray & Lopez, 1996, Yassin, 2000). It is against this backdrop that the study undertakes to examine how do sanitation facilities and hygiene behaviour affect maternal health, how domestic violence affect maternal health, how access to and utilization of maternal health care facilities affect maternal health and how the household structure/status affect maternal health?

## Methodology

The study adopted the descriptive design 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 qualitative instrument to explore the role of the physical and cultural environments of the household on maternal health. The Local Government Areas making up Northern Cross River State are Ogoja, Yala, Bekwarra, Obudu and Obanliku. 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 study population included all women of reproductive age 15-49 and men who have ever fathered a child in the rural communities selected for the study.

The Focus Group Discussion (FGD) and the In - depth Interview were analyzed after being transcribed from the original language to English language. The analysis was focused on comparing the responses of the FGDs from each of the selected communities with others to see whether a similar pattern of responses existed among them. The analysis involved the categorization of data collected into the objectives of the study. This included arranging the information according to gender responses; the responses of the men and women were finally compared to see whether their responses were related. Manual analysis was adopted for analyzing the data. This method involved the transcription of recordings followed by examination and isolation of various responses according to study objectives for the FGDs and IDIs.

The researcher took into consideration the respondents and communities' right of participation in the study. A letter of introduction was collected from the department; it was presented to the chief or head of the communities that formed the sample for the study. The purpose of the study was stated as

academic and the benefits of the study to the communities was to bring to the knowledge of the Government health status and condition of the area in order to elicit appropriate responses from it. The chief's consent was sought and an order was issued for respondents to follow the researcher. The respondents were informed on the purposes and the need for them to answer the questions correctly. Their cooperation yielded the data that is presented in this study.

## Variable Description

Different household environmental conditions affect people living therein differently. Data on the household environmental condition is crucial because the sources of drinking water affects and determine the health of the people that use it. The presentation of data relating to this is done with a view to assessing the likely effect of water sources on maternal health. Poor water sources have been indicated as causing different health hazards and their presentation helps in determining their relative effects on maternal health. Toilet facilities are also issues related to health. Poor toilet facilities create illnesses for those who use improper or poor facilities. These facilities are presented in order to examine their influence on maternal health just as poor cooking facilities negatively affect maternal health and these variables are presented to assess their influence on maternal health.

## Results

### Sources of Water

Data on the household environmental conditions of women in the study area is presented. It can be observed that the predominant source of drinking water is from the stream, mentioned by 46.3 percent of the respondents. Those whose source of drinking water is 'covered well and borehole' made up 31.0 percent and less than 10 percent rely on pipe borne water supply for domestic and other uses. A woman of fifty five years in Ukpah in an interview stated that

*The source of our drinking water is not good because the stream is very far away and not everybody can get there and is located in the swamps but is perennial and pure. The only borehole we have is the sign of government presence in our area and the water from it is not good because it has oil on it. (Ubang).*

Another woman stated further:

*The problem of drinking water is so bad that in the months of March and April, we rarely have it and nothing has been*

*done to improve on the source of water. The promises we have received are many yet nothing has been done. The stream is far and old women like me cannot afford to trek the distance (Alege).*

The cooking facilities used in the study area are not safe. The commonest facility for cooking is firewood and the reason for its use was advanced by a 40-year-old woman thus:

*We use firewood because it is the only source that is readily available, affordable and easy to use. We cannot use electricity because we do not even have electric power. The only other facility that most people use is the charcoal because we have very big trees that can be burnt for charcoal. Besides, we go to the farm every day, it is easy for us to carry firewood from there and it makes life easy for village people.*

Another woman of fifty years old in Ubang collaborated the findings on firewood and cooking thus:

*Firewood is commonly used because that is the only means by which we can cook our food and provide heating for the household/there is no electricity and gas in the rural area is not available. Some of us know that this facility is harmful to health but there is no practical alternative hence we use what we have.*

### Perception of Cleanliness

The perception of cleanliness affects the sanitary condition and hygiene behaviour of the respondents. These factors affect and determine the health condition of those whose immediate area of operation is the household environment. The perception of cleanliness impinges forcefully on maternal health which forms the basis for the presentation of data relating to the perception of cleanliness.

The data indicated that wastes are not properly disposed of. It is obvious from observation that waste is dumped in heaps very close to houses since there is no standardized means of waste disposal. This situation can be injurious to the health status of those in the household since these waste heaps become breeding grounds for mosquitoes, cockroaches and rats. They become bearers of infections and diseases. A 55-year-old woman in Yala maintained that. *I am not worried about that heap because it does not affect me in any way.*

One woman of age 45+ years in Ukpah, in an interview session stated:

Most of the respondents have a good knowledge of what is cleanliness by the way they arranged their homestead. A 39-year-old woman in Utanga stated:

*It will be an eyesore if one's house is not at least kept clean by sweeping daily. This will keep away creeping insects that might be harmful to children. I try my best to see that my small house is habitable for my children.*

Women with positive disposition towards cleanliness were more likely to have good maternal health outcome in comparison to those with negative disposition.

These responses are in line with different findings who maintained that the household life space forms the primary arena within which women operate. They seek food, fuel, water, shelter, fodder, fertilizers, building materials, medicines, the ingredients of income generation and wages in support of their activities as individuals, wives and mothers. It has however been indicated by scholars that some pets can be harbingers of infection. The implication of this information is that the household may be having pets that bear infections and other diseases that might undermine the health of the inhabitants.

### Household Decision

The person who makes or leads in household decision making determines or prioritizes activities that may be to the detriment or help of others. This person determines the health concerns of the family members. However, when both the wife and husband jointly decide on the affairs of the family, the health of the women is likely to be enhanced since the woman influence decisions relating to her health against when only either of the husband or wife that decides. Data here depicts a male dominated household decision making situation, hence suggesting a positive relationship between household decision making and maternal health.

The assertion that women who have complete authority over their income, can decide on her priorities including their 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. An FGD response in Utanga maintained that:

*If we feel any pain, nobody appreciates it better than ourselves, so we have to decide on our health first no matter what happens.*

*Even our husband cannot adequately understand our condition except a professional, hence, it must be a professional that sees us and decides what is wrong.*

*Trying to look good would have to wait till after pregnancy because it is a do or die affair. We take very serious care of this condition because if we do not come out of it, good looks would be useless.*

*Club uniform has to wait because there would always be another time.*

*We have seen several women die in pregnancy and would never want it to happen to us if it is avoidable.*

*The last time I was pregnant, I almost died from prolonged bleeding because I underrated the condition and used the money for club uniform, I do not want that to ever happen again.*

#### **Harmful Cultural Practices**

Different cultural practices affect the people differently. These practices are presented to enable further analysis 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 determine maternal health.

In discussing harmful cultural practices that affect maternal health status, a 40+-year-old woman in an IDI in Aragbang opined that:

*It is not acceptable in this area to discuss about sex and sex organ with an outsider (referring to interviewer). It is only acceptable to discuss with your husband in the secrecy of your bedroom. You may be divorced if you are seen with a person other than your husband discussing this. This situation is strictly determined by custom.*

Another woman in a key informant interview in Bisu stated that:

*We were never told about the experience of sleeping with a man until you are confronted with it. Mentioning the private part of a man or woman publicly is enough to cause you village embarrassment because you will be called a prostitute. As a result, people are very careful about discussing sex.*

When the reason for female circumcision was sought, a woman who had been circumcised stated as follows:

*They say that if a woman is not circumcised, she will go outside because her husband will not satisfy her. So this practice has been there from time immemorial, we cannot suddenly change it.*

A group of women severally stated in an FGD that:

*I was told that I was circumcised, I do not feel it and cannot really say how it feels to be circumcised except that I am told it makes me complete.*

*The agony that most women complain is not felt when one is circumcised as a baby. I do not know how it feels.*

*I almost died from it because I bled so much that I was rushed to the hospital and I was told that the blood that I loss must be replaced or I may have complications during delivery. This practice is barbaric and it should be stopped.*

#### **Discussion/Conclusion**

The findings of this study are in line with the findings of Salzman and Attwood (1996) posited that the complex relations between people and the environment have mutual effect on each other. Similar human population have an ongoing contact with the environment, they shape the environment and the environment in turn affects and influences the life and sustenance of the human population. The theorist concludes that the human population should shape the environment in such a way that its impact would be positive and beneficial to it. The human environment in the study area has been shaped in such a way that the impact of the physical environment is negative and injurious to those who live in it. Women are in the most vulnerable position because they are nearer to the environment by nature of their activities. Women are therefore, exposed to the effects of the environment by having poor maternal health. This is identified in the study because the most frequently reported sickness is malaria and the parasite that causes it thrives in an unsanitary environment or in dirty and stagnant water that serves as breeding grounds for them. The household environmental condition has been shown by the study as affecting negative maternal health outcome.

The study captured succinctly the relationship that exists between the physical environment and the phenomenon that exist therein. The study posits that whatever happens to the environment as a result

human activities, actions or inactions, will affect those who depend on it for sustenance. The study also places this mutual relationship in a web of interplay within the context of analysis. This analysis captures the physical, social, economic and cultural condition in which these phenomenon exist. The conditions interact in the framework of history, environment and social conditions. This situation influences and determines the course of action to be taken.

The study effectively connect the variables in order to show that at one end, maternal health is influenced and determined by the household physical environmental conditions, at another end, it was shown that the conditions in the study area made maternal health poorer in comparison to other areas. This is depicted in the relative likelihood of having good health in the face of daunting socio cultural forces that often undermine other forms of behaviour that may be acceptable elsewhere

## References

- Salzman, P.C. & Attowood, E.B. (1996). *Ecological Anthropology*. (Eds): New York. Henry Holt
- UNICEF (2001). *The state of worlds Children*, New York, UNICEF
- UNICEF, UNFA, WHO. (2000). *Research on the Antenatal Care and Mortality and Morbidity*. WHO Geneva no. 56
- World Bank (2000). *The World Development Indicators: The World Bank Online an Essential Element Database*, Washington.
- Acsadi, T.F. & Acsadi, G.J. (1991). *Social and Cultural Factors Influencing Maternal and Child Mortality in Sub-Saharan African: The Effects of Maternal Mortality on Children in Africa: An exploratory Report on Kenya, Namibia, Tanzania, Zambia and Zimbabwe* Defense for Children International; USA.
- Brockerhoff, M. (1995). *Child Survival in Big Cities: The Disadvantages of Migrants*. *Social science and medicine*, 40: 1371–1388.
- Central Intelligence Agency (CIA) World Fact Book (2012). *Maternal Mortality Rate: Country Comparison*.
- Dada, J. (2008). *The Maternal, Newborn and Child Health: Policy Environment Realities*. *Punch News paper*, June, 2, 2008: 8.
- Kyomuhendio, G.B. (2004). *Cultural and Resource Determinant of Severe Maternal Morbidity: Lessons from Some "Near Miss" Experiences*. *African Sociological Review*. 8(1): 67–82.
- Murray, C.J. & Lopez, A (eds) (1996). *The Global Burden of Disease: A Comprehensive assessment of Mortality from disease, Injuries and risk factors in 1990 and projected to 2020*. Cambridge, Massachusetts: Harvard University Press.
- Nwokocha, E. (2004). *Socio Cultural Factors in Maternal Outcome among the Ibani of Rivers State of Nigeria*. Ph.D theses, Unpublished, University of Ibadan, Nigeria.