

# MATERNAL MORTALITY IN GHANA: THE OTHER SIDE<sup>1</sup>

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## Abstract

According to recent global estimates, some 585,000 women die annually from pregnancy-related complications. Most of these deaths occur in the developing world. In Ghana, efforts to reduce the high maternal mortality rate (ranging from about 200 to 740 deaths per 100,000 live births) have given birth to the institutionalization of policies and programmes most of which derive their explanatory model from the medical perspective. However, the determinants of maternal mortality are a complex web of biology and culture. This paper presents the 'other side' of the story: a wider overview of the casual pathways by which simple interventions may produce the desired effect.

## Introduction

In all Ghanaian societies, the death of a woman from pregnancy-related complications is considered a tragic event, sometimes requiring elaborate ritual purification of the whole society. For instance, at Osu, in Accra, in the event of such an occurrence, all pregnant women are traditionally required to have a ritual bath in the sea soon after the burial of their colleague. In some communities in the Volta Region, the bodies of women who die in pregnancy are quickly buried, often at midnight. Maternal death is *honhon fi* (Akan: uncleanness) and therefore, in all Ghanaian societies, elaborate dietary and behavioural codes are instituted for expectant women in order to ensure not only safe delivery but also the delivery of normal children.

In the contemporary world, maternal mortality is considered a violation of the rights of women<sup>2</sup> and its rate is perceived as a critical index of the level of development of a country. Consequently, nations the world over have instituted programs and policies within their available resources to combat this menace.

Global attention began to focus more seriously on maternal mortality when in 1985, Rosenfield and Maine (1985) published a thought-provoking article in the *Lancet*. In this classic article titled 'Maternal Mortality—a neglected tragedy—where is the M in MCH?', Rosenfield and Maine alerted the world to the fact that many developing countries were neglecting this important problem and that existing programs were unlikely to reduce the high maternal mortality rates in the developing world. Almost immediately Harrison's (1985) analysis of 22,774 consecutive hospital births in Zaria, Northern Nigeria, showed the appalling mortality associated with childbirth. He also drew attention to the importance of social and cultural factors as critical underlying factors in the causation of high mortality and morbidity associated with pregnancy and delivery in Nigeria. Another significant contribution to the crusade against maternal mortality was the WHO (1986) publication, 'Maternal Mortality: helping women off the road to death.' All these led to the Safe Motherhood Conference in Nairobi, Kenya in 1987. Speakers at this conference presented global statistics on death and complications resulting from pregnancy. They also showed that in sub-Saharan Africa, the lifetime risk that a woman would die in childbirth is 1 in 21 and that this is 400 times higher than the lifetime risk for her

<sup>1</sup> The author acknowledges the knowledge and the rich field experience he has acquired over the years as a member of the Ghana Prevention of Maternal Mortality Network.

<sup>2</sup> Article 24 of the 1992 Fourth Republican Constitution of Ghana guarantees women's right to special care before and after childbirth.

counterpart in Western Europe or North America. The conference concluded with strong recommendations about maternal health and so the Safe Motherhood Initiative was born. Since then, a number of international conferences have established goals related to the environment, population, development and health. The reduction of maternal mortality by half the 1990 levels by the year 2000 was a goal common to several of such conferences including in particular, the 1990 World Summit for Children, the 1994 Cairo International Conference on Population and Development and the 1995 Fourth World Conference on Women.

However, almost a decade and a half after the Nairobi conference, the problem of maternal mortality still confronts Ghana and other developing countries perhaps even more than ever before. This is because, to a large extent, programs and policies to address the problem are, as usual, heavily skewed toward the medical explanatory model. In Ghana this model has led to the building of several Maternal and Child Health Clinics (MCH) across the country, the training of over 6,000 traditional midwives, the development of the Safe Motherhood Protocol for all levels of health institutions and the institutionalisation of four free antenatal visits, among others. While these are laudable efforts, they do not necessarily address the heartbeat of the problem.

Thus the basic orientation of this paper is premised on the fact that the factors which promote health and precipitate ill health or death are not purely genetic or biological, but can be social, economic, cultural and psychological and that these elements can work together or against one another in the life of an individual; that in the case of maternal mortality, especially, any strategy designed against it must recognise these dynamics – the other side – and the resulting continuity of risk in the life of the woman. The microbiologist, Rene Dubos (1985) sums this up aptly when he argued that the prevalence and severity of microbial diseases are conditioned more by the ways of life of people than they are by the virulence of specific etiologic agents.

### Maternal Mortality: A Statistical Overview

According to WHO/UNICEF (1996), globally some 585,000 women die annually from pregnancy – related complications. It is estimated that about 99 percent of such women come from the developing world, especially sub-Saharan Africa (WHO 1991b). WHO/UNICEF estimate Ghana's rate to be 740 per 100,000 live births while the Ministry of Health calculates this to be 214 per 1,000 live births. As to be expected, there are regional variations. The table below gives the details.

**Table 1**  
**Regional Distribution of Maternal Mortality (1996-2000)**

Region	1996	1997	1998	1999	2000
Upper East	52	42	45	43	56
Upper West	13	33	14	22	30
Northern	38	39	61	73	60
Brong-Ahafo	70	89	80	91	62
Ashanti	141	128	140	134	177
Eastern	85	101	78	121	108
Central	57	93	117	106	108
Western	44	53	78	98	104
Volta	48	60	70	97	88
Greater Accra	37	49	93	28	63
National Total	585	687	777	813	851

*Source: MOH/RCH Annual Reports 1996-2000*

As the table shows, maternal mortality occurs in all the regions irrespective of the number of health institutions and trained personnel available. Another disturbing revelation is that rather than reducing, the number of cases is increasing annually; it is recorded that the figure for the year 2001 is 994 (MOH 2002). It must be stated at this juncture, however, that these are institution-based (hospital) figures. Like crime statistics, the 'dark figure' - the number of unreported cases will never be known, especially so in the Ghanaian context where domiciliary delivery outnumbers institutional delivery and where deaths are usually not reported. Institutional figures are also problematic because our health institutions woefully lack effective records system. Presumably, therefore, the more effective the records system, the more accurate the institutional figure. Globally, however, maternal mortality figures are fraught with a number of problems. These are due to the fact that:

- We do not know about all deaths of women of reproductive age (15 – 46 years).
- We do not know the cause of death
- We do not know whether or not the woman was pregnant at the time of death or had recently been so; and
- Few countries count birth and death and even fewer register the cause of death.

Whatever the statistical difficulties, the trends are not only disturbing but also are symptomatic of serious problems within the communities and the national health care sector. Indeed, each maternal death must be considered one too many because of its destabilizing effect on the family and the whole society.

### **The Medical Explanatory Model**

The most common clinical causes of maternal death and chronic morbidity during conception and delivery are:

#### **Haemorrhage**

Bleeding during pregnancy may indicate several conditions. In early pregnancy it indicates threatened abortion. In later pregnancy, it suggests problems in placentation. The gravity of haemorrhage is that in anaemic women, even a small amount of blood loss can be fatal. Postpartum haemorrhage is one of the most common reasons for blood transfusion, an intervention that has become dangerous with the advent of HIV/AIDS.

#### **Anaemia**

The WHO has estimated that 52 percent of pregnant women in Africa – 56 percent in West Africa- have haemoglobin levels below 100g/L (WHO 1982). Severe anaemia can contribute to maternal mortality by impairing a pregnant woman's ability to resist infection or severe haemorrhage. In Ghana, parasitic infestation, especially malaria, significantly contributes to this condition.

#### **Obstructed Labour**

This is a complication in which the process of labour does not function normally due to mechanical blockage of the birth canal. In very severe cases, it may lead to fistulation in which urine and faecal matter gain entry into the reproductive system. Obstructed labour may be due to early pregnancy, inadequate nutrition during childhood, foeto-pelvic disproportion, multiparity and abnormal foetal presentation.

## **Abortion**

This is voluntary or involuntary termination of pregnancy before 20 weeks of gestation. It is characterized by bleeding, lower abdominal pains, and passage of foetal and placental tissue.

## **Hypertensive Disorders**

In pregnancy these are associated with pedal and facial oedema and protein in urine. They are the most difficult of the obstetric emergencies to prevent and manage. Yet they are an important cause of maternal death in Africa. If untreated, they may progress to eclampsia characterized by convulsion, brain damage, renal failure and death.

## **Sepsis**

Infection occurs when aseptic procedures are not followed, when the amniotic sac ruptures long before delivery occurs, when vaginal examinations are too frequent or when obstructed labour occurs. Long term consequences of puerperal sepsis include pelvic inflammatory diseases, secondary infertility and in rare cases, maternal tetanus.

## **Others**

Other conditions that cause maternal morbidity or mortality include ectopic pregnancy, renal failure and cardiac disorders.

Some of the conditions mentioned can be predicted while most of them can be prevented or manage if the right conditions prevail. How these conditions interact with the socio-cultural environment to override the right conditions is the focus of the next segment of the discussion and the essence of this paper.

## **The Socio-Cultural Context**

### **Pregnancy and Taboos**

The first step towards maternal mortality is conception and delivery. Although these are biological events, they are significantly influenced by the cultural usages and nuances of the community. According to Sarpong (1974: 84), among the Asante 'pregnancy is considered a happy phenomenon and traditionally, its inception is the target of most sexual activities especially in marriage.' This is true of other ethnic groups in Ghana. In kinship – based societies such as ours, the mathematics of kinship enjoins every adult kin not only to procreate but also to do generously or prolifically. In this regard, according to Sarpong (1974), in offering prayers for the newly married, the Asante appeal to God, the gods and their ancestral spirits to bless the bride with the womb of an elephant. In a similar vein, the Ga specifically request for ten children. It is in this respect of numerous progeny that Fortes (1960) has commented that the childless Ghanaian is regarded with pity not unmingled with scorn: he or she may be considered a wizard or witch or a victim of the machination of demonic forces. Thus the high cultural value placed on conception and multiparity often lead several women to their graves.

In order to ensure safe delivery of normal babies, each society prescribes certain dietary and behavioural taboos or observance, which pregnancy women must comply with. In many societies in this country, it is culturally regarded immodest to show early signs of pregnancy until it is visible (vide Arhin, 2001). Consequently, often the prenatal screening for risk factors is missed.

However, by far, the most prevalent restrictions on pregnancy relate to dietary taboos. In some societies in this country pregnant women are not expected to eat snail lest the child may be born drooling; they must not eat eggs lest the child grows to become a thief. Among the Kassena

and Nankana of the Upper East Region, pregnant women are restricted to vegetarian diet; they must not eat meat and groundnut lest they give birth to 'spirit children'<sup>3</sup> (Senah 1993). In her study among the Akwapim, Darko (1992) observed that expectant women were forbidden to buy tomatoes, pepper, okro and garden eggs from the market. If they did, it is believed that their children will be infected with severe rashes and will consequently suffer from some form of disability. Similar taboos and restrictions have been found among the people of Anyaman in the Dangme - West District (Arhin 2001). Clearly, while some of these taboos may help to check foeto-pelvic disproportion, a very fatal condition, they may exacerbate the already deficient nutritional and anaemic status of pregnant women and subsequently affect the growth and development of the child.

### Traditional Midwives

The large arsenal of customary practices employed to deal with the period from pregnancy through the puerperium is in the custody of the traditional midwives who dominate the obstetric and gynaecologic scene in much of rural Ghana. Generally a well-respected village elder, the midwife is considered an authority on the traditional medical lore associated with childbearing and rearing, traditional modes of family planning and treatment of infertility and lactational deficiencies. She speaks the language of her clients, allows them to position themselves in ways comfortable for delivery, charges far less, accepts payment in kind and handles exertions of childbirth. Perhaps, even more important, she provides strong emotional support during and after delivery. In Ghana, some 6,000 traditional midwives, already highly regarded by members of the community, have been given medical and paramedical training and have proven to be valuable adjuncts to the national health care system. The large majority of them, however, are untrained. In the context where most deliveries occur outside the health facilities and are handled by both trained and untrained traditional midwives, the parturient may lose her life in the event of life-threatening complication such as haemorrhage, obstructed labour or sepsis which cannot be managed by traditional midwives.

### Induced Abortion (*Abortus Provocatus*)

Induced abortion evokes a great deal of passion and controversy which border on religion, culture, ethics and morality. In Ghana, it is said to be the primary cause of maternal mortality. In traditional Ghanaian societies, termination of pregnancy is frowned upon; indeed, it is considered murder (Gyekye 1996). It is, therefore, resorted to in great secrecy.

In spite of the PNDC law 102 which effected amendment to the Criminal Code (1960)<sup>4</sup> and thereby liberalized to a significant degree, the abortion legal regime, many abortionists – trained and quacks- still operate and carry out the procedure in insalubrious environment because the law generally criminalizes abortion.

Estimates of a country's abortion figures are very difficult to obtain; they are at best intelligent quessimates. However, as far back as 1969, Ampofo (1970) calculated the average

<sup>3</sup> In all Ghanaian societies some children are regarded as spirits, especially if the circumstances surrounding their birth appear abnormal or if such children grow with abnormal features or congenital malformations. In some cases such children are eliminated through infanticide. Among the Kasena and Nankana of Upper East Region of Ghana, children born breech or whose birth is followed by a chain of calamities or born supposedly with milk teeth or the sixth digit may qualify as spirit children. Among the Kasena such children are known as *chuchuru*; among the Nankana, they are known as *kinkirigo*.

<sup>4</sup> The 1960 Criminal Code of Ghana virtually outlawed all forms of abortion procedures in the country. In 1985 however, an amendment to the law on abortion relatively liberalized access to the procedure by specifying five conditions under which legal abortion may be procured. These are: (a) if the pregnant woman is a minor, (< 16 yrs); (b) if the pregnancy is as a result of rape or incest; (c) when the pregnancy threatens the life of the pregnant woman; (d) if the pregnant woman is mentally challenged; and (e) if the foetus cannot thrive or if the child is likely to be born with serious congenital malformations.

yearly number of abortions at the Korle-Bu Teaching Hospital between 1963 and 1967 to be 2,541 while for the same period, the average yearly number of births was 7,036. In a study of patients with complications of induced abortion admitted to the same hospital between May 1993 and May 1994, Lassey (1995) recorded 212 acute cases. Recent studies by Anarfi (1996), Nabila and Fayorsey (1996), and Kenyah (2000), indicate that the practice is fairly common.

According to the Ghana Demographic and Health Survey (Ghana Statistical Service and Macro International Inc.1998)12 percent of all pregnancies that occurred in the ten years before the study did not end in a live birth. Also, the study reported that nearly one in four pregnancies to women aged 15-19 years was lost early through spontaneous or induced abortion. Furthermore, it observed that early pregnancy losses were especially high among women aged 15-19 with about two in five pregnancies to women in this age group ending in an early pregnancy loss. In another study on how girls living in Accra cope with unintended pregnancies, Measure DHS<sup>+</sup> [www.measuredhs.com](http://www.measuredhs.com) found that the 29 girls (aged 15-24) interviewed collectively experienced 64 pregnancies half of which resulted in abortions.

In Ghana, the danger with abortion is that when performed especially, by untrained abortionists, sepsis may occur because of the use of improperly sterilized instruments in insalubrious environment. However, by far, the largest number of acute complications is due to self-induced abortion. Writing on the 'anthropology of abortion', in a Kwahu town, Bleek and Asante-Darko (1986) revealed the modes and methods – both allopathic and indigenous – employed in the exercise. Among the 'allopathic' methods include the following: Menstrogen tablets or injection; Mensicol capsules taken with alcoholic drink; Alophen Pills; Primodes Forte; Gynavion Pills and Dr. Bongean's Pills, among others. The herbs and herbal preparations used include *nkrangyedua* (*Jatropha Curcas*); *Nyanyara* (*Passiflora Foetida*; sugar cane; *numum* (*Ocimum Americanum*); cassava leaf stalk (*Manihot Utilissima*) and *Sorowisa* (*Piper Guineense*), and severe beating or vigorous sexual intercourse, among others. The local newspapers often carry stories on abortion in which some 'medicines' were used often with disastrous consequences.

Reasons for induced abortion range from socio-cultural to psychological. While the law frowns on abortion, many women will risk their lives to avoid unwanted births when they have powerful reasons for not wanting to be pregnant – such as concern for their own health, the welfare of the children they already have, their desire to continue work, schooling or apprenticeship. Is there a way to prevent women from dying without liberalizing access to abortion services? This is a moot point.

Against the background of these macro-level societal issues, the question to ask is: How do pregnant women (and their relations) and the health care systems respond to obstetric emergencies? The most common obstetric complications vary in their demand for speedy intervention. However, Maine et al. (1987) have estimated the average interval from the onset to death for the major obstetric complications as shown below:

**Table 2**  
**Estimated Average Interval from Onset of Complication to Death**

COMPLICATION	HOURS	DAYS
Haemorrhage: Postpartum	2	
Haemorrhage: Antepartum	12	
Ruptured Uterus		1
Eclampsia		2
Obstructed Labour		3
Infection		6

Source: Maine et al. (1987)

## The Delays

Clearly, while speedy intervention is essential in the management of obstetric emergencies, the ability of the health system to effect rapid intervention is mediated by socio-cultural factors which, thanks to the Prevention of Maternal Mortality Project (PMM)<sup>5</sup> has come to be known as the THREE DELAYS. The writer, however, recognises four of such delays as discussed below:

### (a) *Delay in the Recognition of a Problem*

As has been emphasised *ad nauseam*, society plays a critical role in the promotion or reduction in the incidence of maternal morbidity and mortality. Medical anthropologists have stressed that the concepts of 'health', 'sickness' and 'problem' are all cultural constructs and consequently they may be reinterpreted to mask the element of medical danger. Consequently, there are instances when grossly oedematous pregnant women are said to be expecting twins or a baby boy when medically they may be on the path to death as a result of pregnancy-induced hypertension. Again, there are instances when pregnant women who spot 'small' quantity of blood regard this as normal. Again in some societies in Ghana, it is the norm that the pains of onset of labour must be borne with stoicism until the foetus is due for expulsion. This non-recognition of obstetric emergency situations resulting from cultural reconstructions can be fatal.

### (b) *Delay in the decision to take appropriate action*

Even when the emergency situation has been appreciated there is considerable delay in taking appropriate action. This may be due to lack of knowledge about where to locate the appropriate facility or the lack of money to access the services of this facility. In the rural areas especially, where women are generally poorer, their dependence on their male counterparts becomes problematic in times of emergency when the men do not also have the resources or are absent at the time. Consequently, obstetric emergencies may find their way to traditional midwives, spiritual homes or shrines.

Another aspect of this delay is that in the event of obstructed labour, women are made to confess their alleged marital infidelity in the belief that such a confession will lend to the expulsion of the foetus. In addition to this, in the northern regions of Ghana, especially, a local herbal preparation often of oxytocic derivation, is administered in obstructed labour. In the Northern Region this is known as *Kalugotim* which is reported to have caused many cases of ruptured uterus; it enhances labour contractions without a corresponding dilatation of the uterus. Hence the rupture.

### (c) *Delay in arriving at a health facility*

When the decision to access the services of a health facility has been taken, there is a further delay in arriving at the facility, which may be several kilometres away. The distance factor is complicated by lack of vehicles, bad roads and high transport fares. In many rural areas, a parturient may be hammocked several kilometres to the next village or road junction where a vehicle may be found. In the Afram Plains, she may be transported on a tractor.

<sup>5</sup> The Prevention of Maternal Mortality Network (PMM) was a multi-site study on maternal mortality carried out in Ghana, Nigeria and Sierra Leone between 1988 and 1996. The study was funded by Carnegie Corporation of New York and was technically back-stopped by Columbia University. Each national team was made up of clinical, social science and public health professionals. Today, the useful lessons derived from this study are being spread throughout the African continent by the Regional Office of Prevention of Maternal Mortality located at Dzorwulu in Accra.

(d) *Delay within the health facility*

The health facility finally accessed from the village may be a private maternity home, an MCH clinic, a district or a regional hospital. However each of these facilities has its own problems which may delay quick intervention. For instance, many private midwives have had no refresher courses since they graduated. There are many private midwives who have no training in *Life Saving Skills* and the use of the partogram and in other modern obstetric techniques. In some cases also the midwives, for financial reasons, delay referral in the hope that the parturient may deliver spontaneously. Beside these, most private maternity homes have no ambulance and the necessary equipment and medical supplies to handle obstetric emergencies. Perhaps, a far more greater danger is the large army of untrained midwives who operate with impunity especially, in the rural areas.

The MCH clinics, most of which operate within the officially stipulated working hours are in no better position than the maternity homes; they are in no position to provide essential obstetric functions. In the district and regional hospitals also, often there are no obstetricians and gynaecologists and anaesthetists. Others do not have an ambulance, blood and blood bank, adequate number of or complete laparotomy set, modern autoclaves, emergency medical supplies and regular supply of water and electricity, among others. Beside, their operating theatres are ill-equipped to handle many major surgical procedures. Indeed, until recently, Winneba Hospital used to depend on the Korle-Bu Teaching Hospital for its blood supplies. How long can a case of postpartum haemorrhage be kept alive while the hospital ambulance drives through the thick traffic to Korle-Bu and back?

### Discussion

The task of this paper has been to show how medical conditions and socio-cultural factors intertwine to produce maternal morbidity and mortality. However, as may be appreciated, maternal mortality is largely a preventable tragedy. Yet in Ghana as in many developing nations, this tragedy continues to afflict hundreds of women annually. This is not only because its socio-cultural components are largely ignored by policy makers, but also because the tragedy is gendered; it is experienced largely by women who are politically voiceless and financially weak. Certainly, if every year, only ten (10) Ghanaian politicians die in road accidents, this will not only hit the headlines but also will call for prompt action from government. The PMM experience has shown that reducing maternal mortality, especially, in the developing world does, not require the building of high-tech health centres. Nor does it require huge capital investment. Indeed, much of the resources needed to stem the tide lie untapped within the communities and the health facilities. For instance, if community members including transport owners are sensitised enough to appreciate the danger signals of obstetric complications and are empowered to design home-made solutions; and if the health facilities, especially those at the peripheral zones are supplied with adequately trained personnel and basic equipment to offer quality essential obstetric care in times of emergency, so many lives would be saved. A nation that sends its troops to war unprepared cannot hope to win any war. In spite of what Ghana has done to contain the problem, it is clear that the nation's state of preparedness is woefully deficient. And this is a serious indictment, for as Tenon (1788) has rightly observed, 'No one is more worthy of care than the pregnant woman who carries within her the support of empires and the gem of future generations.'



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