# PHYSICAL AND SOCIO-CULTURAL FACTORS AS CAUSES OF MATERNAL MORTALITY IN SOUTH-WEST NIGERIA

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**Abstract**
*This study examined the physical and socio-cultural causes of maternal mortality in South-West Nigeria. Descriptive survey research method was used while purposive sampling technique was employed in selecting eight hundred gynaecologists, obstetricians, midwives and nurses. The instrument was a self questionnaire which was validated by using Cronbach alpha at 0.87 level of significance.*
*Three hypotheses were tested with non-parametric statistics of chi-square ($X^2$) two of these hypotheses were accepted ($X^2$) 1.62 and 2.2 while one was rejected ($X^2$) 658.8. Based on the findings it was concluded that age has a significant factor in causes of maternal mortality while traditional and religious beliefs have no significant influence on the cause of maternal mortality.*

**Key words:** Maternal mortality, Socio-cultural factors, Religious belief, Traditional belief.

## Introduction

Procreation is the art, craft and science of producing a healthy offspring from a healthy mother so that neither is impaired for their future activities. Despite the advancement in technology, there is still high rate of maternal mortality. Maternal mortality is defined as death occurring between forty-two days following childbirth irrespective of the gestational age and mode of delivery. This has become a great tragedy in developing countries. Klaus (1991) submitted that it has become more than just a rescue services salvaging mothers and babies from awkward situation. In the Bible, God commanded man to be fruitful, to multiply, to replenish the earth, and subdue it (Genesis 1v28). The problem associated with pregnancy and childbearing is dated back to the period of creation. This is because pregnancy and childbearing are with accompanied problems as pronounced by God

Himself (Genesis 3v16). The period of pregnancy is called the gestation period. This is the fertilization of the ovum and the development of the embryo or fetus within woman's body. It is the state from conception to delivery. Labour is defined as parturition or childbirth which occurs spontaneously at term, i.e. forty weeks with vertex presentation in a single fetus and completes within 24 hours without trauma to the mother or fetus. During the process of parturition, the baby and the placenta are ejected through the vagina (Babalola, 2008). Peuperium is the period following childbirth, during which the maternal uterus and other structures are returning to the non-pregnant state. It is a period of eight weeks (Weller, 2001).

Any problem resulting into death of the mother during this period is referred to as maternal mortality. John (1999) opined that medical illness may be worsened by pregnancy and result into maternal mortality. Turnbull (2003) stated that maternal illness can be fatal and may result to death. Urguhart (2000) submitted that many women died, and large numbers of children were left motherless. A woman dying in pregnancy is regarded as unripe death and this does more harm to the family.

**Culture and Childbearing**

All culture develops means to ensure that man will continue to reproduce. Klaus (1991) observed that culturally women in developing countries are confined to childbearing and rearing, excluded from political, religious and public organization. Klaus also opined that women in this part of the world are usually denied of psychosocial, medical and sometime legal ownership of their bodies. The psychosocial processes of pregnancy in developing countries are very complex, not only does each woman may not be able to respond in their own fashion but also each culture shapes the range of responses at their disposal.

In the traditional societies in Nigeria, a whole framework of folklore and ancestral customs are handed over from one generation to another so that daily life of the woman is punctuated by numerous common rites and beliefs. Urghart (2000) observed that in some Nigerian culture, conception is believed to be the result of spirit entry or magical impregnation, ancestor intervention, or re-incarnation necessitating

various rituals and observance to ensure inception and safety of the pregnancy, the woman, her baby and the community at large.

**Age and Complications of Childbearing**

Research findings showed that the majority of pregnant women in Africa are under the age of twenty-five (Adewumi, 1993; Moore 1993; WHO, 2003). Also, in some parts of Nigeria, many women carry baby as young as age twelve. The reason for this is that many children are given in marriage soon after the onset of menstrual period and begin child bearing before their physical development is completed. Ajayi (1992) stated that young mothers are socially and emotionally immature. This fact makes them to have limited parenting ability. Myles (2003) regarded immaturity as risk factor in pregnancy and childbearing. She also stated that teenage mothers are prone to pre-eclampsia; more difficult deliveries, intra, and postpartum death.

On the other hand, women in the developing countries have children even at old age. Late pregnancy presents many problems for the older women. Akinkugbe (2003) said that hypertension, diabetes mellitus, enclampsia and malpresentation lead to complications in pregnancy. Thus it can be seen that early marriage or late marriage can be a contributing cultural factor that predisposes women to maternal mortality. Young mothers run the risk of uterine vessels damage as these may not open into full capacity leading to difficult delivery, while older women are at risk of ageing process of uterine vessels, leading to placental abrupt and increase rate of malpresentation (Ojo and Briggs, 2009). Agboghoroma and Emuveyan (1997) studied maternal mortality in Lagos State University Teaching Hospital (LUTH) and concluded that maternal mortality rate in patient below 20 and those above 34 years are three times higher than those patients between the ages of 20 and 34years. Olatunji and Abudu (1999) affirm that the safest age of parturition will be between 20-29 years and safest parity will be between 1-3. They further stated that the fourth pregnancy predisposes women to danger during delivery. The risk of maternal mortality after age of 30 years is about twice compared with age 20-29 years and about five times when the patient is below 20 years (Akinkugbe, 2003). It can be drawn from these studies that as the patient gets older and increases in parity so does the risk of maternal mortality.

In a survey carried out by Adewumi (1993) in five obstetric institutions in Osun State, one of the southwestern states of Nigeria, it was affirmed that maternal mortality rate is high. He recorded 35.650 deliveries with a total of 110 maternal deaths. This gives a crude maternal mortality rate of 3.1 per 100 deliveries. WHO (2003) gave a maternal mortality rate of 500 per 100,000 live births quoting from some areas of developing countries in Africa, and in 2004, WHO also submitted that maternal mortality is said to be 800-1100/100,000 in Nigeria.

In southwestern Nigeria, it is believed that the behaviour of the mother during pregnancy will affect the outcome of the pregnancy. In order to ensure successful reproduction, various rituals are prescribed or certain acts forbidden, often involving dietary or activity restrictions.

Akinsola (1993) observed that elders among the women in the traditional African setting are believed to be the important link between tradition and culture. By giving instructions to the pregnant women on how to behave, what to avoid, duties to perform, and rules to obey in order to ensure growth of a healthy baby and to prevent witchcraft activities that may lead to fetal malformation in pregnancy.

The focus of this study is to examine if culture, religious and traditional belief may cause high rate of maternal mortality.

**The following hypotheses were tested:**

1. Age will not be perceived as a significant cause of maternal mortality in Nigeria.
2. Religious belief will not be perceived as significant cause of maternal mortality in Nigeria.
3. Tradition belief will not be perceived as significant cause of maternal mortality in Nigeria.

**Methodology**

Descriptive survey research design was used for this study. The sample for the study consisted of 700 midwives and 100 gynaecologists purposively drawn from selected in selected government hospitals in south-west Nigeria.

The instrument for the study was structured validated questionnaire designed in line of the variable of the hypotheses.

Cronbach's alpha analysis was employed to determine the instrument's internal consistency which yielded an 'r' of 0.85.

Descriptive statistics of frequency count and percentage were used to analyze the demographic data while non-parametric statistics of chi-square ($X^2$) was used to test the variables at 0.05 level of significance.

**Result Analysis and Discussion**

The data collected were based on the responses received from the participants and were analyzed using chi square ($X^2$). Acceptance or rejection of the hypotheses was set at 0.05 level of significance.

**Table 1: Frequency distribution of respondents according to religion**

| No of Religion | No of Respondents | % |
|---|---|---|
| Christianity | 360 | 45 |
| Islamic | 440 | 55 |
| Traditional | 0 | 0 |
| Total | 800 | 100 |

Out of 800 respondents used for this study, 45% (360) were Christian while 55% (440) were Muslim. None of the respondents belong to the traditional group of religion.

**Table 2: Chi-square table showing the association between age and cause of maternal mortality among women of childbearing age in Southwestern Nigeria.**

| | Agreed | % | Disagreed | % | Total |
|---|---|---|---|---|---|
| Under aged nursing mothers is a predisposing factor to maternal mortality. | 785 | 32.71 | 15 | 0.63 | 800 |
| Delivery complication among under aged nursing mothers is a predisposing factor to maternal mortality. | 785 | 32.71 | 15 | 0.63 | 800 |
| Aged motherhood is a predisposing factor to maternal mortality. | 720 | 30 | 80 | 3.3 | 800 |
| Column total | 2290 | | 110 | | 2400 |
| Average | 763.3 | 95 | 36.76 | 5 | 800 |

Chi square ($X^2$)=658.845; df=1;P<0.05 value=3.84

On the effects of age as a cause of maternal mortality among women of child bearing age, 763 (95%) of the total respondents agreed while 40 (5%) respondents disagreed to the various questions as indicated in table 2. The chi-square ($X^2$) value was 658.8. This was greater than critical value of 3.84. The null hypothesis which stated that age will not be a significant cause of maternal mortality among women of childbearing age in southwestern part of Nigeria was rejected. This result was in line with Moore (1993), Agboghoroma and Emuveyan (1997) that early and late marriage predisposes women to maternal mortality during child bearing.

**Table 3: Chi-square table showing the association between religion belief and cause of maternal mortality among women of childbearing age**

| | Agreed | % | Disagreed | % | Total |
|---|---|---|---|---|---|
| Some nursing mothers' belief in God's divine intervention is a predisposing factor to maternal mortality. | 307 | 38.40 | 493 | 61.60 | 800 |
| The type of religion some nursing mothers now embrace is a predisposing factor to maternal mortality. | 528 | 66 | 272 | 34 | 800 |
| Column Total | 835 | | 765 | | 1600 |
| Average | 418 | 52% | 382 | 48% | 800 |

Chi square ($X^2$)=1.62; df=1;P<0.05 value=3.84

Table 3 above shows that 418 (52%) respondents agreed while 382 (48%) disagreed with the questions asked on religious beliefs. The chi square value of 1.62 was obtained. This was less than the critical value 3.84. The hypothesis which stated that the religious belief will not be perceived as significant cause of maternal mortality among women of childbearing age in South-western Nigeria was therefore accepted. WHO annual summit on health and maternal mortality in 2002 recommended that women should have right to high quality prenatal and maternity care. The educational policy of the Federal

Republic of Nigeria gave women an informed choice of their health care. Akinkugbe (2003) opined that illiteracy should be fought among women in Nigeria. The modern concept is that educated individuals are more likely to avail themselves of the available health care services.

This will surely affect the health status of women of child bearing age.

**Table 4: Chi-square table showing the association between traditional belief and cause of maternal mortality among women of child bearing age.**

| | **Agreed** | **%** | **Disagreed** | **%** | **Total** |
|---|---|---|---|---|---|
| Some nursing mothers' belief in traditional medicine is a responding factor to maternal mortality. | 400 | 50 | 400 | 50 | 800 |
| Taking traditional medicine even when orthodox medicine is available is a predisposing factor to maternal mortality. | 312 | 39 | 488 | 61 | 800 |
| The belief of many mothers in traditional medicine to orthodox medicine is a predisposing factor to maternal mortality. | 426 | 53.25 | 374 | 46.75 | 800 |
| Column | 1138 | | 1262 | | 2400 |
| Average | 379 | 47 | 421 | 53 | 800 |

Chi square ($X^2$)=2.2; df=1;P<0.05 value=3.84

Table 4 revealed that 379 (47%) of the respondents agreed while 421 (53%) gave negative responses to the questions relating to association between traditional belief and causes of maternal mortality. Respondent disagreed on the average. The chi-square was 2.2, which was less than the critical value of 3.84 as shown in table 4. Therefore, the hypothesis which stated that tradition belief will not be perceived as significant cause of maternal mortality in Nigeria was accepted. WHO in conjunction with other international organizations opined that in order to reduce maternal mortality, the stakeholders must take it as their responsibilities to strengthen the health network by encouraging basic health education, reasserting the value of midwifery skill and making them available to pregnant women everywhere. Likewise, maternal health and safe motherhood programme should be directed towards provision of maternal health services at all levels of referral.

**Conclusion and Recommendations**

This study was carried out to investigate socio-cultural determinant of maternal mortality in south-western Nigeria. The result of the study identified age as a factor contributing to maternal mortality while traditional and religious beliefs had no significance effect on maternal mortality in south-western Nigeria. Following the presented data, the causes of maternal mortality were brought to limelight. Conclusively, two of the hypotheses were accepted while one was rejected. It is hoped that the findings of this study will be an eye opener for the medical and the paramedical personnel to cater for the factors responsible for maternal mortality. It will also encourage government to intensify efforts on how to reduce the rate of maternal mortality.

In order to prevent occurrence of maternal mortality, the following are recommended:

(1) Religious leaders must be encouraged to educate women to make use of health centre and services.
(2) Family planning, information and services must be appropriate, affordable and acceptable so that women can avoid high-risk in childbearing.
(3) The public need to be well educated that the objectives of antenatal care are utilized so that all the complications of pregnancy and childbirth are overcome.

(4) Women must be encouraged to receive basic professional antenatal care.
(5) Enlightenment campaign, advocacy and involvement of women's group and organization together with their men counterpart are important in redressing the issue of social inequalities confronting women in Nigeria.
(6) Women and families must have access to high quality prenatal and maternity care and they should be able to reach skilled help when obstetric emergencies arise.
(7) Pregnant women should be encouraged to be attending pre-natal and post-natal clinic by the religious leaders.

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