

EDUCATIONAL AND MARITAL DETERMINANTS OF MATERNAL MORTALITY IN AKWA IBOM STATE, 1998 – 2004

A. E. ETIM

ABSTRACT

The main purpose of the study was to determine the influence of educational and marital status on maternal mortality. Two research questions and corresponding hypotheses were formulated to guide the study. The design adopted for the study was ex-post facto. The population for the study consisted of 389 death cases of women who died in the process of delivery or six weeks after delivery from 1998 to 2004 in Akwa Ibom State. This population was revealed by the initial sample survey conducted in the hospitals. Maternal Mortality Inventory (MMI) was used for data collection. The research questions were analyzed using percentage while chi-square (χ^2) was used to verify the hypotheses. The results indicated that women with no formal education were mostly predisposed to maternal mortality, women who were divorced died mostly from maternal mortality. It was further revealed that educational status has significant influence on maternal mortality, and marital status has not significantly influenced maternal mortality. The researcher recommended that seminars and workshops should be organized for women of reproductive age especially women with no formal education and divorced women.

KEY WORDS: Maternal Mortality, Educational Status, Marital Status, Ex-post facto, Maternal Mortality Inventory (MMI).

INTRODUCTION

It is common knowledge in the developing countries that expectant mothers suffer from various disabilities. Some deaths had been reported either during pregnancy, child delivery or shortly after delivery. According to population Reports (2000), more than one quarter of all adult women living in the developing countries suffer from short or long term illness or death which are related to the process of pregnancy and childbirth.

Maternal death seems to be the only devastating phenomenon affecting the survivors and the nation at large. WHO (2001) defined maternal death as the death of a woman while pregnant or within forty-two days of termination of pregnancy irrespective of the duration of pregnancy or aggravated by the pregnancy or its management but not accidents or incidental causes.

The high prevalence of maternal mortality especially in developing countries may be attributed to certain factors: such as medical factors (abortion, ectopic pregnancy, hypertension disease of pregnancy,

haemorrhage, obstructed labour, sepsis, heart disease, anaemia, diabetes, and aside from medical causes. Muokwogwo (1999) based his advocates on the women's socio-demographic characteristics, which include occupation, income, education, parity, birth interval and marital status as social determinant that can positively or negatively affect maternal health. The present research is focusing on educational and marital status as determinant of maternal mortality. The state is characterized by a number of cultural practices, which may impact on the reproductive life of the women thus predisposing them to maternal mortality.

Education as a social factor may predispose women to maternal mortality. The lack of antenatal care, which characterized uneducated women increases the risk of maternal death, with complications in labour. Royston and Armstrong (1990) observed that educated women are more likely than uneducated women to translate knowledge into action. The better knowledge of health and hygiene practices lead to a higher use of modern maternal care and they are more likely to divert from traditional reproductive habits.

It is recognized that education is the key to improving the status of women. As far as maternal death is concerned, education is essential in order to create awareness for women of reproductive age to utilize available maternal health service (WHO, 2001). According to Fred (2002), the following trends can be noted among educated women; later marriage and delayed first birth, schooling and employment, delayed age of marriage, lesser number of children, more likely to use family planning method, and greater length of time between pregnancies which means that mother and child are healthier.

Marital status is one of the factors, which may have influence on maternal mortality. Ross (2002) reported that positive association exists between marital status and the occurrence of pregnancy – related problems. Observations have shown that married women who are better placed economically, and are taken good care of by their husbands and relatives received regular medical attention unlike unmarried pregnant women who are not adequately exposed to maternal health service. The emotional problems and frustration, which characterized unmarried pregnant women may lead to miscarriages and abortions and later may result to maternal death (Ross 2002). WHO (2002) asserted that early marriage, which is common in Africa is characterized by multiple pregnancies, which is maternal health risk. WHO (2001) further explained that one major problem was that a very young mother has not finished growing and her pelvis is relatively small which is accompanied by obstructed labour.

The practice of early marriage, high parity and ignorance resulting in home delivery, which characterized most of the rural women are maternal health risk behaviours. These may have devastating consequences on the maternal health of women during pregnancy, childbirth and shortly after delivery. The resultant effect manifested is worrisome. Against this background the study to determine the influence of marital and educational status on maternal mortality became necessary.

Research Questions

The following research questions were formulated for the study.

1. What is the influence of Educational Status on maternal mortality?
2. What is the influence of marital status on maternal mortality?

Hypotheses

The following hypotheses were postulated based on the variables of the study.

1. Educational status has no significant influence on maternal mortality.
2. Marital status has no significant influence on maternal mortality.

METHODS

The design utilized for the study was ex-post facto. The design is suitable for the study since it involves the process of retrieving data from past records on the occurrence of disease. The population for the study consisted of records of women who died during pregnancy or delivery or shortly after delivery in maternity homes or hospitals in Akwa Ibom State (1998 – 2004). The sample for the study consisted of 389 death cases of women revealed during the sample survey, who died during pregnancy delivery or shortly after delivery in the hospitals. There was therefore no sampling since the population constituted the sample for the study. The instrument used for data collection in the hospital was maternal Mortality Inventory Schedule.

Maternal death cases of the registered (booked) or non-registered pregnant or delivery cases (medical cases) were recorded and kept in the statistics units of the hospital. The research questions were answered using percentage while the postulated null hypotheses were verified using chi-square (χ^2) statistic.

RESULTS

The results of the study are presented in the following tables. The analysis and discussion of the results are also presented.

Table 1: Influence of Educational Status on Maternal Mortality (N = 389)

Educational Status	F	%
No Formal Education	147	38
Primary School	102	26
Secondary School	88	23
Tertiary	52	13
Total	389	100

Table 1 shows that women who had no formal education recorded the highest number of occurrence 147 (38%); primary school level of women recorded 102 (26%) of the occurrence; women with secondary level of education recorded 88(23%) of the occurrence; and women

EDUCATIONAL AND MARITAL DETERMINANTS OF MATERNAL MORTALITY IN AKWA IBOM 9

with tertiary level of education recorded the lowest 52(13%) of the occurrence of maternal mortality for 7 years (1998-2004) in Akwa Ibom State.

Data in Table 2 shows that maternal death occurred mostly 113(29.2%) among divorced women while married women recorded the lowest number 82(21.2%); single women recorded 95(24.5) of the cases; and 97(25.1%) maternal death occurred among the widowed.

Table 2: Influence of Marital Status on Maternal Mortality

Marital Status	F	%
Married	82	21.2
Single	95	24.5
Divorced	113	29.2
Widowed	97	25.1
Total	387	100

Variation in total is due to incompleteness of data in hospitals.

Table 3: Chi-square Analysis of the Influence of Educational status on Maternal Mortality

Variable	O	E	Cal χ^2 value	Tab χ^2 value	Df
Educational Status					
No formal Education	147	96.75	25.45	3.84	1
Primary School	102	96.75	.23	3.84	1
Secondary School	88	96.75	.88	3.84	1
Tertiary	52	96.75	21.05	3.84	1
	389		47.61	9.49	4

Table 3 shows that the overall calculated chi-square (χ^2) value for educational status was greater than the table value of 9.49 hence the null hypothesis that there will be no statistically

significant influence of educational status on maternal mortality was therefore rejected. Thus maternal mortality is significantly predisposed by educational status.

Table 4: Chi-square Analysis of the Influence of Marital Status on Maternal Mortality

Variable	O	E	Cal χ^2 value	Tab χ^2 value	Df
Marital Status					
Married	82	96.75	2.24	3.84	1
Single	95	96.75	.03	3.84	1
Divorced	113	96.75	2.75	3.84	1
Widowed	97	96.75	.001	3.84	1
	389		5.001	7.84	3

Table 4 shows that the overall calculated χ^2 value of 5.001 less than was Table χ^2 value of 7.84 hence the null hypothesis that there will be no statistically significant influence of marital status on maternal mortality therefore accepted. Thus maternal mortality is not significantly predisposed by marital status.

DISCUSSION OF FINDINGS

The study focused on influence of educational status and marital status on maternal

mortality. Records of women who died between 1998 and 2004 were used for data collection.

The result of the study revealed that women (38%) with no formal education were mostly predisposed to maternal mortality. This result was expected in view of available literature. Hogbergu (2000) reported that a lack of antenatal care, which characterized uneducated women, increases the risk of maternal death with complications in labour, and concluded that maternal mortality was common among

uneducated women than educated ones. In support of the above view, Royston and Armstrong (1990) observed that educated women are more likely than uneducated ones to translate knowledge into actions. They further asserted that better knowledge of health and hygiene practices lead to a higher use of modern maternal health care; and they are more likely to divert from traditional or home delivery to hospital delivery.

Observations have shown that majority of women in the study area are not educated especially those in the rural areas; and they are not likely to put into practice what they are taught during ante-natal and post-natal services. Uneducated women are less ready to seek professional health care than the educated sisters because she is not fully aware of what to offer or is frightened and out of her depth in the alien world of maternal health services.

Result indicated that divorced women (29.2%) were mostly predisposed to maternal mortality. This result supported Ross (2002) that emotional problems and frustration, which characterized unmarried pregnant women might lead to miscarriages and abortions, and may later result to maternal death. This result is in accordance with Harrison (1999) assertion that adolescents who are pregnant but not married might have the tendency of suffering from pregnancy and delivery-related problems especially maternal mortality.

It could be argued that although married women may have the full supports of their husbands to enable them utilize available maternal health services; divorced women who are gainfully employed may also utilize maternal health services during pregnancy and delivery. The work status of a woman may be a pre-requisite to the utilization of maternal health services (Fred, 2002).

CONCLUSION

Following from the results and consequent discourse, it could be concluded thus:

1. Women with no formal education were mostly predisposed to maternal mortality and educational status has a significant influence on maternal mortality.
2. Divorced women were mostly predisposed to marital mortality; and

marital status has not significantly influenced maternal mortality.

RECOMMENDATION

1. Health Educators should organize seminars on maternal education in order to create awareness for women of reproductive age especially illiterate ones on effective utilization of maternal health services.
2. Government and health educators should organize seminars, workshops and home talks to encourage and create awareness to women especially divorced women on the need to utilize maternal health service.

REFERENCES

- Fred, S., 2002. Women's health, family planning saves lives. *African Health* 14(3): 10-11.
- Harrison, K. A., 1999. Maternal Mortality in Nigeria: The real African Journal of Reproductive Health 7-13.
- Hogberg, O., 2000. Maternal mortality—a worldwide problem. *International Journal of Gynaecology and Obstetrics* 23, 463-470.
- Muokwogwo, R., 1999. Incidence of maternal Mortality at University of Nigeria Teaching Hospital, Enugu (1986-1999) Unpublished MBBS Thesis 1993. University of Nigeria Teaching Hospital, Enugu.
- Population Reports, 2000. Maternal and Child Mortality: Important problem, family planning Studies 27, 661-663.
- Ross, R. A., 2002. Some important factors in perinatal mortality statistics in a rural state. *American Journal of Obstetrics and Gynaecology*, 88.340-342.
- Royston, E. and Armstrong, S., 1990. Preventing maternal deaths. *World Health Statistics Quarterly* 35, 52-91.
- World Health Organization, 2002. Maternal Mortality, a global fact book. Geneva: The Author.